BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

PETITION NO.....

IN THE MATTER OF : Petition Under Section 62 and 79 (1) (a) of the Electricity Act, 2003 read with Chapter-III of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 and Chapter-3, Regulation-9 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for approval of tariff of **Barh Super Thermal Power Station Stage-I (3x660 MW) for the period from 01.04.2024 to 31.03.2029**.

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Summary of Issues

Determination of Tariff of Barh Stage-I (3X660 MW) for 2024-29 Period

I. CONSPECTUS:

- Barh Stage-I Station comprises of three units of 660 MW each. Unit#1 was declared Commercial on 12.11.2021, Unit#2 on 01.08.2023 and anticipated date of COD of U#3 is 31.03.2024. The petitioner vide affidavit dated 27.08.2024 had filed petition (236/GT/2021) for approval of tariff of Barh Super Thermal Power Station, Stage-I (3x660 MW) for the period from the date of commercial operation of the Unit I i.e. 01.11.2021 to 31.03.2024 including truing up exercise in line with the applicable provisions of Tariff Regulations 2019.

- Instant Petition is filed under Section 62 and 79 (1) (a) of the Electricity Act, 2003 read with Chapter-III of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 and Chapter-3, Regulation-9 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for approval of tariff of Barh Super Thermal Power Station Stage-I1 (3x660 MW) for the period from 01.04.2024 to 31.03.2029.

II. ISSUES FOR CONSIDERATION:

(a) **Capital Cost:** It is submitted that aforesaid petition no. 236/GT/2021 is under kind consideration of Hon'ble Commission. Accordingly, in the instant petition, the opening capital cost (Rs 1598393.94 Lakhs) as on 01.04.2024 has been considered same as closing capital cost as on 31.03.2024 in the aforesaid petition no. 236/GT/2021.

(b) The tariff of instant station for 2024-29 period has been worked out based on opening capital cost as on 01.04.2024 arrived as above and projected additional capital expenditure (Add Cap) for 2024-29 period. The detail of

projected add cap year wise is provided in Form-9 of the Tariff forms attached as **Appendix-I.**

(c) **Claim of water charges, Capital Spares Consumption & security expenses:**

i. **Water Charges:** Water charges are claimed based on projected expenditure towards water charges and provided in Form-3A of Appendix-I.

ii. **Capital Spares Consumption:** The details of year-wise actual capital spares consumption is not provided at the instant petition. The same shall be provided at the time of true-up in terms of the proviso to the Regulation 36(1)(6) based on actual consumption of spares during the period 2024-29.

iii. **Security expenses:** Security expenses are claimed based on estimated expenditure to be incurred towards deployment of CISF personnel/security personnel for safety and security according to security threat perception, survey and as per the guidelines of Ministry of Home Affairs. The estimated security expenses year wise is provided in Form-3A of the Appendix-I.

(d) **Ash Transportation Charges:** Hon'ble Commission vide its order dated 28.10.2022 in petition no 205/MP/2021 allowed the Ash transportation expenses for FY 2019-20, 2020-21, and 2021-22 and further allowed the monthly billing of ash transportation charges for 2022-23 and 23-24 period. The petitioner is incurring ash transportation charges as per MOEF&CC

notifications dated 25.1.2016 and 31.12.2021 in current tariff period as well. Accordingly, Petitioner has claimed ash transportation charges on the projected basis for 2024-29 period and same has been provided in Form-3A of Appendix-I. To avoid the interest payment liability of the beneficiaries, it is prayed that the petitioner may be allowed to recover/ pass on the ash transportation charges on a monthly basis subject to true-up at the end of the 2024-29 period.

(e) **Filing and Publication Expenses:** Petitioner has claimed the Filing and Publication expenses as per Regulation, 94 of Tariff Regulations, 2024.

(f) **Liberty to approach Commission for Pay Revision:** It is submitted that the pay/wage revision for the employees of the Petitioner will be due wef 01.01.2027. Further, the wage/pay revision of CISF and Kendriya Vidyalaya employees will also be due for revision during the tariff period 2024-29. In view of the above, Petitioner seeks liberty to approach the Hon'ble Commission for allowing the impact of Pay/wage revision of employees of the Petitioner and personnel of CISF and Kendriya Vidyalaya as applicable.

III. ANNUAL FIXED CHARGES CLAIMED:

The detail of Annual Fixed Charges are provided at **Appendix-I**.

IV. Prayer

In the light of the above submissions, the Petitioner, therefore, prays that the Hon'ble Commission may be pleased to:

i) Approve tariff of Barh Super Thermal Power Station Stage-I (3x660 MW) for the tariff period 01.04.2024 to 31.03.2029.

ii) Allow the recovery of filing fees as & when paid to the Hon'ble Commission and publication expenses from the beneficiaries.

iii) Consider Station Heat Rate based on design heat Rate with applicable operating margin provisionally and also allow the petitioner to amend the boiler efficiency at a later stage

iv) Allow reimbursement of Ash Transportation Charges directly from the beneficiaries on monthly basis, subject to true up.

v) Grant liberty to approach the Hon'ble Commission to allow for the recovery of pay/wage revision due in 2024-29 period as additional O&M over and above the normative O&M.

vi) Pass any other order as it may deem fit in the circumstances mentioned above.

BEFORE THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

PETITION NO.....

IN THE MATTER OF : Petition Under Section 62 and 79 (1) (a) of the Electricity Act, 2003 read with Chapter-III of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 and Chapter-3, Regulation-9 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for approval of tariff of **Barh Super Thermal Power Station Stage-I (3x660 MW) for the period from 01.04.2024 to 31.03.2029**.

AND
IN THE MATTER OF

Petitioner: : NTPC Ltd.
NTPC Bhawan
Core-7, Scope Complex
7, Institutional Area, Lodhi Road
New Delhi-110 003.

Respondents

1	North Bihar Power Distribution Company Ltd (NBPDCL), Vidyut Bhawan, Bailey Road Patna- 800021
2	South Bihar Power Distribution Company Ltd (SBPDCL), Vidyut Bhawan, Bailey Road Patna- 800021
3	Jharkhand Urja Vikas Nigam Limited Engineering Building, HEC Township Dhurwa, Ranchi-834004
4	GRIDCO Ltd. 24, Janpath, Bhubaneswar – 751007

5	Power Department Govt. of Sikkim, Kazi Road, Gangtok, Sikkim-737101
6	Gujarat Urja Vikas Nigam Limited Sardar Patel Vidyut Bhawan Race Course, Baroda - 390007

The Petitioner humbly states that:

1) The Petitioner herein NTPC Ltd. (hereinafter referred to as '**Petitioner**' or **'NTPC')**, is a company incorporated under provisions of the Company Act, 1956 and a Government Company as defined under Section 2(45) of the Companies Act, 2013. Further, NTPC is a 'Generating Company' as defined under Section 2(28) of the Electricity Act, 2003.

2) In terms of Section 79(1)(a) of Electricity Act, 2003, the Hon'ble Commission has been vested with the functions to regulate the tariff of NTPC, being a Generating Company owned and controlled by the Central Government. The regulation of the tariff of NTPC is as provided under Section 79(1)(a) read with Section 61, 62 and 64 of the Electricity Act, 2003 and the Regulations notified by the Hon'ble Commission in exercise of powers under Section 178 read with Section 61 of the Electricity Act, 2003.

3) The Petitioner is having power stations/ projects at different regions and places in the country. **Barh Super Thermal Power Station Stage-I (3x660 MW)** (hereinafter referred to as Barh Stage-I) is one such station located in the State of Bihar. The power generated from Barh Stage-I is being supplied to the respondents herein above.

4) The Hon'ble Commission has notified the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2024 (hereinafter 'Tariff Regulations 2024') which came into force from 01.04.2024, specifying the terms & conditions and methodology of tariff determination for the period 01.04.2024 to 31.03.2029.

5) Regulation 9(2) of Tariff Regulations 2024 provides as follows:

"(2) In case of an existing generating station or unit thereof, or transmission system or element thereof, the application shall be made by the generating company or the transmission licensee, as the case may be, by 30.11.2024 , based on admitted capital cost including additional capital expenditure already admitted and incurred up to 31.3.2024 (either based on actual or projected additional capital expenditure) and estimated additional capital expenditure for the respective years of the tariff period 2024-29 along with the true up petition for the period 2019-24 in accordance with the CERC (Terms and Conditions of Tariff) Regulations, 2019."

In terms of above, the Petitioner is filing the present petition for determination of tariff for Barh Stage-I for the period from 01.04.2024 to 31.03.2029 as per the Tariff Regulations 2024.

6) The Barh Stage-I project comprising of three units of 660 MW each. Unit#1 was declared Commercial on 12.11.2021, Unit#2 on 01.08.2023 and anticipated date of COD of U#3 is 31.03.2024. The petitioner vide affidavit dated 27.08.2024 had filed petition (236/GT/2021) for approval of tariff of Barh Super Thermal Power Station, Stage-I (3x660 MW) for the period from the date of commercial operation of the Unit I i.e. 01.11.2021 to 31.03.2024 including truing up exercise in line with the applicable provisions of Tariff Regulations 2019.

7) It is submitted that aforesaid petition no. 236/GT/2021 is under kind consideration of Hon'ble Commission. Accordingly, in the instant petition, the opening capital cost (Rs 1598393.94 Lakhs) as on 01.04.2024 has been considered same as closing capital cost as on 31.03.2024 in the aforesaid petition no. 236/GT/2021.

8) The capital cost claimed in the instant petition is based on the opening capital cost as on 01.04.2024 considered as above and projected estimated capital expenditures claimed for the period 2024-29 under Regulation 19 and Regulation 24, 25 and 26 of the Tariff Regulations, 2024.

9) The Petitioner further respectfully submits that as per Regulation 36(1)(6) of the Tariff Regulations 2024, the water charges, security expenses, ash transportation expenses and capital spares consumed for thermal generating stations are to be allowed separately. The details in respect of water charges such as type of cooling water system, water consumption, rate of water charges as applicable for 2023-24 have been furnished below. In accordance with provision of the Regulations, the petitioner shall be furnishing the details of actual for the relevant year at the time of truing up and the same shall be subject to retrospective adjustment.

Description	**Remarks**
Type of Plant	Coal based station
Type of cooling water system	Closed Cycle
Rate of Water charges	Water Charges: Rs 18 per Thousand gallon. Copy of notification enclosed as **Annexure-E**.
Total Water Charges	Projected water charges furnished in the Form-3A of Appendix-1A.

10) Similarly, the Petitioner is claiming the security & ash transportation expenses based on the estimated expenses for the period 2024-29, the same shall be subject to retrospective adjustment based on actuals at the time of truing up. In respect of capital spares consumption, it is submitted that the same shall be claimed at the time of true-up in terms of the proviso to the Regulation 36(1)(6) based on actual consumption of spares during the period 2024-29.

11) However, it is submitted that the expenditure towards the ash transportation charges is recurring in nature and the Petitioner has been incurring ash transportation expenditure in its stations in the current tariff period also. In case the same is permitted to be recovered after the issuance of the tariff order for the period 2024-29, there will be additional liability on the beneficiary on account of the interest payment for the period till the time the tariff petitions for the period 2024-29 is decided. To avoid the interest payment liability of the beneficiaries, it is prayed that the petitioner may be allowed to recover/ pass on the ash transportation charges on a monthly basis subject to true-up at the end of the 2024-29 period.

12) The petitioner humbly submits that petition no. 227/MP/2024 has been filed by the petitioner concerning Ash Transport Expenditure for its stations which is under active consideration of this Hon'ble Commission and the outcome of the said petition will be applicable to the instant petition also.

13) It is submitted that Hon'ble Commission has prescribed boiler efficiency and turbine heat rate separately for deriving the unit heat rate where the Unit Heat Rate is not guaranteed by the suppliers. It is submitted that the instant station was envisaged during the period 2004-09 and equipments including SG and TG specifications for tendering / award was stipulated considering the boiler efficiency and the turbine heat rate prescribed by the Hon'ble Commission in the Tariff Regulations at that time. Based on the same the equipments were ordered through competitive bidding. It was not possible for the petitioner to specify the efficiency parameters at the time of finalizing the contracts on the instant station as per the efficiency parameters specified in Tariff Regulations 2024-29 which are more stringent.

In a similar case, Hon'ble Commission in its order dated 20.02.2014 in Petition No. 160/GT/2012 has considered the design parameters for computing Gross Heat Rate of the station with appropriate operating margin and has stated as under:

Quote

"161. As per the guaranteed turbine cycle heat rate of 1945 kCal/kWh and boiler efficiency of 88.5% along with the deviation of 6.5 % as per the 2009 Tariff Regulations, the Gross Heat Rate works out to 2340.59 kcal/kWh. Without the margin of Auxiliary consumption of 6.5%, the Gross Heat Rate works out as 2197.74 kcal/kWh. In light of this, achieving a GSHR of 2220 kcal/kWh as per submission of the respondents 1 to 6 is not possible. Also, the EPC contract was finalized in 2006 and there was no possibility for the petitioner to specify the Station Heat Rate as per the 2009 Tariff Regulations. In view of above, we consider a GSHR of 2340.59 kCal/kWh based on guaranteed turbine cycle heat rate 1945 kCal/kWh and boiler efficiency of 88.5% with a deviation of 6.5 % from the guaranteed design value."

UNQUOTE

Further, Hon'ble Commission vide its order dated 21.04.2022 in petition no 362/GT/2020 while determining tariff of Kahalgaon STPS-II of NTPC Limited has relaxed the boiler efficiency for computing Gross Heat Rate of the station with appropriate operating margin. The same is quoted below:

Quote

"157. Accordingly, the Commission considered the SHR of 2425 kCal /kWh as approved for 2009-14 tariff period and in exercise of Power to Relax under Regulation 54 and Power to Remove Difficulty under Regulations 55 of Tariff Regulations, 2014 allowed boiler efficiency of the units of the generating station below 0.85 for the period 2014–19"

UNQUOTE

14) Further, if the Petitioner had stipulated more stringent unit heat rate for ordering the BTG plant, this would have increased the capital cost commensurate to the efficiency parameters sought. The benefit of the lower capital cost due to lower efficiency parameters has already been passed onto the beneficiaries in terms of lower capital cost. It is also submitted that as explained in detail in the petition no. 236/GT/2021, the contract for supply and installation of SG and Aux. package, as awarded to TPE, was terminated in the year 2015. The balance work was re-awarded to Doosan. It is submitted that as the contract awarded to M/s Doosan was on an "as is where is basis", there is no contractual obligation on Doosan to demonstrate the boiler efficiency in this case. Accordingly, the Petitioner has considered the boiler efficiency of 84.331 % i.e. as per the original contract awarded on M/s TPE and as claimed in the petition no. 236/GT/2021 on a provisional basis to compute the tariff. It is submitted that Barh Stage-I being a special case, Petitioner craves liberty to amend the Boiler efficiency at a later stage and accordingly submits that the documents pertaining to same shall be submitted at a later stage.

15) If now the boiler efficiency for working out the normative heat rate is considered as 86% instead of the actual design efficiency of 84.331% as specified by M/s TPE, the Unit heat rate would be worked out to be 2196.51 Kcal/Kwh and the operating margin available over the design heat rate would be 2.95% only which is much less than the operating margin of 4.5% allowed in the Tariff Regulations 2024. Moreover, it is submitted that boiler

efficiency is largely a function of coal quality. In view of the above submissions, it is prayed that the Gross Station Heat rate may be allowed based on a guaranteed turbine cycle heat rate of 1889 Kcal/Kwh and design boiler efficiency of 84.331% with an operating margin of 4.5% from the guaranteed design value. The tariff computation attached at Appendix-I is based on considering Station Heat Rate as per design heat rate with applicable operating margin of 4.5%.

16) The present petition is filed on the basis of norms specified in the Tariff Regulations 2024. It is submitted that the petitioner is in the process of installing the Emission Control Systems (ECS) in compliance of the Revised Emission Standards as notified by MOEF vide notification dated 07.12.2015 as amended. Completion of these schemes in compliance of revised emission norms will affect the Station APC, Heat Rate, O&M expenses, water consumption, etc. Considering the anticipated date of FGD commissioning, Petitioner has considered the APC and O&M expenses also on this account while computing tariff. Further, the effect of various ECS scheme on Heat Rate and shut down required shall be furnished separately by the Petitioner.

17) It is submitted that in terms of Regulation 60 (5) of the Tariff Regulations 2024, the Petitioner is required to furnish details qua providing the details of Landed Price & Gross Calorific Value **("GCV")** of coal in Form 15. It is further submitted that the Petitioner in terms of Regulation 40 of the Tariff Regulations 2019 was required to furnish the details for Landed Price & GCV of coal also as per Form 15 of the Tariff Regulations, 2019.

18) However, in so far as the present Petition is concerned, the Petitioner has prepared & submitted the data of coal as per Form 15 of the Tariff Regulations, 2019. The same is because of the following reasons:-

(a) This Hon'ble Commission had notified the Tariff Regulations, 2019 on 07.03.2019 and the same was in effect till 31.03.2024.

(b) The Petitioner being a diligent utility has been seamlessly providing the said data of coal in terms of the prescribed format (i.e. Form 15 of Annexure-I (Part I)) of the

Tariff Regulations, 2019 to this Hon'ble Commission for computation of Interest on Working Capital.

(c) Thereafter, this Hon'ble Commission on 15.03.2024 notified the Tariff Regulations, 2024, wherein the format of Form 15 was changed/ amended by this Hon'ble Commission and a new format was placed in the Tariff Regulations 2024 in the month of June'2024.

(d) By virtue of the said change, the Petitioner has been obligated to furnish the data of coal for its existing plants month wise for the preceding 12 months i.e. for FY 2023-24 for computation of Interest on Working Capital.

19) It is humbly submitted that by virtue of the Tariff Regulations, 2024, this Hon'ble Commission has added a new format/ revised the format of Form-15 which has not prescribed in the past Tariff Regulations i.e. of 2019. Hence, it is only now (in the Tariff Regulations 2024) that the Petitioner has been obligated to furnish the data of coal as per the new format of Form-15.

20) It is respectfully submitted that since the format for Form 15 has been changed in Tariff Regulations, 2024 and was notified in the month of June'2024, the Petitioner could not have been aware about the said changes earlier, hence the Petitioner did not maintain the data required in new format of Form 15 of Tariff Regulations, 2024.

21) Therefore, this Hon'ble Commission may kindly exempt the Petitioner from furnishing the data of coal in terms of new format of Form 15 of the Tariff Regulations, 2024 & may be allowed to furnish the details of coal for FY 2023-24 in terms of the prescribed format of Form-15 of the Tariff Regulations, 2019.

22) In light of the above submissions, it may kindly be noted that no prejudice shall be caused to any party if the Petitioner is allowed for providing the details of Landed Price & GCV of coal to this Hon'ble Commission in terms of Form 15 of the Tariff Regulations, 2019 as the value of Landed Price & GCV of coal will remains unaffected.

23) The petitioner has accordingly calculated the tariff for 2024-29 period based on the above and the same is enclosed as **Appendix-I** to this petition.

24) The Petitioner humbly submits that the pay/wage revision for the employees of the Petitioner will be due wef 01.01.2027. Further, the wage/pay revision of CISF and Kendriya Vidyalaya employees will also be due for revision during the tariff period 2024-29. Regulation-36(1)(8) of CERC (Terms & Conditions of Tariff) Regulations-2024 provides as below:

"In the case of a generating company owned by the Central or State Government, the impact on account of implementation of wage or pay revision shall be allowed at the time of truing up of tariff."

In accordance with the above said regulation, the Petitioner shall approach the Hon'ble Commission for allowing the impact of Pay/wage revision of employees of the Petitioner i.e. NTPC Limited, CISF and Kendriya Vidyalaya (wherever applicable) as additional O&M at the time of truing-up of tariff for the control period 2024-29. Hon'ble Commission may be pleased to grant liberty to consider the impact of wage/pay revision as an additional impact on O&M from the date same is implemented and allow the same as additional O&M over and above the normative O&M.

25) It is submitted the Petitioner has served the copy of the Petition on to the Respondents mentioned herein above and has posted the Petition on the company website i.e. www.ntpc.co.in.

26) In accordance with the 'Conduct of Business Regulations 2023' of the Hon'ble Commission, the Petitioner shall, within 7 days after filing the tariff petition, publish a notice about such filing in at least two daily leading digital newspapers one in English language and another in any of the Indian languages, having wide circulation in each of the States and Union Territories where the beneficiaries are situated, as per Form 14 appended to these regulations. Subsequently, the Petitioner shall submit the proof of publications as soft copies of the publications under an affidavit through the e-filing portal of the Hon'ble Commission within one week from the date of publication. Further, the

Petitioner shall also submit the detail of expenses incurred for publication of the notice alongwith the prayer for recovery of Publication Expenses as per Regulation-94 of CERC Tariff Regulations 2024.

27) It is submitted that the Petitioner has already paid the requisite filing fee vide **UTR No. 37c568eba62158b7b321** on 24.04.2024 for the year 2024-25 and the details of the same have been duly furnished to the Hon'ble Commission vide our letter dtd.24.04.2024. For the subsequent years, it shall be paid as per the provisions of the CERC (Payment of Fees) Regulations, 2012 as amended. Further Regulation 94 (1) of Tariff Regulations 2024 provides that the application fee and publication expenses may be allowed to be recovered directly from the beneficiaries at the discretion of the Hon'ble Commission. Accordingly, it is prayed that Hon'ble Commission may be pleased to allow recovery of filing fee and publication fee directly from the beneficiaries.

28) It is submitted that the petitioner is filing this tariff petition subject to the outcome of its various appeals/ petitions pending before different courts. Besides, the petitions filed by NTPC for determination of capital base as on 31.3.2019 through true-up exercise are pending before the Hon'ble Commission and would take some time. The Petitioner, therefore, reserves its right to amend the tariff petition as per the outcome in such appeals/ petitions, if required.

Prayers

In the light of the above submissions, the Petitioner, therefore, prays that the Hon'ble Commission may be pleased to:

i) Approve tariff of Barh Super Thermal Power Station Stage-I (3x660 MW) for the tariff period 01.04.2024 to 31.03.2029.

ii) Allow the recovery of filing fees as & when paid to the Hon'ble Commission and publication expenses from the beneficiaries.

iii) Consider Station Heat Rate based on design heat Rate with applicable operating margin provisionally and also allow the petitioner to amend the boiler efficiency at a later stage

iv) Allow reimbursement of Ash Transportation Charges directly from the beneficiaries on monthly basis, subject to true up.

v) Grant liberty to approach the Hon'ble Commission to allow for the recovery of pay/wage revision due in 2024-29 period as additional O&M over and above the normative O&M.

vi) Pass any other order as it may deem fit in the circumstances mentioned above.

Petitioner

Noida

BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

PETITION NO.....

IN THE MATTER OF	:	Petition Under Section 62 and 79 (1) (a) of the Electricity Act, 2003 read with Chapter-III of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 2023 and Chapter-3, Regulation-9 of Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for approval of tariff of **Barh Super Thermal Power Station Stage-I (3x660 MW) for the period from 01.04.2024 to 31.03.2029**.
Petitioner:	:	NTPC Ltd. NTPC Bhawan Core-7, Scope Complex 7, Institutional Area, Lodhi Road New Delhi-110 003
Respondents:		North Bihar Power Distribution Company Ltd (NBPDCL), Vidyut Bhawan, Bailey Road Patna- 800021 And Others

AFFIDAVIT

I, Prashant Chaturvedi, Son of Dr. S.C.Chaturvedi, aged about 48 years, working as Additional General Manager (Commercial) at NTPC Limited, resident of 103, Bhabha Tower, GrihaPravesh, Sector-77, Noida (UP)-201301, do hereby solemnly affirm and state as follows:

1. That the deponent is the Additional General Manager (Commercial) of the Petitioner NTPC Ltd., and is well conversant with the facts and the circumstances of the case and therefore competent to swear this affidavit.

2. That the accompanying Petition under Section 62 and 79 (1) (a) of the Electricity Act, 2003, has been filed by my authorized representative under my

instruction and the contents of the same are true and correct to the best of my knowledge and belief.

3. That the contents of Para No...1..... to...38. as mentioned in the Petition are true and correct based on my personal knowledge, belief and records maintained in the office.

4. That the annexures annexed to the Petition are correct and true copies of the respective originals.

5. That the Deponent has not filed any other Petition or Appeal before any other forum or court of law with respect to the subject matter of the dispute.

प्रशान्त चतुर्वेदी/PRASHANT CHATURVEDI
अपर महाप्रबन्धक (वाणिज्यिक)
Addl. General Manager (Commercial)
एन टी पी सी लिमिटेड/NTPC LIMITED
EOC, A-8A, Sector-24, NOIDA-201301

(Deponent)

Verification:

Verified at Noida on this 29th day of November 2024, that the contents of my above noted affidavit are true and correct to my knowledge and no part of it is false and nothing material has been concealed therefrom.

(Deponent)

प्रशान्त चतुर्वेदी/PRASHANT CHATURVEDI
अपर महाप्रबन्धक (वाणिज्यिक)
Addl. General Manager (Commercial)
एन टी पी सी लिमिटेड/NTPC LIMITED
EOC, A-8A, Sector-24, NOIDA-201301

NOTARY GOVT. OF INDIA

ATTESTED
YOGENDRA SINGH
NOTARY NOIDA
G.B. NAGAR (U.P.) INDIA

29 NOV 2024

TARIFF FILING FORMS (THERMAL)

FOR DETERMINATION OF TARIFF

FOR

Barh Super Thermal Power Project Stage-I (3x660 MW)

(From 01.04.2024 to 31.03.2029)

PART-I

APPENDIX-I

Checklist of Main Tariff Forms and other information for tariff filing for Thermal Stations

Form No.	Title of Tariff Filing Forms (Thermal)	Tick
FORM- 1	Summary of Tariff	✓
FORM -1 (I)	Statement showing claimed capital cost	✓
FORM -1 (II)	Statement showing Return on Equity	✓
FORM-2	Plant Characteristics	✓
FORM-3	Normative parameters considered for tariff computations	✓
FORM-3A**	Statement showing O&M Expenses	✓
FORM- 4	Details of Foreign loans	NA
FORM- 4A	Details of Foreign Equity	NA
FORM-5	Abstract of Admitted Capital Cost for the existing Projects	NA
FORM- 6	Financial Package upto COD	NA
FORM- 7	Details of Project Specific Loans	NA
FORM- 8	Details of Allocation of corporate loans to various projects	NA
FORM-9A**	Summary of Statement of Additional Capitalisation claimed during the period	✓
FORM-9##	Statement of Additional Capitalisation after COD	✓
FORM- 10	Financing of Additional Capitalisation	✓
FORM- 11	Calculation of Depreciation on original project cost	✓
FORM- 12	Statement of Depreciation	✓
FORM- 13	Calculation of Weighted Average Rate of Interest on Actual Loans	✓
FORM- 14	Draw Down Schedule for Calculation of IDC & Financing Charges	NA
FORM- 15	Details of Fuel for Computation of Energy Charges	✓
FORM- 15A**	Details of Seconday Fuel for Computation of Energy Charges	✓
FORM- 15B**	Computation of Energy Charges	✓
FORM- 16	Details of Limestone for Computation of Energy Charge Rate	NA
FORM-17	Details of Capital Spares	***
FORM- 18	Non-Tariff Income	***
FORM-19	Details of Water Charges	***
FORM-20	Details of Statutory Charges	***

PART-I

List of Supporting Forms / documents for tariff filing for Thermal Stations

Form No.	Title of Tariff Filing Forms (Thermal)	Tick
FORM-A	Abstract of Capital Cost Estimates	NA
FORM-B	Break-up of Capital Cost for Coal/Lignite based projects	✓
FORM-C	Break-up of Capital Cost for Gas/Liquid fuel based Projects	NA
FORM-D	Break-up of Construction/Supply/Service packages	NA
FORM-E	Details of variables , parameters , optional package etc. for New Project	NA
FORM-F	Details of cost over run	NA
FORM-G	Details of time over run	NA
FORM –H	Statement of Additional Capitalisation during end of the useful life	NA
FORM –I##	Details of Assets De-capitalised during the period	***
FORM –J	Reconciliation of Capitalisation claimed vis-à-vis books of accounts	***
FORM –K##	Statement showing details of items/assets/works claimed under Exclusions	***
FORM-L	Statement of Capital cost	✓
FORM-M	Statement of Capital Woks in Progress	✓
FORM-N	Calculation of Interest on Normative Loan	✓
FORM-O	Calculation of Interest on Working Capital	✓
FORM-P	Incidental Expenditure up to SCOD and up to Actual COD	NA
FORM-Q	Expenditure under different packages up to SCOD and up to Actual COD	NA
FORM-R	Actual cash expenditure	NA
FORM-S	Statement of Liability flow	✓
FORM-T	Summary of issues involved in the petition	✓

** Additional Forms

Provided yearwise for the period 2024-29

*** Shall be provided at the time of true-up.

Summary of Tariff

PART-I
FORM- 1

Name of the Petitioner:	NTPC Limited
Name of the Generating Station:	Barh Super Thermal Power Project Stage-I (3x660 MW)
Place (Region/District/State):	Northern Region/Patna District/Bihar

Amount in Rs. Lakhs

S. No.	Particulars	Unit	Existing 2023-24	2024-25 (From 01.04.24 to 30.03.2025)	2024-25 (From 31.03.25 to 31.03.2025)	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7	8	10	11
1.1	Depreciation	Rs Lakh	81,756.95	82,601.30	1,14,628.21	1,15,025.23	1,18,091.83	1,20,810.39	1,21,004.58
1.2	Interest on Loan	Rs Lakh	75,930.81	71,148.71	1,00,404.98	96,701.71	91,280.92	85,233.81	75,807.76
1.3	Return on Equity	Rs Lakh	89,334.11	90,254.99	1,25,247.60	1,25,679.59	1,29,028.60	1,31,999.17	1,32,211.35
1.4	Interest on Working Capital	Rs Lakh	15,787.38	15,400.05	22,384.38	22,489.99	22,984.78	23,120.06	23,179.80
1.5	O&M Expenses	Rs Lakh	41,668.74	47,576.20	64,591.00	67,612.94	73,843.29	77,059.51	80,657.99
1.6	Special Allowance (If applicable)	Rs Lakh	0.00	-	-	-	-	-	-
	Total	Rs Lakh	**3,04,477.99**	**3,06,981.24**	**4,27,256.18**	**4,27,509.45**	**4,35,229.41**	**4,38,222.94**	**4,32,861.49**
2.1	Landed Fuel Cost of coal as per FSA approved by beneficiaries	Rs/Ton							
	(%) of Fuel Quantity	(%)							
2.2	Landed Fuel Cost of Imported Coal as per FSA approved by beneficiaries	Rs/Ton							
	(%) of Fuel Quantity	(%)							
2.3	Landed Fuel Cost of coal other than FSA	Rs/Ton							
	(%) of Fuel Quantity	(%)							
2.4	Landed Fuel Cost Imported Coal other than FSA.	Rs/Ton							
	(%) of Fuel Quantity	(%)							
2.5	Secondary fuel oil cost	Rs/Unit	0.03	0.07	0.07	0.07	0.07	0.07	0.07
	Energy Charge Rate ex-bus 2A, 2B, 2C, 2D	Rs/Unit	3.52	3.23	3.23	3.23	3.27	3.27	3.27

(Petitioner)

PART-I
FORM- 1(I)

Name of the Petitioner:	NTPC Limited
Name of the Generating Station:	Barh Super Thermal Power Project Stage-I (3x660 MW)

Amount in Rs. Lakhs

Statement showing claimed capital cost – (A+B)

S. No.	Particulars	2024-25 (From 01.04.24 to 30.03.2025)	2024-25 (From 31.03.25 to 31.03.2025)	2025-26	2026-27	2027-28	2028-29
1	2	3		4	5	6	8
1	Opening Capital Cost	15,98,393.94	22,22,938.45	22,22,938.45	22,38,336.95	23,41,876.95	23,43,776.95
2	Add: Addition during the year	6,919.00	-	15,398.50	1,03,540.00	1,900.00	5,631.60
3	Less: De-capitalisation during the year	-		-	-	-	-
4	Less: Reversal during the year	-		-	-	-	-
5	Add: Discharges during the year	-		-	-	-	-
6	Closing Capital Cost	16,05,312.94	22,22,938.45	22,38,336.95	23,41,876.95	23,43,776.95	23,49,408.55
7	**Average Capital Cost**	**16,01,853.44**	**22,22,938.45**	**22,30,637.70**	**22,90,106.95**	**23,42,826.95**	**23,46,592.75**

Statement showing claimed capital cost eligible for RoE at normal rate (A)

S. No.	Particulars	2024-25 (From 01.04.24 to 30.03.2025)	2024-25 (From 31.03.25 to 31.03.2025)	2025-26	2026-27	2027-28	2028-29
1	2	3		4	5		7
1	Opening Capital Cost	15,98,393.94	22,22,438.45	22,22,438.45	22,37,535.45	23,41,075.45	23,42,975.45
2	Add: Addition during the year	6,419.00	-	15,097.00	1,03,540.00	1,900.00	5,631.60
3	Less: De-capitalisation during the year	-		-	-	-	-
4	Less: Reversal during the year	-		-	-	-	-
5	Add: Discharges during the year	-		-	-	-	-
6	Closing Capital Cost	16,04,812.94	22,22,438.45	22,37,535.45	23,41,075.45	23,42,975.45	23,48,607.05
7	**Average Capital Cost**	**16,01,603.44**	**22,22,438.45**	**22,29,986.95**	**22,89,305.45**	**23,42,025.45**	**23,45,791.25**

PART-I
FORM- 1(I)

Name of the Petitioner:	NTPC Limited
Name of the Generating Station:	Barh Super Thermal Power Project Stage-I (3x660 MW)

Amount in Rs. Lakhs

Statement showing claimed capital cost eligible for RoE linked to SBI MCLR (B)

S. No.	Particulars	2024-25 (From 01.04.24 to 30.03.2025)	2024-25 (From 31.03.25 to 31.03.2025)	2025-26	2026-27	2027-28	2028-29
1	2	3		4	5		7
1	Opening Capital Cost	-	500.00	500.00	801.50	801.50	801.50
2	Add: Addition during the year	500.00	-	301.50	-	-	-
3	Less: De-capitalisation during the year	-	-	-	-	-	-
4	Less: Reversal during the year	-	-	-	-	-	-
5	Add: Discharges during the year	-	-	-	-	-	-
6	Closing Capital Cost	500.00	500.00	801.50	801.50	801.50	801.50
7	**Average Capital Cost**	**250.00**		**650.75**	**801.50**	**801.50**	**801.50**

(Petitioner)

Form-I (II A)

Statement showing Return on Equity at Normal Rate

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Barh Super Thermal Power Project Stage-I (3x660 MW)

Amount in Rs. Lakhs

S. No.	Particulars	2024-25 (From 01.04.24 to 30.03.2025)	2024-25 (From 31.03.25 to 31.03.2025)	2025-26	2026-27	2027-28	2028-29
1	2	3		4	5	6	8
	Return on Equity@ Normal Rate						
1	Gross Opening Equity (Normal)	4,79,518.18	6,66,731.54	6,66,731.54	6,71,260.64	7,02,322.64	7,02,892.64
2	Less: Adjustment in Opening Equity	-		-	-	-	-
3	Adjustment during the year	-					
4	Net Opening Equity (Normal)	4,79,518.18	6,66,731.54	6,66,731.54	6,71,260.64	7,02,322.64	7,02,892.64
5	Add: Increase in equity due to addition during the year	1,925.70	-	4,529.10	31,062.00	570.00	1,689.48
7	Less: Decrease due to De-capitalisation during the year	-		-	-	-	-
8	Less: Decrease due to reversal during the year	-		-	-	-	-
9	Add: Increase due to discharges during the year	-		-	-	-	-
10	Net closing Equity (Normal)	4,81,443.88	6,66,731.54	6,71,260.64	7,02,322.64	7,02,892.64	7,04,582.12
11	Average Equity (Normal)	4,80,481.03	6,66,731.54	6,68,996.09	6,86,791.64	7,02,607.64	7,03,737.38
12	Rate of ROE (%)	18.7820%	18.78%	18.78%	18.7820%	18.78%	18.78%
13	Total ROE	**90,243.95**	**1,25,225.52**	**1,25,650.84**	**1,28,993.20**	**1,31,963.77**	**1,32,175.95**

(Petitioner)

Form-I (II B)

Statement showing Return on Equity at Rate Linked to SBI MCLR+350 basis points

Name of the Petitioner:	NTPC Limited
Name of the Generating Station:	Barh Super Thermal Power Project Stage-I (3x660 MW)

Amount in Rs. Lakhs

S. No.	Particulars	2024-25 (From 01.04.24 to 30.03.2025)	2024-25 (From 31.03.25 to 31.03.2025)	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	5	7	8
	Return on Equity @ Rate Linked to SBI MCLR+350 basis points						
1	Gross Opening Equity (Normal)	-	150.00	150.00	240.45	240.45	240.45
2	Less: Adjustment in Opening Equity	-		-	-	-	-
3	Adjustment during the year	-		-	-	-	-
4	Net Opening Equity (Normal)	-	150.00	150.00	240.45	240.45	240.45
5	Add: Increase in equity due to addition during the year	150.00		90.45	-	-	-
7	Less: Decrease due to De-capitalisation during the year	-		-	-	-	-
8	Less: Decrease due to reversal during the year	-		-	-	-	-
9	Add: Increase due to discharges during the year	-		-	-	-	-
10	Net closing Equity (Normal)	150.00	150.00	240.45	240.45	240.45	240.45
11	Average Equity (Normal)	75.00	150.00	195.23	240.45	240.45	240.45
12	Rate of ROE (Pre-Tax) (%)	12.15%	12.15%	12.15%	12.15%	12.15%	12.15%
13	Rate of ROE (Post-Tax) (%)	14.72%	14.72%	14.72%	14.72%	14.72%	14.72%
14	Total ROE	**11.04**	**22.08**	**28.74**	**35.40**	**35.40**	**35.40**

(Petitioner)

Form-2

Plant Characteristics

Name of the Petitioner : NTPC Limited

Name of the Generating Station : Barh Super Thermal Power Project Stage I (3 x 660 MW)

Unit(s)/ Block(s) Parameters	**Unit I**	**Unit II**	**Unit III**
Installed Capacity (MW)	660	660	660
Schedule COD as per Investment Approval	Feb'10 (Revised to 29.06.2014)	Dec'10 (Revised to 29.12.2014)	Oct'11 (Revised to 29.06.2015)
Actual COD /Date of Taken Over (Anticipated)	Nov'21	Aug'23	March'25
Pit Head or Non Pit Head or Integrated Mine	Non Pit Head		
Name of the Boiler Manufacture	M/s TECHNOPROMEXPORT		
Name of Turbine Generator Manufacture	M/s OJSC "Power Machines"		
Main Steams Pressure at Turbine inlet (kg/Cm2) abs	247		
Main Steam Temperature at Turbine inlet (oC)	537		
Reheat Steam Pressure at Turbine inlet (kg/Cm2)	42.79		
Reheat Steam Temperature at Turbine inlet (oC)	565		
Main Steam flow at Turbine inlet under MCR condition (tons /hr)	2005.75		
Main Steam flow at Turbine inlet under VWO condition (tons /hr)	2160		
Unit Gross electrical output under MCR /Rated condition (MW)	660		
Unit Gross electrical output under VWO condition (MW)	696.8		
Guaranteed Design Gross Turbine Cycle Heat Rate (kCal/kWh)	1889		
Boiler Efficiency specified by Manufacturer (%)#	84.331		
Conditions on which design turbine cycle heat rate guaranteed			
% MCR	100		
% Makeup Water Consumption	0		
Design Capacity of Make up Water System	Design make-up capacity of raw water system (intake from River Ganga) for Stage I is 3x5500 = 16500 m3/hr		
Design Capacity of Inlet Cooling System	80000 cubic meter per hour		
Design Cooling Water Temperature (C)	33		
Back Pressure (kg/cm2)	0.105		
Steam flow at super heater outlet under BMCR condition (tons/hr)	2225		
Steam Pressure at super heater outlet under BMCR condition) (kg/Cm2) (abs)	256		
Steam Temperature at super heater outlet under BMCR condition (C)	540		
Steam Temperature at Reheater outlet at BMCR condition (C)	568		
Design / Guaranteed Boiler Efficiency (%)#	84.331		
Design Fuel with and without Blending of domestic/imported coal	Domestic		
Type of Cooling Tower	IDCT		
Type of cooling system	Closed Circuit Cooling		
Type of Boiler Feed Pump	2 x 50% Turbine Driven BFP & 1 x 60% Motor Driven BFP (Standby)		
Type of Coal Mill	Bowl Mill		
Type of Boiler Firing	Wall (Side fired boiler)		
Fuel Details			
- Primary Fuel	Coal		
-Secondary Fuel	LDO / HFO		
-Alternate Fuels	-		
Types of SOX control system	FGD UNDER IMPLEMENTATION		
Types of NOX control system	Over Fire Air Dampers (OFA)		
Details of SPM control system	High Efficiency ESPs		
Special Features/Site Specific Features	-		
Special Technological Features	Supercritical		
Environmental Regulation related features	FGD, OFA, ESPs		
Any other special features	-		
Heat Balance Diagram attached as Annexure-I			

#On provisional basis as OEM Contract was terminated and Reawrded on M/s Doosan. Details provided in the petition

Petitioner

Normative parameters considered for tariff computations

Form-3

Name of the Petitioner:	**NTPC Limited**
Name of the Generating Station:	**Barh Super Thermal Power Project Stage-I (3x660 MW)**

(Year Ending March)

Particulars	Unit	Existing 2023-24	2024-25 (From 01.04.24 to 30.03.2025)	2024-25 (From 31.03.25 to 31.03.2025)	2025-26	2026-27	2027-28	2028-29
1	2	3	4		5		6	8
Base Rate of Return on Equity at normal rate	%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%	15.50%
Base Rate of Return on Equity on Add. Capitalization at Rate linked to SBI MCLR	%	7.57%	12.15%	12.15%	12.15%	12.15%	12.15%	12.15%
Effective Tax Rate	%	17.47%	17.47%	17.47%	17.47%	17.47%	17.47%	17.47%
Target Availability	%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%
Peak Hours	%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%
Off-Peak Hours	%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%
ß- Average Monthly Frequency Response Performance ##	0-1	Shall be provided at the time of truing-up.						
Auxiliary Energy Consumption	%	6.25%	5.75%	5.75%	5.75%	6.75%	6.75%	6.75%
Auxiliary Energy Consumption (FGD)*		FGD UNDER IMPLEMENTATION						
Gross Station Heat Rate	kCal/kWh	2351.98	2340.78	2340.78	2340.78	2340.78	2340.78	2340.78
Specific Fuel Oil Consumption	ml/kWh	0.50	1.00	1.00	1.00	1.00	1.00	1.00
Cost of Coal/Lignite for WC	in Days	50	50	50	50	50	50	50
Cost of Main Secondary Fuel Oil for WC	in Months	2	2	2	2	2	2	2
Fuel Cost for WC	in Months							
Liquid Fuel Stock for WC	in Months							
O&M Expenses	Rs lakh/MW	23.26	25.78	25.78	27.13	28.56	30.06	31.64
Maintenance Spares for WC	% of O&M	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%	20.00%
Receivables for WC	in Days	45.00	45.00	45.00	45.00	45.00	45.00	45.00
Storage capacity of Primary fuel	MT	5.9 Lakh MT						
SBI 1 Year MCLR plus 350 basis point	%	12.00%	11.90%	11.90%	11.90%	11.90%	11.90%	11.90%
Blending ratio of domestic coal/imported coal	%							
Norms for consumption of reagent								
Specific Limestone consumption for Wet Limestone FGD	kg/kWh	0.0122	0.0122	0.0122	0.0122	0.0122	0.0122	0.0122
Specific Limestone consumption for Lime Spray Dryer or Semi-dry FGD		TO BE PROVIDED AT THE TIME OF TRUING UP						
Specific consumption of sodium bicarbonate								
Specific Limestone consumption for CFBC based generating station								
specific urea consumption of the SNCR								
Specific ammonia consumption of the SCR								
Transit and Handling Losses of coal or lignite, as applicable								

Shall be provided at the time of truing-up.

*** Extra row added.**

Petitioner

Part-I
FORM-3A
ADDITIONAL FORM

Calculation of O&M Expenses

Name of the Company :	NTPC Limited
Name of the Power Station :	Barh Super Thermal Power Project Stage-I (3x660 MW)

Amount in Rs. Lakhs

S.No.	Particulars	2024-25 (From 01.04.24 to 30.03.2025)	2024-25 (From 31.03.25 to 31.03.2025)	2025-26	2026-27	2027-28	2028-29
1	2	3		4	5	6	8
1	**O&M expenses under Reg.36(1)(1)**						
1a	Normative	34,029.60	51,044.40	53,717.40	56,548.80	59,518.80	62,647.20
2	**O&M expenses under Reg.36(1)(6)**						
2a	Water Charges	987.00	987.00	1386.00	1386.00	1386.00	1386.00
2b	Security expenses	2209.60	2209.60	3509.54	3860.49	4246.54	4671.19
2c	Capital Spares	SHALL BE PROVIDED AT THE TIME OF TRUE-UP					
3	O&M expenses-Ash Transportation	10350.00	10350.00	9000.00	10140.00	9900.00	9840.00
4	O&M expenses- ECS (FGD)	0.00	0.00	0.00	1908.00	2008.17	2113.60
	Total O&M Expenses	**47576.20**	**64591.00**	**67612.94**	**73843.29**	**77059.51**	**80657.99**

Petitioner

PART 1
FORM- 5A

Abstract of Claimed Capital Cost for the existing Projects

Name of the Company :	**NTPC LIMITED**
Name of the Power Station :	**Barh Super Thermal Power Project Stage-I (3x660 MW)**

Reference of Final True-up Tariff Petition	**Affidavit dated**	27.08.2024
Capital Cost allowed in the Main / True Up 2019-24 Tariff Petition no.236/GT/2020	**Rs. Lakh**	Order Awaited
Following details as considered by the Petitioner as on the last date of the period for which final true-up tariff is claimed:		
Capital cost as on 01.04.2024 (cash basis)		1598393.94
Amount of un-discharged liabilities included in above (& forming part of admitted capital cost) as on 31.03.2024		
Amount of un-discharged liabilities corresponding to above admitted capital cost (but not forming part of admitted capital cost being allowed on cash basis)		
Gross Normative Debt	**(Rs. in lakh)***	1100762.70
Cumulative Repayment		133792.55
Net Normative Debt		1070234.82
Normative Equity		479518.18
Cumulative Depreciation		133792.55
Freehold land		13142.04

(Petitioner)

PART-I
FORM- 9A

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Barh Super Thermal Power Project Stage-I (3x660 MW)
COD	U#1 12.11.2021, U#2 01.08.2023, U#3 31.03.2025 (Anticipated)
For Financial Year	2019-24 (Summary)

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed						Justification	Admitted Cost by the Commission, if any
		2024-25 (From 01.04.24 to 30.03.2025)	2024-25 (From 31.03.25 to 31.03.2025)	2025-26	2026-27	2027-28	2028-29		
1	2	3		4	5	6	7	8	9
A.	**Works eligble for RoE at Normal Rate**								
1	Steam Generator (SG) Island (Incl. ESP)	393		2,150	950	1,100		Pl. refer Form-9 of respective FYs.	
2	Turbine Generator Island	255		1,215	650	800			
3	Fuel Handling & Storage system	346							
4	Coal Handling Plant	280		885					
5	Ash Handling Package	2,200		3,800	2,800				
6	Control & Instrumentation (C & I) Package	75							
7	Cables, Cable facilities & grounding			100	40				
8	Ash disposal area development (Ash Dyke)	950		5,100	3,000				
9	Township & Colony	650							
10	CW System			50					
11	Fire fighting System			50					
12	Lighting			70					
13	Main Plant/Adm. Building			480					
14	Tools & Plant			100					
15	MBOA Assets			300	700				
16	FGD				95,400				
17	Upgradation against Obsolescence of HMI of M/s Yokogawa (BOP DCS) NTPC BARH Stage-1	473							
18	Comprehensive cyber security as per CEA guidelines of M/s Emerson Supplied system to NTPC BARH Stage-1	797		797					
19	Infrastructure for supply of Treated Sewage water for NTPC Barh						5,632		
	Subtotal (A.1)	**6,419**	-	**15,097**	**1,03,540**	**1,900**	**5,632**		
A.2	Liabilty Discharge eligible for RoE at Normal Rate	-		-	-	-			
	Total additional capitalization claimed with RoE at Normal Rate (A)	**6,419**	-	**15,097**	**1,03,540**	**1,900**	**5,632**		
B.	**Works eligble for Return on Equity linked to SBI MCLR:**								
20	ClO2 system at NTPC Barh Stage-I(3X660 MW)	500.00		301.50					
	Subtotal (B.1)								
B.2	**Liabilty Discharge eligible for RoE at SBI MCLR**	-		-	-	-	-		
	Total additional capitalization claimed with RoE at SBI MCLR (B)	**500.00**		**301.50**	-	-			
Total Add. Cap. Claimed (A+B)		**6,919**	-	**15,399**	**1,03,540**	**1,900**	**5,632**		

(Petitioner)

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Barh Super Thermal Power Project Stage-I (3x660 MW)
COD	U#1 12.11.2021, U#2 01.08.2023, U#3 31.08.2026 (Anticipated)
For Financial Year	2024-26 (From 01.04.2024 to 30.08.2026)

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Projected)						Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per Ind AS	Ind AS adjustment	Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2			3	4	5=(3-4)	6	7	8	9
A.	**Works eligible for RoE at Normal Rate**									
1	Steam Generator (SG) Island (Incl. ESP)	393		393		393		24(1)(b)	Original Scope work before cut off date under Regulation 24(1)(b)	
2	Turbine Generator Island	255		255		255				
3	Fuel Handling & Storage system	346		346		346				
4	Coal Handling Plant	280		280		280				
5	Ash Handling Package	2200		2200		2200				
6	Control & Instrumentation (C & I) Package	75		75		75				
7	Ash disposal area development (Ash Dyke)	950		950		950				
8	Township & Colony	650		650		650				
9	Upgradation against Obsolescence of HMI of M/s Yokogawa (BOP DCS) NTPC BARH Stage-1	473		473		473		24 (1) (e)	It is submitted that the HMI system of OEM's are based on window server system 2003 / XP/2007 operating system . As Microsoft has officially ended support for Windows XP on April 8, 2014, Windows server 2003 on July 2015 and Window 7 on January 14,2020, no further maintenance patches, security updates, or antivirus support are available, exposing the existing system to significant security risks. Documentary evidence in this regard is placed as **Annexure-A**. It is further submitted that the CEA Guidelines (2021) for Cyber Security in the Power Sector (attached as **Annexure-B**) mandates (i) Phasing out legacy systems, (ii) Hardening existing systems with additional security controls in consultation with the OEM, and (iii) Maintaining system logs for a minimum of six months. In light of these mandates, it has become essential to upgrade the existing systems. It is submitted that the proposed upgradation involves upgradation of existing System and implementing a cybersecurity suite for HMI to strengthen system hardening as mandated in the CEA guideline. Hon'ble Commission has allowed the similar additional capital expenditure incurred on HMI upgradation in Anta gas power station and Meja thermal power station vide its order dated 05.09.2023 (in petition no. 432-GT-2020) and order dated 27.04.2023 (in petition no. 568-GT-2020) respectively. **Therefore, it is humbly requested that Hon'ble Commission may be pleased to allow the same under** Regulation 24(1)(e) of Tariff Regulations 2024.	
10	Comprehensive cyber security as per CEA guidelines of M/s Emerson Supplied system to NTPC BARH Stage-1	797		797		797		24 (1) (e)		
	Subtotal (A.1)	**8,419.00**	**-**	**8,419.00**	**-**	**8,419.00**				
A.2	**Liability Discharge eligible for RoE at Normal Rate**									
	Total additional capitalization claimed with RoE at Normal Rate (A)					**8,419.00**				

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Barh Super Thermal Power Project Stage-I (3x660 MW)
COD	U#1 12.11.2021, U#2 01.08.2023, U#3 31.08.2026 (Anticipated)
For Financial Year	2024-26 (From 01.04.2024 to 30.03.2026)

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Projected)						Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per Ind AS	Ind AS adjustment	Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2			3	4	5= (3-4)	6	7	8	9
B.	Works eligible for Return on Equity linked to SBI MCLR:									
C	WORK S DUE TO CHANGE IN LAW									
11	ClO2 system at NTPC Barh Stage-I(3X660 MW)	500		500		500		26 (1) (b) (d) & (i)	Chlorine gas is being dozed directly at various stages of water treatment to maintain water quality and to inhibit organic growth in the water retaining structures. Chlorine gas is very hazardous and may prove fatal in case of leakage; handling and storage of same involves risk to the life of public at large. Installation of ClO2 system by replacing chlorine gas injecting system is being undertaken at all NTPC stations to enhance safety of personnel engaged in power plant operation. Work taken-up in accordance to the various provisions and objectives of the "National Disaster Management Guidelines – Chemical Disasters" which provides that industrial systems shall be continuously improved and upgraded for the prevention and management of chemical accidents. It is also pertinent that the action for installation of ClO2 system is also in compliance with the duties necessitated for an employer (NTPC) under the clause 6(1)(a) and 6(1)(d) of "The Occupational Safety, Health and Working Conditions Code, 2020" notified by Ministry of Law & Justice, GoI vide Gazette Notification dated 29.09.2020 relevant extracts of which are reproduced below: "DUTIES OF EMPLOYER AND EMPLOYEES, ETC. 6.(1) Every employer shall: (a)ensure that workplace is free from hazards which cause or are likely to cause injury or occupational disease to the employees; ... (e)Provide and maintains, as far as is reasonably practicable, a working environment that is safe and without risk to the health of the employees" Some of the major benefits of installation of ClO2 system are as under (a) Avoid possible accidents due to leakage of chlorine while handling (b) Improves safety of personnel and plant & equipment (c) Increases the shelf life of water retaining structures/ equipment such as clarifiers, storage tanks, cooling towers, condenser tubes & piping etc thereby reduces the replacement cost. (d) Helps in complying with statutory direction of some states that have already made it mandatory. Additionally Chlorine dioxide (ClO2) dosing also helps control bacteria, algae, and biofilm in cooling towers and prevents Legionella contamination and improve heat transfer efficiency in Cooling Towers.In view of the above, it is humbly requested that Hon'ble Commission may be pleased to allow the same as a change in law event or compliance of any existing law under Regulation 26(1) (b), under Regulation 26 (1)(d) which permits consideration for need for higher security and safety of the plant as advised or directed by statutory authorities responsible for national or internal security and also under 26(1)(i) as it results in higher operating efficiency in Cooling towers/CW system. Justification documents are placed as **Annexure-C.**	
	Subtotal (B.1)	500	0	500	0	500				
	Liability Discharge eligible for RoE at SBI MCLR									
	Total additional capitalization claimed with RoE at SBI MCLR (B)			-	-	500.00	-			
Total Add. Cap. Claimed (A+B)						8,818.00				

(Petitioner)

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Barh Super Thermal Power Project Stage-I (3x660 MW)
COD	U#1 12.11.2021, U#2 01.08.2023, U#3 31.03.2025 (Anticipated)
For Financial Year	2024-25 (From 31.03.2025 to 31.03.2025)

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Projected)						Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per Ind AS	Ind AS adjustment	Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2			3	4	5= (3-4)	6	7	8	9
A.	Works eligible for RoE at Normal Rate									
	Subtotal (A.1)									
A.2	Liability Discharge eligible for RoE at Normal Rate									
	Total additional capitalization claimed with RoE at Normal Rate (A)					-				
B.	Works eligible for Return on Equity linked to SBI MCLR:									
	Subtotal (B.1)									
	Liability Discharge eligible for RoE at SBI MCLR									
	Total additional capitalization claimed with RoE at SBI MCLR (B)			-	-	-	-			
Total Add. Cap. Claimed (A+B)						-				

(Petitioner)

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Barh Super Thermal Power Project Stage-I (3x660 MW)
COD	U#1 12.11.2021, U#2 01.08.2023, U#3 31.03.2025 (Anticipated)
For Financial Year	2025-26

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Projected)						Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per Ind AS	Ind AS Adjustment	Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC Included in col. 3			
1	2			3	4	5= (3-4)	6	7	8	9
A.	**Works eligble for RoE at Normal Rate**									
1	Steam Generator (SG) Island (Incl. ESP)	2150		2,150.00		2,150.00		24(1)(b)	Original Scope work before cut off date under Regulation 24(1)(b)	
2	Turbine Generator Island	1215		1,215.00		1,215.00				
3	Coal Handling Plant	885		885.00		885.00				
4	CW System	50		50.00		50.00				
5	Ash Handling Package	3800		3,800.00		3,800.00				
6	Fire fighting System	50		50.00		50.00				
7	Cables, Cable facilities & grounding	100		100.00		100.00				
8	Lighting	70		70.00		70.00				
9	Ash disposal area development (Ash Dyke)	5100		5,100.00		5,100.00				
10	Main Plant/Adm. Building	480		480.00		480.00				
11	Tools & Plant	100		100.00		100.00				
12	MBOA Assets	300		300.00		300.00				
13	Comprehensive cyber security as per CEA guidelines of M/s Emersion Supplied system to NTPC BARH Stage-1	797		797.00		797.00		24 (1) (e)	Justification as per S.No. 10 at Form- '9 24-25'.	
	Subtotal (A.1)	**15097.00**	**0.00**	**15097.00**		**15,097.00**				
A.2	**Liability Discharge eligible for RoE at Normal Rate**									
	Total additional capitalization claimed with RoE at Normal Rate (A)					**15,097.00**				
B.	**Works eligble for Return on Equity linked to SBI MCLR:**									
14	ClO2 system at NTPC Barh Stage-I	301.5		301.50		301.50		26 (1) (b) (d) & (i)	Justification as per S.No. 11 at Form- '9 25-26'.	
	Subtotal (B.1)									
	Liability Discharge eligible for RoE at SBI MCLR					0				
	Total additional capitalization claimed with RoE at SBI MCLR (B)	**301.5**	**0**	**301.5**	**0**	**301.5**				
Total Add. Cap. Claimed (A+B)						**15,398.50**				

(Petitioner)

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Barh Super Thermal Power Project Stage-I (3x660 MW)
COD	U#1 12.11.2021, U#2 01.08.2023, U#3 31.03.2025 (Anticipated)
For Financial Year	2026-27

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Projected)						Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per Ind AS	Ind AS Adjustment	Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2			3	4	5= (3-4)	6	7	8	9
A.	**Works eligble for RoE at Normal Rate**									
1	Steam Generator (SG) Island (Incl. ESP)	950		950		950		24(1)(b)	Original Scope work before cut off date under Regulation 24(1)(b)	
2	Turbine Generator Island	650		650		650				
3	Ash Handling Package	2800		2800		2800				
4	Cables, Cable facilities & grounding	40		40		40				
5	Ash disposal area development (Ash Dyke)	3000		3000		3000				
6	MBOA Assets	700		700		700				
7	FGD	95400		95400		95400				
	Subtotal (A.1)	**103540**		**103540**		**103540**				
A.2	**Liabilty Discharge eligible for RoE at Normal Rate**									
	Total additional capitalization claimed with RoE at Normal Rate (A)					**1,03,540.00**				
B.	**Works eligble for Return on Equity linked to SBI MCLR:**									
	Subtotal (B.1)									
	Liabilty Discharge eligible for RoE at SBI MCLR					-				
	Total additional capitalization claimed with RoE at SBI MCLR (B)			-	-	-	-			
Total Add. Cap. Claimed (A+B)						**1,03,540.00**				

(Petitioner)

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Barh Super Thermal Power Project Stage-I (3x660 MW)
COD	U#1 12.11.2021, U#2 01.08.2023, U#3 31.03.2025 (Anticipated)
For Financial Year	2027-28

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Projected)						Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per Ind AS	Ind AS Adjustment	Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2			3	4	5= (3-4)	6	7	8	9
A.	Works eligble for RoE at Normal Rate									
1	Steam Generator (SG) Island (Incl. ESP)	1100		1100		1,100.00		24(1)(b)	Original Scope work before cut off date under Regulation 24(1)(b)	
2	Turbine Generator Island	800		800		800.00				
	Subtotal (A.1)					1,900.00				
A.2	Liability Discharge eligible for RoE at Normal Rate									
	Total additional capitalization claimed with RoE at Normal Rate (A)					1,900.00				
B.	Works eligble for Return on Equity linked to SBI MCLR:									
	Subtotal (B.1)									
	Liability Discharge eligible for RoE at SBI MCLR									
	Total additional capitalization claimed with RoE at SBI MCLR (B)			-	-	-	-			
Total Add. Cap. Claimed (A+B)						1,900.00				

(Petitioner)

PART-I
FORM- 9

Year wise Statement of Additional Capitalisation after COD

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Barh Super Thermal Power Project Stage-I (3x660 MW)
COD	U#1 12.11.2021, U#2 01.08.2023, U#3 31.03.2025 (Anticipated)
For Financial Year	2028-29

Amount in Rs Lakh

Sl. No.	Head of Work /Equipment	ACE Claimed (Actual)						Regulations under which claimed	Justification	Admitted Cost by the Commission, if any
		Accrual basis as per Ind AS	Ind AS Adjustment	Accrual basis as per IGAAP	Un-discharged Liability included in col. 3	Cash basis	IDC included in col. 3			
1	2			3	4	5= (3-4)	6	7	8	9
A.	Works eligble for RoE at Normal Rate									
1	Infrastructure for supply of Treated Sewage water for NTPC Barh	5631.6		5631.6		5,631.60		26 (1) (f)	Agreement has been signed between NTPC Barh and Bihar Urban Infrastructure Development Corporation (BUIDCO) for supply of treated sewage water from sewage treatment plant to NTPC Barh for Non potable application. This includes treatment of raw muncipal sewage through STP of BUIDCO. The secondary treated sewage water at STP outlet shall meet NGT norms.The cost of developing infrastructure for pumping of water i.e. pumping system, Tertiary Treatment Plant, pipe conveying system upto NTPC Barh shall be executed by BUIDCo on deposit works basis and expenditure shall be borne by NTPC. The total expenditure is projected as Rs.93.86 Crore and Rs. 56.31 Cr has been projected in Barh Stage-I based on prorate capacity and balance amount is being claimed in Barh Stage-II. Copy of Agreement enclosed as **Annexure-D.**	
	Total additional capitalization claimed with RoE at Normal Rate (A)	5631.6	0	5631.6	0	5631.6				
B.	Works eligble for Return on Equity linked to SBI MCLR:									
				-		-		26(1)(d)		
				-		-		26(1)(d)		
	Total (B)			-	-	-	-			
Total Add. Cap. Claimed (A+B)						5,631.60				

(Petitioner)

Financing of Additional Capitalisation

PART-I
FORM- 10

Name of the Petitioner	**NTPC Limited**
Name of the Generating Station	**Barh Super Thermal Power Project Stage-I (3x660 MW)**
Date of COD	**U#1 12.11.2021, U#2 01.08.2023, U#3 31.03.2025 (Anticipated)**

Amount in Rs Lakh

Financial Year (Starting from COD)1	Actual						Admitted					
	2024-25 (From 01.04.24 to 30.03.2025)	**2024-25 (From 31.03.25 to 31.03.2025)**	**2025-26**	**2026-27**	**2027-28**	**2028-29**	**2024-25 (From 01.04.24 to 30.03.2025)**	**2024-25 (From 31.03.25 to 31.03.2025)**	**2025-26**	**2026-27**	**2027-28**	**2028-29**
1	2		3	4	5	6	7		8	9	10	11
Amount capitalised in Work/ Equipment												
Financing Details	**SHALL BE PROVIDED AT THE TIME OF TRUE-UP.**											
Loan-1												
Loan-2												
Loan-3 and so on												
Total Loan2												
Equity Internal Resources												
Others (Pl. specify)												
Total												

(Petitioner)

PART-I
FORM- 11

Calculation of Depreciation

Name of the Petitioner: NTPC Limited
Name of the Generating Station: Barh STPP-I

			(Amount in Rs Lakh)			(Amount in Rs Lakh)	
Sl.No.	Name of the Assets1	Gross Block as on COD of Unit-2	Depreciation Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount for each year up to COD of Unit-2	Gross Block as on 31.03.2024	Depreciation Rates as per CERC's Depreciation Rate Schedule	Depreciation Amount 01.04.2024 to 30.03.2025
1	2	3	4	5=Col.2 X Col.3	6	7	8=Col.6 X Col.7
1	Freehold Land	19064.85	0.00%	0	19064.8	0.00%	0
2	Roads, bridges, culverts & helipads	11695.91	3.34%	390.64	11988.9	3.34%	400.43
3	Main plant Building	10719.05	3.34%	358.02	10719.1	3.34%	358.02
4	Other Buildings	33303.97	3.34%	1112.35	35242.7	3.34%	1177.11
5	Temporary erection	11.07	100.00%	11.07	11.1	100.00%	11.07
6	Water supply, drainage & sewerage	8913.91	5.28%	470.65	9073.0	5.28%	479.06
7	Railway siding	135.33	5.28%	7.15	135.3	5.28%	7.15
8	Plant and machinery	1531583.18	5.28%	80867.59	1533664.4	5.28%	80977.48
9	Furniture and fixtures	1663.43	6.33%	105.3	1856.4	6.33%	117.51
10	Vehicles - Owned	0.68	9.50%	0.06	0.7	9.50%	0.06
11	Other Office Equipments	634.05	6.33%	40.14	689.9	6.33%	43.67
12	EDP, WP machines & SATCOM equipment	421.69	15.00%	63.25	739.2	15.00%	110.89
13	Electrical installations	9796.76	5.28%	517.27	9635.0	5.28%	508.73
14	Communication equipment	350.78	6.33%	22.2	566.9	6.33%	35.89
15	Hospital equipment	185.56	5.28%	9.8	187.3	5.28%	9.89
16	Software	0.80	15.00%	0.12	0.8	15.00%	0.12
	TOTAL	**1628481.0**		**83975.61**	**1633575.5**		**84237.08**
	Weighted Average Rate of Depreciation (%)			**5.156683**			**5.156608**

Petitioner

Statement of Depreciation

PART-I
FORM- 12

Name of the Company : NTPC Limited

Name of the Power Station : Barh Super Thermal Power Project Stage-I (3x660 MW)

(Amount in Rs Lakh)

S. No.	Particulars	Existing 2023-24	2024-25 (From 01.04.24 to 30.03.2025)	2024-25 (From 31.03.25 to 31.03.2025)	2025-26	2026-27	2027-28	2028-29
1	2	3	4	5	6	7	8	9
1	Opening Capital Cost	1572518.15	1598393.94	2222938.45	2222938.45	2238336.95	2341876.95	2343776.95
2	Closing Capital Cost	1598393.94	1605312.94	2222938.45	2238336.95	2341876.95	2343776.95	2349408.55
3	Average Capital Cost	1585456.04	1601853.44	2222938.45	2230637.70	2290106.95	2342826.95	2346592.75
1a	Cost of IT Equipments & Software included in (1) above*	-	-		-	-	-	-
2a	Cost of IT Equipments & Software included in (2) above*	-	-		-	-	-	-
3a	Average Cost of IT Equipments & Software*	420.53	420.53	420.53	420.53	420.53	420.53	420.53
4	Freehold land	13,142.04	13,142.04	13,142.04	13,142.04	13,142.04	13,142.04	13,142.04
5	Rate of depreciation	5.1567%	5.1566%	5.1566%	5.1566%	5.1566%	5.1566%	5.1566%
6	Depreciable value	14,15,124.65	14,29,882.31	19,88,858.82	19,95,788.14	20,49,310.47	20,96,758.47	21,00,147.69
7	Balance useful life at the beginning of the period	24.43	23.76	23.76	22.76	21.76	20.76	19.76
8	Remaining depreciable value	13,35,721.39	12,96,089.75	17,72,691.27	17,79,306.55	17,17,803.64	16,47,159.81	15,29,738.64
9	Depreciation (for the period)	54,504.63	82,374.99	314.05	1,15,025.23	1,18,091.83	1,20,810.39	1,21,004.58
10	Depreciation (annualised)	**81,756.95**	**82,601.30**	**1,14,628.21**	**1,15,025.23**	**1,18,091.83**	**1,20,810.39**	**1,21,004.58**
11	Cumulative depreciation at the end of the period	1,33,907.89	2,16,167.54	2,16,481.59	3,31,506.83	4,49,598.66	5,70,409.05	6,91,413.63
12	Less: Cumulative depreciation adjustment on account of un-discharged liabilities deducted as on 01.04.2009	0.00	0.00		0.00	0.00	0.00	0.00
13	Add: Cumulative depreciation adjustment on account of liability Discharge	0.00	0.00		0.00	0.00	0.00	0.00
14	Less: Cumulative depreciation adjustment on account of de-capitalisation	115.34	0.00		0.00	0.00	0.00	0.00
15	Net Cumulative depreciation at the end of the period after adjustments	1,33,792.55	2,16,167.54	2,16,481.59	3,31,506.83	4,49,598.66	5,70,409.05	6,91,413.63
* Shall be provided at the time of true-up		133792.5533	216167.5434	216394.3371	2,99,571.05	3,85,814.35	4,74,776.22	5,63,932.27

PETITONER

Form-13

	Name of the Company :	NTPC LIMITED					
	Name of the Power Station:	Barh Super Thermal Power Station Stage-I (3x660 MW)					
Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
1	AXIS Bank-IV (Repayment from 29.03.2024-10Y) (Refinanced loan from Axis Bank II)						
	Gross Drawl opening	22,000.00	22,000.00	22,000.00	22,000.00	22,000.00	22,000.00
	Cummulative repayment of drawl till prev yr	2,200.00	4,400.00	4,400.00	6,600.00	8,800.00	11,000.00
	Net Loan opening	19,800.00	17,600.00	17,600.00	15,400.00	13,200.00	11,000.00
	Increase decrease due to FERV	-	-	-	-	-	-
	Increase decrease due to ACE	-	-	-	-	-	-
	Total	19,800.00	17,600.00	17,600.00	15,400.00	13,200.00	11,000.00
	Repayment of loan during the year	2,200.00	-	2,200.00	2,200.00	2,200.00	2,200.00
	Net loan closing	17,600.00	17,600.00	15,400.00	13,200.00	11,000.00	8,800.00
	Average net loan	18,700.00	17,600.00	16,500.00	14,300.00	12,100.00	9,900.00
	Rate of Interest on loan	8.1500%	8.1500%	8.1500%	8.1500%	8.1500%	8.1500%
	Interest on loan annualised	1,524.05	1,434.40	1,344.75	1,165.45	986.15	806.85
2	Bank Of India-IV Repayment from 07.12.2024- 9Y						
	Gross Drawl opening	5,982.50	8,416.25	8,416.25	8,416.25	8,416.25	8,416.25
	Cummulative repayment of drawl till prev yr	-	498.54	498.54	1,218.33	1,938.12	2,657.91
	Net Loan opening	5,982.50	7,917.71	7,917.71	7,197.92	6,478.13	5,758.34
	Increase decrease due to FERV	-	-	-	-	-	-
	Increase decrease due to ACE	2,433.75	-	-	-	-	-
	Total	8,416.25	7,917.71	7,917.71	7,197.92	6,478.13	5,758.34
	Repayment of loan during the year	498.54		719.79	719.79	719.79	719.79
	Net loan closing	7,917.71	7,917.71	7,197.92	6,478.13	5,758.34	5,038.55
	Average net loan	6,950.10	7,917.71	7,557.81	6,838.02	6,118.23	5,398.44
	Rate of Interest on loan	6.5993%	6.5993%	5.5410%	5.5410%	5.5410%	5.5409%
	Interest on loan annualised	458.66	436.72	418.78	378.89	339.01	299.13
3	Bank Of India-V-A Repayment from 05.03.2025- 12Y						
	Gross Drawl opening	26,091.00	26,091.00	26,091.00	26,091.00	26,091.00	26,091.00
	Cummulative repayment of drawl till prev yr	-	2,174.25	2,174.25	4,348.50	6,522.75	8,697.00
	Net Loan opening	26,091.00	23,916.75	23,916.75	21,742.50	19,568.25	17,394.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	26,091.00	23,916.75	23,916.75	21,742.50	19,568.25	17,394.00
	Repayment of loan during the year	2,174.25		2,174.25	2,174.25	2,174.25	2,174.25
	Net loan closing	23,916.75	23,916.75	21,742.50	19,568.25	17,394.00	15,219.75
	Average net loan	25,003.88	23,916.75	22,829.63	20,655.38	18,481.13	16,306.88
	Rate of Interest on loan	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%
	Interest on loan annualised	2,000.31	1,913.34	1,826.37	1,652.43	1,478.49	1,304.55
4	HDFC Bank Limited-III						
	Gross Drawl opening	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00	16,500.00
	Cummulative repayment of drawl till prev yr	5,500.00	7,333.33	7,333.33	9,166.67	11,000.00	12,833.33
	Net Loan opening	11,000.00	9,166.67	9,166.67	7,333.33	5,500.00	3,666.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	11,000.00	9,166.67	9,166.67	7,333.33	5,500.00	3,666.67
	Repayment of loan during the year	1,833.33		1,833.33	1,833.33	1,833.33	1,833.33
	Net loan closing	9,166.67	9,166.67	7,333.33	5,500.00	3,666.67	1,833.33
	Average net loan	10,083.33	9,166.67	8,250.00	6,416.67	4,583.33	2,750.00
	Rate of Interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan annualised	801.63	728.75	655.88	510.13	364.38	218.63
5	HDFC Bank Limited-V						
	Gross Drawl opening	28,000.00	26,000.00	26,000.00	26,000.00	26,000.00	26,000.00
	Cummulative repayment of drawl till prev yr	-	2,888.89	2,888.89	5,777.78	8,666.67	11,555.56
	Net Loan opening	28,000.00	23,111.11	23,111.11	20,222.22	17,333.33	14,444.44

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	26,000.00	23,111.11	23,111.11	20,222.22	17,333.33	14,444.44
	Repayment of loan during the year	2,888.89		2,888.89	2,888.89	2,888.89	2,888.89
	Net loan closing	23,111.11	23,111.11	20,222.22	17,333.33	14,444.44	11,555.56
	Average net loan	24,555.56	23,111.11	21,666.67	18,777.78	15,888.89	13,000.00
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan annualised	1,952.17	1,837.33	1,722.50	1,492.83	1,263.17	1,033.50
6	HDFC Bank Ltd. VI						
	Gross Drawl opening	16,200.00	16,200.00	16,200.00	16,200.00	16,200.00	16,200.00
	Cummulative repayment of drawl till prev yr	-	-	-	1,800.00	3,600.00	5,400.00
	Net Loan opening	16,200.00	16,200.00	16,200.00	14,400.00	12,600.00	10,800.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	16,200.00	16,200.00	16,200.00	14,400.00	12,600.00	10,800.00
	Repayment of loan during the year	-		1,800.00	1,800.00	1,800.00	1,800.00
	Net loan closing	16,200.00	16,200.00	14,400.00	12,600.00	10,800.00	9,000.00
	Average net loan	16,200.00	16,200.00	15,300.00	13,500.00	11,700.00	9,900.00
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan annualised	1,287.90	1,287.90	1,216.35	1,073.25	930.15	787.05
7	HDFC Bank Limited-VII						
	Gross Drawl opening	91,800.00	91,800.00	91,800.00	91,800.00	91,800.00	91,800.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	10,200.00	20,400.00
	Net Loan opening	91,800.00	91,800.00	91,800.00	91,800.00	81,600.00	71,400.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	91,800.00	91,800.00	91,800.00	91,800.00	81,600.00	71,400.00
	Repayment of loan during the year	-		-	10,200.00	10,200.00	10,200.00
	Net loan closing	91,800.00	91,800.00	91,800.00	81,600.00	71,400.00	61,200.00
	Average net loan	91,800.00	91,800.00	91,800.00	86,700.00	76,500.00	66,300.00
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan annualised	7,298.10	7,298.10	7,298.10	6,892.65	6,081.75	5,270.85
8	HDFC-IX						
	Gross Drawl opening	86,666.00	86,666.00	86,666.00	86,666.00	86,666.00	86,666.00
	Cummulative repayment of drawl till prev yr	-	7,222.17	7,222.17	14,444.33	21,666.50	28,888.67
	Net Loan opening	86,666.00	79,443.83	79,443.83	72,221.67	64,999.50	57,777.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	86,666.00	79,443.83	79,443.83	72,221.67	64,999.50	57,777.33
	Repayment of loan during the year	7,222.17		7,222.17	7,222.17	7,222.17	7,222.17
	Net loan closing	79,443.83	79,443.83	72,221.67	64,999.50	57,777.33	50,555.17
	Average net loan	83,054.92	79,443.83	75,832.75	68,610.58	61,388.42	54,166.25
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan annualised	6,602.87	6,315.78	6,028.70	5,454.54	4,880.38	4,306.22
9	HDFC-X						
	Gross Drawl opening	8,084.74	8,084.74	8,084.74	8,084.74	8,084.74	8,084.74
	Cummulative repayment of drawl till prev yr	-	-	-	673.73	1,347.46	2,021.18
	Net Loan opening	8,084.74	8,084.74	8,084.74	7,411.01	6,737.28	6,063.55
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	8,084.74	8,084.74	8,084.74	7,411.01	6,737.28	6,063.55
	Repayment of loan during the year	-		673.73	673.73	673.73	673.73
	Net loan closing	8,084.74	8,084.74	7,411.01	6,737.28	6,063.55	5,389.83
	Average net loan	8,084.74	8,084.74	7,747.87	7,074.15	6,400.42	5,726.69
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan annualised	642.74	642.74	615.96	562.39	508.83	455.27
10	HDFC-XI						
	Gross Drawl opening	1,35,914.00	1,35,914.00	1,35,914.00	1,35,914.00	1,35,914.00	1,35,914.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	11,326.17
	Net Loan opening	1,35,914.00	1,35,914.00	1,35,914.00	1,35,914.00	1,35,914.00	1,24,587.83
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,35,914.00	1,35,914.00	1,35,914.00	1,35,914.00	1,35,914.00	1,24,587.83

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Repayment of loan during the year	-		-	-	11,326.17	11,326.17
	Net loan closing	1,35,914.00	1,35,914.00	1,35,914.00	1,35,914.00	1,24,587.83	1,13,261.67
	Average net loan	1,35,914.00	1,35,914.00	1,35,914.00	1,35,914.00	1,30,250.92	1,18,924.75
	Rate of interest on loan	7.8400%	7.8400%	7.8400%	7.8400%	7.8400%	7.8400%
	Interest on loan annualised	10,655.66	10,655.66	10,655.66	10,655.66	10,211.67	9,323.70
11	HDFC-XII						
	Gross Drawl opening	1,15,050.00	1,15,050.00	1,15,050.00	1,15,050.00	1,15,050.00	1,15,050.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	9,587.50
	Net Loan opening	1,15,050.00	1,15,050.00	1,15,050.00	1,15,050.00	1,15,050.00	1,05,462.50
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,15,050.00	1,15,050.00	1,15,050.00	1,15,050.00	1,15,050.00	1,05,462.50
	Repayment of loan during the year	-		-	-	9,587.50	9,587.50
	Net loan closing	1,15,050.00	1,15,050.00	1,15,050.00	1,15,050.00	1,05,462.50	95,875.00
	Average net loan	1,15,050.00	1,15,050.00	1,15,050.00	1,15,050.00	1,10,256.25	1,00,668.75
	Rate of interest on loan	7.6000%	7.6000%	7.6000%	7.6000%	7.6000%	7.6000%
	Interest on loan annualised	8,743.80	8,743.80	8,743.80	8,743.80	8,379.48	7,650.83
12	ICICI-VII						
	Gross Drawl opening	26,608.00	26,608.00	26,608.00	26,608.00	26,608.00	26,608.00
	Cummulative repayment of drawl till prev yr	-	2,217.33	2,217.33	4,434.67	6,652.00	8,869.33
	Net Loan opening	26,608.00	24,390.67	24,390.67	22,173.33	19,956.00	17,738.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	26,608.00	24,390.67	24,390.67	22,173.33	19,956.00	17,738.67
	Repayment of loan during the year	2,217.33		2,217.33	2,217.33	2,217.33	2,217.33
	Net loan closing	24,390.67	24,390.67	22,173.33	19,956.00	17,738.67	15,521.33
	Average net loan	25,499.33	24,390.67	23,282.00	21,064.67	18,847.33	16,630.00
	Rate of interest on loan	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%
	Interest on loan annualised	2,039.95	1,951.25	1,862.56	1,685.17	1,507.79	1,330.40
13	Jammu & Kashmir Bank-IV						
	Gross Drawl opening	21,000.00	21,000.00	21,000.00	21,000.00	21,000.00	21,000.00
	Cummulative repayment of drawl till prev yr	7,000.00	9,333.33	11,666.67	14,000.00	16,333.33	18,666.67
	Net Loan opening	14,000.00	11,666.67	9,333.33	7,000.00	4,666.67	2,333.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	14,000.00	11,666.67	9,333.33	7,000.00	4,666.67	2,333.33
	Repayment of loan during the year	2,333.33	2,333.33	2,333.33	2,333.33	2,333.33	2,333.33
	Net loan closing	11,666.67	9,333.33	7,000.00	4,666.67	2,333.33	-
	Average net loan	12,833.33	10,500.00	8,166.67	5,833.33	3,500.00	1,166.67
	Rate of interest on loan	6.5291%	6.5291%	7.9800%	7.9800%	7.9800%	7.9800%
	Interest on loan annualised	837.90	744.80	651.70	465.50	279.30	93.10
14	Punjab National Bank III						
	Gross Drawl opening	14,000.00	14,000.00	14,000.00	14,000.00	14,000.00	14,000.00
	Cummulative repayment of drawl till prev yr	4,666.67	6,222.22	6,222.22	7,777.78	9,333.33	10,888.89
	Net Loan opening	9,333.33	7,777.78	7,777.78	6,222.22	4,666.67	3,111.11
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	9,333.33	7,777.78	7,777.78	6,222.22	4,666.67	3,111.11
	Repayment of loan during the year	1,555.56		1,555.56	1,555.56	1,555.56	1,555.56
	Net loan closing	7,777.78	7,777.78	6,222.22	4,666.67	3,111.11	1,555.56
	Average net loan	8,555.56	7,777.78	7,000.00	5,444.44	3,888.89	2,333.33
	Rate of interest on loan	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%
	Interest on loan annualised	675.89	614.44	553.00	430.11	307.22	184.33
15	PNB-IV						
	Gross Drawl opening	10,857.00	10,857.00	10,857.00	10,857.00	10,857.00	10,857.00
	Cummulative repayment of drawl till prev yr	2,412.67	3,619.00	3,619.00	4,825.33	6,031.67	7,238.00
	Net Loan opening	8,444.33	7,238.00	7,238.00	6,031.67	4,825.33	3,619.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	8,444.33	7,238.00	7,238.00	6,031.67	4,825.33	3,619.00

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Repayment of loan during the year	1,206.33		1,206.33	1,206.33	1,206.33	1,206.33
	Net loan closing	7,238.00	7,238.00	6,031.67	4,825.33	3,619.00	2,412.67
	Average net loan	7,841.17	7,238.00	6,634.83	5,428.50	4,222.17	3,015.83
	Rate of interest on loan	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%
	Interest on loan annualised	619.45	571.80	524.15	428.85	333.55	238.25
16	PNB-V						
	Gross Drawl opening	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00
	Cummulative repayment of drawl till prev yr	625.00	1,250.00	1,250.00	1,875.00	2,500.00	3,125.00
	Net Loan opening	6,875.00	6,250.00	6,250.00	5,625.00	5,000.00	4,375.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	6,875.00	6,250.00	6,250.00	5,625.00	5,000.00	4,375.00
	Repayment of loan during the year	625.00		625.00	625.00	625.00	625.00
	Net loan closing	6,250.00	6,250.00	5,625.00	5,000.00	4,375.00	3,750.00
	Average net loan	6,562.50	6,250.00	5,937.50	5,312.50	4,687.50	4,062.50
	Rate of interest on loan	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%
	Interest on loan annualised	518.44	493.75	469.06	419.69	370.31	320.94
17	SBB&J II						
	Gross Drawl opening	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00
	Cummulative repayment of drawl till prev yr	5,000.00	6,000.00	6,000.00	7,000.00	8,000.00	9,000.00
	Net Loan opening	5,000.00	4,000.00	4,000.00	3,000.00	2,000.00	1,000.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	5,000.00	4,000.00	4,000.00	3,000.00	2,000.00	1,000.00
	Repayment of loan during the year	1,000.00		1,000.00	1,000.00	1,000.00	1,000.00
	Net loan closing	4,000.00	4,000.00	3,000.00	2,000.00	1,000.00	-
	Average net loan	4,500.00	4,000.00	3,500.00	2,500.00	1,500.00	500.00
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan annualised	369.00	328.00	287.00	205.00	123.00	41.00
18	State Bank Of India VIII						
	Gross Drawl opening	92,800.00	92,800.00	92,800.00	92,800.00	92,800.00	92,800.00
	Cummulative repayment of drawl till prev yr	30,933.33	41,244.44	41,244.44	51,555.56	61,866.67	72,177.78
	Net Loan opening	61,866.67	51,555.56	51,555.56	41,244.44	30,933.33	20,622.22
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	61,866.67	51,555.56	51,555.56	41,244.44	30,933.33	20,622.22
	Repayment of loan during the year	10,311.11		10,311.11	10,311.11	10,311.11	10,311.11
	Net loan closing	51,555.56	51,555.56	41,244.44	30,933.33	20,622.22	10,311.11
	Average net loan	56,711.11	51,555.56	46,400.00	36,088.89	25,777.78	15,466.67
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan annualised	4,650.31	4,227.56	3,804.80	2,959.29	2,113.78	1,268.27
19	State Bank of India - IX						
	Gross Drawl opening	42,788.89	42,788.89	42,788.89	42,788.89	42,788.89	42,788.89
	Cummulative repayment of drawl till prev yr	18,955.53	18,955.53	23,722.20	28,488.86	33,255.53	38,022.19
	Net Loan opening	23,833.36	23,833.36	19,066.69	14,300.03	9,533.36	4,766.70
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	23,833.36	23,833.36	19,066.69	14,300.03	9,533.36	4,766.70
	Repayment of loan during the year	-	4,766.67	4,766.67	4,766.67	4,766.67	4,766.67
	Net loan closing	23,833.36	19,066.69	14,300.03	9,533.36	4,766.70	0.03
	Average net loan	23,833.36	21,450.03	16,683.36	11,916.70	7,150.03	2,383.37
	Rate of interest on loan	7.3800%	7.3800%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan annualised	1,758.90	1,583.47	1,368.04	977.17	586.30	195.44
20	State Bank of India - X						
	Gross Drawl opening	55,397.00	55,397.00	55,397.00	55,397.00	55,397.00	55,397.00
	Cummulative repayment of drawl till prev yr	-	6,155.22	6,155.22	12,310.44	18,465.67	24,620.89
	Net Loan opening	55,397.00	49,241.78	49,241.78	43,086.56	36,931.33	30,776.11
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	55,397.00	49,241.78	49,241.78	43,086.56	36,931.33	30,776.11
	Repayment of loan during the year	6,155.22		6,155.22	6,155.22	6,155.22	6,155.22
	Net loan closing	49,241.78	49,241.78	43,086.56	36,931.33	30,776.11	24,620.89
	Average net loan	52,319.39	49,241.78	46,164.17	40,006.94	33,853.72	27,698.50
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan annualised	4,290.19	4,037.83	3,785.46	3,280.73	2,776.01	2,271.28
21	State Bank of India - XI						

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Gross Drawl opening	40,600.00	40,600.00	40,600.00	40,600.00	40,600.00	40,600.00
	Cummulative repayment of drawl till prev yr	9,022.12	13,533.23	13,533.23	18,044.34	22,555.46	27,066.57
	Net Loan opening	31,577.88	27,066.77	27,066.77	22,555.66	18,044.54	13,533.43
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	31,577.88	27,066.77	27,066.77	22,555.66	18,044.54	13,533.43
	Repayment of loan during the year	4,511.11		4,511.11	4,511.11	4,511.11	4,511.11
	Net loan closing	27,066.77	27,066.77	22,555.66	18,044.54	13,533.43	9,022.32
	Average net loan	29,322.32	27,066.77	24,811.21	20,300.10	15,788.99	11,277.88
	Rate of Interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan annualised	2,404.43	2,219.47	2,034.52	1,664.61	1,294.70	924.79
22	State Bank of India - XII						
	Gross Drawl opening	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	5,555.56	11,111.11	16,666.67
	Net Loan opening	50,000.00	50,000.00	50,000.00	44,444.44	38,888.89	33,333.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	50,000.00	50,000.00	50,000.00	44,444.44	38,888.89	33,333.33
	Repayment of loan during the year	-		5,555.56	5,555.56	5,555.56	5,555.56
	Net loan closing	50,000.00	50,000.00	44,444.44	38,888.89	33,333.33	27,777.78
	Average net loan	50,000.00	50,000.00	47,222.22	41,666.67	36,111.11	30,555.56
	Rate of Interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan annualised	4,100.00	4,100.00	3,872.22	3,416.67	2,961.11	2,505.56
23	Union Bank Of India II						
	Gross Drawl opening	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00
	Cummulative repayment of drawl till prev yr	2,250.00	2,550.00	2,550.00	2,850.00	3,000.00	3,000.00
	Net Loan opening	750.00	450.00	450.00	150.00	-	-
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	750.00	450.00	450.00	150.00	-	-
	Repayment of loan during the year	300.00		300.00	150.00	-	-
	Net loan closing	450.00	450.00	150.00	-	-	-
	Average net loan	600.00	450.00	300.00	75.00	-	-
	Rate of Interest on loan	8.1000%	8.1000%	8.1000%	8.1000%	8.1000%	8.1000%
	Interest on loan annualised	48.60	36.45	24.30	6.08	-	-
24	UCO Bank IV						
	Gross Drawl opening	40,010.00	40,010.00	40,010.00	40,010.00	40,010.00	40,010.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	3,334.17	6,668.33
	Net Loan opening	40,010.00	40,010.00	40,010.00	40,010.00	36,675.83	33,341.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	40,010.00	40,010.00	40,010.00	40,010.00	36,675.83	33,341.67
	Repayment of loan during the year	-		-	3,334.17	3,334.17	3,334.17
	Net loan closing	40,010.00	40,010.00	40,010.00	36,675.83	33,341.67	30,007.50
	Average net loan	40,010.00	40,010.00	40,010.00	38,342.92	35,008.75	31,674.58
	Rate of Interest on loan	7.7000%	7.7000%	7.7000%	7.7000%	7.7000%	7.7000%
	Interest on loan annualised	3,080.77	3,080.77	3,080.77	2,952.40	2,695.67	2,438.94
25	Bond Series -32(25-3-2016)						
	Gross Drawl opening	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00
	Cummulative repayment of drawl till prev yr	1,500.03	1,666.70	1,666.70	1,833.36	2,000.03	2,166.70
	Net Loan opening	999.97	833.30	833.30	666.64	499.97	333.30
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	999.97	833.30	833.30	666.64	499.97	333.30
	Repayment of loan during the year	166.67		166.67	166.67	166.67	166.67
	Net loan closing	833.30	833.30	666.64	499.97	333.30	166.64
	Average net loan	916.64	833.30	749.97	583.30	416.64	249.97
	Rate of Interest on loan	8.8793%	8.8793%	8.8793%	8.8793%	8.8793%	8.8793%
	Interest on loan annualised	81.39	73.99	66.59	51.79	36.99	22.20
26	Bond Series -34(10-6-2016)						
	Gross Drawl opening	5,300.00	5,300.00	5,300.00	5,300.00	5,300.00	5,300.00
	Cummulative repayment of drawl till prev yr	2,826.64	3,179.97	3,179.97	3,533.30	3,886.64	4,239.97

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Net Loan opening	2,473.36	2,120.03	2,120.03	1,766.70	1,413.36	1,060.03
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	2,473.36	2,120.03	2,120.03	1,766.70	1,413.36	1,060.03
	Repayment of loan during the year	353.33		353.33	353.33	353.33	353.33
	Net loan closing	2,120.03	2,120.03	1,766.70	1,413.36	1,060.03	706.70
	Average net loan	2,296.70	2,120.03	1,943.36	1,590.03	1,236.70	883.36
	Rate of interest on loan	8.7400%	8.7400%	8.7400%	8.7400%	8.7400%	8.7400%
	Interest on loan annualised	200.73	185.29	169.85	138.97	108.09	77.21
27	Bond Series -36(15-12-2016)						
	Gross Drawl opening	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00
	Cummulative repayment of drawl till prev yr	1,333.33	1,500.00	1,500.00	1,666.67	1,833.33	2,000.00
	Net Loan opening	1,166.67	1,000.00	1,000.00	833.33	666.67	500.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,166.67	1,000.00	1,000.00	833.33	666.67	500.00
	Repayment of loan during the year	166.67		166.67	166.67	166.67	166.67
	Net loan closing	1,000.00	1,000.00	833.33	666.67	500.00	333.33
	Average net loan	1,083.33	1,000.00	916.67	750.00	583.33	416.67
	Rate of interest on loan	8.8386%	8.8386%	8.8386%	8.8386%	8.8386%	8.8386%
	Interest on loan annualised	95.75	88.39	81.02	66.29	51.56	36.83
28	Bond Series -38(22-3-2017)						
	Gross Drawl opening	700.00	700.00	700.00	700.00	700.00	700.00
	Cummulative repayment of drawl till prev yr	373.33	420.00	420.00	466.67	513.33	560.00
	Net Loan opening	326.67	280.00	280.00	233.33	186.67	140.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	326.67	280.00	280.00	233.33	186.67	140.00
	Repayment of loan during the year	46.67		46.67	46.67	46.67	46.67
	Net loan closing	280.00	280.00	233.33	186.67	140.00	93.33
	Average net loan	303.33	280.00	256.67	210.00	163.33	116.67
	Rate of interest on loan	9.2000%	9.2000%	9.2000%	9.2000%	9.2000%	9.2000%
	Interest on loan annualised	27.91	25.76	23.61	19.32	15.03	10.73
29	Bond Series -39(5-6-2017)						
	Gross Drawl opening	1,200.00	1,200.00	1,200.00	1,200.00	1,200.00	1,200.00
	Cummulative repayment of drawl till prev yr	560.00	640.00	640.00	720.00	800.00	880.00
	Net Loan opening	640.00	560.00	560.00	480.00	400.00	320.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	640.00	560.00	560.00	480.00	400.00	320.00
	Repayment of loan during the year	80.00		80.00	80.00	80.00	80.00
	Net loan closing	560.00	560.00	480.00	400.00	320.00	240.00
	Average net loan	600.00	560.00	520.00	440.00	360.00	280.00
	Rate of interest on loan	9.4196%	9.4196%	9.4196%	9.4196%	9.4196%	9.4196%
	Interest on loan annualised	56.52	52.75	48.98	41.45	33.91	26.37
30	Bond Series -41(23-12-2017)						
	Gross Drawl opening	4,500.00	4,500.00	4,500.00	4,500.00	4,500.00	4,500.00
	Cummulative repayment of drawl till prev yr	2,100.00	2,400.00	2,400.00	2,700.00	3,000.00	3,300.00
	Net Loan opening	2,400.00	2,100.00	2,100.00	1,800.00	1,500.00	1,200.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	2,400.00	2,100.00	2,100.00	1,800.00	1,500.00	1,200.00
	Repayment of loan during the year	300.00		300.00	300.00	300.00	300.00
	Net loan closing	2,100.00	2,100.00	1,800.00	1,500.00	1,200.00	900.00
	Average net loan	2,250.00	2,100.00	1,950.00	1,650.00	1,350.00	1,050.00
	Rate of interest on loan	9.7013%	9.7013%	9.7013%	9.7013%	9.7013%	9.7013%
	Interest on loan annualised	218.28	203.73	189.18	160.07	130.97	101.86
31	Bond Series -42(25-1-2023)						
	Gross Drawl opening	8,400.00	8,400.00	8,400.00	8,400.00	8,400.00	8,400.00
	Cummulative repayment of drawl till prev yr	3,360.00	5,040.00	5,040.00	6,720.00	8,400.00	8,400.00
	Net Loan opening	5,040.00	3,360.00	3,360.00	1,680.00	-	-
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	5,040.00	3,360.00	3,360.00	1,680.00	-	-
	Repayment of loan during the year	1,680.00		1,680.00	1,680.00	-	-
	Net loan closing	3,360.00	3,360.00	1,680.00	-	-	-

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Average net loan	4,200.00	3,360.00	2,520.00	840.00	-	-
	Rate of interest on loan	9.0300%	9.0300%	9.0300%	9.0300%	9.0300%	9.0300%
	Interest on loan annualised	379.26	303.41	227.56	75.85	-	-
32	Bond Series -44(4-5-2023)						
	Gross Drawl opening	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00
	Cummulative repayment of drawl till prev yr	600.00	1,200.00	1,200.00	1,800.00	2,400.00	3,000.00
	Net Loan opening	2,400.00	1,800.00	1,800.00	1,200.00	600.00	-
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	2,400.00	1,800.00	1,800.00	1,200.00	600.00	-
	Repayment of loan during the year	600.00		600.00	600.00	600.00	-
	Net loan closing	1,800.00	1,800.00	1,200.00	600.00	-	-
	Average net loan	2,100.00	1,800.00	1,500.00	900.00	300.00	-
	Rate of interest on loan	9.2800%	9.2800%	9.2800%	9.2800%	9.2800%	9.2800%
	Interest on loan annualised	194.88	167.04	139.20	83.52	27.84	-
33	Bond Series -46(20-7-2018)						
	Gross Drawl opening	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00
	Cummulative repayment of drawl till prev yr	3,000.00	3,500.00	3,500.00	4,000.00	4,500.00	5,000.00
	Net Loan opening	4,500.00	4,000.00	4,000.00	3,500.00	3,000.00	2,500.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	4,500.00	4,000.00	4,000.00	3,500.00	3,000.00	2,500.00
	Repayment of loan during the year	500.00		500.00	500.00	500.00	500.00
	Net loan closing	4,000.00	4,000.00	3,500.00	3,000.00	2,500.00	2,000.00
	Average net loan	4,250.00	4,000.00	3,750.00	3,250.00	2,750.00	2,250.00
	Rate of interest on loan	9.3773%	9.3773%	9.3773%	9.3773%	9.3773%	9.3773%
	Interest on loan annualised	398.54	375.09	351.65	304.76	257.86	210.99
34	Bond Series -50-2A(16-12-2028)						
	Gross Drawl opening	4,670.42	4,670.42	4,670.42	4,670.42	4,670.42	4,670.42
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	-
	Net Loan opening	4,670.42	4,670.42	4,670.42	4,670.42	4,670.42	4,670.42
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	4,670.42	4,670.42	4,670.42	4,670.42	4,670.42	4,670.42
	Repayment of loan during the year	-		-	-	-	4,670.42
	Net loan closing	4,670.42	4,670.42	4,670.42	4,670.42	4,670.42	-
	Average net loan	4,670.42	4,670.42	4,670.42	4,670.42	4,670.42	2,335.21
	Rate of interest on loan	8.5100%	8.5100%	8.5100%	8.5100%	8.5100%	8.5100%
	Interest on loan annualised	397.45	397.45	397.45	397.45	397.45	198.73
35	Bond Series -50-3A(16-12-2033)						
	Gross Drawl opening	5,830.46	5,830.46	5,830.46	5,830.46	5,830.46	5,830.46
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	-
	Net Loan opening	5,830.46	5,830.46	5,830.46	5,830.46	5,830.46	5,830.46
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	5,830.46	5,830.46	5,830.46	5,830.46	5,830.46	5,830.46
	Repayment of loan during the year	-		-	-	-	-
	Net loan closing	5,830.46	5,830.46	5,830.46	5,830.46	5,830.46	5,830.46
	Average net loan	5,830.46	5,830.46	5,830.46	5,830.46	5,830.46	5,830.46
	Rate of interest on loan	8.6900%	8.6900%	8.6900%	8.6900%	8.6900%	8.6900%
	Interest on loan annualised	506.67	506.67	506.67	506.67	506.67	506.67
36	Bond Series -50-2B(16-12-2028)						
	Gross Drawl opening	1,707.74	1,707.74	1,707.74	1,707.74	1,707.74	1,707.74
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	-
	Net Loan opening	1,707.74	1,707.74	1,707.74	1,707.74	1,707.74	1,707.74
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,707.74	1,707.74	1,707.74	1,707.74	1,707.74	1,707.74
	Repayment of loan during the year	-		-	-	-	1,707.74
	Net loan closing	1,707.74	1,707.74	1,707.74	1,707.74	1,707.74	-
	Average net loan	1,707.74	1,707.74	1,707.74	1,707.74	1,707.74	853.87
	Rate of interest on loan	8.7600%	8.7600%	8.7600%	8.7600%	8.7600%	8.7600%
	Interest on loan annualised	149.60	149.60	149.60	149.60	149.60	74.80
37	Bond Series -50-3B(16-12-2033)						

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Gross Drawl opening	7,473.69	7,473.69	7,473.69	7,473.69	7,473.69	7,473.69
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	-
	Net Loan opening	7,473.69	7,473.69	7,473.69	7,473.69	7,473.69	7,473.69
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	7,473.69	7,473.69	7,473.69	7,473.69	7,473.69	7,473.69
	Repayment of loan during the year	-	-	-	-	-	-
	Net loan closing	7,473.69	7,473.69	7,473.69	7,473.69	7,473.69	7,473.69
	Average net loan	7,473.69	7,473.69	7,473.69	7,473.69	7,473.69	7,473.69
	Rate of interest on loan	8.9400%	8.9400%	8.9400%	8.9400%	8.9400%	8.9400%
	Interest on loan annualised	668.15	668.15	668.15	668.15	668.15	668.15
38	Bond Series -51-B(4-3-2029)						
	Gross Drawl opening	4,700.00	4,700.00	4,700.00	4,700.00	4,700.00	4,700.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	-
	Net Loan opening	4,700.00	4,700.00	4,700.00	4,700.00	4,700.00	4,700.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	4,700.00	4,700.00	4,700.00	4,700.00	4,700.00	4,700.00
	Repayment of loan during the year	-		-	-	-	4,700.00
	Net loan closing	4,700.00	4,700.00	4,700.00	4,700.00	4,700.00	-
	Average net loan	4,700.00	4,700.00	4,700.00	4,700.00	4,700.00	2,350.00
	Rate of interest on loan	8.6600%	8.6600%	8.6600%	8.6600%	8.6600%	8.6600%
	Interest on loan annualised	407.02	407.02	407.02	407.02	407.02	203.51
39	Bond Series -51-C(4-3-2034)						
	Gross Drawl opening	2,300.00	2,300.00	2,300.00	2,300.00	2,300.00	2,300.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	-
	Net Loan opening	2,300.00	2,300.00	2,300.00	2,300.00	2,300.00	2,300.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	2,300.00	2,300.00	2,300.00	2,300.00	2,300.00	2,300.00
	Repayment of loan during the year	-	-	-	-	-	-
	Net loan closing	2,300.00	2,300.00	2,300.00	2,300.00	2,300.00	2,300.00
	Average net loan	2,300.00	2,300.00	2,300.00	2,300.00	2,300.00	2,300.00
	Rate of interest on loan	8.6400%	8.6400%	8.6400%	8.6400%	8.6400%	8.6400%
	Interest on loan annualised	198.72	198.72	198.72	198.72	198.72	198.72
40	Bond Series -53(22-8-2024)						
	Gross Drawl opening	19,000.00	19,000.00	19,000.00	19,000.00	19,000.00	19,000.00
	Cummulative repayment of drawl till prev yr	-	19,000.00	19,000.00	19,000.00	19,000.00	19,000.00
	Net Loan opening	19,000.00	-	-	-	-	-
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	19,000.00	-	-	-	-	-
	Repayment of loan during the year	19,000.00		-	-	-	-
	Net loan closing	-	-	-	-	-	-
	Average net loan	9,500.00	-	-	-	-	-
	Rate of interest on loan	9.2000%	9.2000%	9.2000%	9.2000%	9.2000%	9.2000%
	Interest on loan annualised	874.00	-	-	-	-	-
41	Bond Series -54(25-3-2023)						
	Gross Drawl opening	78,183.05	78,183.05	78,183.05	78,183.05	78,183.05	78,183.05
	Cummulative repayment of drawl till prev yr	46,909.83	78,183.05	78,183.05	78,183.05	78,183.05	78,183.05
	Net Loan opening	31,273.22	-	-	-	-	-
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	31,273.22	-	-	-	-	-
	Repayment of loan during the year	31,273.22		-	-	-	-
	Net loan closing	-	-	-	-	-	-
	Average net loan	15,636.61	-	-	-	-	-
	Rate of interest on loan	8.5200%	8.5200%	8.5200%	8.5200%	8.5200%	8.5200%
	Interest on loan annualised	1,332.24	-	-	-	-	-
42	Bond Series -57(15-12-2025)						
	Gross Drawl opening	8,900.00	8,900.00	8,900.00	8,900.00	8,900.00	8,900.00
	Cummulative repayment of drawl till prev yr	-	-	-	8,900.00	8,900.00	8,900.00
	Net Loan opening	8,900.00	8,900.00	8,900.00	-	-	-
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	8,900.00	8,900.00	8,900.00	-	-	-

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Repayment of loan during the year	-		8,900.00	-	-	-
	Net loan closing	8,900.00	8,900.00	-	-	-	-
	Average net loan	8,900.00	8,900.00	4,450.00	-	-	-
	Rate of interest on loan	8.2200%	8.2200%	8.2200%	8.2200%	8.2200%	8.2200%
	Interest on loan annualised	731.58	731.58	365.79	-	-	-
43	Bond Series -60(5-6-2026)						
	Gross Drawl opening	14,800.00	14,800.00	14,800.00	14,800.00	14,800.00	14,800.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	14,800.00	14,800.00
	Net Loan opening	14,800.00	14,800.00	14,800.00	14,800.00	-	-
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	14,800.00	14,800.00	14,800.00	14,800.00	-	-
	Repayment of loan during the year	-		-	14,800.00	-	-
	Net loan closing	14,800.00	14,800.00	14,800.00	-	-	-
	Average net loan	14,800.00	14,800.00	14,800.00	7,400.00	-	-
	Rate of interest on loan	8.0800%	8.0800%	8.0800%	8.0800%	8.0800%	8.0800%
	Interest on loan annualised	1,195.84	1,195.84	1,195.84	597.92	-	-
44	Bond Series -61(27-5-2021)						
	Gross Drawl opening	8,850.00	8,850.00	8,850.00	8,850.00	8,850.00	8,850.00
	Cummulative repayment of drawl till prev yr	2,950.00	2,950.00	2,950.00	2,950.00	5,900.00	5,900.00
	Net Loan opening	5,900.00	5,900.00	5,900.00	5,900.00	2,950.00	2,950.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	5,900.00	5,900.00	5,900.00	5,900.00	2,950.00	2,950.00
	Repayment of loan during the year	-		-	2,950.00	-	-
	Net loan closing	5,900.00	5,900.00	5,900.00	2,950.00	2,950.00	2,950.00
	Average net loan	5,900.00	5,900.00	5,900.00	4,425.00	2,950.00	2,950.00
	Rate of interest on loan	8.1300%	8.1300%	8.1300%	8.1300%	8.1300%	8.1300%
	Interest on loan annualised	479.67	479.67	479.67	359.75	239.84	239.84
45	Bond Series -62(23-8-2026)						
	Gross Drawl opening	6,400.00	6,400.00	6,400.00	6,400.00	6,400.00	6,400.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	6,400.00	6,400.00
	Net Loan opening	6,400.00	6,400.00	6,400.00	6,400.00	-	-
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	6,400.00	6,400.00	6,400.00	6,400.00	-	-
	Repayment of loan during the year	-		-	6,400.00	-	-
	Net loan closing	6,400.00	6,400.00	6,400.00	-	-	-
	Average net loan	6,400.00	6,400.00	6,400.00	3,200.00	-	-
	Rate of interest on loan	7.6100%	7.6100%	7.6100%	7.6100%	7.6100%	7.6100%
	Interest on loan annualised	487.04	487.04	487.04	243.52	-	-
46	Bond Series -64(7-11-2031)						
	Gross Drawl opening	9,300.00	9,300.00	9,300.00	9,300.00	9,300.00	9,300.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	-
	Net Loan opening	9,300.00	9,300.00	9,300.00	9,300.00	9,300.00	9,300.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	9,300.00	9,300.00	9,300.00	9,300.00	9,300.00	9,300.00
	Repayment of loan during the year	-		-	-	-	-
	Net loan closing	9,300.00	9,300.00	9,300.00	9,300.00	9,300.00	9,300.00
	Average net loan	9,300.00	9,300.00	9,300.00	9,300.00	9,300.00	9,300.00
	Rate of interest on loan	7.5200%	7.5200%	7.5200%	7.5200%	7.5200%	7.5200%
	Interest on loan annualised	699.36	699.36	699.36	699.36	699.36	699.36
47	Bond Series -66(14-12-2031)						
	Gross Drawl opening	46,300.00	46,300.00	46,300.00	46,300.00	46,300.00	46,300.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	-
	Net Loan opening	46,300.00	46,300.00	46,300.00	46,300.00	46,300.00	46,300.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	46,300.00	46,300.00	46,300.00	46,300.00	46,300.00	46,300.00
	Repayment of loan during the year	-		-	-	-	-
	Net loan closing	46,300.00	46,300.00	46,300.00	46,300.00	46,300.00	46,300.00
	Average net loan	46,300.00	46,300.00	46,300.00	46,300.00	46,300.00	46,300.00
	Rate of interest on loan	7.4000%	7.4000%	7.4000%	7.4000%	7.4000%	7.4000%
	Interest on loan annualised	3,426.20	3,426.20	3,426.20	3,426.20	3,426.20	3,426.20

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
48	Bond Series -67(15-1-2029)						
	Gross Drawl opening	65,957.14	65,957.14	65,957.14	65,957.14	65,957.14	65,957.14
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	-
	Net Loan opening	65,957.14	65,957.14	65,957.14	65,957.14	65,957.14	65,957.14
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	65,957.14	65,957.14	65,957.14	65,957.14	65,957.14	65,957.14
	Repayment of loan during the year	-		-	-	-	65,957.14
	Net loan closing	65,957.14	65,957.14	65,957.14	65,957.14	65,957.14	-
	Average net loan	65,957.14	65,957.14	65,957.14	65,957.14	65,957.14	32,978.57
	Rate of interest on loan	8.3300%	8.3300%	8.3300%	8.3300%	8.3300%	8.3300%
	Interest on loan annualised	5,494.23	5,494.23	5,494.23	5,494.23	5,494.23	2,747.11
49	Bond Series -69(17-7-2025)						
	Gross Drawl opening	84,200.00	84,200.00	84,200.00	84,200.00	84,200.00	84,200.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	-
	Net Loan opening	84,200.00	84,200.00	84,200.00	84,200.00	84,200.00	84,200.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	84,200.00	84,200.00	84,200.00	84,200.00	84,200.00	84,200.00
	Repayment of loan during the year	-		-	-	-	-
	Net loan closing	84,200.00	84,200.00	84,200.00	84,200.00	84,200.00	84,200.00
	Average net loan	84,200.00	84,200.00	84,200.00	84,200.00	84,200.00	84,200.00
	Rate of interest on loan	7.3500%	7.3500%	7.3500%	7.3500%	7.3500%	7.3500%
	Interest on loan annualised	6,188.70	6,188.70	6,188.70	6,188.70	6,188.70	6,188.70
50	Bond Series -72(15-10-2025)						
	Gross Drawl opening	3,866.67	3,866.67	3,866.67	3,866.67	3,866.67	3,866.67
	Cummulative repayment of drawl till prev yr	-	-	-	3,866.67	3,866.67	3,866.67
	Net Loan opening	3,866.67	3,866.67	3,866.67	-	-	-
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	3,866.67	3,866.67	3,866.67	-	-	-
	Repayment of loan during the year	-		3,866.67	-	-	-
	Net loan closing	3,866.67	3,866.67	-	-	-	-
	Average net loan	3,866.67	3,866.67	1,933.34	-	-	-
	Rate of interest on loan	5.4800%	5.4800%	5.4800%	5.4800%	5.4800%	5.4800%
	Interest on loan annualised	211.89	211.89	105.95	-	-	-
51	Bond Series -73(27-1-2031)						
	Gross Drawl opening	51,100.00	51,100.00	51,100.00	51,100.00	51,100.00	51,100.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	-
	Net Loan opening	51,100.00	51,100.00	51,100.00	51,100.00	51,100.00	51,100.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	51,100.00	51,100.00	51,100.00	51,100.00	51,100.00	51,100.00
	Repayment of loan during the year	-		-	-	-	-
	Net loan closing	51,100.00	51,100.00	51,100.00	51,100.00	51,100.00	51,100.00
	Average net loan	51,100.00	51,100.00	51,100.00	51,100.00	51,100.00	51,100.00
	Rate of interest on loan	6.4600%	6.4600%	6.4600%	6.4600%	6.4600%	6.4600%
	Interest on loan annualised	3,301.06	3,301.06	3,301.06	3,301.06	3,301.06	3,301.06
52	Bond Series -74(21-4-2036)						
	Gross Drawl opening	32,900.00	32,900.00	32,900.00	32,900.00	32,900.00	32,900.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	-
	Net Loan opening	32,900.00	32,900.00	32,900.00	32,900.00	32,900.00	32,900.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	32,900.00	32,900.00	32,900.00	32,900.00	32,900.00	32,900.00
	Repayment of loan during the year	-		-	-	-	-
	Net loan closing	32,900.00	32,900.00	32,900.00	32,900.00	32,900.00	32,900.00
	Average net loan	32,900.00	32,900.00	32,900.00	32,900.00	32,900.00	32,900.00
	Rate of interest on loan	6.9000%	6.9000%	6.9000%	6.9000%	6.9000%	6.9000%
	Interest on loan annualised	2,270.10	2,270.10	2,270.10	2,270.10	2,270.10	2,270.10
53	Bond Series-75 (13/09/2031)						
	Gross Drawl opening	42,800.00	42,800.00	42,800.00	42,800.00	42,800.00	42,800.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	-
	Net Loan opening	42,800.00	42,800.00	42,800.00	42,800.00	42,800.00	42,800.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Total	42,800.00	42,800.00	42,800.00	42,800.00	42,800.00	42,800.00
	Repayment of loan during the year	-		-	-	-	-
	Net loan closing	42,800.00	42,800.00	42,800.00	42,800.00	42,800.00	42,800.00
	Average net loan	42,800.00	42,800.00	42,800.00	42,800.00	42,800.00	42,800.00
	Rate of Interest on loan	6.7200%	6.7200%	6.7200%	6.7200%	6.7200%	6.7200%
	Interest on loan annualised	2,876.16	2,876.16	2,876.16	2,876.16	2,876.16	2,876.16
54	Bond Series-76 (14/04/2032)						
	Gross Drawl opening	11,050.00	11,050.00	11,050.00	11,050.00	11,050.00	11,050.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	-
	Net Loan opening	11,050.00	11,050.00	11,050.00	11,050.00	11,050.00	11,050.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	11,050.00	11,050.00	11,050.00	11,050.00	11,050.00	11,050.00
	Repayment of loan during the year	-		-	-	-	-
	Net loan closing	11,050.00	11,050.00	11,050.00	11,050.00	11,050.00	11,050.00
	Average net loan	11,050.00	11,050.00	11,050.00	11,050.00	11,050.00	11,050.00
	Rate of Interest on loan	6.7700%	6.7700%	6.7700%	6.7700%	6.7700%	6.7700%
	Interest on loan annualised	748.09	748.09	748.09	748.09	748.09	748.09
55	Bond Series-78 (25.08.2032)						
	Gross Drawl opening	4,511.00	4,511.00	4,511.00	4,511.00	4,511.00	4,511.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	-
	Net Loan opening	4,511.00	4,511.00	4,511.00	4,511.00	4,511.00	4,511.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	4,511.00	4,511.00	4,511.00	4,511.00	4,511.00	4,511.00
	Repayment of loan during the year	-		-	-	-	-
	Net loan closing	4,511.00	4,511.00	4,511.00	4,511.00	4,511.00	4,511.00
	Average net loan	4,511.00	4,511.00	4,511.00	4,511.00	4,511.00	4,511.00
	Rate of Interest on loan	7.4700%	7.4700%	7.4700%	7.4700%	7.4700%	7.4700%
	Interest on loan annualised	336.97	336.97	336.97	336.97	336.97	336.97
56	Bond Series-79 (15/04/2033)						
	Gross Drawl opening	3,051.00	3,051.00	3,051.00	3,051.00	3,051.00	3,051.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	-
	Net Loan opening	3,051.00	3,051.00	3,051.00	3,051.00	3,051.00	3,051.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	3,051.00	3,051.00	3,051.00	3,051.00	3,051.00	3,051.00
	Repayment of loan during the year	-		-	-	-	-
	Net loan closing	3,051.00	3,051.00	3,051.00	3,051.00	3,051.00	3,051.00
	Average net loan	3,051.00	3,051.00	3,051.00	3,051.00	3,051.00	3,051.00
	Rate of Interest on loan	7.4700%	7.4700%	7.4700%	7.4700%	7.4700%	7.4700%
	Interest on loan annualised	227.91	227.91	227.91	227.91	227.91	227.91
57	JBIC BARH						
	Gross Drawl opening	2,68,903.16	2,68,903.16	2,68,903.16	2,68,903.16	2,68,903.16	2,68,903.16
	Cummulative repayment of drawl till prev yr	2,23,341.82	2,41,566.36	2,41,566.36	2,59,790.89	2,68,903.16	2,68,903.16
	Net Loan opening	45,561.34	27,336.80	27,336.80	9,112.27	-	-
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	45,561.34	27,336.80	27,336.80	9,112.27	-	-
	Repayment of loan during the year	18,224.54		18,224.54	9,112.27	-	-
	Net loan closing	27,336.80	27,336.80	9,112.27	-	-	-
	Average net loan	36,449.07	27,336.80	18,224.54	4,556.13	-	-
	Rate of Interest on loan	5.8941%	5.8941%	5.8941%	5.8941%	5.8941%	5.8941%
	Interest on loan annualised	2,148.33	1,611.25	1,074.16	268.54	-	-
58	4.25% Fixed Rate Notes due 2026						
	Gross Drawl opening	27,208.99	27,208.99	27,208.99	27,208.99	27,208.99	27,208.99
	Cummulative repayment of drawl till prev yr	-	-	-	-	27,208.99	27,208.99
	Net Loan opening	27,208.99	27,208.99	27,208.99	27,208.99	-	-
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	27,208.99	27,208.99	27,208.99	27,208.99	-	-
	Repayment of loan during the year	-		-	27,208.99	-	-
	Net loan closing	27,208.99	27,208.99	27,208.99	-	-	-
	Average net loan	27,208.99	27,208.99	27,208.99	13,604.50	-	-
	Rate of Interest on loan	4.4955%	4.4955%	4.4955%	4.4955%	4.4955%	4.4955%

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Interest on loan annualised	1,223.18	1,223.18	1,223.18	611.59	-	-
59	JBIC Green Untied Loan Drawal I						
	Gross Drawl opening	1,686.85	1,686.85	1,686.85	1,686.85	1,686.85	1,686.85
	Cummulative repayment of drawl till prev yr	135.92	270.87	270.87	405.82	540.76	675.71
	Net Loan opening	1,550.93	1,415.98	1,415.98	1,281.03	1,146.08	1,011.13
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,550.93	1,415.98	1,415.98	1,281.03	1,146.08	1,011.13
	Repayment of loan during the year	134.95		134.95	134.95	134.95	134.95
	Net loan closing	1,415.98	1,415.98	1,281.03	1,146.08	1,011.13	876.19
	Average net loan	1,483.45	1,415.98	1,348.50	1,213.56	1,078.61	943.66
	Rate of interest on loan	1.0901%	1.0901%	1.0901%	1.0901%	1.0901%	1.0901%
	Interest on loan annualised	16.17	15.44	14.70	13.23	11.76	10.29
60	JBIC Green Untied Loan Drawal II						
	Gross Drawl opening	1,062.39	1,062.39	1,062.39	1,062.39	1,062.39	1,062.39
	Cummulative repayment of drawl till prev yr	85.60	170.59	170.59	255.58	340.57	425.56
	Net Loan opening	976.79	891.80	891.80	806.81	721.82	636.83
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	976.79	891.80	891.80	806.81	721.82	636.83
	Repayment of loan during the year	84.99		84.99	84.99	84.99	84.99
	Net loan closing	891.80	891.80	806.81	721.82	636.83	551.83
	Average net loan	934.29	891.80	849.30	764.31	679.32	594.33
	Rate of interest on loan	1.0901%	1.0901%	1.0901%	1.0901%	1.0901%	1.0901%
	Interest on loan annualised	10.18	9.72	9.26	8.33	7.41	6.48
61	JBIC Green Untied Loan Drawal III						
	Gross Drawl opening	535.86	535.86	535.86	535.86	535.86	535.86
	Cummulative repayment of drawl till prev yr	43.18	86.05	86.05	128.92	171.79	214.66
	Net Loan opening	492.68	449.81	449.81	406.94	364.06	321.21
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	492.68	449.81	449.81	406.94	364.06	321.21
	Repayment of loan during the year	42.87		42.87	42.87	42.87	42.87
	Net loan closing	449.81	449.81	406.94	364.06	321.21	278.34
	Average net loan	471.25	449.81	428.38	385.51	342.64	299.77
	Rate of interest on loan	1.0901%	1.0901%	1.0901%	1.0901%	1.0901%	1.0901%
	Interest on loan annualised	5.14	4.90	4.67	4.20	3.74	3.27
62	JBIC Green Untied Loan Drawal IV						
	Gross Drawl opening	1,367.71	1,367.71	1,367.71	1,367.71	1,367.71	1,367.71
	Cummulative repayment of drawl till prev yr	110.20	219.62	219.62	329.03	438.45	547.87
	Net Loan opening	1,257.51	1,148.09	1,148.09	1,038.68	929.26	819.84
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,257.51	1,148.09	1,148.09	1,038.68	929.26	819.84
	Repayment of loan during the year	109.42		109.42	109.42	109.42	109.42
	Net loan closing	1,148.09	1,148.09	1,038.68	929.26	819.84	710.43
	Average net loan	1,202.80	1,148.09	1,093.39	983.97	874.55	765.13
	Rate of interest on loan	1.0901%	1.0901%	1.0901%	1.0901%	1.0901%	1.0901%
	Interest on loan annualised	13.11	12.52	11.92	10.73	9.53	8.34
63	USD 750 Million I Drawl I						
	Gross Drawl opening	5,897.00	5,897.00	5,897.00	5,897.00	5,897.00	5,897.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	842.43	1,684.86
	Net Loan opening	5,897.00	5,897.00	5,897.00	5,897.00	5,054.57	4,212.14
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	5,897.00	5,897.00	5,897.00	5,897.00	5,054.57	4,212.14
	Repayment of loan during the year	-		-	842.43	842.43	842.43
	Net loan closing	5,897.00	5,897.00	5,897.00	5,054.57	4,212.14	3,369.71
	Average net loan	5,897.00	5,897.00	5,897.00	5,475.79	4,633.36	3,790.93
	Rate of interest on loan	6.7698%	6.7698%	6.7698%	6.7698%	6.7698%	6.7698%
	Interest on loan annualised	399.22	399.22	399.22	370.70	313.67	256.64
64	USD 750 Million I Drawl II						
	Gross Drawl opening	18,760.81	18,760.81	18,760.81	18,760.81	18,760.81	18,760.81
	Cummulative repayment of drawl till prev yr	-	-	-	-	2,680.12	5,360.23
	Net Loan opening	18,760.81	18,760.81	18,760.81	18,760.81	16,080.69	13,400.58
	Increase decrease due to FERV						
	Increase decrease due to ACE						

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Total	18,760.81	18,760.81	18,760.81	18,760.81	16,080.69	13,400.56
	Repayment of loan during the year	-		-	2,680.12	2,680.12	2,680.12
	Net loan closing	18,760.81	18,760.81	18,760.81	16,080.69	13,400.56	10,720.46
	Average net loan	18,760.81	18,760.81	18,760.81	17,420.75	14,740.63	12,060.52
	Rate of interest on loan	6.7698%	6.7698%	6.7698%	6.7698%	6.7698%	6.7698%
	Interest on loan annualised	1,270.07	1,270.07	1,270.07	1,179.35	997.91	816.47
65	USD 750 Million I Drawl III						
	Gross Drawl opening	24,824.06	24,824.06	24,824.06	24,824.06	24,824.06	24,824.06
	Cummulative repayment of drawl till prev yr	-	-	-	-	3,546.29	7,092.59
	Net Loan opening	24,824.06	24,824.06	24,824.06	24,824.06	21,277.76	17,731.47
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	24,824.06	24,824.06	24,824.06	24,824.06	21,277.76	17,731.47
	Repayment of loan during the year	-		-	3,546.29	3,546.29	3,546.29
	Net loan closing	24,824.06	24,824.06	24,824.06	21,277.76	17,731.47	14,185.17
	Average net loan	24,824.06	24,824.06	24,824.06	23,050.91	19,504.61	15,958.32
	Rate of interest on loan	7.4798%	7.4798%	7.4798%	7.4798%	7.4798%	7.4798%
	Interest on loan annualised	1,856.79	1,856.79	1,856.79	1,724.16	1,458.91	1,193.65
66	USD 750 Million I Drawl IV						
	Gross Drawl opening	13,030.97	13,030.97	13,030.97	13,030.97	13,030.97	13,030.97
	Cummulative repayment of drawl till prev yr	-	-	-	-	1,861.57	3,723.13
	Net Loan opening	13,030.97	13,030.97	13,030.97	13,030.97	11,169.40	9,307.84
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	13,030.97	13,030.97	13,030.97	13,030.97	11,169.40	9,307.84
	Repayment of loan during the year	-		-	1,861.57	1,861.57	1,861.57
	Net loan closing	13,030.97	13,030.97	13,030.97	11,169.40	9,307.84	7,446.27
	Average net loan	13,030.97	13,030.97	13,030.97	12,100.19	10,238.62	8,377.05
	Rate of interest on loan	6.7698%	6.7698%	6.7698%	6.7698%	6.7698%	6.7698%
	Interest on loan annualised	882.17	882.17	882.17	819.16	693.13	567.11
67	USD 750 Million I Drawl V						
	Gross Drawl opening	5,516.36	5,516.36	5,516.36	5,516.36	5,516.36	5,516.36
	Cummulative repayment of drawl till prev yr	-	-	-	-	788.05	1,576.10
	Net Loan opening	5,516.36	5,516.36	5,516.36	5,516.36	4,728.30	3,940.25
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	5,516.36	5,516.36	5,516.36	5,516.36	4,728.30	3,940.25
	Repayment of loan during the year	-		-	788.05	788.05	788.05
	Net loan closing	5,516.36	5,516.36	5,516.36	4,728.30	3,940.25	3,152.20
	Average net loan	5,516.36	5,516.36	5,516.36	5,122.33	4,334.28	3,546.23
	Rate of interest on loan	6.7698%	6.7698%	6.7698%	6.7698%	6.7698%	6.7698%
	Interest on loan annualised	373.45	373.45	373.45	346.77	293.42	240.07
68	USD 750 Million I Drawl VI						
	Gross Drawl opening	2,138.44	2,138.44	2,138.44	2,138.44	2,138.44	2,138.44
	Cummulative repayment of drawl till prev yr	-	-	-	-	305.49	610.98
	Net Loan opening	2,138.44	2,138.44	2,138.44	2,138.44	1,832.94	1,527.45
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	2,138.44	2,138.44	2,138.44	2,138.44	1,832.94	1,527.45
	Repayment of loan during the year	-		-	305.49	305.49	305.49
	Net loan closing	2,138.44	2,138.44	2,138.44	1,832.94	1,527.45	1,221.96
	Average net loan	2,138.44	2,138.44	2,138.44	1,985.69	1,680.20	1,374.71
	Rate of interest on loan	6.7698%	6.7698%	6.7698%	6.7698%	6.7698%	6.7698%
	Interest on loan annualised	144.77	144.77	144.77	134.43	113.75	93.07
69	JPY Equ. $400 Million Drawl I						
	Gross Drawl opening	4,380.85	4,380.85	4,380.85	4,380.85	4,380.85	4,380.85
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	625.84
	Net Loan opening	4,380.85	4,380.85	4,380.85	4,380.85	4,380.85	3,755.01
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	4,380.85	4,380.85	4,380.85	4,380.85	4,380.85	3,755.01
	Repayment of loan during the year	-		-	-	625.84	625.84
	Net loan closing	4,380.85	4,380.85	4,380.85	4,380.85	3,755.01	3,129.18
	Average net loan	4,380.85	4,380.85	4,380.85	4,380.85	4,067.93	3,442.10
	Rate of interest on loan	1.2155%	1.2155%	1.2155%	1.2155%	1.2155%	1.2155%
	Interest on loan annualised	53.25	53.25	53.25	53.25	49.45	41.84
70	JPY Equ. $400 Million Drawl II						

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Gross Drawi opening	8,524.18	8,524.18	8,524.18	8,524.18	8,524.18	8,524.18
	Cummulative repayment of drawi till prev yr	-	-	-	-	-	1,217.74
	Net Loan opening	8,524.18	8,524.18	8,524.18	8,524.18	8,524.18	7,306.44
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	8,524.18	8,524.18	8,524.18	8,524.18	8,524.18	7,306.44
	Repayment of loan during the year	-		-	-	1,217.74	1,217.74
	Net loan closing	8,524.18	8,524.18	8,524.18	8,524.18	7,306.44	6,088.70
	Average net loan	8,524.18	8,524.18	8,524.18	8,524.18	7,915.31	6,697.57
	Rate of interest on loan	1.2155%	1.2155%	1.2155%	1.2155%	1.2155%	1.2155%
	Interest on loan annualised	103.61	103.61	103.61	103.61	96.21	81.41
71	JPY Equ. $400 Million Drawi III						
	Gross Drawi opening	1,055.27	1,055.27	1,055.27	1,055.27	1,055.27	1,055.27
	Cummulative repayment of drawi till prev yr	-	-	-	-	-	150.75
	Net Loan opening	1,055.27	1,055.27	1,055.27	1,055.27	1,055.27	904.52
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,055.27	1,055.27	1,055.27	1,055.27	1,055.27	904.52
	Repayment of loan during the year	-		-	-	150.75	150.75
	Net loan closing	1,055.27	1,055.27	1,055.27	1,055.27	904.52	753.76
	Average net loan	1,055.27	1,055.27	1,055.27	1,055.27	979.89	829.14
	Rate of interest on loan	1.2155%	1.2155%	1.2155%	1.2155%	1.2155%	1.2155%
	Interest on loan annualised	12.83	12.83	12.83	12.83	11.91	10.08
72	JPY Equ. $400 Million Drawi IV						
	Gross Drawi opening	7,321.31	7,321.31	7,321.31	7,321.31	7,321.31	7,321.31
	Cummulative repayment of drawi till prev yr	-	-	-	-	-	1,045.90
	Net Loan opening	7,321.31	7,321.31	7,321.31	7,321.31	7,321.31	6,275.41
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	7,321.31	7,321.31	7,321.31	7,321.31	7,321.31	6,275.41
	Repayment of loan during the year	-		-	-	1,045.90	1,045.90
	Net loan closing	7,321.31	7,321.31	7,321.31	7,321.31	6,275.41	5,229.51
	Average net loan	7,321.31	7,321.31	7,321.31	7,321.31	6,798.36	5,752.46
	Rate of interest on loan	1.2222%	1.2222%	1.2222%	1.2222%	1.2222%	1.2222%
	Interest on loan annualised	89.48	89.48	89.48	89.48	83.09	70.31
	Total Loan-Cumulative						
	Gross Drawi opening	19,10,514	19,12,948	19,12,948	19,12,948	19,12,948	19,12,948
	Cummulative repayment of drawi till prev yr	3,77,795	4,97,591	5,04,691	5,99,997	7,48,191	8,58,038
	Net Loan opening	15,32,719	14,15,358	14,08,258	13,12,951	11,64,757	10,54,910
	Increase decrease due to FERV	-	-	-	-	-	-
	Increase decrease due to ACE	2,434	-	-	-	-	-
	Total	15,35,153	14,15,358	14,08,258	13,12,951	11,64,757	10,54,910
	Repayment of loan during the year	1,19,795	7,100	95,306	1,48,194	1,09,847	1,88,282
	Net loan closing	14,15,358	14,08,258	13,12,951	11,64,757	10,54,910	8,66,628
	Average net loan	14,74,036	14,11,808	13,60,604	12,38,854	11,09,834	9,61,769
	Rate of interest on loan(%) (Annualised)	**7.5185%**	**7.4944%**	**7.5111%**	**7.5282%**	**7.5430%**	**7.4531%**
	Interest on loan annualised	1,10,825	1,05,807	1,02,196	93,263	83,715	72,066
	AXIS Bank-II						
	Gross Drawi opening						
	Cummulative repayment of drawi till prev yr						
	Net Loan opening						
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total						
	Repayment of loan during the year						
	Net loan closing						
	Average net loan						
	Rate of interest on loan						
	Interest on loan						
	AXIS Bank-II						
	Gross Drawi opening						
	Cummulative repayment of drawi till prev yr						
	Net Loan opening						
	Increase decrease due to FERV						
	Increase decrease due to ACE						

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Total						
	Repayment of loan during the year						
	Net loan closing						
	Average net loan						
	Rate of interest on loan						
	Interest on loan						
	AXIS Bank-II						
	Gross Drawi opening						
	Cummulative repayment of drawi till prev yr						
	Net Loan opening						
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total						
	Repayment of loan during the year						
	Net loan closing						
	Average net loan						
	Rate of interest on loan						
	Interest on loan						
	AXIS Bank-IV						
	Gross Drawi opening	22,000.00	22,000.00	22,000.00	22,000.00	22,000.00	22,000.00
	Cummulative repayment of drawi till prev yr	2,200.00	4,400.00	4,400.00	6,600.00	8,800.00	11,000.00
	Net Loan opening	19,800.00	17,600.00	17,600.00	15,400.00	13,200.00	11,000.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	19,800.00	17,600.00	17,600.00	15,400.00	13,200.00	11,000.00
	Repayment of loan during the year	2,200.00		2,200.00	2,200.00	2,200.00	2,200.00
	Net loan closing	17,600.00	17,600.00	15,400.00	13,200.00	11,000.00	8,800.00
	Average net loan	18,700.00	17,600.00	16,500.00	14,300.00	12,100.00	9,900.00
	Rate of interest on loan	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%
	Interest on loan	1,496.00	1,408.00	1,320.00	1,144.00	968.00	792.00
	Bank of Maharashtra V						
	Gross Drawi opening						
	Cummulative repayment of drawi till prev yr						
	Net Loan opening						
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total						
	Repayment of loan during the year						
	Net loan closing						
	Average net loan						
	Rate of interest on loan						
	Interest on loan						
	Bank of Maharashtra V						
	Gross Drawi opening						
	Cummulative repayment of drawi till prev yr						
	Net Loan opening						
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total						
	Repayment of loan during the year						
	Net loan closing						
	Average net loan						
	Rate of interest on loan						
	Interest on loan						
	Bank Of India-IV						
	Gross Drawi opening	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
	Cummulative repayment of drawi till prev yr	-	166.67	166.67	333.33	500.00	666.67
	Net Loan opening	2,000.00	1,833.33	1,833.33	1,666.67	1,500.00	1,333.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	2,000.00	1,833.33	1,833.33	1,666.67	1,500.00	1,333.33
	Repayment of loan during the year	166.67		166.67	166.67	166.67	166.67
	Net loan closing	1,833.33	1,833.33	1,666.67	1,500.00	1,333.33	1,166.67
	Average net loan	1,916.67	1,833.33	1,750.00	1,583.33	1,416.67	1,250.00
	Rate of interest on loan	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%
	Interest on loan	153.33	146.67	140.00	126.67	113.33	100.00

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Bank Of India-IV						
	Gross Drawl opening	1,327.50	1,327.50	1,327.50	1,327.50	1,327.50	1,327.50
	Cummulative repayment of drawl till prev yr	-	110.63	110.63	221.25	331.88	442.50
	Net Loan opening	1,327.50	1,216.88	1,216.88	1,106.25	995.63	885.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,327.50	1,216.88	1,216.88	1,106.25	995.63	885.00
	Repayment of loan during the year	110.63		110.63	110.63	110.63	110.63
	Net loan closing	1,216.88	1,216.88	1,106.25	995.63	885.00	774.38
	Average net loan	1,272.19	1,216.88	1,161.56	1,050.94	940.31	829.69
	Rate of interest on loan	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%
	Interest on loan	101.78	97.35	92.93	84.08	75.23	66.38
	Bank Of India-IV						
	Gross Drawl opening	1,327.50	1,327.50	1,327.50	1,327.50	1,327.50	1,327.50
	Cummulative repayment of drawl till prev yr	-	110.63	110.63	221.25	331.88	442.50
	Net Loan opening	1,327.50	1,216.88	1,216.88	1,106.25	995.63	885.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,327.50	1,216.88	1,216.88	1,106.25	995.63	885.00
	Repayment of loan during the year	110.63		110.63	110.63	110.63	110.63
	Net loan closing	1,216.88	1,216.88	1,106.25	995.63	885.00	774.38
	Average net loan	1,272.19	1,216.88	1,161.56	1,050.94	940.31	829.69
	Rate of interest on loan	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%
	Interest on loan	101.78	97.35	92.93	84.08	75.23	66.38
	Bank Of India-IV						
	Gross Drawl opening	1,327.50	1,327.50	1,327.50	1,327.50	1,327.50	1,327.50
	Cummulative repayment of drawl till prev yr	-	110.63	110.63	221.25	331.88	442.50
	Net Loan opening	1,327.50	1,216.88	1,216.88	1,106.25	995.63	885.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,327.50	1,216.88	1,216.88	1,106.25	995.63	885.00
	Repayment of loan during the year	110.63		110.63	110.63	110.63	110.63
	Net loan closing	1,216.88	1,216.88	1,106.25	995.63	885.00	774.38
	Average net loan	1,272.19	1,216.88	1,161.56	1,050.94	940.31	829.69
	Rate of interest on loan	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%
	Interest on loan	101.78	97.35	92.93	84.08	75.23	66.38
	Bank of India-V-A						
	Gross Drawl opening	2,355.00	2,355.00	2,355.00	2,355.00	2,355.00	2,355.00
	Cummulative repayment of drawl till prev yr	-	196.25	196.25	392.50	588.75	785.00
	Net Loan opening	2,355.00	2,158.75	2,158.75	1,962.50	1,766.25	1,570.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	2,355.00	2,158.75	2,158.75	1,962.50	1,766.25	1,570.00
	Repayment of loan during the year	196.25		196.25	196.25	196.25	196.25
	Net loan closing	2,158.75	2,158.75	1,962.50	1,766.25	1,570.00	1,373.75
	Average net loan	2,256.88	2,158.75	2,060.63	1,864.38	1,668.13	1,471.88
	Rate of interest on loan	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%
	Interest on loan	180.55	172.70	164.85	149.15	133.45	117.75
	Bank of India-V-A						
	Gross Drawl opening	23,736.00	23,736.00	23,736.00	23,736.00	23,736.00	23,736.00
	Cummulative repayment of drawl till prev yr	-	1,978.00	1,978.00	3,956.00	5,934.00	7,912.00
	Net Loan opening	23,736.00	21,758.00	21,758.00	19,780.00	17,802.00	15,824.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	23,736.00	21,758.00	21,758.00	19,780.00	17,802.00	15,824.00
	Repayment of loan during the year	1,978.00		1,978.00	1,978.00	1,978.00	1,978.00
	Net loan closing	21,758.00	21,758.00	19,780.00	17,802.00	15,824.00	13,846.00
	Average net loan	22,747.00	21,758.00	20,769.00	18,791.00	16,813.00	14,835.00
	Rate of interest on loan	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%
	Interest on loan	1,819.76	1,740.64	1,661.52	1,503.28	1,345.04	1,186.80
	Central Bank Of India III						
	Gross Drawl opening						
	Cummulative repayment of drawl till prev yr						
	Net Loan opening						
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total						
	Repayment of loan during the year						
	Net loan closing						

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Average net loan						
	Rate of Interest on loan						
	Interest on loan						
	Central Bank Of India III						
	Gross Drawl opening						
	Cummulative repayment of drawl till prev yr						
	Net Loan opening						
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total						
	Repayment of loan during the year						
	Net loan closing						
	Average net loan						
	Rate of Interest on loan						
	Interest on loan						
	HDFC Bank Limited-III						
	Gross Drawl opening	12,000.00	12,000.00	12,000.00	12,000.00	12,000.00	12,000.00
	Cummulative repayment of drawl till prev yr	4,000.00	5,333.33	5,333.33	6,666.67	8,000.00	9,333.33
	Net Loan opening	8,000.00	6,666.67	6,666.67	5,333.33	4,000.00	2,666.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	8,000.00	6,666.67	6,666.67	5,333.33	4,000.00	2,666.67
	Repayment of loan during the year	1,333.33		1,333.33	1,333.33	1,333.33	1,333.33
	Net loan closing	6,666.67	6,666.67	5,333.33	4,000.00	2,666.67	1,333.33
	Average net loan	7,333.33	6,666.67	6,000.00	4,666.67	3,333.33	2,000.00
	Rate of Interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	583.00	530.00	477.00	371.00	265.00	159.00
	HDFC Bank Limited-III						
	Gross Drawl opening	4,500.00	4,500.00	4,500.00	4,500.00	4,500.00	4,500.00
	Cummulative repayment of drawl till prev yr	1,500.00	2,000.00	2,000.00	2,500.00	3,000.00	3,500.00
	Net Loan opening	3,000.00	2,500.00	2,500.00	2,000.00	1,500.00	1,000.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	3,000.00	2,500.00	2,500.00	2,000.00	1,500.00	1,000.00
	Repayment of loan during the year	500.00		500.00	500.00	500.00	500.00
	Net loan closing	2,500.00	2,500.00	2,000.00	1,500.00	1,000.00	500.00
	Average net loan	2,750.00	2,500.00	2,250.00	1,750.00	1,250.00	750.00
	Rate of Interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	218.63	198.75	178.88	139.13	99.38	59.63
	HDFC Bank Limited-V						
	Gross Drawl opening	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00
	Cummulative repayment of drawl till prev yr	-	111.11	111.11	222.22	333.33	444.44
	Net Loan opening	1,000.00	888.89	888.89	777.78	666.67	555.56
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,000.00	888.89	888.89	777.78	666.67	555.56
	Repayment of loan during the year	111.11		111.11	111.11	111.11	111.11
	Net loan closing	888.89	888.89	777.78	666.67	555.56	444.44
	Average net loan	944.44	888.89	833.33	722.22	611.11	500.00
	Rate of Interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	75.08	70.67	66.25	57.42	48.58	39.75
	HDFC Bank Limited-V						
	Gross Drawl opening	9,000.00	9,000.00	9,000.00	9,000.00	9,000.00	9,000.00
	Cummulative repayment of drawl till prev yr	-	1,000.00	1,000.00	2,000.00	3,000.00	4,000.00
	Net Loan opening	9,000.00	8,000.00	8,000.00	7,000.00	6,000.00	5,000.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	9,000.00	8,000.00	8,000.00	7,000.00	6,000.00	5,000.00
	Repayment of loan during the year	1,000.00		1,000.00	1,000.00	1,000.00	1,000.00
	Net loan closing	8,000.00	8,000.00	7,000.00	6,000.00	5,000.00	4,000.00
	Average net loan	8,500.00	8,000.00	7,500.00	6,500.00	5,500.00	4,500.00
	Rate of Interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	675.75	636.00	596.25	516.75	437.25	357.75
	HDFC Bank Limited-V						
	Gross Drawl opening	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00
	Cummulative repayment of drawl till prev yr	-	1,111.11	1,111.11	2,222.22	3,333.33	4,444.44
	Net Loan opening	10,000.00	8,888.89	8,888.89	7,777.78	6,666.67	5,555.56

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	10,000.00	8,888.89	8,888.89	7,777.78	6,666.67	5,555.56
	Repayment of loan during the year	1,111.11		1,111.11	1,111.11	1,111.11	1,111.11
	Net loan closing	8,888.89	8,888.89	7,777.78	6,666.67	5,555.56	4,444.44
	Average net loan	9,444.44	8,888.89	8,333.33	7,222.22	6,111.11	5,000.00
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	750.83	706.67	662.50	574.17	485.83	397.50
	HDFC Bank Limited-V						
	Gross Drawl opening	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00
	Cummulative repayment of drawl till prev yr	-	666.67	666.67	1,333.33	2,000.00	2,666.67
	Net Loan opening	6,000.00	5,333.33	5,333.33	4,666.67	4,000.00	3,333.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	6,000.00	5,333.33	5,333.33	4,666.67	4,000.00	3,333.33
	Repayment of loan during the year	666.67		666.67	666.67	666.67	666.67
	Net loan closing	5,333.33	5,333.33	4,666.67	4,000.00	3,333.33	2,666.67
	Average net loan	5,666.67	5,333.33	5,000.00	4,333.33	3,666.67	3,000.00
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	450.50	424.00	397.50	344.50	291.50	238.50
	HDFC Bank Ltd. VI						
	Gross Drawl opening	5,500.00	5,500.00	5,500.00	5,500.00	5,500.00	5,500.00
	Cummulative repayment of drawl till prev yr	-	-	-	611.11	1,222.22	1,833.33
	Net Loan opening	5,500.00	5,500.00	5,500.00	4,888.89	4,277.78	3,666.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	5,500.00	5,500.00	5,500.00	4,888.89	4,277.78	3,666.67
	Repayment of loan during the year	-		611.11	611.11	611.11	611.11
	Net loan closing	5,500.00	5,500.00	4,888.89	4,277.78	3,666.67	3,055.56
	Average net loan	5,500.00	5,500.00	5,194.44	4,583.33	3,972.22	3,361.11
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	437.25	437.25	412.96	364.38	315.79	267.21
	HDFC Bank Ltd. VI						
	Gross Drawl opening	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	888.89	1,777.78	2,666.67
	Net Loan opening	8,000.00	8,000.00	8,000.00	7,111.11	6,222.22	5,333.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	8,000.00	8,000.00	8,000.00	7,111.11	6,222.22	5,333.33
	Repayment of loan during the year	-		888.89	888.89	888.89	888.89
	Net loan closing	8,000.00	8,000.00	7,111.11	6,222.22	5,333.33	4,444.44
	Average net loan	8,000.00	8,000.00	7,555.56	6,666.67	5,777.78	4,888.89
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	636.00	636.00	600.67	530.00	459.33	388.67
	HDFC Bank Ltd. VI						
	Gross Drawl opening	2,700.00	2,700.00	2,700.00	2,700.00	2,700.00	2,700.00
	Cummulative repayment of drawl till prev yr	-	-	-	300.00	600.00	900.00
	Net Loan opening	2,700.00	2,700.00	2,700.00	2,400.00	2,100.00	1,800.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	2,700.00	2,700.00	2,700.00	2,400.00	2,100.00	1,800.00
	Repayment of loan during the year	-		300.00	300.00	300.00	300.00
	Net loan closing	2,700.00	2,700.00	2,400.00	2,100.00	1,800.00	1,500.00
	Average net loan	2,700.00	2,700.00	2,550.00	2,250.00	1,950.00	1,650.00
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	214.65	214.65	202.73	178.88	155.03	131.18
	HDFC Bank Limited-VII						
	Gross Drawl opening	9,800.00	9,800.00	9,800.00	9,800.00	9,800.00	9,800.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	1,088.89	2,177.78
	Net Loan opening	9,800.00	9,800.00	9,800.00	9,800.00	8,711.11	7,622.22
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	9,800.00	9,800.00	9,800.00	9,800.00	8,711.11	7,622.22
	Repayment of loan during the year	-		-	1,088.89	1,088.89	1,088.89

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Net loan closing	9,800.00	9,800.00	9,800.00	8,711.11	7,622.22	6,533.33
	Average net loan	9,800.00	9,800.00	9,800.00	9,255.56	8,166.67	7,077.78
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	779.10	779.10	779.10	735.82	649.25	562.68
	HDFC Bank Limited-VII						
	Gross Drawl opening	12,000.00	12,000.00	12,000.00	12,000.00	12,000.00	12,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	1,333.33	2,666.67
	Net Loan opening	12,000.00	12,000.00	12,000.00	12,000.00	10,666.67	9,333.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	12,000.00	12,000.00	12,000.00	12,000.00	10,666.67	9,333.33
	Repayment of loan during the year	-		-	1,333.33	1,333.33	1,333.33
	Net loan closing	12,000.00	12,000.00	12,000.00	10,666.67	9,333.33	8,000.00
	Average net loan	12,000.00	12,000.00	12,000.00	11,333.33	10,000.00	8,666.67
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	954.00	954.00	954.00	901.00	795.00	689.00
	HDFC Bank Limited-VII						
	Gross Drawl opening	29,000.00	29,000.00	29,000.00	29,000.00	29,000.00	29,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	3,222.22	6,444.44
	Net Loan opening	29,000.00	29,000.00	29,000.00	29,000.00	25,777.78	22,555.56
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	29,000.00	29,000.00	29,000.00	29,000.00	25,777.78	22,555.56
	Repayment of loan during the year	-		-	3,222.22	3,222.22	3,222.22
	Net loan closing	29,000.00	29,000.00	29,000.00	25,777.78	22,555.56	19,333.33
	Average net loan	29,000.00	29,000.00	29,000.00	27,388.89	24,166.67	20,944.44
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	2,305.50	2,305.50	2,305.50	2,177.42	1,921.25	1,665.08
	HDFC Bank Limited-VII						
	Gross Drawl opening	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	333.33	666.67
	Net Loan opening	3,000.00	3,000.00	3,000.00	3,000.00	2,666.67	2,333.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	3,000.00	3,000.00	3,000.00	3,000.00	2,666.67	2,333.33
	Repayment of loan during the year	-		-	333.33	333.33	333.33
	Net loan closing	3,000.00	3,000.00	3,000.00	2,666.67	2,333.33	2,000.00
	Average net loan	3,000.00	3,000.00	3,000.00	2,833.33	2,500.00	2,166.67
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	238.50	238.50	238.50	225.25	198.75	172.25
	HDFC Bank Limited-VII						
	Gross Drawl opening	33,000.00	33,000.00	33,000.00	33,000.00	33,000.00	33,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	3,666.67	7,333.33
	Net Loan opening	33,000.00	33,000.00	33,000.00	33,000.00	29,333.33	25,666.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	33,000.00	33,000.00	33,000.00	33,000.00	29,333.33	25,666.67
	Repayment of loan during the year	-		-	3,666.67	3,666.67	3,666.67
	Net loan closing	33,000.00	33,000.00	33,000.00	29,333.33	25,666.67	22,000.00
	Average net loan	33,000.00	33,000.00	33,000.00	31,166.67	27,500.00	23,833.33
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	2,623.50	2,623.50	2,623.50	2,477.75	2,186.25	1,894.75
	HDFC Bank Limited-VII						
	Gross Drawl opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	555.56	1,111.11
	Net Loan opening	5,000.00	5,000.00	5,000.00	5,000.00	4,444.44	3,888.89
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	5,000.00	5,000.00	5,000.00	5,000.00	4,444.44	3,888.89
	Repayment of loan during the year	-		-	555.56	555.56	555.56
	Net loan closing	5,000.00	5,000.00	5,000.00	4,444.44	3,888.89	3,333.33
	Average net loan	5,000.00	5,000.00	5,000.00	4,722.22	4,166.67	3,611.11
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	397.50	397.50	397.50	375.42	331.25	287.08

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	HDFC-IX						
	Gross Drawl opening	6,766.00	6,766.00	6,766.00	6,766.00	6,766.00	6,766.00
	Cummulative repayment of drawl till prev yr	-	563.83	563.83	1,127.67	1,691.50	2,255.33
	Net Loan opening	6,766.00	6,202.17	6,202.17	5,638.33	5,074.50	4,510.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	6,766.00	6,202.17	6,202.17	5,638.33	5,074.50	4,510.67
	Repayment of loan during the year	563.83		563.83	563.83	563.83	563.83
	Net loan closing	6,202.17	6,202.17	5,638.33	5,074.50	4,510.67	3,946.83
	Average net loan	6,484.08	6,202.17	5,920.25	5,356.42	4,792.58	4,228.75
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	515.48	493.07	470.66	425.84	381.01	336.19
	HDFC-IX						
	Gross Drawl opening	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
	Cummulative repayment of drawl till prev yr	-	333.33	333.33	666.67	1,000.00	1,333.33
	Net Loan opening	4,000.00	3,666.67	3,666.67	3,333.33	3,000.00	2,666.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	4,000.00	3,666.67	3,666.67	3,333.33	3,000.00	2,666.67
	Repayment of loan during the year	333.33		333.33	333.33	333.33	333.33
	Net loan closing	3,666.67	3,666.67	3,333.33	3,000.00	2,666.67	2,333.33
	Average net loan	3,833.33	3,666.67	3,500.00	3,166.67	2,833.33	2,500.00
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	304.75	291.50	278.25	251.75	225.25	198.75
	HDFC-IX						
	Gross Drawl opening	7,000.00	7,000.00	7,000.00	7,000.00	7,000.00	7,000.00
	Cummulative repayment of drawl till prev yr	-	583.33	583.33	1,166.67	1,750.00	2,333.33
	Net Loan opening	7,000.00	6,416.67	6,416.67	5,833.33	5,250.00	4,666.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	7,000.00	6,416.67	6,416.67	5,833.33	5,250.00	4,666.67
	Repayment of loan during the year	583.33		583.33	583.33	583.33	583.33
	Net loan closing	6,416.67	6,416.67	5,833.33	5,250.00	4,666.67	4,083.33
	Average net loan	6,708.33	6,416.67	6,125.00	5,541.67	4,958.33	4,375.00
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	533.31	510.13	486.94	440.56	394.19	347.81
	HDFC-IX						
	Gross Drawl opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
	Cummulative repayment of drawl till prev yr	-	416.67	416.67	833.33	1,250.00	1,666.67
	Net Loan opening	5,000.00	4,583.33	4,583.33	4,166.67	3,750.00	3,333.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	5,000.00	4,583.33	4,583.33	4,166.67	3,750.00	3,333.33
	Repayment of loan during the year	416.67		416.67	416.67	416.67	416.67
	Net loan closing	4,583.33	4,583.33	4,166.67	3,750.00	3,333.33	2,916.67
	Average net loan	4,791.67	4,583.33	4,375.00	3,958.33	3,541.67	3,125.00
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	380.94	364.36	347.81	314.69	281.56	248.44
	HDFC-IX						
	Gross Drawl opening	14,000.00	14,000.00	14,000.00	14,000.00	14,000.00	14,000.00
	Cummulative repayment of drawl till prev yr	-	1,166.67	1,166.67	2,333.33	3,500.00	4,666.67
	Net Loan opening	14,000.00	12,833.33	12,833.33	11,666.67	10,500.00	9,333.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	14,000.00	12,833.33	12,833.33	11,666.67	10,500.00	9,333.33
	Repayment of loan during the year	1,166.67		1,166.67	1,166.67	1,166.67	1,166.67
	Net loan closing	12,833.33	12,833.33	11,666.67	10,500.00	9,333.33	8,166.67
	Average net loan	13,416.67	12,833.33	12,250.00	11,083.33	9,916.67	8,750.00
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	1,066.63	1,020.25	973.88	881.13	788.38	695.63
	HDFC-IX						
	Gross Drawl opening	12,500.00	12,500.00	12,500.00	12,500.00	12,500.00	12,500.00
	Cummulative repayment of drawl till prev yr	-	1,041.67	1,041.67	2,083.33	3,125.00	4,166.67
	Net Loan opening	12,500.00	11,458.33	11,458.33	10,416.67	9,375.00	8,333.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	12,500.00	11,458.33	11,458.33	10,416.67	9,375.00	8,333.33

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Repayment of loan during the year	1,041.67		1,041.67	1,041.67	1,041.67	1,041.67
	Net loan closing	11,458.33	11,458.33	10,416.67	9,375.00	8,333.33	7,291.67
	Average net loan	11,979.17	11,458.33	10,937.50	9,895.83	8,854.17	7,812.50
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	952.34	910.94	869.53	786.72	703.91	621.09
	HDFC-IX						
	Gross Drawl opening	17,500.00	17,500.00	17,500.00	17,500.00	17,500.00	17,500.00
	Cummulative repayment of drawl till prev yr	-	1,458.33	1,458.33	2,916.67	4,375.00	5,833.33
	Net Loan opening	17,500.00	16,041.67	16,041.67	14,583.33	13,125.00	11,666.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	17,500.00	16,041.67	16,041.67	14,583.33	13,125.00	11,666.67
	Repayment of loan during the year	1,458.33		1,458.33	1,458.33	1,458.33	1,458.33
	Net loan closing	16,041.67	16,041.67	14,583.33	13,125.00	11,666.67	10,208.33
	Average net loan	16,770.83	16,041.67	15,312.50	13,854.17	12,395.83	10,937.50
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	1,333.28	1,275.31	1,217.34	1,101.41	985.47	869.53
	HDFC-IX						
	Gross Drawl opening	13,000.00	13,000.00	13,000.00	13,000.00	13,000.00	13,000.00
	Cummulative repayment of drawl till prev yr	-	1,083.33	1,083.33	2,166.67	3,250.00	4,333.33
	Net Loan opening	13,000.00	11,916.67	11,916.67	10,833.33	9,750.00	8,666.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	13,000.00	11,916.67	11,916.67	10,833.33	9,750.00	8,666.67
	Repayment of loan during the year	1,083.33		1,083.33	1,083.33	1,083.33	1,083.33
	Net loan closing	11,916.67	11,916.67	10,833.33	9,750.00	8,666.67	7,583.33
	Average net loan	12,458.33	11,916.67	11,375.00	10,291.67	9,208.33	8,125.00
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	990.44	947.36	904.31	818.19	732.06	645.94
	HDFC-IX						
	Gross Drawl opening	6,800.00	6,800.00	6,800.00	6,800.00	6,800.00	6,800.00
	Cummulative repayment of drawl till prev yr	-	566.67	566.67	1,133.33	1,700.00	2,266.67
	Net Loan opening	6,800.00	6,233.33	6,233.33	5,666.67	5,100.00	4,533.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	6,800.00	6,233.33	6,233.33	5,666.67	5,100.00	4,533.33
	Repayment of loan during the year	566.67		566.67	566.67	566.67	566.67
	Net loan closing	6,233.33	6,233.33	5,666.67	5,100.00	4,533.33	3,966.67
	Average net loan	6,516.67	6,233.33	5,950.00	5,383.33	4,816.67	4,250.00
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	518.08	495.55	473.03	427.98	382.93	337.88
	HDFC-IX						
	Gross Drawl opening	100.00	100.00	100.00	100.00	100.00	100.00
	Cummulative repayment of drawl till prev yr	-	8.33	8.33	16.67	25.00	33.33
	Net Loan opening	100.00	91.67	91.67	83.33	75.00	66.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	100.00	91.67	91.67	83.33	75.00	66.67
	Repayment of loan during the year	8.33		8.33	8.33	8.33	8.33
	Net loan closing	91.67	91.67	83.33	75.00	66.67	58.33
	Average net loan	95.83	91.67	87.50	79.17	70.83	62.50
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	7.62	7.29	6.96	6.29	5.63	4.97
	HDFC-X						
	Gross Drawl opening	3,982.50	3,982.50	3,982.50	3,982.50	3,982.50	3,982.50
	Cummulative repayment of drawl till prev yr	-	-	-	331.88	663.75	995.63
	Net Loan opening	3,982.50	3,982.50	3,982.50	3,650.63	3,318.75	2,986.88
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	3,982.50	3,982.50	3,982.50	3,650.63	3,318.75	2,986.88
	Repayment of loan during the year	-		331.88	331.88	331.88	331.88
	Net loan closing	3,982.50	3,982.50	3,650.63	3,318.75	2,986.88	2,655.00
	Average net loan	3,982.50	3,982.50	3,816.56	3,484.69	3,152.81	2,820.94
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	316.61	316.61	303.42	277.03	250.65	224.26
	HDFC-X						
	Gross Drawl opening	1,327.50	1,327.50	1,327.50	1,327.50	1,327.50	1,327.50

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Cummulative repayment of drawl till prev yr	-	-	-	110.63	221.25	331.88
	Net Loan opening	1,327.50	1,327.50	1,327.50	1,216.88	1,106.25	995.63
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,327.50	1,327.50	1,327.50	1,216.88	1,106.25	995.63
	Repayment of loan during the year	-		110.63	110.63	110.63	110.63
	Net loan closing	1,327.50	1,327.50	1,216.88	1,106.25	995.63	885.00
	Average net loan	1,327.50	1,327.50	1,272.19	1,161.56	1,050.94	940.31
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	105.54	105.54	101.14	92.34	83.55	74.75
	HDFC-X						
	Gross Drawl opening	1,327.50	1,327.50	1,327.50	1,327.50	1,327.50	1,327.50
	Cummulative repayment of drawl till prev yr	-	-	-	110.63	221.25	331.88
	Net Loan opening	1,327.50	1,327.50	1,327.50	1,216.88	1,106.25	995.63
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,327.50	1,327.50	1,327.50	1,216.88	1,106.25	995.63
	Repayment of loan during the year	-		110.63	110.63	110.63	110.63
	Net loan closing	1,327.50	1,327.50	1,216.88	1,106.25	995.63	885.00
	Average net loan	1,327.50	1,327.50	1,272.19	1,161.56	1,050.94	940.31
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	105.54	105.54	101.14	92.34	83.55	74.75
	HDFC-X						
	Gross Drawl opening	1,447.24	1,447.24	1,447.24	1,447.24	1,447.24	1,447.24
	Cummulative repayment of drawl till prev yr	-	-	-	120.60	241.21	361.81
	Net Loan opening	1,447.24	1,447.24	1,447.24	1,326.63	1,206.03	1,085.43
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,447.24	1,447.24	1,447.24	1,326.63	1,206.03	1,085.43
	Repayment of loan during the year	-		120.60	120.60	120.60	120.60
	Net loan closing	1,447.24	1,447.24	1,326.63	1,206.03	1,085.43	964.83
	Average net loan	1,447.24	1,447.24	1,386.94	1,266.33	1,145.73	1,025.13
	Rate of interest on loan	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%	7.9500%
	Interest on loan	115.06	115.06	110.26	100.67	91.09	81.50
	HDFC-XI						
	Gross Drawl opening	36,000.00	36,000.00	36,000.00	36,000.00	36,000.00	36,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	3,000.00
	Net Loan opening	36,000.00	36,000.00	36,000.00	36,000.00	36,000.00	33,000.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	36,000.00	36,000.00	36,000.00	36,000.00	36,000.00	33,000.00
	Repayment of loan during the year	-		-	-	3,000.00	3,000.00
	Net loan closing	36,000.00	36,000.00	36,000.00	36,000.00	33,000.00	30,000.00
	Average net loan	36,000.00	36,000.00	36,000.00	36,000.00	34,500.00	31,500.00
	Rate of interest on loan	7.8400%	7.8400%	7.8400%	7.8400%	7.8400%	7.8400%
	Interest on loan	2,822.40	2,822.40	2,822.40	2,822.40	2,704.80	2,469.60
	HDFC-XI						
	Gross Drawl opening	42,500.00	42,500.00	42,500.00	42,500.00	42,500.00	42,500.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	3,541.67
	Net Loan opening	42,500.00	42,500.00	42,500.00	42,500.00	42,500.00	38,958.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	42,500.00	42,500.00	42,500.00	42,500.00	42,500.00	38,958.33
	Repayment of loan during the year	-		-	-	3,541.67	3,541.67
	Net loan closing	42,500.00	42,500.00	42,500.00	42,500.00	38,958.33	35,416.67
	Average net loan	42,500.00	42,500.00	42,500.00	42,500.00	40,729.17	37,187.50
	Rate of interest on loan	7.8400%	7.8400%	7.8400%	7.8400%	7.8400%	7.8400%
	Interest on loan	3,332.00	3,332.00	3,332.00	3,332.00	3,193.17	2,915.50
	HDFC-XI						
	Gross Drawl opening	50,214.00	50,214.00	50,214.00	50,214.00	50,214.00	50,214.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	4,184.50
	Net Loan opening	50,214.00	50,214.00	50,214.00	50,214.00	50,214.00	46,029.50
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	50,214.00	50,214.00	50,214.00	50,214.00	50,214.00	46,029.50
	Repayment of loan during the year	-		-	-	4,184.50	4,184.50
	Net loan closing	50,214.00	50,214.00	50,214.00	50,214.00	46,029.50	41,845.00
	Average net loan	50,214.00	50,214.00	50,214.00	50,214.00	48,121.75	43,937.25

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Rate of interest on loan	7.8400%	7.8400%	7.8400%	7.8400%	7.8400%	7.8400%
	Interest on loan	3,936.78	3,936.78	3,936.78	3,936.78	3,772.75	3,444.66
	HDFC-XI						
	Gross Drawl opening	7,200.00	7,200.00	7,200.00	7,200.00	7,200.00	7,200.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	600.00
	Net Loan opening	7,200.00	7,200.00	7,200.00	7,200.00	7,200.00	6,600.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	7,200.00	7,200.00	7,200.00	7,200.00	7,200.00	6,600.00
	Repayment of loan during the year	-	-	-	-	600.00	600.00
	Net loan closing	7,200.00	7,200.00	7,200.00	7,200.00	6,600.00	6,000.00
	Average net loan	7,200.00	7,200.00	7,200.00	7,200.00	6,900.00	6,300.00
	Rate of interest on loan	7.8400%	7.8400%	7.8400%	7.8400%	7.8400%	7.8400%
	Interest on loan	564.48	564.48	564.48	564.48	540.96	493.92
	HDFC-XII						
	Gross Drawl opening	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	625.00
	Net Loan opening	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	6,875.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	6,875.00
	Repayment of loan during the year	-	-	-	-	625.00	625.00
	Net loan closing	7,500.00	7,500.00	7,500.00	7,500.00	6,875.00	6,250.00
	Average net loan	7,500.00	7,500.00	7,500.00	7,500.00	7,187.50	6,562.50
	Rate of interest on loan	7.6000%	7.6000%	7.6000%	7.6000%	7.6000%	7.6000%
	Interest on loan	570.00	570.00	570.00	570.00	546.25	498.75
	HDFC-XII						
	Gross Drawl opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	416.67
	Net Loan opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	4,583.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	4,583.33
	Repayment of loan during the year	-	-	-	-	416.67	416.67
	Net loan closing	5,000.00	5,000.00	5,000.00	5,000.00	4,583.33	4,166.67
	Average net loan	5,000.00	5,000.00	5,000.00	5,000.00	4,791.67	4,375.00
	Rate of interest on loan	7.6000%	7.6000%	7.6000%	7.6000%	7.6000%	7.6000%
	Interest on loan	380.00	380.00	380.00	380.00	364.17	332.50
	HDFC-XII						
	Gross Drawl opening	21,300.00	21,300.00	21,300.00	21,300.00	21,300.00	21,300.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	1,775.00
	Net Loan opening	21,300.00	21,300.00	21,300.00	21,300.00	21,300.00	19,525.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	21,300.00	21,300.00	21,300.00	21,300.00	21,300.00	19,525.00
	Repayment of loan during the year	-	-	-	-	1,775.00	1,775.00
	Net loan closing	21,300.00	21,300.00	21,300.00	21,300.00	19,525.00	17,750.00
	Average net loan	21,300.00	21,300.00	21,300.00	21,300.00	20,412.50	18,637.50
	Rate of interest on loan	7.6000%	7.6000%	7.6000%	7.6000%	7.6000%	7.6000%
	Interest on loan	1,618.80	1,618.80	1,618.80	1,618.80	1,551.35	1,416.45
	HDFC-XII						
	Gross Drawl opening	24,000.00	24,000.00	24,000.00	24,000.00	24,000.00	24,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	2,000.00
	Net Loan opening	24,000.00	24,000.00	24,000.00	24,000.00	24,000.00	22,000.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	24,000.00	24,000.00	24,000.00	24,000.00	24,000.00	22,000.00
	Repayment of loan during the year	-	-	-	-	2,000.00	2,000.00
	Net loan closing	24,000.00	24,000.00	24,000.00	24,000.00	22,000.00	20,000.00
	Average net loan	24,000.00	24,000.00	24,000.00	24,000.00	23,000.00	21,000.00
	Rate of interest on loan	7.6000%	7.6000%	7.6000%	7.6000%	7.6000%	7.6000%
	Interest on loan	1,824.00	1,824.00	1,824.00	1,824.00	1,748.00	1,596.00
	HDFC-XII						
	Gross Drawl opening	950.00	950.00	950.00	950.00	950.00	950.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	79.17
	Net Loan opening	950.00	950.00	950.00	950.00	950.00	870.83
	Increase decrease due to FERV						

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Increase decrease due to ACE						
	Total	950.00	950.00	950.00	950.00	950.00	870.83
	Repayment of loan during the year	-		-	-	79.17	79.17
	Net loan closing	950.00	950.00	950.00	950.00	870.83	791.67
	Average net loan	950.00	950.00	950.00	950.00	910.42	831.25
	Rate of interest on loan	7.6000%	7.6000%	7.6000%	7.6000%	7.6000%	7.6000%
	Interest on loan	72.20	72.20	72.20	72.20	69.19	63.18
	HDFC-XII						
	Gross Drawl opening	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	333.33
	Net Loan opening	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	3,666.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	3,666.67
	Repayment of loan during the year	-		-	-	333.33	333.33
	Net loan closing	4,000.00	4,000.00	4,000.00	4,000.00	3,666.67	3,333.33
	Average net loan	4,000.00	4,000.00	4,000.00	4,000.00	3,833.33	3,500.00
	Rate of interest on loan	7.6000%	7.6000%	7.6000%	7.6000%	7.6000%	7.6000%
	Interest on loan	304.00	304.00	304.00	304.00	291.33	266.00
	HDFC-XII						
	Gross Drawl opening	52,300.00	52,300.00	52,300.00	52,300.00	52,300.00	52,300.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	-	4,358.33
	Net Loan opening	52,300.00	52,300.00	52,300.00	52,300.00	52,300.00	47,941.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	52,300.00	52,300.00	52,300.00	52,300.00	52,300.00	47,941.67
	Repayment of loan during the year	-		-	-	4,358.33	4,358.33
	Net loan closing	52,300.00	52,300.00	52,300.00	52,300.00	47,941.67	43,583.33
	Average net loan	52,300.00	52,300.00	52,300.00	52,300.00	50,120.83	45,762.50
	Rate of interest on loan	7.6000%	7.6000%	7.6000%	7.6000%	7.6000%	7.6000%
	Interest on loan	3,974.80	3,974.80	3,974.80	3,974.80	3,809.18	3,477.95
	ICICI-IV						
	Gross Drawl opening						
	Cummulative repayment of drawl till prev yr						
	Net Loan opening						
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total						
	Repayment of loan during the year						
	Net loan closing						
	Average net loan						
	Rate of interest on loan						
	Interest on loan						
	ICICI-IV						
	Gross Drawl opening						
	Cummulative repayment of drawl till prev yr						
	Net Loan opening						
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total						
	Repayment of loan during the year						
	Net loan closing						
	Average net loan						
	Rate of interest on loan						
	Interest on loan						
	ICICI-V						
	Gross Drawl opening						
	Cummulative repayment of drawl till prev yr						
	Net Loan opening						
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total						
	Repayment of loan during the year						
	Net loan closing						
	Average net loan						
	Rate of interest on loan						
	Interest on loan						

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	ICICI-V						
	Gross Drawl opening						
	Cummulative repayment of drawl till prev yr						
	Net Loan opening						
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total						
	Repayment of loan during the year						
	Net loan closing						
	Average net loan						
	Rate of interest on loan						
	Interest on loan						
	ICICI-VI						
	Gross Drawl opening						
	Cummulative repayment of drawl till prev yr						
	Net Loan opening						
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total						
	Repayment of loan during the year						
	Net loan closing						
	Average net loan						
	Rate of interest on loan						
	Interest on loan						
	ICICI-VI						
	Gross Drawl opening						
	Cummulative repayment of drawl till prev yr						
	Net Loan opening						
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total						
	Repayment of loan during the year						
	Net loan closing						
	Average net loan						
	Rate of interest on loan						
	Interest on loan						
	ICICI-VI						
	Gross Drawl opening						
	Cummulative repayment of drawl till prev yr						
	Net Loan opening						
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total						
	Repayment of loan during the year						
	Net loan closing						
	Average net loan						
	Rate of interest on loan						
	Interest on loan						
	ICICI-VI						
	Gross Drawl opening						
	Cummulative repayment of drawl till prev yr						
	Net Loan opening						
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total						
	Repayment of loan during the year						
	Net loan closing						
	Average net loan						
	Rate of interest on loan						
	Interest on loan						
	ICICI-VII						
	Gross Drawl opening	9,600.00	9,600.00	9,600.00	9,600.00	9,600.00	9,600.00
	Cummulative repayment of drawl till prev yr	-	800.00	800.00	1,600.00	2,400.00	3,200.00
	Net Loan opening	9,600.00	8,800.00	8,800.00	8,000.00	7,200.00	6,400.00
	Increase decrease due to FERV						

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Increase decrease due to ACE						
	Total	9,600.00	8,800.00	8,800.00	8,000.00	7,200.00	6,400.00
	Repayment of loan during the year	800.00		800.00	800.00	800.00	800.00
	Net loan closing	8,800.00	8,800.00	8,000.00	7,200.00	6,400.00	5,600.00
	Average net loan	9,200.00	8,800.00	8,400.00	7,600.00	6,800.00	6,000.00
	Rate of interest on loan	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%
	Interest on loan	736.00	704.00	672.00	608.00	544.00	480.00
	ICICI-VII						
	Gross Drawl opening	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00
	Cummulative repayment of drawl till prev yr	-	250.00	250.00	500.00	750.00	1,000.00
	Net Loan opening	3,000.00	2,750.00	2,750.00	2,500.00	2,250.00	2,000.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	3,000.00	2,750.00	2,750.00	2,500.00	2,250.00	2,000.00
	Repayment of loan during the year	250.00		250.00	250.00	250.00	250.00
	Net loan closing	2,750.00	2,750.00	2,500.00	2,250.00	2,000.00	1,750.00
	Average net loan	2,875.00	2,750.00	2,625.00	2,375.00	2,125.00	1,875.00
	Rate of interest on loan	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%
	Interest on loan	230.00	220.00	210.00	190.00	170.00	150.00
	ICICI-VII						
	Gross Drawl opening	14,008.00	14,008.00	14,008.00	14,008.00	14,008.00	14,008.00
	Cummulative repayment of drawl till prev yr	-	1,167.33	1,167.33	2,334.67	3,502.00	4,669.33
	Net Loan opening	14,008.00	12,840.67	12,840.67	11,673.33	10,506.00	9,338.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	14,008.00	12,840.67	12,840.67	11,673.33	10,506.00	9,338.67
	Repayment of loan during the year	1,167.33		1,167.33	1,167.33	1,167.33	1,167.33
	Net loan closing	12,840.67	12,840.67	11,673.33	10,506.00	9,338.67	8,171.33
	Average net loan	13,424.33	12,840.67	12,257.00	11,089.67	9,922.33	8,755.00
	Rate of interest on loan	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%	8.0000%
	Interest on loan	1,073.95	1,027.25	980.56	887.17	793.79	700.40
	Jammu & Kashmir Bank-IV						
	Gross Drawl opening	21,000.00	21,000.00	21,000.00	21,000.00	21,000.00	21,000.00
	Cummulative repayment of drawl till prev yr	9,333.33	11,666.67	11,666.67	14,000.00	16,333.33	18,666.67
	Net Loan opening	11,666.67	9,333.33	9,333.33	7,000.00	4,666.67	2,333.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	11,666.67	9,333.33	9,333.33	7,000.00	4,666.67	2,333.33
	Repayment of loan during the year	2,333.33		2,333.33	2,333.33	2,333.33	2,333.33
	Net loan closing	9,333.33	9,333.33	7,000.00	4,666.67	2,333.33	-
	Average net loan	10,500.00	9,333.33	8,166.67	5,833.33	3,500.00	1,166.67
	Rate of interest on loan	7.9800%	7.9800%	7.9800%	7.9800%	7.9800%	7.9800%
	Interest on loan	837.90	744.80	651.70	465.50	279.30	93.10
	Punjab National Bank III						
	Gross Drawl opening	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00
	Cummulative repayment of drawl till prev yr	1,000.00	1,333.33	1,333.33	1,666.67	2,000.00	2,333.33
	Net Loan opening	2,000.00	1,666.67	1,666.67	1,333.33	1,000.00	666.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	2,000.00	1,666.67	1,666.67	1,333.33	1,000.00	666.67
	Repayment of loan during the year	333.33		333.33	333.33	333.33	333.33
	Net loan closing	1,666.67	1,666.67	1,333.33	1,000.00	666.67	333.33
	Average net loan	1,833.33	1,666.67	1,500.00	1,166.67	833.33	500.00
	Rate of interest on loan	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%
	Interest on loan	144.83	131.67	118.50	92.17	65.83	39.50
	Punjab National Bank III						
	Gross Drawl opening	11,000.00	11,000.00	11,000.00	11,000.00	11,000.00	11,000.00
	Cummulative repayment of drawl till prev yr	3,666.67	4,888.89	4,888.89	6,111.11	7,333.33	8,555.56
	Net Loan opening	7,333.33	6,111.11	6,111.11	4,888.89	3,666.67	2,444.44
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	7,333.33	6,111.11	6,111.11	4,888.89	3,666.67	2,444.44
	Repayment of loan during the year	1,222.22		1,222.22	1,222.22	1,222.22	1,222.22
	Net loan closing	6,111.11	6,111.11	4,888.89	3,666.67	2,444.44	1,222.22
	Average net loan	6,722.22	6,111.11	5,500.00	4,277.78	3,055.56	1,833.33

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Rate of Interest on loan	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%
	Interest on loan	531.06	482.78	434.50	337.94	241.39	144.83
	PNB-IV						
	Gross Drawl opening	10,857.00	10,857.00	10,857.00	10,857.00	10,857.00	10,857.00
	Cummulative repayment of drawl till prev yr	2,412.67	3,619.00	3,619.00	4,825.33	6,031.67	7,238.00
	Net Loan opening	8,444.33	7,238.00	7,238.00	6,031.67	4,825.33	3,619.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	8,444.33	7,238.00	7,238.00	6,031.67	4,825.33	3,619.00
	Repayment of loan during the year	1,206.33		1,206.33	1,206.33	1,206.33	1,206.33
	Net loan closing	7,238.00	7,238.00	6,031.67	4,825.33	3,619.00	2,412.67
	Average net loan	7,841.17	7,238.00	6,634.83	5,428.50	4,222.17	3,015.83
	Rate of Interest on loan	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%
	Interest on loan	619.45	571.80	524.15	428.85	333.55	238.25
	PNB-V						
	Gross Drawl opening	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00
	Cummulative repayment of drawl till prev yr	111.11	222.22	222.22	333.33	444.44	555.56
	Net Loan opening	888.89	777.78	777.78	666.67	555.56	444.44
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	888.89	777.78	777.78	666.67	555.56	444.44
	Repayment of loan during the year	111.11		111.11	111.11	111.11	111.11
	Net loan closing	777.78	777.78	666.67	555.56	444.44	333.33
	Average net loan	833.33	777.78	722.22	611.11	500.00	388.89
	Rate of Interest on loan	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%
	Interest on loan	65.83	61.44	57.06	48.28	39.50	30.72
	PNB-V						
	Gross Drawl opening	6,500.00	6,500.00	6,500.00	6,500.00	6,500.00	6,500.00
	Cummulative repayment of drawl till prev yr	-	722.22	722.22	1,444.44	2,166.67	2,888.89
	Net Loan opening	6,500.00	5,777.78	5,777.78	5,055.56	4,333.33	3,611.11
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	6,500.00	5,777.78	5,777.78	5,055.56	4,333.33	3,611.11
	Repayment of loan during the year	722.22		722.22	722.22	722.22	722.22
	Net loan closing	5,777.78	5,777.78	5,055.56	4,333.33	3,611.11	2,888.89
	Average net loan	6,138.89	5,777.78	5,416.67	4,694.44	3,972.22	3,250.00
	Rate of Interest on loan	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%	7.9000%
	Interest on loan	484.97	456.44	427.92	370.86	313.81	256.75
	SBBJ II						
	Gross Drawl opening	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00
	Cummulative repayment of drawl till prev yr	4,000.00	5,000.00	5,000.00	6,000.00	7,000.00	8,000.00
	Net Loan opening	6,000.00	5,000.00	5,000.00	4,000.00	3,000.00	2,000.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	6,000.00	5,000.00	5,000.00	4,000.00	3,000.00	2,000.00
	Repayment of loan during the year	1,000.00		1,000.00	1,000.00	1,000.00	1,000.00
	Net loan closing	5,000.00	5,000.00	4,000.00	3,000.00	2,000.00	1,000.00
	Average net loan	5,500.00	5,000.00	4,500.00	3,500.00	2,500.00	1,500.00
	Rate of Interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	451.00	410.00	369.00	287.00	205.00	123.00
	State Bank Of India VIII						
	Gross Drawl opening	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00
	Cummulative repayment of drawl till prev yr	3,333.33	4,444.44	4,444.44	5,555.56	6,666.67	7,777.78
	Net Loan opening	6,666.67	5,555.56	5,555.56	4,444.44	3,333.33	2,222.22
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	6,666.67	5,555.56	5,555.56	4,444.44	3,333.33	2,222.22
	Repayment of loan during the year	1,111.11		1,111.11	1,111.11	1,111.11	1,111.11
	Net loan closing	5,555.56	5,555.56	4,444.44	3,333.33	2,222.22	1,111.11
	Average net loan	6,111.11	5,555.56	5,000.00	3,888.89	2,777.78	1,666.67
	Rate of Interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	501.11	455.56	410.00	318.89	227.78	136.67
	State Bank Of India VIII						
	Gross Drawl opening	4,500.00	4,500.00	4,500.00	4,500.00	4,500.00	4,500.00
	Cummulative repayment of drawl till prev yr	1,500.00	2,000.00	2,000.00	2,500.00	3,000.00	3,500.00
	Net Loan opening	3,000.00	2,500.00	2,500.00	2,000.00	1,500.00	1,000.00

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	3,000.00	2,500.00	2,500.00	2,000.00	1,500.00	1,000.00
	Repayment of loan during the year	500.00		500.00	500.00	500.00	500.00
	Net loan closing	2,500.00	2,500.00	2,000.00	1,500.00	1,000.00	500.00
	Average net loan	2,750.00	2,500.00	2,250.00	1,750.00	1,250.00	750.00
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	225.50	205.00	184.50	143.50	102.50	61.50
	State Bank Of India VIII						
	Gross Drawl opening	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
	Cummulative repayment of drawl till prev yr	666.67	888.89	888.89	1,111.11	1,333.33	1,555.56
	Net Loan opening	1,333.33	1,111.11	1,111.11	888.89	666.67	444.44
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,333.33	1,111.11	1,111.11	888.89	666.67	444.44
	Repayment of loan during the year	222.22		222.22	222.22	222.22	222.22
	Net loan closing	1,111.11	1,111.11	888.89	666.67	444.44	222.22
	Average net loan	1,222.22	1,111.11	1,000.00	777.78	555.56	333.33
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	100.22	91.11	82.00	63.78	45.56	27.33
	State Bank Of India VIII						
	Gross Drawl opening	1,200.00	1,200.00	1,200.00	1,200.00	1,200.00	1,200.00
	Cummulative repayment of drawl till prev yr	400.00	533.33	533.33	666.67	800.00	933.33
	Net Loan opening	800.00	666.67	666.67	533.33	400.00	266.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	800.00	666.67	666.67	533.33	400.00	266.67
	Repayment of loan during the year	133.33		133.33	133.33	133.33	133.33
	Net loan closing	666.67	666.67	533.33	400.00	266.67	133.33
	Average net loan	733.33	666.67	600.00	466.67	333.33	200.00
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	60.13	54.67	49.20	38.27	27.33	16.40
	State Bank Of India VIII						
	Gross Drawl opening	5,400.00	5,400.00	5,400.00	5,400.00	5,400.00	5,400.00
	Cummulative repayment of drawl till prev yr	1,800.00	2,400.00	2,400.00	3,000.00	3,600.00	4,200.00
	Net Loan opening	3,600.00	3,000.00	3,000.00	2,400.00	1,800.00	1,200.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	3,600.00	3,000.00	3,000.00	2,400.00	1,800.00	1,200.00
	Repayment of loan during the year	600.00		600.00	600.00	600.00	600.00
	Net loan closing	3,000.00	3,000.00	2,400.00	1,800.00	1,200.00	600.00
	Average net loan	3,300.00	3,000.00	2,700.00	2,100.00	1,500.00	900.00
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	270.60	246.00	221.40	172.20	123.00	73.80
	State Bank Of India VIII						
	Gross Drawl opening	3,100.00	3,100.00	3,100.00	3,100.00	3,100.00	3,100.00
	Cummulative repayment of drawl till prev yr	1,033.33	1,377.78	1,377.78	1,722.22	2,066.67	2,411.11
	Net Loan opening	2,066.67	1,722.22	1,722.22	1,377.78	1,033.33	688.89
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	2,066.67	1,722.22	1,722.22	1,377.78	1,033.33	688.89
	Repayment of loan during the year	344.44		344.44	344.44	344.44	344.44
	Net loan closing	1,722.22	1,722.22	1,377.78	1,033.33	688.89	344.44
	Average net loan	1,894.44	1,722.22	1,550.00	1,205.56	861.11	516.67
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	155.34	141.22	127.10	98.86	70.61	42.37
	State Bank Of India VIII						
	Gross Drawl opening	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00
	Cummulative repayment of drawl till prev yr	833.33	1,111.11	1,111.11	1,388.89	1,666.67	1,944.44
	Net Loan opening	1,666.67	1,388.89	1,388.89	1,111.11	833.33	555.56
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,666.67	1,388.89	1,388.89	1,111.11	833.33	555.56
	Repayment of loan during the year	277.78		277.78	277.78	277.78	277.78
	Net loan closing	1,388.89	1,388.89	1,111.11	833.33	555.56	277.78
	Average net loan	1,527.78	1,388.89	1,250.00	972.22	694.44	416.67
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Interest on loan	125.28	113.89	102.50	79.72	56.94	34.17
	State Bank Of India VIII						
	Gross Drawl opening	1,800.00	1,800.00	1,800.00	1,800.00	1,800.00	1,800.00
	Cummulative repayment of drawl till prev yr	600.00	800.00	800.00	1,000.00	1,200.00	1,400.00
	Net Loan opening	1,200.00	1,000.00	1,000.00	800.00	600.00	400.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,200.00	1,000.00	1,000.00	800.00	600.00	400.00
	Repayment of loan during the year	200.00		200.00	200.00	200.00	200.00
	Net loan closing	1,000.00	1,000.00	800.00	600.00	400.00	200.00
	Average net loan	1,100.00	1,000.00	900.00	700.00	500.00	300.00
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	90.20	82.00	73.80	57.40	41.00	24.60
	State Bank Of India VIII						
	Gross Drawl opening	900.00	900.00	900.00	900.00	900.00	900.00
	Cummulative repayment of drawl till prev yr	300.00	400.00	400.00	500.00	600.00	700.00
	Net Loan opening	600.00	500.00	500.00	400.00	300.00	200.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	600.00	500.00	500.00	400.00	300.00	200.00
	Repayment of loan during the year	100.00		100.00	100.00	100.00	100.00
	Net loan closing	500.00	500.00	400.00	300.00	200.00	100.00
	Average net loan	550.00	500.00	450.00	350.00	250.00	150.00
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	45.10	41.00	36.90	28.70	20.50	12.30
	State Bank Of India VIII						
	Gross Drawl opening	3,500.00	3,500.00	3,500.00	3,500.00	3,500.00	3,500.00
	Cummulative repayment of drawl till prev yr	1,166.67	1,555.56	1,555.56	1,944.44	2,333.33	2,722.22
	Net Loan opening	2,333.33	1,944.44	1,944.44	1,555.56	1,166.67	777.78
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	2,333.33	1,944.44	1,944.44	1,555.56	1,166.67	777.78
	Repayment of loan during the year	388.89		388.89	388.89	388.89	388.89
	Net loan closing	1,944.44	1,944.44	1,555.56	1,166.67	777.78	388.89
	Average net loan	2,138.89	1,944.44	1,750.00	1,361.11	972.22	583.33
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	175.39	159.44	143.50	111.61	79.72	47.83
	State Bank Of India VIII						
	Gross Drawl opening	22,400.00	22,400.00	22,400.00	22,400.00	22,400.00	22,400.00
	Cummulative repayment of drawl till prev yr	7,466.67	9,955.56	9,955.56	12,444.44	14,933.33	17,422.22
	Net Loan opening	14,933.33	12,444.44	12,444.44	9,955.56	7,466.67	4,977.78
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	14,933.33	12,444.44	12,444.44	9,955.56	7,466.67	4,977.78
	Repayment of loan during the year	2,488.89		2,488.89	2,488.89	2,488.89	2,488.89
	Net loan closing	12,444.44	12,444.44	9,955.56	7,466.67	4,977.78	2,488.89
	Average net loan	13,688.89	12,444.44	11,200.00	8,711.11	6,222.22	3,733.33
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	1,122.49	1,020.44	918.40	714.31	510.22	306.13
	State Bank Of India VIII						
	Gross Drawl opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
	Cummulative repayment of drawl till prev yr	1,666.67	2,222.22	2,222.22	2,777.78	3,333.33	3,888.89
	Net Loan opening	3,333.33	2,777.78	2,777.78	2,222.22	1,666.67	1,111.11
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	3,333.33	2,777.78	2,777.78	2,222.22	1,666.67	1,111.11
	Repayment of loan during the year	555.56		555.56	555.56	555.56	555.56
	Net loan closing	2,777.78	2,777.78	2,222.22	1,666.67	1,111.11	555.56
	Average net loan	3,055.56	2,777.78	2,500.00	1,944.44	1,388.89	833.33
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	250.56	227.78	205.00	159.44	113.89	68.33
	State Bank Of India VIII						
	Gross Drawl opening	30,000.00	30,000.00	30,000.00	30,000.00	30,000.00	30,000.00
	Cummulative repayment of drawl till prev yr	10,000.00	13,333.33	13,333.33	16,666.67	20,000.00	23,333.33
	Net Loan opening	20,000.00	16,666.67	16,666.67	13,333.33	10,000.00	6,666.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Total	20,000.00	16,666.67	16,666.67	13,333.33	10,000.00	6,666.67
	Repayment of loan during the year	3,333.33		3,333.33	3,333.33	3,333.33	3,333.33
	Net loan closing	16,666.67	16,666.67	13,333.33	10,000.00	6,666.67	3,333.33
	Average net loan	18,333.33	16,666.67	15,000.00	11,666.67	8,333.33	5,000.00
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	1,503.33	1,366.67	1,230.00	956.67	683.33	410.00
	State Bank Of India VIII						
	Gross Drawl opening	500.00	500.00	500.00	500.00	500.00	500.00
	Cummulative repayment of drawl till prev yr	166.67	222.22	222.22	277.78	333.33	388.89
	Net Loan opening	333.33	277.78	277.78	222.22	166.67	111.11
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	333.33	277.78	277.78	222.22	166.67	111.11
	Repayment of loan during the year	55.56		55.56	55.56	55.56	55.56
	Net loan closing	277.78	277.78	222.22	166.67	111.11	55.56
	Average net loan	305.56	277.78	250.00	194.44	138.89	83.33
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	25.06	22.78	20.50	15.94	11.39	6.83
	State Bank of India - IX						
	Gross Drawl opening	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
	Cummulative repayment of drawl till prev yr	1,777.76	2,222.20	2,222.20	2,666.65	3,111.09	3,555.54
	Net Loan opening	2,222.24	1,777.80	1,777.80	1,333.35	888.91	444.46
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	2,222.24	1,777.80	1,777.80	1,333.35	888.91	444.46
	Repayment of loan during the year	444.44		444.44	444.44	444.44	444.44
	Net loan closing	1,777.80	1,777.80	1,333.35	888.91	444.46	0.02
	Average net loan	2,000.02	1,777.80	1,555.57	1,111.13	666.68	222.24
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	164.00	145.78	127.56	91.11	54.67	18.22
	State Bank of India - IX						
	Gross Drawl opening	5,400.00	5,400.00	5,400.00	5,400.00	5,400.00	5,400.00
	Cummulative repayment of drawl till prev yr	2,400.00	3,000.00	3,000.00	3,600.00	4,200.00	4,800.00
	Net Loan opening	3,000.00	2,400.00	2,400.00	1,800.00	1,200.00	600.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	3,000.00	2,400.00	2,400.00	1,800.00	1,200.00	600.00
	Repayment of loan during the year	600.00		600.00	600.00	600.00	600.00
	Net loan closing	2,400.00	2,400.00	1,800.00	1,200.00	600.00	-
	Average net loan	2,700.00	2,400.00	2,100.00	1,500.00	900.00	300.00
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	221.40	196.80	172.20	123.00	73.80	24.60
	State Bank of India - IX						
	Gross Drawl opening	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00
	Cummulative repayment of drawl till prev yr	4,444.44	5,555.55	5,555.55	6,666.66	7,777.77	8,888.88
	Net Loan opening	5,555.56	4,444.45	4,444.45	3,333.34	2,222.23	1,111.12
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	5,555.56	4,444.45	4,444.45	3,333.34	2,222.23	1,111.12
	Repayment of loan during the year	1,111.11		1,111.11	1,111.11	1,111.11	1,111.11
	Net loan closing	4,444.45	4,444.45	3,333.34	2,222.23	1,111.12	0.00
	Average net loan	5,000.00	4,444.45	3,888.89	2,777.78	1,666.67	555.56
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	410.00	364.44	318.89	227.78	136.67	45.56
	State Bank of India - IX						
	Gross Drawl opening	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00
	Cummulative repayment of drawl till prev yr	3,555.56	4,444.45	4,444.45	5,333.34	6,222.23	7,111.12
	Net Loan opening	4,444.44	3,555.55	3,555.55	2,666.66	1,777.77	888.88
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	4,444.44	3,555.55	3,555.55	2,666.66	1,777.77	888.88
	Repayment of loan during the year	888.89		888.89	888.89	888.89	888.89
	Net loan closing	3,555.55	3,555.55	2,666.66	1,777.77	888.88	-0.00
	Average net loan	4,000.00	3,555.55	3,111.11	2,222.22	1,333.33	444.44
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	328.00	291.56	255.11	182.22	109.33	36.44

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	State Bank of India - IX						
	Gross Drawl opening	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00	8,000.00
	Cummulative repayment of drawl till prev yr	3,555.56	4,444.45	4,444.45	5,333.34	6,222.23	7,111.12
	Net Loan opening	4,444.44	3,555.55	3,555.55	2,666.66	1,777.77	888.88
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	4,444.44	3,555.55	3,555.55	2,666.66	1,777.77	888.88
	Repayment of loan during the year	888.89		888.89	888.89	888.89	888.89
	Net loan closing	3,555.55	3,555.55	2,666.66	1,777.77	888.88	-0.00
	Average net loan	4,000.00	3,555.55	3,111.11	2,222.22	1,333.33	444.44
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	328.00	291.56	255.11	182.22	109.33	36.44
	State Bank of India - IX						
	Gross Drawl opening	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00	2,500.00
	Cummulative repayment of drawl till prev yr	1,111.12	1,388.90	1,388.90	1,666.68	1,944.45	2,222.23
	Net Loan opening	1,388.88	1,111.10	1,111.10	833.32	555.55	277.77
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,388.88	1,111.10	1,111.10	833.32	555.55	277.77
	Repayment of loan during the year	277.78		277.78	277.78	277.78	277.78
	Net loan closing	1,111.10	1,111.10	833.32	555.55	277.77	-0.01
	Average net loan	1,249.99	1,111.10	972.21	694.44	416.66	138.88
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	102.50	91.11	79.72	56.94	34.17	11.39
	State Bank of India - IX						
	Gross Drawl opening	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
	Cummulative repayment of drawl till prev yr	1,777.76	2,222.20	2,222.20	2,666.65	3,111.09	3,555.54
	Net Loan opening	2,222.24	1,777.80	1,777.80	1,333.35	888.91	444.46
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	2,222.24	1,777.80	1,777.80	1,333.35	888.91	444.46
	Repayment of loan during the year	444.44		444.44	444.44	444.44	444.44
	Net loan closing	1,777.80	1,777.80	1,333.35	888.91	444.46	0.02
	Average net loan	2,000.02	1,777.80	1,555.57	1,111.13	666.68	222.24
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	164.00	145.78	127.56	91.11	54.67	18.22
	State Bank of India - IX						
	Gross Drawl opening	888.89	888.89	888.89	888.89	888.89	888.89
	Cummulative repayment of drawl till prev yr	333.33	444.44	444.44	555.55	666.66	777.77
	Net Loan opening	555.56	444.45	444.45	333.34	222.23	111.12
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	555.56	444.45	444.45	333.34	222.23	111.12
	Repayment of loan during the year	111.11		111.11	111.11	111.11	111.11
	Net loan closing	444.45	444.45	333.34	222.23	111.12	0.01
	Average net loan	500.01	444.45	388.90	277.79	166.68	55.57
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	41.00	36.44	31.89	22.78	13.67	4.56
	State Bank of India - X						
	Gross Drawl opening	24,097.00	24,097.00	24,097.00	24,097.00	24,097.00	24,097.00
	Cummulative repayment of drawl till prev yr	-	2,677.44	2,677.44	5,354.89	8,032.33	10,709.78
	Net Loan opening	24,097.00	21,419.56	21,419.56	18,742.11	16,064.67	13,387.22
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	24,097.00	21,419.56	21,419.56	18,742.11	16,064.67	13,387.22
	Repayment of loan during the year	2,677.44		2,677.44	2,677.44	2,677.44	2,677.44
	Net loan closing	21,419.56	21,419.56	18,742.11	16,064.67	13,387.22	10,709.78
	Average net loan	22,758.28	21,419.56	20,080.83	17,403.39	14,725.94	12,048.50
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	1,866.18	1,756.40	1,646.63	1,427.08	1,207.53	987.96
	State Bank of India - X						
	Gross Drawl opening	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00
	Cummulative repayment of drawl till prev yr	-	1,111.11	1,111.11	2,222.22	3,333.33	4,444.44
	Net Loan opening	10,000.00	8,888.89	8,888.89	7,777.78	6,666.67	5,555.56
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	10,000.00	8,888.89	8,888.89	7,777.78	6,666.67	5,555.56
	Repayment of loan during the year	1,111.11		1,111.11	1,111.11	1,111.11	1,111.11

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Net loan closing	8,888.89	8,888.89	7,777.78	6,666.67	5,555.56	4,444.44
	Average net loan	9,444.44	8,888.89	8,333.33	7,222.22	6,111.11	5,000.00
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	774.44	728.89	683.33	592.22	501.11	410.00
	State Bank of India - X						
	Gross Drawl opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
	Cummulative repayment of drawl till prev yr	-	555.56	555.56	1,111.11	1,666.67	2,222.22
	Net Loan opening	5,000.00	4,444.44	4,444.44	3,888.89	3,333.33	2,777.78
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	5,000.00	4,444.44	4,444.44	3,888.89	3,333.33	2,777.78
	Repayment of loan during the year	555.56		555.56	555.56	555.56	555.56
	Net loan closing	4,444.44	4,444.44	3,888.89	3,333.33	2,777.78	2,222.22
	Average net loan	4,722.22	4,444.44	4,166.67	3,611.11	3,055.56	2,500.00
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	387.22	364.44	341.67	296.11	250.56	205.00
	State Bank of India - X						
	Gross Drawl opening	16,300.00	16,300.00	16,300.00	16,300.00	16,300.00	16,300.00
	Cummulative repayment of drawl till prev yr	-	1,811.11	1,811.11	3,622.22	5,433.33	7,244.44
	Net Loan opening	16,300.00	14,488.89	14,488.89	12,677.78	10,866.67	9,055.56
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	16,300.00	14,488.89	14,488.89	12,677.78	10,866.67	9,055.56
	Repayment of loan during the year	1,811.11		1,811.11	1,811.11	1,811.11	1,811.11
	Net loan closing	14,488.89	14,488.89	12,677.78	10,866.67	9,055.56	7,244.44
	Average net loan	15,394.44	14,488.89	13,583.33	11,772.22	9,961.11	8,150.00
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	1,262.34	1,188.09	1,113.83	965.32	816.81	668.30
	State Bank of India - XI						
	Gross Drawl opening	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00
	Cummulative repayment of drawl till prev yr	1,666.57	2,499.90	2,499.90	3,333.23	4,166.57	4,999.90
	Net Loan opening	5,833.43	5,000.10	5,000.10	4,166.77	3,333.43	2,500.10
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	5,833.43	5,000.10	5,000.10	4,166.77	3,333.43	2,500.10
	Repayment of loan during the year	833.33		833.33	833.33	833.33	833.33
	Net loan closing	5,000.10	5,000.10	4,166.77	3,333.43	2,500.10	1,666.77
	Average net loan	5,416.77	5,000.10	4,583.43	3,750.10	2,916.77	2,083.43
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	444.17	410.01	375.84	307.51	239.17	170.84
	State Bank of India - XI						
	Gross Drawl opening	28,500.00	28,500.00	28,500.00	28,500.00	28,500.00	28,500.00
	Cummulative repayment of drawl till prev yr	6,333.33	9,500.00	9,500.00	12,666.67	15,833.33	19,000.00
	Net Loan opening	22,166.67	19,000.00	19,000.00	15,833.33	12,666.67	9,500.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	22,166.67	19,000.00	19,000.00	15,833.33	12,666.67	9,500.00
	Repayment of loan during the year	3,166.67		3,166.67	3,166.67	3,166.67	3,166.67
	Net loan closing	19,000.00	19,000.00	15,833.33	12,666.67	9,500.00	6,333.33
	Average net loan	20,583.33	19,000.00	17,416.67	14,250.00	11,083.33	7,916.67
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	1,687.83	1,558.00	1,428.17	1,168.50	908.83	649.17
	State Bank of India - XI						
	Gross Drawl opening	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
	Cummulative repayment of drawl till prev yr	888.89	1,333.33	1,333.33	1,777.78	2,222.22	2,666.67
	Net Loan opening	3,111.11	2,666.67	2,666.67	2,222.22	1,777.78	1,333.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	3,111.11	2,666.67	2,666.67	2,222.22	1,777.78	1,333.33
	Repayment of loan during the year	444.44		444.44	444.44	444.44	444.44
	Net loan closing	2,666.67	2,666.67	2,222.22	1,777.78	1,333.33	888.89
	Average net loan	2,888.89	2,666.67	2,444.44	2,000.00	1,555.56	1,111.11
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	236.89	218.67	200.44	164.00	127.56	91.11
	State Bank of India - XI						
	Gross Drawl opening	600.00	600.00	600.00	600.00	600.00	600.00
	Cummulative repayment of drawl till prev yr	133.33	200.00	200.00	266.67	333.33	400.00

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Net Loan opening	466.67	400.00	400.00	333.33	266.67	200.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	466.67	400.00	400.00	333.33	266.67	200.00
	Repayment of loan during the year	66.67		66.67	66.67	66.67	66.67
	Net loan closing	400.00	400.00	333.33	266.67	200.00	133.33
	Average net loan	433.33	400.00	366.67	300.00	233.33	166.67
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	35.53	32.80	30.07	24.60	19.13	13.67
	State Bank of India - XII						
	Gross Drawl opening	13,000.00	13,000.00	13,000.00	13,000.00	13,000.00	13,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	1,444.44	2,888.89	4,333.33
	Net Loan opening	13,000.00	13,000.00	13,000.00	11,555.56	10,111.11	8,666.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	13,000.00	13,000.00	13,000.00	11,555.56	10,111.11	8,666.67
	Repayment of loan during the year	-		1,444.44	1,444.44	1,444.44	1,444.44
	Net loan closing	13,000.00	13,000.00	11,555.56	10,111.11	8,666.67	7,222.22
	Average net loan	13,000.00	13,000.00	12,277.78	10,833.33	9,388.89	7,944.44
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	1,066.00	1,066.00	1,006.78	888.33	769.89	651.44
	State Bank of India - XII						
	Gross Drawl opening	9,000.00	9,000.00	9,000.00	9,000.00	9,000.00	9,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	1,000.00	2,000.00	3,000.00
	Net Loan opening	9,000.00	9,000.00	9,000.00	8,000.00	7,000.00	6,000.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	9,000.00	9,000.00	9,000.00	8,000.00	7,000.00	6,000.00
	Repayment of loan during the year	-		1,000.00	1,000.00	1,000.00	1,000.00
	Net loan closing	9,000.00	9,000.00	8,000.00	7,000.00	6,000.00	5,000.00
	Average net loan	9,000.00	9,000.00	8,500.00	7,500.00	6,500.00	5,500.00
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	738.00	738.00	697.00	615.00	533.00	451.00
	State Bank of India - XII						
	Gross Drawl opening	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	555.56	1,111.11	1,666.67
	Net Loan opening	5,000.00	5,000.00	5,000.00	4,444.44	3,888.89	3,333.33
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	5,000.00	5,000.00	5,000.00	4,444.44	3,888.89	3,333.33
	Repayment of loan during the year	-		555.56	555.56	555.56	555.56
	Net loan closing	5,000.00	5,000.00	4,444.44	3,888.89	3,333.33	2,777.78
	Average net loan	5,000.00	5,000.00	4,722.22	4,166.67	3,611.11	3,055.56
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	410.00	410.00	387.22	341.67	296.11	250.56
	State Bank of India - XII						
	Gross Drawl opening	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00	4,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	444.44	888.89	1,333.33
	Net Loan opening	4,000.00	4,000.00	4,000.00	3,555.56	3,111.11	2,666.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	4,000.00	4,000.00	4,000.00	3,555.56	3,111.11	2,666.67
	Repayment of loan during the year	-		444.44	444.44	444.44	444.44
	Net loan closing	4,000.00	4,000.00	3,555.56	3,111.11	2,666.67	2,222.22
	Average net loan	4,000.00	4,000.00	3,777.78	3,333.33	2,888.89	2,444.44
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	328.00	328.00	309.78	273.33	236.89	200.44
	State Bank of India - XII						
	Gross Drawl opening	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00	7,500.00
	Cummulative repayment of drawl till prev yr	-	-	-	833.33	1,666.67	2,500.00
	Net Loan opening	7,500.00	7,500.00	7,500.00	6,666.67	5,833.33	5,000.00
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	7,500.00	7,500.00	7,500.00	6,666.67	5,833.33	5,000.00
	Repayment of loan during the year	-		833.33	833.33	833.33	833.33
	Net loan closing	7,500.00	7,500.00	6,666.67	5,833.33	5,000.00	4,166.67
	Average net loan	7,500.00	7,500.00	7,083.33	6,250.00	5,416.67	4,583.33
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Interest on loan	615.00	615.00	580.83	512.50	444.17	375.83
	State Bank of India - XII						
	Gross Drawl opening	11,500.00	11,500.00	11,500.00	11,500.00	11,500.00	11,500.00
	Cummulative repayment of drawl till prev yr	-	-	-	1,277.78	2,555.56	3,833.33
	Net Loan opening	11,500.00	11,500.00	11,500.00	10,222.22	8,944.44	7,666.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	11,500.00	11,500.00	11,500.00	10,222.22	8,944.44	7,666.67
	Repayment of loan during the year	-		1,277.78	1,277.78	1,277.78	1,277.78
	Net loan closing	11,500.00	11,500.00	10,222.22	8,944.44	7,666.67	6,388.89
	Average net loan	11,500.00	11,500.00	10,861.11	9,583.33	8,305.56	7,027.78
	Rate of interest on loan	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%	8.2000%
	Interest on loan	943.00	943.00	890.61	785.83	681.06	576.26
	UCO Bank IV						
	Gross Drawl opening	1,100.00	1,100.00	1,100.00	1,100.00	1,100.00	1,100.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	91.67	183.33
	Net Loan opening	1,100.00	1,100.00	1,100.00	1,100.00	1,008.33	916.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	1,100.00	1,100.00	1,100.00	1,100.00	1,008.33	916.67
	Repayment of loan during the year	-		-	91.67	91.67	91.67
	Net loan closing	1,100.00	1,100.00	1,100.00	1,008.33	916.67	825.00
	Average net loan	1,100.00	1,100.00	1,100.00	1,054.17	962.50	870.83
	Rate of interest on loan	7.7000%	7.7000%	7.7000%	7.7000%	7.7000%	7.7000%
	Interest on loan	84.70	84.70	84.70	81.17	74.11	67.05
	UCO Bank IV						
	Gross Drawl opening	13,223.00	13,223.00	13,223.00	13,223.00	13,223.00	13,223.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	1,101.92	2,203.83
	Net Loan opening	13,223.00	13,223.00	13,223.00	13,223.00	12,121.08	11,019.17
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	13,223.00	13,223.00	13,223.00	13,223.00	12,121.08	11,019.17
	Repayment of loan during the year	-		-	1,101.92	1,101.92	1,101.92
	Net loan closing	13,223.00	13,223.00	13,223.00	12,121.08	11,019.17	9,917.25
	Average net loan	13,223.00	13,223.00	13,223.00	12,672.04	11,570.13	10,468.21
	Rate of interest on loan	7.7000%	7.7000%	7.7000%	7.7000%	7.7000%	7.7000%
	Interest on loan	1,018.17	1,018.17	1,018.17	975.75	890.90	806.05
	UCO Bank IV						
	Gross Drawl opening	87.00	87.00	87.00	87.00	87.00	87.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	7.25	14.50
	Net Loan opening	87.00	87.00	87.00	87.00	79.75	72.50
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	87.00	87.00	87.00	87.00	79.75	72.50
	Repayment of loan during the year	-		-	7.25	7.25	7.25
	Net loan closing	87.00	87.00	87.00	79.75	72.50	65.25
	Average net loan	87.00	87.00	87.00	83.38	76.13	68.88
	Rate of interest on loan	7.7000%	7.7000%	7.7000%	7.7000%	7.7000%	7.7000%
	Interest on loan	6.70	6.70	6.70	6.42	5.86	5.30
	UCO Bank IV						
	Gross Drawl opening	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00	2,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	166.67	333.33
	Net Loan opening	2,000.00	2,000.00	2,000.00	2,000.00	1,833.33	1,666.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	2,000.00	2,000.00	2,000.00	2,000.00	1,833.33	1,666.67
	Repayment of loan during the year	-		-	166.67	166.67	166.67
	Net loan closing	2,000.00	2,000.00	2,000.00	1,833.33	1,666.67	1,500.00
	Average net loan	2,000.00	2,000.00	2,000.00	1,916.67	1,750.00	1,583.33
	Rate of interest on loan	7.7000%	7.7000%	7.7000%	7.7000%	7.7000%	7.7000%
	Interest on loan	154.00	154.00	154.00	147.58	134.75	121.92
	UCO Bank IV						
	Gross Drawl opening	9,600.00	9,600.00	9,600.00	9,600.00	9,600.00	9,600.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	800.00	1,600.00
	Net Loan opening	9,600.00	9,600.00	9,600.00	9,600.00	8,800.00	8,000.00
	Increase decrease due to FERV						

Sl. No.	Particulars	2024-25 (1.4.24 to 30.3.2025)	2024-25 (31.3.2025 to 31.3.2025)	2025-26	2026-27	2027-28	2028-29
	Increase decrease due to ACE						
	Total	9,600.00	9,600.00	9,600.00	9,600.00	8,800.00	8,000.00
	Repayment of loan during the year	-		-	800.00	800.00	800.00
	Net loan closing	9,600.00	9,600.00	9,600.00	8,800.00	8,000.00	7,200.00
	Average net loan	9,600.00	9,600.00	9,600.00	9,200.00	8,400.00	7,600.00
	Rate of interest on loan	7.7000%	7.7000%	7.7000%	7.7000%	7.7000%	7.7000%
	Interest on loan	739.20	739.20	739.20	708.40	646.80	585.20
	UCO Bank IV						
	Gross Drawl opening	14,000.00	14,000.00	14,000.00	14,000.00	14,000.00	14,000.00
	Cummulative repayment of drawl till prev yr	-	-	-	-	1,166.67	2,333.33
	Net Loan opening	14,000.00	14,000.00	14,000.00	14,000.00	12,833.33	11,666.67
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	14,000.00	14,000.00	14,000.00	14,000.00	12,833.33	11,666.67
	Repayment of loan during the year	-		-	1,166.67	1,166.67	1,166.67
	Net loan closing	14,000.00	14,000.00	14,000.00	12,833.33	11,666.67	10,500.00
	Average net loan	14,000.00	14,000.00	14,000.00	13,416.67	12,250.00	11,083.33
	Rate of interest on loan	7.7000%	7.7000%	7.7000%	7.7000%	7.7000%	7.7000%
	Interest on loan	1,078.00	1,078.00	1,078.00	1,033.08	943.25	853.42
	Union Bank Of India II						
	Gross Drawl opening	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00
	Cummulative repayment of drawl till prev yr	2,250.00	2,550.00	2,550.00	2,850.00	3,000.00	3,000.00
	Net Loan opening	750.00	450.00	450.00	150.00	-	-
	Increase decrease due to FERV						
	Increase decrease due to ACE						
	Total	750.00	450.00	450.00	150.00	-	-
	Repayment of loan during the year	300.00		300.00	150.00	-	-
	Net loan closing	450.00	450.00	150.00	-	-	-
	Average net loan	600.00	450.00	300.00	75.00	-	-
	Rate of interest on loan	8.1000%	8.1000%	8.1000%	8.1000%	8.1000%	8.1000%
	Interest on loan	48.60	36.45	24.30	6.08	-	-

Details of Source wise Fuel for Computation of Energy Charges

Name of the Company :		NTPC Limited						
Name of the Power Station :		Barh Super Thermal Power Project Stage-I (3x660 MW)						
S. No.	Month	Unit	Apr-23			May-23		
			DOMESTIC COAL		IMPORTED COAL	DOMESTIC COAL		IMPORTED COAL
			NTPC MINES	Other Sources	COAL_IMPORTED	NTPC MINES	Other Sources	COAL_IMPORTED
A)	OPENING QUANTITY							
1	Opening Quantity of Coal/ Lignite	(MT)	41,247.68	3,94,968.94	9,625.08	49,318.03	2,01,767.83	400.52
2	Value of Stock	(Rs.)	127324795.2	1909217281	16,26,52,436.64	16,38,53,750.83	98,32,11,820.03	67,56,158.32
B)	QUANTITY							
3	Quantity of Coal supplied by Coal Company	(MT)	75,082.24	5,11,081.28	15,969.50	1,93,529.34	6,18,739.22	24,073.20
4	Adjustment (+/-) in quantity supplied made by Coal Company	(MT)	-1,248.49	-	-	-3,371.28	-	-
5	Coal supplied by Coal Company (3+4)	(MT)	73,833.75	5,11,081.28	15,969.50	1,90,158.06	6,18,739.22	24,073.20
6	Normative Transit & Handling Losses	(MT)	590.67	4,088.65	31.94	1,521.26	4,949.91	48.15
7	Net coal / Lignite Supplied (5-6)	(MT)	73,243.08	5,06,992.63	15,937.56	1,88,636.80	6,13,789.31	24,025.05
C)	PRICE							
8	Amount charged by the Coal Company	(Rs.)	17,56,77,239.00	1,84,35,91,486.36	26,86,78,483.81	45,96,20,787.00	2,16,77,90,769.53	39,32,23,159.80
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	-30,15,918.06	16,24,37,956.15	-	-61,40,339.35	21,47,23,658.70	-
10	Unloading, Handling and Sampling Charges	(Rs.)	18,80,062.39	1,27,97,632.51		48,46,034.22	1,54,93,420.45	
11	Total amount Charged (8+9+10)	(Rs.)	17,45,41,403.33	2,01,88,27,075.02	26,86,78,483.81	45,83,26,481.87	2,39,80,08,068.68	39,32,23,159.80
D)	TRANSPORTATION							
12	Transportation charges by rail ship, road transport	(Rs.)	7,82,11,174.00	46,51,21,398.15	-	18,31,87,152.20	57,14,97,936.54	-
13	Adjustment (+/-) in amount charged made by Railways/ Transport Company	(Rs.)						
14	Demurrage Charges, if any	(Rs.)	-	-	-	-	-	-
15	Cost of fuel in transporting coal through MGR system, if applicable	(Rs.)	3,05,641.07	20,80,484.37		7,67,609.66	25,18,732.96	
16	Total Transportation Charges (12+13+14+15)	(Rs.)	7,85,16,815.07	46,72,01,882.52	-	18,39,74,961.86	57,40,16,669.52	
17	Total amount Charged for coal supplied including Transportation (11+16)	(Rs.)	25,30,58,218.40	2,48,60,28,957.54	26,86,78,483.81	64,03,01,443.73	2,97,20,24,736.20	39,32,23,159.80
E)	TOTAL COST							
18	Landed cost of coal (2+17)/(1+7)	Rs./MT	3,322.39	4,872.95	16,873.45	3,375.44	4,845.74	16,375.52
19	Blending Ratio	%	15.00%	85.00%	0.00%	29.00%	71.00%	0.00%
20	Weighted average cost of coal	Rs./MT		4640.40			4423.35	
F)	QUALITY							
21	GCV of Domestic Coal of the opening stock as per bill of Coal Company	(kCal/Kg)						
22	GCV of Domestic Coal supplied as per bill Coal Company	(kCal/Kg)						
23	GCV of Imported Coal of the opening stock as per bill of Coal Company	(kCal/Kg)						
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)						
25	Weighted average GCV of coal/ Lignite as Billed	(kCal/Kg)						
26	GCV of Domestic Coal of opening stock as received at Station	(kCal/Kg)	3391.00	3956.00		3371.00	3883.00	5016.00
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	3360.00	3826.00		3522.00	3723.00	4901.00
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)			4966.00			
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)			5049.00			
30	Weighted average GCV of coal/ Lignite as Received	(kCal/Kg)		3806.00			3684.00	

Details of Source wise Fuel for Computation of Energy Charges

Name of the Company :							
Name of the Power Station :							
S. No.	Month	Jun-23			Jul-23		
		DOMESTIC COAL		IMPORTED COAL	DOMESTIC COAL		IMPORTED COAL
		NTPC MINES	Other Sources	COAL_IMPORTED	NTPC MINES	Other Sources	COAL_IMPORTED
A)	OPENING QUANTITY						
1	Opening Quantity of Coal/ Lignite	61,445.91	3,39,168.55	3,003.57	43,845.60	1,90,100.74	1,243.54
2	Value of Stock	20,76,53,059.09	1644877820	4,91,85,051.81	14,93,16,301.99	923910491.5	2,04,33,889.62
B)	QUANTITY						
3	Quantity of Coal supplied by Coal Company	1,90,164.92	4,65,655.75	3,617.20	3,27,576.61	4,87,870.91	34,621.40
4	Adjustment (+/-) in quantity supplied made by Coal Company	-999.32	-	-	-	-	-
5	Coal supplied by Coal Company (3+4)	1,89,165.60	4,65,655.75	3,617.20	3,27,576.61	4,87,870.91	34,621.40
6	Normative Transit & Handling Losses	1,513.32	3,725.25	7.23	2,620.61	3,902.97	69.24
7	Net coal / Lignite Supplied (5-6)	1,87,652.28	4,61,930.50	3,609.97	3,24,956.00	4,83,967.94	34,552.16
C)	PRICE						
8	Amount charged by the Coal Company	46,83,78,139.92	1,49,40,07,879.66	5,94,88,954.20	86,10,44,595.00	1,68,78,12,128.72	44,18,10,549.61
9	Adjustment (+/-) in amount charged made by Coal Company	-25,15,048.16	24,88,18,106.15	-	-9,90,706.44	16,24,23,106.91	
10	Unloading, Handling and Sampling Charges	47,61,788.11	1,16,60,163.26		69,80,051.65	1,03,95,627.00	-
11	Total amount Charged (8+9+10)	47,06,24,879.87	1,75,44,86,149.07	5,94,88,954.20	86,70,33,940.41	1,86,06,30,862.63	44,18,10,549.61
D)	TRANSPORTATION						
12	Transportation charges by rail ship, road transport	17,31,39,772.30	49,21,69,897.81		29,19,36,616.16	48,41,72,676.73	-
13	Adjustment (+/-) in amount charged made by Railways/ Transport Company						
14	Demurrage Charges, if any		-	-		-	-
15	Cost of fuel in transporting coal through MGR system, if applicable	7,74,113.94	18,95,568.37		11,93,501.33	17,77,521.84	-
16	Total Transportation Charges (12+13+14+15)	17,39,13,886.24	49,40,65,466.18	-	29,31,30,117.49	48,59,50,198.57	-
17	Total amount Charged for coal supplied including Transportation (11+16)	64,45,38,766.11	2,24,85,51,615.25	5,94,88,954.20	1,16,01,64,057.90	2,34,65,81,061.20	44,18,10,549.61
E)	TOTAL COST						
18	**Landed cost of coal (2+17)/(1+7)**	**3,421.11**	**4,860.11**	**16,432.05**	**3,552.56**	**4,851.87**	**12,913.41**
19	Blending Ratio	55.00%	45.00%	0.00%	49.00%	51.00%	0.00%
20	Weighted average cost of coal	4068.66			4215.21		
F)	QUALITY						
21	GCV of Domestic Coal of the opening stock as per bill of Coal Company						
22	GCV of Domestic Coal supplied as per bill Coal Company						
23	GCV of Imported Coal of the opening stock as per bill of Coal Company						
24	GCV of Imported Coal supplied as per bill Coal Company						
25	Weighted average GCV of coal/ Lignite as Billed						
26	GCV of Domestic Coal of opening stock as received at Station	3490.00	3762.00		3385.00	3630.00	
27	GCV of Domestic Coal supplied as received at Station	3350.00	3538.00		3226.00	3609.00	
28	GCV of Imported Coal of opening stock as received at Station			4903.00			4866.00
29	GCV of Imported Coal supplied as received at Station			4834.00			4865.00
30	**Weighted average GCV of coal/ Lignite as Received**	**3495.00**			**3433.00**		

Details of Source wise Fuel for Computation of Energy Charges

Name of the Company :

Name of the Power Station :

S. No.	Month	Aug-23			Sep-23		
		DOMESTIC COAL		IMPORTED COAL	DOMESTIC COAL		IMPORTED COAL
		NTPC MINES	Other Sources	COAL_IMPORTED	NTPC MINES	Other Sources	COAL_IMPORTED
A)	OPENING QUANTITY						
1	Opening Quantity of Coal/ Lignite	44,532.34	1,30,125.27	14,676.70	49,948.69	1,04,688.91	1,748.73
2	Value of Stock	15,62,03,947.79	6313505134	18,95,51,993.51	17,56,46,924.56	507801383.2	2,17,56,451.47
B)	QUANTITY						
3	Quantity of Coal supplied by Coal Company	4,17,075.02	6,17,701.16	64,382.80	3,71,190.03	4,43,222.72	42,316.40
4	Adjustment (+/-) in quantity supplied made by Coal Company	-3,921.51	-	-	-6,802.98	-	-
5	Coal supplied by Coal Company (3+4)	4,13,153.51	6,17,701.16	64,382.80	3,64,387.05	4,43,222.72	42,316.40
6	Normative Transit & Handling Losses	3,305.23	4,941.61	128.77	2,915.10	3,545.78	84.63
7	Net coal / Lignite Supplied (5-6)	4,09,848.28	6,12,759.55	64,254.03	3,61,471.95	4,39,676.94	42,231.77
C)	PRICE						
8	Amount charged by the Coal Company	1,10,23,58,048.26	2,17,13,34,787.15	79,24,72,650.85	92,15,39,647.00	1,50,30,73,674.00	49,12,49,733.93
9	Adjustment (+/-) in amount charged made by Coal Company	-98,19,636.60	18,73,01,712.78	-	-1,70,53,038.57	11,02,96,907.83	-
10	Unloading, Handling and Sampling Charges	96,21,496.23	1,42,49,737.10	-	79,02,141.03	94,35,621.00	-
11	Total amount Charged (8+9+10)	1,10,21,59,907.89	2,37,28,86,237.03	79,24,72,650.85	91,23,88,749.46	1,62,28,06,202.83	49,12,49,733.93
D)	TRANSPORTATION						
12	Transportation charges by rail ship, road transport	33,62,00,746.71	59,04,05,695.80	-	32,58,61,791.44	45,88,22,684.88	-
13	Adjustment (+/-) in amount charged made by Railways/ Transport Company						
14	Demurrage Charges, if any	-	-	-			-
15	Cost of fuel in transporting coal through MGR system, if applicable	12,86,275.02	19,05,013.56		13,98,375.89	16,69,743.03	
16	Total Transportation Charges (12+13+14+15)	33,74,87,021.73	59,23,10,709.36	-	32,72,60,167.33	46,04,92,427.91	-
17	Total amount Charged for coal supplied including Transportation (11+16)	1,43,96,46,929.62	2,96,51,96,946.39	79,24,72,650.85	1,23,96,48,916.79	2,08,32,98,630.74	49,12,49,733.93
E)	TOTAL COST						
18	Landed cost of coal (2+17)/(1+7)	3,516.55	4,841.33	12,441.29	3,440.02	4,756.10	11,664.40
19	Blending Ratio	59.50%	38.22%	2.28%	58.00%	40.26%	1.74%
20	Weighted average cost of coal	4226			4113.45		
F)	QUALITY						
21	GCV of Domestic Coal of the opening stock as per bill of Coal Company						
22	GCV of Domestic Coal supplied as per bill Coal Company						
23	GCV of Imported Coal of the opening stock as per bill of Coal Company						
24	GCV of Imported Coal supplied as per bill Coal Company						
25	Weighted average GCV of coal/ Lignite as Billed						
26	GCV of Domestic Coal of opening stock as received at Station	3245.00	3615.00		3203.00	3454.00	
27	GCV of Domestic Coal supplied as received at Station	3198.00	3420.00		3299.00	3586.00	
28	GCV of Imported Coal of opening stock as received at Station			4865.00			4656.00
29	GCV of Imported Coal supplied as received at Station			4853.00			4854.00
30	Weighted average GCV of coal/ Lignite as Received	3336.00			3424.00		

Details of Source wise Fuel for Computation of Energy Charges

Name of the Company :								
Name of the Power Station :								
S. No.	Month	Oct-23			Nov-23			
		DOMESTIC COAL		IMPORTED COAL	DOMESTIC COAL		IMPORTED COAL	
		NTPC MINES	Other Sources	COAL_IMPORTED	NTPC MINES	Other Sources	COAL_IMPORTED	
A)	OPENING QUANTITY							
1	Opening Quantity of Coal/ Lignite	91,573.56	61,488.66	5,396.50	55,927.83	75,137.94	5,011.24	
2	Value of Stock	31,50,14,995.71	2925693326.4	6,29,46,912.64	19,20,14,981.87	351736938.7	61739586.96	
B)	QUANTITY							
3	Quantity of Coal supplied by Coal Company	3,49,039.46	3,62,286.73	52,326.40	3,32,784.72	4,12,672.84	14,983.40	
4	Adjustment (+/-) in quantity supplied made by Coal Company	-5,978.15	-	-	-3,441.91	-	-	
5	Coal supplied by Coal Company (3+4)	3,43,061.31	3,62,286.73	52,326.40	3,29,342.81	4,12,672.84	14,983.40	
6	Normative Transit & Handling Losses	2,744.49	2,898.29	104.65	2,634.74	3,301.38	29.97	
7	Net coal / Lignite Supplied (5-6)	3,40,316.82	3,59,388.44	52,221.75	3,26,708.07	4,09,371.46	14,953.43	
C)	PRICE							
8	Amount charged by the Coal Company	65,47,34,159.51	1,25,87,21,608.00	64,69,21,979.02	80,08,22,548.77	1,39,89,63,362.36	17,05,34,551.89	
9	Adjustment (+/-) in amount charged made by Coal Company	-1,49,77,588.74	5,94,17,155.22	-	-86,29,754.75	7,05,96,706.29	-	
10	Unloading, Handling and Sampling Charges	59,75,362.06	62,02,168.74		56,96,198.25	70,63,624.52		
11	Total amount Charged (8+9+10)	64,57,31,952.83	1,32,43,40,931.96	64,69,21,979.02	79,78,88,992.27	1,47,66,23,713.19	17,05,34,551.89	
D)	TRANSPORTATION							
12	Transportation charges by rail ship, road transport	32,07,64,546.65	35,19,75,569.47	-	32,08,26,761.77	38,60,48,979.50		
13	Adjustment (+/-) in amount charged made by Railways/ Transport Company							
14	Demurrage Charges, if any	-	-	-				
15	Cost of fuel in transporting coal through MGR system, if applicable	12,82,102.34	13,30,762.62		12,22,394.94	15,15,842.41		
16	Total Transportation Charges (12+13+14+15)	32,20,46,648.99	35,33,06,332.09	-	32,20,49,156.71	38,75,64,821.91		-
17	Total amount Charged for coal supplied including Transportation (11+16)	1,16,77,78,601.82	1,67,76,47,264.05	64,69,21,979.02	1,11,99,38,148.98	1,86,41,88,535.10	17,05,34,551.89	
E)	TOTAL COST							
18	**Landed cost of coal (2+17)/(1+7)**	**3,433.26**	**4,681.22**	**12,320.21**	**3,428.72**	**4,573.54**	**11,634.26**	
19	Blending Ratio	40.00%	54.74%	5.26%	55.00%	42.28%	2.72%	
20	Weighted average cost of coal	4583.64			4135.95			
F)	QUALITY							
21	GCV of Domestic Coal of the opening stock as per bill of Coal Company							
22	GCV of Domestic Coal supplied as per bill Coal Company							
23	GCV of Imported Coal of the opening stock as per bill of Coal Company							
24	GCV of Imported Coal supplied as per bill Coal Company							
25	Weighted average GCV of coal/ Lignite as Billed							
26	GCV of Domestic Coal of opening stock as received at Station	3287.00	3561.00		3387.00	3570.00		
27	GCV of Domestic Coal supplied as received at Station	3413.00	3571.00		3354.00	3320.00		
28	GCV of Imported Coal of opening stock as received at Station			4654.00			4870.00	
29	GCV of Imported Coal supplied as received at Station			4871.00			4872.00	
30	**Weighted average GCV of coal/ Lignite as Received**	3565.00			3399.00			

Details of Source wise Fuel for Computation of Energy Charges

Name of the Company :

Name of the Power Station :

S. No.	Month	Dec-23			Jan-24		
		DOMESTIC COAL		IMPORTED COAL	DOMESTIC COAL		IMPORTED COAL
		NTPC MINES	Other Sources	COAL_IMPORTED	NTPC MINES	Other Sources	COAL_IMPORTED
A)	OPENING QUANTITY						
1	Opening Quantity of Coal/ Lignite	90,621.97	1,13,580.68	2,992.68	85,603.03	3,46,483.66	80.42
2	Value of Stock	31,07,17,783.70	519466352	3,48,17,574.22	29,30,92,898.32	1524245269	9,97,970.65
B)	QUANTITY						
3	Quantity of Coal supplied by Coal Company	4,55,748.42	4,08,971.09	30,069.90	3,90,004.12	5,24,213.78	87,686.40
4	Adjustment (+/-) in quantity supplied made by Coal Company	-5,799.55	-	-	-3,628.90	-	-
5	Coal supplied by Coal Company (3+4)	4,49,948.87	4,08,971.09	30,069.90	3,86,375.22	5,24,213.78	87,686.40
6	Normative Transit & Handling Losses	3,599.59	3,271.77	60.14	3,091.00	4,193.71	175.37
7	Net coal / Lignite Supplied (5-6)	4,46,349.28	4,05,699.32	30,009.76	3,83,284.22	5,20,020.07	87,511.03
C)	PRICE						
8	Amount charged by the Coal Company	1,15,93,58,168.06	1,35,47,11,693.60	37,47,41,112.63	1,00,97,69,785.35	1,74,99,23,908.00	1,08,76,44,834.34
9	Adjustment (+/-) in amount charged made by Coal Company	-1,45,63,191.66	6,88,19,441.94	-	-50,58,619.34	-1,60,23,082.09	-
10	Unloading, Handling and Sampling Charges	77,17,957.32	69,25,797.83	-	1,16,47,499.90	1,56,55,680.63	-
11	Total amount Charged (8+9+10)	1,15,25,12,933.74	1,42,84,56,933.37	37,47,41,112.63	1,01,63,58,665.91	1,74,95,56,506.54	1,08,76,44,834.34
D)	TRANSPORTATION						
12	Transportation charges by rail ship, road transport	37,36,09,882.09	33,49,63,449.02	-	32,55,75,470.66	50,97,66,361.37	-
13	Adjustment (+/-) in amount charged made by Railways/ Transport Company						
14	Demurrage Charges, if any			-			-
15	Cost of fuel in transporting coal through MGR system, if applicable	16,74,068.94	15,02,245.03		15,09,211.26	20,28,566.63	
16	Total Transportation Charges (12+13+14+15)	37,52,83,951.03	33,64,65,694.05	-	32,70,84,681.92	51,17,94,928.00	-
17	Total amount Charged for coal supplied including Transportation (11+16)	1,52,77,96,884.77	1,76,49,22,627.42	37,47,41,112.63	1,34,34,43,347.83	2,26,13,51,434.54	1,08,76,44,834.34
E)	TOTAL COST						
18	**Landed cost of coal (2+17)/(1+7)**	**3,423.86**	**4,395.15**	**12,405.55**	**3,450.26**	**4,368.82**	**12,428.64**
19	Blending Ratio	82.00%	12.21%	5.79%	85.00%	4.65%	10.35%
20	Weighted average cost of coal	4063.38			4456.18		
F)	QUALITY						
21	GCV of Domestic Coal of the opening stock as per bill of Coal Company						
22	GCV of Domestic Coal supplied as per bill Coal Company						
23	GCV of Imported Coal of the opening stock as per bill of Coal Company						
24	GCV of Imported Coal supplied as per bill Coal Company						
25	Weighted average GCV of coal/ Lignite as Billed						
26	GCV of Domestic Coal of opening stock as received at Station	3359.00	3357.00	-	3239.00	3253.00	-
27	GCV of Domestic Coal supplied as received at Station	3214.00	3225.00	-	3360.00	3445.00	-
28	GCV of Imported Coal of opening stock as received at Station			4,871.00			4875.00
29	GCV of Imported Coal supplied as received at Station			4,976.00			4908.00
30	**Weighted average GCV of coal/ Lignite as Received**	3335.00			3502.00		

Details of Source wise Fuel for Computation of Energy Charges

PART-I
FORM- 15

Name of the Company :

Name of the Power Station :

S. No.	Month	Feb-24			Mar-24		
		DOMESTIC COAL		IMPORTED COAL	DOMESTIC COAL		IMPORTED COAL
		NTPC MINES	Other Sources	COAL_IMPORTED	NTPC MINES	Other Sources	COAL_IMPORTED
A)	OPENING QUANTITY						
1	Opening Quantity of Coal/ Lignite	62,278.04	5,54,579.91	38,082.45	98,043.41	4,57,740.51	1,06,939.26
2	Value of Stock	21,73,66,407.43	2422858317	47,33,13,116.71	34,43,03,265.63	2001625305	1,34,74,09,604.20
B)	QUANTITY						
3	Quantity of Coal supplied by Coal Company	3,10,121.49	4,50,495.76	1,62,682.20	3,85,492.70	5,43,243.55	38,157.30
4	Adjustment (+/-) in quantity supplied made by Coal Company	-1,838.46	-	-	-5,141.71	-	-
5	Coal supplied by Coal Company (3+4)	3,08,283.03	4,50,495.76	1,62,682.20	3,80,350.99	5,43,243.55	38,157.30
6	Normative Transit & Handling Losses	2,466.26	3,603.97	325.36	3042.81	4,345.95	76.32
7	Net coal / Lignite Supplied (5-6)	3,05,816.77	4,46,891.79	1,62,356.84	3,77,308.18	5,38,897.60	38,080.98
C)	PRICE						
8	Amount charged by the Coal Company	81,37,65,838.21	1,47,75,04,941.62	2,05,21,74,232.50	97,14,76,837.00	1,85,88,95,229.25	44,64,54,939.30
9	Adjustment (+/-) in amount charged made by Coal Company	-13,10,986.20	1,26,56,920.81	-	-89,46,317.01	-71,89,645.61	-
10	Unloading, Handling and Sampling Charges	92,62,961.64	1,34,55,774.84	-	1,15,15,427.75	1,62,27,756.97	-
11	Total amount Charged (8+9+10)	82,17,17,813.65	1,50,36,17,637.27	2,05,21,74,232.50	97,40,45,947.74	1,86,79,33,340.61	44,64,54,939.30
D)	TRANSPORTATION						
12	Transportation charges by rail ship, road transport	25,16,82,565.76	45,00,55,971.21	-	33,05,69,007.00	54,38,34,748.59	-
13	Adjustment (+/-) in amount charged made by Railways/ Transport Company						
14	Demurrage Charges, if any	-	-	-			-
15	Cost of fuel in transporting coal through MGR system, if applicable	18,87,841.36	27,42,359.23		14,12,670.60	19,90,761.94	
16	Total Transportation Charges (12+13+14+15)	25,35,70,407.12	45,27,98,330.44	-	33,19,81,677.60	54,58,25,510.53	-
17	Total amount Charged for coal supplied including Transportation (11+16)	1,07,52,88,220.77	1,95,64,15,967.71	2,05,21,74,232.50	1,30,60,27,625.34	2,41,37,58,851.14	44,64,54,939.30
E)	TOTAL COST						
18	**Landed cost of coal (2+17)/(1+7)**	**3,511.74**	**4,372.84**	**12,595.76**	**3,471.81**	**4,430.28**	**12,369.75**
19	Blending Ratio	40.00%	49.97%	10.03%	66.50%	22.69%	10.81%
20	Weighted average cost of coal	4853.28			4650.97		
F)	QUALITY						
21	GCV of Domestic Coal of the opening stock as per bill of Coal Company						
22	GCV of Domestic Coal supplied as per bill Coal Company						
23	GCV of Imported Coal of the opening stock as per bill of Coal Company						
24	GCV of Imported Coal supplied as per bill Coal Company						
25	Weighted average GCV of coal/ Lignite as Billed						
26	GCV of Domestic Coal of opening stock as received at Station	3350.00	3388.00	-	3286.00	3370.00	-
27	GCV of Domestic Coal supplied as received at Station	3215.00	3287.00	-	3355.00	3625.00	-
28	GCV of Imported Coal of opening stock as received at Station						4941.00
29	GCV of Imported Coal supplied as received at Station						4916.00
30	**Weighted average GCV of coal/ Lignite as Received**	3459.00			3551.00		

(Petitioner)

Details of Secondary Fuel for Computation of Energy Charges

Name of the Company :	NTPC Limited
Name of the Power Station :	Barh Super Thermal Power Project Stage-I (3x660 MW)

Sl.No.	Month	Unit	Apr-23		May-23		Jun-23	
			HFO	LDO	HFO	LDO	HFO	LDO
1	Opening Quantity of Oil	KL	3493.2	3092.88	3,359.62	3199.18	5,638.37	4813.71
2	Value of Opening	(Rs)	18,39,47,678.00	37,79,11,365.00	17,69,13,521.00	37,85,47,328.00	30,60,06,199.00	42,85,91,032.00
3	Quantity of Oil supplied by Oil Company	KL	-	219.82	4,937.760	3,742.92	6,701.530	3,928.11
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL						
5	Oil supplied by oil company (3+4)	KL	-	219.82	4,937.76	3,742.92	6,701.53	3,928.11
6	Normative Transit & Handling Losses	KL	-				-	
7	Net Oil Supplied (5-6)	KL	-	219.82	4,937.76	3,742.92	6,701.53	3,928.11
8	Amount charged by the Oil Company	(Rs)	-	1,40,68,363.00	27,34,02,692.25	23,95,45,913.00	37,10,62,251.74	25,13,98,092.00
9	Adjustment(+/-) in amount charged made by Oil Company	(Rs)	-					
10	Handling, Sampling and such other Similar Charges	(Rs)	-					
11	**Total amount charged (8+9+10)**	(Rs)	-	1,40,68,363.00	27,34,02,692.25	23,95,45,913.00	37,10,62,251.74	25,13,98,092.00
12	Transportation charges by rail / ship / road transport							
	By Rail	(Rs)	-					
	By Road	(Rs)	-					
	By Ship	(Rs)	-					
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs)	-		-			
14	Demurrage Charges, if any	(Rs)	-					
15	Cost of diesel in transporting Oil through MGR system, if applicable	(Rs)	-					
16	Total Transportation Charges (12+/-13-14+15)	(Rs)	-		-		-	
17	Total amount Charged for fuel supplied including Transportation (11+16)	(Rs)	-	1,40,68,363.00	27,34,02,692.25	23,95,45,913.00	37,10,62,251.74	25,13,98,092.00
18	Landed Cost of Oil (LDO/HFO) (2+17)/(1+7)	(Rs)	52,658.76	1,18,326.29	54,272.08	89,035.47	54,868.22	77,785.75
19	Blending Ratio/Usage qty.		133.58	113.52	384.01	246.39	429.68	255.14
20	Weighted average cost of Secondary Fuel/ For Month	(kCal/Ltr)	82827.02		67859.25		63406.49	
21	GCV of Oil of the Opening stock as per bill of Oil company	(kCal/Ltr)	9,600.00	9,560.00	9,504.00	9,371.00	9,554.00	9,326.00
22	GCV of oil supplied as per bill of oil company	(kCal/Ltr)						
23	GCV if Imported coal of the opening stock as per bill of Oil company	(kCal/Ltr)						
24	GCV of Imported Oil supplied as per bill of coal company	(kCal/Ltr)						
25	Weighted average GCV if Oil as billed	(kCal/Ltr)						
26	GCV of Oil of the Opening stock as received at station	(kCal/Ltr)						
27	GCV of Oil supplied	(kCal/Ltr)						
28	GCV of Imported coal of the Opening stock as received at station	(kCal/Ltr)						
29	GCV of Imported coal supplied as received at station	(kCal/Ltr)						
30	Weighted Average GCV of Secondary Fuel/ as recevied	(kCal/Ltr)	9,504.00	9,371.00	9,554.00	9,326.00	9,748.00	9,486.00

Details of Secondary Fuel for Computation of Energy Charges

Name of the Company :	NTPC Limite
Name of the Power Station :	Barh Super

Sl.No	Month	Unit	Jul-23		Aug-23		Sep-23	
			HFO	LDO	HFO	LDO	HFO	LDO
1	Opening Quantity of Oil	KL	2,287.66	4833.82	1,043.27	2903.58	1,677.81	3503.42
2	Value of Opening	(Rs)	12,55,19,941.00	37,60,02,404.00	5,52,60,343.00	22,57,31,303.00	8,70,38,154.00	27,13,60,660.00
3	Quantity of Oil supplied by Oil Company	KL	2,935.88	361.88	2,935.13	2,843.90	2,939.35	941.72
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL						
5	Oil supplied by oil company (3+4)	KL	2,935.88	361.88	2,935.13	2,843.90	2,939.35	941.72
6	Normative Transit & Handling Losses	KL	-		-		-	
7	Net Oil Supplied (5-6)	KL	2,935.88	361.88	2,935.13	2,843.90	2,939.35	941.72
8	Amount charged by the Oil Company	(Rs)	15,11,61,661.27	2,79,23,752.00	15,11,23,045.50	21,94,45,114.00	15,13,40,323.53	7,26,66,434.00
9	Adjustment(+/-) in amount charged made by Oil Company	(Rs)						
10	Handling, Sampling and such other Similar Charges	(Rs)						
11	**Total amount charged (8+9+10)**	(Rs)	15,11,61,661.27	2,79,23,752.00	15,11,23,045.50	21,94,45,114.00	15,13,40,323.53	7,26,66,434.00
12	Transportation charges by rail / ship / road transport							
	By Rail	(Rs)						
	By Road	(Rs)						
	By Ship	(Rs)						
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs)						
14	Demurrage Charges, if any	(Rs)						
15	Cost of diesel in transporting Oil through MGR system, if applicable	(Rs)						
16	Total Transportation Charges (12+/-13-14+15)	(Rs)	-		-		-	
17	Total amount Charged for fuel supplied including Transportation (11+16)	(Rs)	15,11,61,661.27	2,79,23,752.00	15,11,23,045.50	21,94,45,114.00	15,13,40,323.53	7,26,66,434.00
18	Landed Cost of Oil (LDO/HFO) (2+17)/(1+7)	(Rs)	52,968.20	77,742.41	51,875.93	77,455.93	51,628.77	77,393.97
19	Blending Ratio/Usage qty.		250.92	242.33	2300.59	1754.06	1966.67	1389.17
20	Weighted average cost of Secondary Fuel/ For Month	(kCal/Ltr)	65139.58		62941.95		62294.41	
21	GCV of Oil of the Opening stock as per bill of Oil company	(kCal/Ltr)	9,748.00	9,486.00	9,784.00	9,362.00	9,457.00	9,724.00
22	GCV of oil supplied as per bill of oil company	(kCal/Ltr)						
23	GCV if Imported coal of the opening stock as per bill of Oil company	(kCal/Ltr)						
24	GCV of Imported Oil supplied as per bill of coal company	(kCal/Ltr)						
25	Weighted average GCV if Oil as billed	(kCal/Ltr)						
26	GCV of Oil of the Opening stock as received at station	(kCal/Ltr)						
27	GCV of Oil supplied	(kCal/Ltr)						
28	GCV of Imported coal of the Opening stock as received at station	(kCal/Ltr)						
29	GCV of Imported coal supplied as received at station	(kCal/Ltr)						
30	Weighted Average GCV of Secondary Fuel/ as recevied	(kCal/Ltr)	9,784.00	9,362.00	9,457.00	9,724.00	9,695.00	9,471.00

Details of Secondary Fuel for Computation of Energy Charges

Name of the Company :	NTPC Limite
Name of the Power Station :	Barh Super

Sl.No	Month	Unit	Oct-23		Nov-23		Dec-23	
			HFO	LDO	HFO	LDO	HFO	LDO
1	Opening Quantity of Oil	KL	2,650.49	2508.97	1,360.49	4252.6	2,514.89	1412.02
2	Value of Opening	(Rs)	13,68,41,526.00	19,41,79,218.00	7,02,40,626.00	32,32,52,434.00	18,13,59,080.00	10,73,31,322.00
3	Quantity of Oil supplied by Oil Company	KL	-	2,966.71	-			3,987.50
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL						
5	Oil supplied by oil company (3+4)	KL	-	2,966.71	2,938.99		-	3,987.50
6	Normative Transit & Handling Losses	KL	-		-		-	
7	Net Oil Supplied (5-6)	KL	-	2,966.71	2,938.99		-	3,987.50
8	Amount charged by the Oil Company	(Rs)	-	22,20,43,045.00	23,98,12,388.50			29,84,43,647.00
9	Adjustment(+/-) in amount charged made by Oil Company	(Rs)						
10	Handling, Sampling and such other Similar Charges	(Rs)						
11	**Total amount charged (8+9+10)**	(Rs)	-	22,20,43,045.00	23,98,12,388.50		-	29,84,43,647.00
12	Transportation charges by rail / ship / road transport							
	By Rail	(Rs)						
	By Road	(Rs)						
	By Ship	(Rs)						
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs)						
14	Demurrage Charges, if any	(Rs)						
15	Cost of diesel in transporting Oil through MGR system, if applicable	(Rs)						
16	Total Transportation Charges (12+/-13-14+15)	(Rs)	-		-		-	
17	Total amount Charged for fuel supplied including Transportation (11+16)	(Rs)	-	22,20,43,045.00	23,98,12,388.50		-	29,84,43,647.00
18	Landed Cost of Oil (LDO/HFO) (2+17)/(1+7)	(Rs)	51,628.77	76,012.88	72,114.01	76,012.88	72,114.01	75,150.32
19	Blending Ratio/Usage qty.		1290.00	906.57	1784.59	1537.54	561.98	550.35
20	Weighted average cost of Secondary Fuel/ For Month	(kCal/Ltr)	61692.61		73918.47		73616.30	
21	GCV of Oil of the Opening stock as per bill of Oil company	(kCal/Ltr)	9,695.00	9,471.00	9,693.00	9,481.00	9,691.00	9,500.00
22	GCV of oil supplied as per bill of oil company	(kCal/Ltr)						
23	GCV if Imported coal of the opening stock as per bill of Oil company	(kCal/Ltr)						
24	GCV of Imported Oil supplied as per bill of coal company	(kCal/Ltr)						
25	Weighted average GCV if Oil as billed	(kCal/Ltr)						
26	GCV of Oil of the Opening stock as received at station	(kCal/Ltr)						
27	GCV of Oil supplied	(kCal/Ltr)						
28	GCV of Imported coal of the Opening stock as received at station	(kCal/Ltr)						
29	GCV of Imported coal supplied as received at station	(kCal/Ltr)						
30	Weighted Average GCV of Secondary Fuel/ as recevied	(kCal/Ltr)	9,693.00	9,481.00	9,691.00	9,500.00	9,691.00	9,500.00

Details of Secondary Fuel for Computation of Energy Charges

PART-I
FORM- 15A

Name of the Company :	NTPC Limite
Name of the Power Station :	Barh Super

Sl.No	Month	Unit	Jan-24		Feb-24		Mar-24	
			HFO	LDO	HFO	LDO	HFO	LDO
1	Opening Quantity of Oil	KL	1,952.92	4458.92	4,003.70	3378.19	2,736.58	2654.59
2	Value of Opening	(Rs)	14,08,32,668.00	33,50,89,181.00	23,74,29,606.00	23,74,29,606.00	16,22,85,907.00	19,94,93,208.00
3	Quantity of Oil supplied by Oil Company	KL	2,763.04		-			2,967.80
4	Adjustment (+/-) in quantity supplied made by Oil Company	KL						
5	Oil supplied by oil company (3+4)	KL	2,763.04		-		-	2,967.80
6	Normative Transit & Handling Losses	KL	-				-	
7	Net Oil Supplied (5-6)	KL	2,763.04		-		-	2,967.80
8	Amount charged by the Oil Company	(Rs)	13,88,35,662.14		-			24,50,46,840.00
9	Adjustment(+/-) in amount charged made by Oil Company	(Rs)						
10	Handling, Sampling and such other Similar Charges	(Rs)						
11	**Total amount charged (8+9+10)**	(Rs)	13,88,35,662.14		-		-	24,50,46,840.00
12	Transportation charges by rail / ship / road transport							
	By Rail	(Rs)						
	By Road	(Rs)						
	By Ship	(Rs)						
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs)						
14	Demurrage Charges, if any	(Rs)						
15	Cost of diesel in transporting Oil through MGR system, if applicable	(Rs)						
16	Total Transportation Charges (12+/-13-14+15)	(Rs)	-				-	
17	Total amount Charged for fuel supplied including Transportation (11+16)	(Rs)	13,88,35,662.14		-		-	24,50,46,840.00
18	Landed Cost of Oil (LDO/HFO) (2+17)/(1+7)	(Rs)	59,302.56	75,150.32	59,302.56	75,150.32	59,302.56	79,066.04
19	Blending Ratio/Usage qty.		712.26	515.73	1267.12	723.60	843.77	702.99
20	Weighted average cost of Secondary Fuel/ For Month	(kCal/Ltr)	65958.30		65063.00		69618.82	
21	GCV of Oil of the Opening stock as per bill of Oil company	(kCal/Ltr)	9,691.00	9,500.00	9,676.00	9,504.00	9,666.00	9,468.00
22	GCV of oil supplied as per bill of oil company	(kCal/Ltr)						
23	GCV if Imported coal of the opening stock as per bill of Oil company	(kCal/Ltr)						
24	GCV of Imported Oil supplied as per bill of coal company	(kCal/Ltr)						
25	Weighted average GCV if Oil as billed	(kCal/Ltr)						
26	GCV of Oil of the Opening stock as received at station	(kCal/Ltr)						
27	GCV of Oil supplied	(kCal/Ltr)						
28	GCV of Imported coal of the Opening stock as received at station	(kCal/Ltr)						
29	GCV of Imported coal supplied as received at station	(kCal/Ltr)						
30	Weighted Average GCV of Secondary Fuel/ as recevied	(kCal/Ltr)	9,676.00	9,504.00	9,666.00	9,468.00	9,660.00	9,499.00

PETITIONER

Computation of Energy Charges

Form-15B
ADDITIONAL FORM

Name of the Company	**NTPC Limited**
Name of the Power Station	**Barh Super Thermal Power Project Stage-I (3x660 MW)**

Computation of Energy Charges

			2024-25 (From 01.04.24 to 30.09.2025)	2024-25 (From 31.03.25 to 31.03.2025)	2025-26	2026-27	2027-28	2028-29
1	Rate of Energy Charge from Sec. Fuel Oil/ Alternate Fuel (p/kwh)	$(ECR)_2$ = $(Q)_2$ X P_2	6.197	6.197	6.197	6.197	6.197	6.197
2	Heat Contribution from SFO / Alternate Fuel	(H_2) = $(Qa)_2$ X $(GCV)_2$	0.652	0.652	0.652	0.652	0.652	0.652
3	Heat Contribution from coal	$(H_1)_n$ = GHR- H_2	2331.13	2331.13	2331.13	2331.13	2331.13	2331.13
4	Specific Primary Fuel Consumption	$(Qa)_1$ = H_1/ $(GCV)_1$	0.683	0.683	0.683	0.683	0.683	0.683
5	Rate of Energy charge from Primary Fuel (p/kwh)	$(ECR)_1$	298.336	298.336	298.336	298.336	298.336	298.336
6	Rate of Energy charge ex-bus (p/kWh)	$(ECR)_1$ = $((ECR)_1 + (ECR)_2$ / $(1-(AUX))$	323.112	323.112	323.112	323.112	323.112	323.112
6	Rate of Energy charge ex-bus (p/kWh)	$(ECR)_1$ = $((ECR)_1 + (ECR)_2$ / $(1-(AUX))$	323.112	323.112	323.112	326.577	326.577	326.577
7	Specific Consumption (kg/ kWh)	Limestone	0.012	0.012	0.012	0.012	0.012	0.012
8			0.00	0.00	0.00	3.75	3.75	3.75
	Rate of Supplementary Energy Charge from Limestone (p/kWh)							
	ECR supp. (Rs /kwh)	dECR= [(SRC x LPR / 10)/(100-(AUXn + AUXen))]						
K	(35.2 x Design SO2 Removal Efficiency/96%)		35.53	35.53	35.53	35.53	35.53	35.53

		2024-25 (From 01.04.24 to 30.09.2025)	2024-25 (From 31.03.25 to 31.03.2025)	2025-26	2026-27	2027-28	2028-29
No of Days in the period	Days	364	1	365	365	366	365
No of Days in the year	Days	365	365	365	365	366	365
Sp. Oil consumption	ml/kwh	1	1	1	1	1	1
Auxiliary consumption	%	5.75%	5.75%	5.75%	5.75%	5.75%	5.75%
Auxiliary consumption (FGD)	%				1.00%	1.00%	1.00%
Heat Rate	Kcal/Kwh	2,340.78	2,340.78	2,340.78	2,340.78	2,340.78	2,340.78
Computation of Variable Charges							
Variable Charge (Coal)	p/kwh	316.537	316.537	316.537	316.537	316.537	316.537
Variable Charge (Limestone)	p/kwh	0.000	0.000	0.000	3.984	3.984	3.984
Variable Charge (Oil)	p/kwh	6.575	6.575	6.575	6.575	6.575	6.575
Total	p/kwh	323.112	323.112	323.112	327.096	327.096	327.096
Price of fuel from Form-15/15A							
Coal Cost	(Rs./MT)	4369.31	4369.31	4369.31	4369.31	4369.31	4369.31
Oil Cost	(Rs./KL)	61972.10	61972.10	61972.10	61972.10	61972.10	61972.10
Computation of Fuel Expenses for Calculation of IWC:							
FSO in a year	(MUs)	9263.57	13895.35	13895.35	13895.35	13933.42	13895.35
FSO for 50 days	(MUs)	1268.982	1903.473	1903.473	1903.473	1903.473	1903.473
FSO for 50 days	(MUs)	1268.982	1903.473	1903.473	1903.473	1903.473	1903.473
Cost of coal for 50 Days	(Rs. Lakh)	40167.94	60251.91	60251.91	60251.91	60251.91	60251.91
Cost of limestone for 50 Days	(Rs. Lakh)	0.00	0.00	0.00	758.34	758.34	758.34
Cost of oil for 2 months	(Rs. Lakh)	1015.18	1522.77	1522.77	1522.77	1526.94	1522.77
Energy Expenses for 45 days	(Rs. Lakh)	36902.10	55353.15	55353.15	56035.66	56035.66	56035.66

Coal		2024-25 (From 01.04.24 to 30.09.2025)	2024-25 (From 31.03.25 to 31.03.2025)	2025-26	2026-27	2027-28	2028-29
Wtd. Avg. Price of Coal	Rs./MT	4369.31	4369.31	4369.31	4369.31	4369.31	4369.31
Wtd. Avg. GCV of Coal as received	kCal/Kg	3409.08	3409.08	3409.08	3409.08	3409.08	3409.08
Wtd. Avg. GCV of Coal as received after adjs	kCal/Kg	**3414.08**	**3414.08**	**3414.08**	**3414.08**	**3414.08**	**3414.08**
Sec. Oil							
Wtd. Avg. Price of Secondary Fuel	Rs/KL	61972.10	61972.10	61972.10	61972.10	61972.10	61972.10
Wtd. Avg. GCV of Secondary Fuel	kCal/L	9651.58	9651.58	9651.58	9651.58	9651.58	9651.58
Limestone Cost (tentative landed price)	(Rs/ MT)				3082.50	3082.50	3082.50
Limestone Purity (LP)	%	85.00%	85.00%	85.00%	85.00%	85.00%	85.00%
Sulphur Content in Coal (Design)	%	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%

Petitioner

PART-I
FORM-B

Break-up of Capital Cost for New Coal/Lignite based projects

Name of the Petitioner: NTPC Limited
Name of the Generating Station: Barh Super Thermal Power Project Stage-I

Amt in Lakhs

Sl. No. (1)	Break Down (2)	As per RCE	Actual Capital Expenditure as on 12.11.2021 i.e. COD for Unit#1 (Cash Basis)	Liabilities/ Provisions Unit#1 (Not included in col 4)	Actual Capital Expenditure as on 12.11.2021 i.e. COD for Unit#1 (Gross Block)	Actual Capital Expenditure as on COD Unit#2 (Cash Basis)	Liabilities/ Provisions Unit#2 (Not included in col 6)	Actual Capital Expenditure as on COD Unit#2 (Gross Block)	Estimated Capital Expenditure as on Anticipated COD Unit#3 (Cash Basis)	Liabilities/ Provisions Unit#3 (Not included in col 7)	Estimated Capital Expenditure as on Anticipated COD Unit#3 (Gross Block)
1	2	3	4	5	6	7	8	9	7	8	9=(7+8)
1	**Cost of Land & Site Development**										
1.1	Land	23,036.75	13,125.93	5,938.92	19,064.85	13,142.04	5,922.80	19,064.85	13,142.04	5,922.80	19,064.85
1.2	Rehabilitation & Resettlement (R&R) Incl 1.1										
1.3	Preliminary Investigation, Site levelling & Development, Enabling works	19,028.67	5,354.28	39.35	5,393.62	9,230.86	68.73	9,299.60	9,230.86	68.73	9,299.60
	Total Land & Site Development	**42,065.42**	**18,480.21**	**5,978.26**	**24,458.47**	**22,372.91**	**5,991.54**	**28,364.44**	**22,372.91**	**5,991.54**	**28,364.44**
2	**Plant & Equipment**										
2.1	Steam Generator (SG) Island (Incl. ESP)	5,57,281.08	2,17,984.60	22,757.49	2,40,742.08	3,83,922.67	40,355.09	4,24,277.76	6,08,912.42	53,626.05	6,62,538.47
2.2	Turbine Generator Island	2,30,261.93	83,856.82	10,881.09	94,737.91	1,64,558.13	16,651.87	1,81,210.00	2,77,807.96	26,813.27	3,04,621.23
2.3	**BOP Mechanical**				-			-			
2.3.1	External water supply system	6,316.75			-			-			
2.3.2	CW system (Incl. WPT & MUW Pipes supply)		9,204.09	187.98	9,392.07	12,407.90	313.16	12,721.06	13,845.32	502.49	14,347.81
2.3.3	DM water Plant	2,560.89	1,534.90	18.98	1,553.89	1,532.79	18.98	1,551.78	1,532.79	18.98	1,551.78
2.3.4	Clarification plant	-	-		-			-			
2.3.5	Chlorination Plant	-	-		-			-			
2.3.6	Fuel Handling & Storage system	4,877.34	2,097.39	120.78	2,218.17	2,457.18	0.51	2,457.69	2,457.18	0.51	2,457.69
2.3.7	Ash Handling System	22,132.80	9,690.79	2,046.62	11,737.41	17,286.11	3,232.44	20,518.55	21,056.66	4,521.63	25,578.30
2.3.8	Coal Handling Plant	45,624.33	41,966.78	1,440.33	43,407.11	43,188.37	1,421.84	44,610.21	43,962.06	1,518.02	45,480.08
2.3.9	Rolling Stock and Locomotives	1,964.38	139.65		139.65	139.65	-	139.65	139.65	-	139.65
2.3.10	MGR	-	-		-	-	-	-	-	-	-
2.3.11	Air Compressor System	-	-	-	-	-	-	-	-	-	-
2.3.12	Air Condition & Ventilation System	3,604.43	1,106.47	168.49	1,274.97	1,853.39	184.17	2,037.56	3,071.55	335.60	3,407.15
2.3.13	Fire fighting System	5,737.76	3,793.33	490.23	4,283.56	3,991.51	493.43	4,484.95	3,991.51	493.43	4,484.95
2.3.14	HP/ LP Piping	-	-		-	-	-	-	-	-	-
2.3.15	WTP	5,051.31	5,032.35	187.40	5,219.74	5,068.10	186.57	5,254.67	5,087.55	188.99	5,276.54
2.3.16	FGD System	95,400.00									
	Total BOP Mechanical	**9,80,813.00**	**3,76,387.18**	**38,299.39**	**4,14,686.57**	**6,36,405.80**	**62,858.08**	**6,99,263.87**	**9,81,864.65**	**88,018.98**	**10,69,883.63**
2.4	**BOP Electrical**										
2.4.1	Switch Yard Package (Incl ICT)	15,434.69	5,062.60	233.15	5,295.76	5,119.39	258.99	5,378.38	5,119.39	258.99	5,378.38
2.4.2	Transformer Package	21,112.88	8,173.88	125.35	8,299.24	15,649.53	189.16	15,838.69	24,015.96	1,291.16	25,307.11
2.4.3	Switch gear Package (Inc. HT & LT)	5,953.51	2,430.04	185.58	2,615.63	4,467.39	196.56	4,663.95	8,911.23	781.89	9,693.12
2.4.4	Cables, Cable facilities & grounding	12,267.97	2,117.26	139.03	2,256.30	4,169.85	485.94	4,655.79	6,582.38	803.71	7,386.09
2.4.5	Lighting	Included in 2.4.4	-	-							
2.4.6	Emergency D.G. set	Included in 2.4.4									
	Total BOP Electrical	**54,769.05**	**17,783.79**	**683.12**	**18,466.91**	**29,406.16**	**1,130.65**	**30,536.80**	**44,628.96**	**3,135.75**	**47,764.71**
2.5	**Control &Instrumentation(C & I) Package**	7,289.80	2,634.95	456.83	3,091.78	5,309.16	518.02	5,827.17	6,824.64	717.63	7,542.27
2.5A	**Networking**	1,914.83	171.37	1.40	172.77	171.98	0.80	172.77	171.98	0.80	172.77
	Total Plant & Equipment including taxes & Duties	**10,44,786.68**	**3,96,977.29**	**39,440.74**	**4,36,418.03**	**6,71,293.08**	**64,507.54**	**7,35,800.62**	**10,33,490.23**	**91,873.15**	**11,25,363.38**
2.6	**Taxes & Duties**	Included in respective packages									
3	**Initial Spares Included with Plant & machinery packages**	Included in respective packages. Separate Break Up provided.									
4	**Civil Works**										
4.1	Main Plant/Adm. Building	16,840.82	11,196.30	47.36	11,243.65	13,501.58	113.35	13,614.94	13,501.58	113.35	13,614.94
4.2	CW system	9,167.18	154.65	135.44	290.09	279.37	177.32	456.68	4,319.72	709.50	5,029.22
4.3	Cooling Towers	11,329.82	4,397.70	306.75	4,704.44	8,557.76	928.83	9,486.59	16,036.21	1,913.87	17,950.08
4.4	DM water Plant	-	-	-	-	-	-	-	-	-	-

Sl. No. (1)	Break Down (2)	As per RCE	Actual Capital Expenditure as on 12.11.2021 i.e. COD for Unit#1 (Cash Basis)	Liabilities/ Provisions Unit#1 (Not included in col 4)	Actual Capital Expenditure as on 12.11.2021 i.e. COD for Unit#1 (Gross Block)	Actual Capital Expenditure as on COD Unit#2 (Cash Basis)	Liabilities/ Provisions Unit#2 (Not included in col 6)	Actual Capital Expenditure as on COD Unit#2 (Gross Block)	Estimated Capital Expenditure as on Anticipated COD Unit#3 (Cash Basis)	Liabilities/ Provisions Unit#3 (Not included in col 7)	Estimated Capital Expenditure as on Anticipated COD Unit#3 (Gross Block)
1	2	3	4	5	6	7	8	9	7	8	9=(7+8)
4.5	Clarification plant	-	-	-	-	-	-	-	-	-	-
4.6	Chlorination plant	-	-	-	-	-	-	-	-	-	-
4.7	Fuel handling & Storage system	-	-	-	-	-	-	-	-	-	-
4.8	Coal Handling Plant	-	-	-	-	-	-	-	-	-	-
4.9	MGR & Marshalling Yard	-	-	-	-	-	-	-	-	-	-
4.10	Ash Handling System	-	-	-	-	-	-	-	-	-	-
4.11	Ash disposal area development (Ash Dyke)	9,560.03	4,918.49	538.13	5,456.62	6,194.40	506.82	6,701.22	9,423.95	932.21	10,356.16
4.12	Fire fighting System	-	-	-	-	-	-	-	-	-	-
4.13	Township & Colony	24,853.16	6,804.97	225.54	6,230.51	12,396.04	281.91	12,677.95	12,680.37	317.26	12,997.63
4.14	Temp. construction & enabling works	3,252.50	331.56	17.29	348.85	696.17	73.43	769.60	696.17	73.43	769.60
4.15	Road & Drainage	9,726.66	5,513.00	59.06	5,572.06	11,882.88	40.56	11,923.44	11,882.88	40.56	11,923.44
4.16	Chimney	7,506.35	2,889.66	35.95	2,925.61	4,393.48	58.65	4,452.13	10,092.22		10,092.22
4.17	Railway Siding and S&T system pkg	26,833.83	135.33	-	135.33	135.33	-	135.33	135.33		135.33
	Total Civil works	**1,19,070.34**	**35,541.65**	**1,365.51**	**36,907.16**	**58,037.02**	**2,150.87**	**60,217.88**	**78,768.44**	**4,100.18**	**82,868.62**
5	**Construction Power & Pre-Commissioning Expenses**										
5.1	Erection Testing and commissioning	49,620.00	28058.55	0.00	28058.55	62,969.19	-	62,969.19	91,182.92		91,182.92
5.2	Site supervision	Included in 5.1			0.00			-			
5.3	Operator's Training				0.00			-			
5.4	Construction Insurance				0.00			-			
5.5	Tools & Plant	2,382.56	1079.19	142.13	1221.32	1,594.31	156.90	1,751.21	1,693.31	156.90	1,850.21
5.6	Start up fuel	Included in 5.1						-			-
	Total Construction & Pre-Commissioning Expenses	**52,002.56**	**29,537.74**	**142.13**	**29,679.88**	**64,563.50**	**156.90**	**64,720.40**	**92,876.22**	**156.90**	**93,033.13**
6	**Overheads**										
6.1	Establishment	132325.00	42733.88		42733.88	79,020.64		79020.64	1,05,896.64		105896.64
6.2	Design & Engineering	Included in 6.1									
6.3	Audit & Accounts	Included in 6.1									
6.4	Contingency	Included in 6.1									
6.5	Other Assets (MBDA)	Included in 6.1	1727.86	59.76	1787.62	2258.74	98.01	2356.75	3,128.74	98.01	3226.75
	Total Overheads	**1,32,325.00**	**44,461.74**	**59.76**	**44,521.50**	**81,279.39**	**98.01**	**81,377.39**	**1,09,025.39**	**98.01**	**1,09,123.39**
7	**Total Capital Cost excluding IDC & FC**	**13,90,250.00**	**5,24,998.62**	**46,986.42**	**5,71,985.04**	**8,97,545.89**	**72,934.86**	**9,70,480.74**	**13,36,533.19**	**1,02,219.78**	**14,38,752.96**
8	**IDC, FC, FERV, Hedging Cost & WCM**										
8.1	Interest During Construction (IDC)	7,04,096.00	3,12,722.41	-	3,12,722.41	5,61,443.73	-	5,61,443.73	7,63,877.73		7,63,877.73
8.2	Financing Charges (FC)				-			-			
8.3	Foreign Exchange Rate Variation (FERV)		50,998.34	-	50,998.34	95,296.22	-	95,296.22	1,20,767.22		1,20,767.22
8.4	Hedging Cost				-			-			
8.5	Working Capital Margin	36,865.00			-						
8.6	Unamortized Transaction Cost		132.62	-	132.62	1,260.31		1,260.31	1,260.31		1,260.31
	Total of IDC, FC, FERV, Hedging Cost & WCM	7,40,961.00	3,63,853.37	-	3,63,853.37	6,58,000.26	-	6,58,000.26	8,85,905.26	-	8,85,905.26
9	**Capital cost including IDC, FC, FERV, Hedging Cost &WCM**	**21,31,211.00**	**8,88,851.99**	**46,986.42**	**9,35,838.41**	**15,55,546.16**	**72,934.86**	**16,28,481.00**	**22,22,438.45**	**1,02,219.78**	**23,24,658.23**

(Petitioner)

PART-I
FORM- 1

Statement of Capital cost

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Barh Super Thermal Power Project Stage-I (3x660 MW)
COD	U#1 12.11.2021, U#2 01.08.2023, U#3 31.03.2025 (Anticipated)
For Financial Year	2024-29

(Rs Lakh)

Sl. No.	Particulars	2024-25 (From 01.04.24 to 30.09.2025)			2024-25 (From 01.03.25 to 31.03.2025)			2025-26			2026-27			2027-28			2028-29		
		Accrual Basis	Un-discharged Liabilities	Cash Basis	Accrual Basis	Un-discharged Liabilities	Cash Basis	Accrual Basis	Un-discharged Liabilities	Cash Basis	Accrual Basis	Un-discharged Liabilities	Cash Basis	Accrual Basis	Un-discharged Liabilities	Cash Basis	Accrual Basis	Un-discharged Liabilities	Cash Basis
A	a) Opening Gross Block Amount as per books	16,99,379.99	83,109.90	16,81,470.09	SHALL BE PROVIDED AT THE TIME OF TRUE-UP.														
	b) Amount of IDC in A(a) above	9,81,969.80		9,81,969.80															
	c) Amount of FC in A(a) above	-		-															
	d) Amount of FERV in A(a) above	99,123.01		99,123.01															
	e) Amount of Hedging Cost in A(a) above	-		-															
	f) Amount of IEDC in A(a) above	79,093.49		79,093.49															
B	a) Addition in Gross Block Amount during the period (Direct purchase)	SHALL BE PROVIDED AT THE TIME OF TRUE-UP.																	
	b) Amount of IDC in B(a) above																		
	c) Amount of FC in B(a) above																		
	d) Amount of FERV in B(a) above																		
	e) Amount of Hedging Cost in B(a) above																		
	f) Amount of IEDC in B(a) above																		
C	a) Addition in Gross Block Amount during the period (Transferred from CWIP)																		
	b) Amount of IDC in C(a) above																		
	c) Amount of FC in C(a) above																		
	d) Amount of FERV in C(a) above																		
	e) Amount of Hedging Cost in C(a) above																		
	f) Amount of IEDC in C(a) above																		
D	a) Deletion in Gross Block Amount during the period																		
	b) Amount of IDC in D(a) above																		
	c) Amount of FC in D(a) above																		
	d) Amount of FERV in D(a) above																		
	e) Amount of Hedging Cost in D(a) above																		
	f) Amount of IEDC in D(a) above																		
E	a) Closing Gross Block Amount as per books																		
	b) Amount of IDC in E(a) above																		
	c) Amount of FC in E(a) above																		
	d) Amount of FERV in E(a) above																		
	e) Amount of Hedging Cost in E(a) above																		
	f) Amount of IEDC in E(a) above																		

Petitioner

PART-I
FORM- M

Statement of Capital Works in Progress

Name of the Petitioner	NTPC Limited
Name of the Generating Station	Barh Super Thermal Power Project Stage-I (3x660 MW)
COD	U#1 12.11.2021, U#2 01.08.2023, U#3 31.03.2025 (Anticipated)
For Financial Year	2024-29

(Rs Lakh)

Sl. No.	Particulars	2024-25 (From 01.04.24 to 30.03.2025)			2024-25 (From 31.03.25 to 31.03.2025)			2025-26			2026-27			2027-28			2028-29		
		Accrual Basis	Un-discharged Liabilities	Cash Basis	Accrual Basis	Un-discharged Liabilities	Cash Basis	Accrual Basis	Un-discharged Liabilities	Cash Basis	Accrual Basis	Un-discharged Liabilities	Cash Basis	Accrual Basis	Un-discharged Liabilities	Cash Basis	Accrual Basis	Un-discharged Liabilities	Cash Basis
A	a) Opening CWIP as per books	5,21,661.96	51,033.07	4,70,628.89	SHALL BE PROVIDED AT THE TIME OF TRUE-UP.														
	b) Amount of IDC in A(a) above	1,81,730.49	-	1,81,730.49															
	c) Amount of FC in A(a) above	-	-	-															
	d) Amount of FERV in A(a) above	24,488.32	-	24,488.32															
	e) Amount of Hedging Cost in A(a) above	-	-	-															
	f) Amount of IEDC in A(a) above	29,154.17	-	29,154.17															
B	a) Addition in CWIP during the period	SHALL BE PROVIDED AT THE TIME OF TRUE-UP.																	
	b) Amount of IDC in B(a) above																		
	c) Amount of FC in B(a) above																		
	d) Amount of FERV in B(a) above																		
	e) Amount of Hedging Cost in B(a) above																		
	f) Amount of IEDC in B(a) above																		
C	a) Transferred to Gross Block Amount during the period	SHALL BE PROVIDED AT THE TIME OF TRUE-UP.																	
	b) Amount of IDC in C(a) above																		
	c) Amount of FC in C(a) above																		
	d) Amount of FERV in C(a) above																		
	e) Amount of Hedging Cost in C(a) above																		
	f) Amount of IEDC in C(a) above																		
D	a) Deletion in CWIP during the period	SHALL BE PROVIDED AT THE TIME OF TRUE-UP.																	
	b) Amount of IDC in D(a) above																		
	c) Amount of FC in D(a) above																		
	d) Amount of FERV in D(a) above																		
	e) Amount of Hedging Cost in D(a) above																		
	f) Amount of IEDC in D(a) above																		
E	a) Closing CWIP as per books	SHALL BE PROVIDED AT THE TIME OF TRUE-UP.																	
	b) Amount of IDC in E(a) above																		
	c) Amount of FC in E(a) above																		
	d) Amount of FERV in E(a) above																		
	e) Amount of Hedging Cost in E(a) above																		
	f) Amount of IEDC in E(a) above																		

Petitioner

PART-I
FORM- N

Calculation of Interest on Normative Loan

Name of the Company :		NTPC Limited
Name of the Power Station :		Barh Super Thermal Power Project Stage-I (3x660 MW)

(Amount in Rs Lakh)

S. No.	Particulars		Existing 2023-24	2024-25 (From 01.04.24 to 30.03.2025)	2024-25 (From 31.03.25 to 31.03.2025)	2025-26	2026-27	2027-28	2028-29
1	2		3	4		5		6	8
1	Gross Normative loan – Opening	A	11,00,762.70	11,18,875.76	15,56,056.92	15,56,056.92	15,86,835.87	16,39,313.87	16,40,643.87
2	Cumulative repayment of Normative loan up to previous year	B	79,403.26	1,33,792.55	2,16,167.54	2,16,481.59	3,31,506.83	4,49,598.66	5,70,409.05
3	**Net Normative loan – Opening**	**C=A-B**	10,21,359.44	9,85,083.20	13,39,889.37	13,39,575.32	12,55,329.04	11,89,715.21	10,70,234.82
4	Add: Increase due to addition during the year / period	D	4,219.74	4,843.30	-	10,778.95	72,478.00	1,330.00	3,942.12
5	Less: Decrease due to de-capitalisation during the year / period	E	789.20	-	-	-	-	-	-
6	Less: Decrease due to reversal during the year / period	F		-	-	-	-	-	-
7	Add: Increase due to discharges during the year / period	G	14,682.52	-	-	-	-	-	-
8	Normative Loan Closing	H=C+D-E-F+G	1039472.50	989926.50	1339889.37	1350354.27	1307807.04	1191045.21	1074176.94
9	Repayment of Loan during the year	I	54504.63	82374.99	314.05	115025.23	118091.83	120810.39	121004.58
10	Repayment adjustment on account of decapitalization	J	115.34	0.00	0.00	0.00	0.00	0.00	0.00
11	Net Repayment of loan during the year	K=I-J	54,389.29	82,374.99	314.05	1,15,025.23	1,18,091.83	1,20,810.39	1,21,004.58
12	**Net Normative loan - Closing**	**L=H-K**	9,85,083.20	9,07,551.51	13,39,575.32	12,35,329.04	11,89,715.21	10,70,234.82	9,53,172.36
13	**Average Normative loan**	**M=Average(C,L)**	10,03,221.32	9,46,317.36	13,39,732.35	12,87,452.18	12,12,522.12	11,29,975.01	10,11,703.59
14	Weighted average rate of interest	N	7.569%	7.518%	7.494%	7.511%	7.528%	7.543%	7.493%
15	**Interest on Loan**	**O=MxN**	**75930.81**	**71148.71**	**100404.98**	**96701.71**	**91280.92**	**85233.81**	**75807.76**
15	Cumulative repayment of Normative loan at the end of the period	P=B+K	1,33,792.55	2,16,167.54	2,16,481.59	3,31,506.83	4,49,598.66	5,70,409.05	6,91,413.63

(Petitioner)

PART 1
FORM- O

Calculation of Interest on Working Capital

Name of the Company :	**NTPC Limited**
Name of the Power Station :	**Barh Super Thermal Power Project Stage-I (3x660 MW)**

(Amount in Rs Lakh)

S. No.	Particulars	Existing 2023-24	2024-25 (From 01.04.24 to 30.03.2025)	2024-25 (From 31.03.25 to 31.03.2025)	2025-26	2026-27	2027-28	2028-29
1	2	3	4		5		6	8
1	Cost of Coal/Lignite	43,991.13	40167.94	60251.91	60251.91	60251.91	60251.91	60251.91
2	Cost of Main Secondary Fuel Oil	486.37	1015.18	1522.77	1522.77	1522.77	1526.94	1522.77
3	Cost of Limestone		0.00	0.00	0.00	758.34	758.34	758.34
3	Fuel Cost							
4	Liquid Fuel Stock							
5	O & M Expenses	2,852.17	3964.68	5382.58	5634.41	6153.61	6421.63	6721.50
6	Maintenance Spares	6,845.22	9515.24	12918.20	13522.59	14768.66	15411.90	16131.60
7	Receivables	77,386.63	74749.10429	108028.5716	108059.8	109694.08	109915.53	109402.15
8	Total Working Capital	131561.53	129412.15	188104.03	188991.48	193149.37	194286.25	194788.27
9	Rate of Interest	12.00%	11.90%	11.90%	11.90%	11.90%	11.90%	11.90%
10	**Interest on Working Capital**	**15787.38**	**15400.05**	**22384.38**	**22489.99**	**22984.78**	**23120.06**	**23179.80**

(Petitioner)

Summary of issue involved in the petition

PART 1
FORM-T

Name of the Company :		NTPC Limited					
Name of the Power Station :		Barh Super Thermal Power Project Stage-I (3x660 MW)					
1	Petitioner:	NTPC Limited					
2	Subject	Determination of Tariff for 2024-29 period					
3	Prayer: i) Approve tariff of Barh Super Thermal Power Station Stage-I (3x660 MW) for the tariff period 01.04.2024 to 31.03.2029. ii)Allow the recovery of filing fees as & when paid to the Hon'ble Commission and publication expenses from the beneficiaries. iii)Consider Station Heat Rate based on design heat Rate with applicable operating margin provisionally and also allow the petitioner to amend the boiler efficiency at a later stage. iv)Allow reimbursement of Ash Transportation Charges directly from the beneficiaries on monthly basis, subject to true up. v)Grant liberty to approach the Hon'ble Commission to allow for the recovery of pay/wage revision due in 2024-29 period as additional O&M over and above the normative O&M. vi)Pass any other order as it may deem fit in the circumstances mentioned above.						
4	Respondents						
	Name of Respondents						
	1.North Bihar Power Distribution Company Ltd (NBPDCL)						
	2.South Bihar Power Distribution Company Ltd (SBPDCL)						
	3. Jharkhand Urja Vikas Nigam Limited						
	4. GRIDCO Ltd.						
	5. Power Department, Govt. of Sikkim						
	6. Gujarat Urja Vikas Nigam Limited						
5	Project Scope						
	Date of Station COD	U#1 12.11.2021, U#2 01.08.2023, U#3 31.03.2025 (Anticipated)					
	Claim (Rs Lakh)	2024-25 (From 01.04.24 to 30.03.2025)	2024-25 (From 31.03.25 to 31.03.2025)	2025-26	2026-27	2027-28	2028-29
	AFC	3,06,981.24	4,27,256.18	4,27,509.45	4,35,229.41	4,38,222.94	4,32,861.49
	Capital Cost	16,01,853.44	22,22,938.45	22,30,637.70	22,90,106.95	23,42,826.95	23,46,592.75
	Initial spare	N/A					
	NAPAF (Gen)	85%					
	Any Specific						

(Petitioner)

ANNEXURE-A

To,
NTPC Limted Noida

TO WHOMSOEVER IT MAY CONCERN

Sub: Support for Installed System at Various Location at NTPC Plants

As per Lifecycle policy of Yokogawa, we have Two Phases in Lifecycle:

a) *Standard Sales Phase*
b) *Maintenance Phase*

The Hardware is supported for at least 10 Years in the maintenance phase

While in Standard Sales Phase the Hardware is supplied for all NEW Projects and / or expansion projects while in Maintenance phase initially it is provided for expansion projects and later only for maintenance purpose

The Hardware (CENTUM VP) Supplied at NTPC except controllers for Barh - Offsites is in Standard Sales Phase

Please note as WINDOWS 7 Support is not available from Microsoft, CENTUM VP Licensed Software version is also changed to be compatible to WINDOWS 10. The earlier version of CENTUM VP Software compatible to WINDOWS 7 is obsolete.

The Workstation, Server, network Switches compatible to WINDOWS 7 are also obsolete and are not available .

The Same will not be available for following Projects

1. *Kudgi STPP- 1 , 3x 800 MW*
2. *Lara STPP- 1 , 2x 800 MW*
3. *NTPC Barh STPP-I, 3 x 660 MW*
4. *BRBCL- 4 x 250 MW*
5. *NTPC Talcher, Kaniya- 2 x 500 MW*
6. *NTPC Vindyachal-V, 1 x 500 MW*

Further:

Suppor t Availability -for Windows 10 and Windows Server 2019 along with Control System:

Support for the Supplied control system will be available for next 10 years from year 2022 after Upgradation of HMI , when read in conjunction with following:

- *Windows 10 LTSC Version Support will be available till 2029 (as per Microsoft)*
- *Windows Server 2019 will be available till 2029 (as per Microsoft)*
- *In ONLY BARH SSTPP- offsites section the support for supplied controller will be available till 2025*

With the Operating System and CENTUM VP System Software Upgrade - application Software and the NEW CENTUM VP System Software will work seamlessly

We endeavor to provide unstinted Services and envisage to have continued relation with your esteemed organization

Thanking you and assuring you best of attention at all times Yours sincerely

For Yokogawa India Limited

Avnish Garg

AVP- System Sales

ANNEXURE-B

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
सूचना प्रौद्योगिकी एवं साइबर सुरक्षा प्रभाग
Information Technology & Cyber Security Division
****

विषय : CEA (Cyber Security in Power Sector) Guidelines, 2021.

CEA is mandated to prepare 'Guidelines on Cyber Security' in Power Sector under the provision of regulation (10) of the Central Electricity Authority (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2019. Guidelines on Cyber Security in Power Sector incorporating the cardinal principles has been prepared by CEA. In compliance to the provision of the above regulation, **CEA (Cyber Security in Power Sector) Guidelines, 2021** are issued for compliance by all entities listed in the clause 2.3 (Applicability of the Guidelines) of the guidelines.

Encl: Guidelines on Cyber Security

07/10/21
(V.K Mishra)
Secretary CEA

CEA (Cyber Security in Power Sector) Guidelines, 2021

1.0 Background

1.1 Cyber intrusion attempts and Cyber-attacks in any critical sector are carried out with a malicious intent. In Power Sector it's either to compromise the Power Supply System or to render the grid operation in-secure. Any such compromise, may result in mal-operations of equipments, equipment damages or even in a cascading grid brownout/blackout. The much hyped air gap myth between IT and OT Systems now stands shattered. The artificial air gap created by deploying firewalls between any IT and OT System can be jumped by any insider or an outsider through social engineering. Cyber-attacks are staged through tactics & techniques of Initial Access, Execution, Persistence, Privilege Escalation, Defence Evasion, Command and Control, Exfiltration. After gaining the entry inside the system through privilege escalation, the control of IT network and operations of OT systems can be taken over even remotely by any cyber adversary. The gain of sensitive operational data through such intrusions may help the Nation/State sponsored or non-sponsored adversaries and cyber attackers to design more sinister and advanced cyber-attacks.

1.2 Government of India has set up the Indian Computer Emergency Response Team (CERT-In) for Early Warning and Response to cyber security incidents and to have collaboration at National and International level for information sharing on mitigation of cyber threats. CERT-In regularly issues advisories on safeguarding computer systems and publishes Security Guidelines which are widely circulated for compliances. All Central Government Ministries/ Departments and State/Union Territory Governments have been advised to conduct cyber security audit of their entire Cyber Infrastructure including websites at regular interval through CERT-In empanelled Auditors so as to identify gaps and appropriate corrective actions to be taken in cyber security practices. CERT-In extends supports to enable Responsible Entity in conducting cyber security mock drills and in assessment of their preparation to withstand cyber-attacks. The Responsible Entity must submit Reports of Cyber Audit of cyber security controls, architecture, vulnerability management, network security and periodic cyber security drills to sectoral CERT as well as CERT-In. Team of experts shall review these reports and shortcomings if any in the compliances shall be flagged by them. CERT-In on regular basis also conducts workshops and training programs to enhance Cyber awareness of all Stakeholders.

1.3 Ministry of Power has created 6(six) sectoral CERTs namely Thermal, Hydro, Transmission, Grid Operation, RE and Distribution for ensuring cyber security in Indian Power Sector. Each Sectoral CERT has prepared their sub-sector specific model Cyber Crisis Management Plan(C-CMP) for countering cyber-attacks and cyber terrorism. Each Sectoral CERT has circulated their model C-CMPs for preparation and implementation of organization specific C-CMP by each of their Constituent Utility.

1.4 All Responsible Entities, Service Providers, Equipment Suppliers/Vendors and Consultants engaged in Power Sector are equally responsible for ensuring cyber security of the Indian Power Supply System. They are to act timely upon each threat intelligence,

advisories and other inputs received from authenticated sources, for continuous improvement in their cyber security posture.

1.5 In the current Indian scenario though many cyber security directives and guidelines exists, but none of them are power sector specific. Ministry of Power has directed CEA to prepare Regulation on Cyber Security in Power Sector. And as an interim measures CEA has been directed to issue Guideline on Cyber Security in Power Sector, under the provision of Regulation 10 on Cyber Security in the "Central Electricity Authority (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2019".

1.6 The Guidelines on Cyber Security, in the form of Articles written below, requires mandatory Compliance by all Responsible Entities. The Guidelines shall come into effect from the date of issue by Central Electricity Authority, New Delhi.

2.0 Hereby the Guidelines on Cyber Security are drawn in the form of Articles for compliance by the Requester as well as User under the following provision of Regulation 10 on Cyber Security, in the "Central Electricity Authority (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2019".

"The requester and the user shall comply with cyber security guidelines issued by the Central Government, from time to time, and the technical standards for communication system in Power Sector laid down by the Authority."

2.1 **Objective of issuing Guideline**:

a) Creating cyber security awareness
b) Creating a secure cyber ecosystem,
c) Creating a cyber-assurance framework,
d) Strengthening the regulatory framework,
e) Creating mechanisms for security threat early warning, vulnerability management and response to security threats,
f) Securing remote operations and services,
g) Protection and resilience of critical information infrastructure,
h) Reducing cyber supply chain risks,
i) Encouraging use of open standards,
j) Promotion of research and development in cyber security,
k) Human resource development in the domain of Cyber Security,
l) Developing effective public private partnerships,
m) Information sharing and cooperation
n) Operationalization of the National Cyber Security Policy

2.2 Within the text of these Articles, '**Responsible Entity**' shall mean all:

a) Transmission Utilities as well as Transmission Licensees,
b) Load despatch centres (State, Regional and National),
c) Generation utilities (Hydro, Thermal, Nuclear, RE),
d) Distribution Utilities
e) Generation Aggregators,
f) Trading Exchanges,
g) Regional Power Committees, and
h) Regulatory Commissions.

2.3 **Applicability:**

All Responsible Entities as well as System Integrators, Equipment Manufacturers, Suppliers/Vendors, Service Providers, IT Hardware and Software OEMs engaged in the Indian Power Supply System.

2.4 **Scope:**

2.4.1 **Control Systems for System Operation and Operation Management.**

a) Grid Control and Management Systems,
b) Power Plant Control Systems,
c) Central Systems used to monitor and control of distributed generation and loads e.g. virtual power plants, storage management, central control rooms for hydroelectric plants, photovoltaic/wind power installations,
d) Systems for fault management and work force management,
e) Metering and measurement management systems,
f) Data archiving systems,
g) Parameterisation, configuration and programming systems,
h) Supporting systems required for operation of the above mentioned systems,

2.4.2 **Communication System.**

a) Routers switches and firewalls,
b) Communication technology-related network components,
c) Wireless digital systems.
d) Control Centre to Control Centre Communications for data exchange on ICCP. **(IEC 61850/60850-5/TASE.2/)**

2.4.3 **Secondary, Automation and Tele control technologies**

a) Control and Automation components,
b) Control and field devices,
c) Tele control devices,
d) Programmable logic controllers / Remote Terminal Units, including digital sensor and actuators elements,
e) Protection devices,
f) Safety components,
g) Digital measurement and metering installations,
h) Synchronisation devices,
i) Excitation Systems,

3.0 Definition of Terms:

1. **Access Management**: shall mean set of policies and procedures of the Responsible Entity for allowing Personnel, devices and IoT to securely perform a broad range of operational, maintenance, and asset management tasks either on site or remotely as laid down in Clause 5.2.5 of IS 16335.
2. **Accreditation:** shall mean the process of verifying that an organisation is capable of conducting the tests and assessments against a product/process that are required to be certified.

3. **Accreditation Body:** shall mean an organisation that has been accredited to verify the credentials and capabilities of the organisations that wish to become a certification body.
4. **Act:** shall mean the Information Technology Act, 2000 (21 of 2000)
5. **Asset**: shall mean anything that has value to the organization.
6. **Certification:** shall mean the process of verifying that a product has been manufactured in conformance with a set of predefined standards and/or regulations by an organisation, that is accredited to conduct the certification process
7. **Certification Body:** shall mean an organisation that has been accredited by an accreditation body to certify products / process against a certification scheme.
8. **Certification Scheme:** shall mean the processes, paperwork, tools, and documentation that define how a product or manufacturer is certified
9. **Chief Information Security Officer:** shall means the designated employee of Senior management level directly reporting to Managing Director/Chief Executive Officer/Secretary of the Responsible Entity, having knowledge of Information Security and related issues, responsible for cyber security efforts and initiatives including planning, developing, maintaining, reviewing and implementation of Information Security Policies
10. **Critical Assets:** shall mean the facilities, systems and equipment which, if destroyed, degraded or otherwise declared unavailable, would affect the reliability or operability of the Power Supply System.
11. **Critical System:** shall mean cyber assets essential to the reliable operation of critical asset. Critical System consists of those cyber assets that have at least one of the following characteristics:
    a) The cyber asset uses a routable protocol to communicate outside the electronic security perimeter.
    b) The cyber asset uses a routable protocol within a control centre.
    c) The cyber asset is dial-up accessible.
12. **Critical Information Infrastructure:** shall mean Critical Information Infrastructure as defined in explanation of sub-section (1) of Section 70 of the Act.
13. **Cyber Assets**: shall mean the programmable electronic devices, including the hardware, software and data in those devices that are connected over a network, such as LAN, WAN and HAN.
14. **Cyber Crisis Management Plan:** shall mean a framework for dealing with cyber related incidents for a coordinated, multi-disciplinary and broad-based approach for rapid identification, information exchange, swift response and remedial actions to mitigate and recover from malicious cyber related incidents impacting critical processes.
15. **Cyber Security Breach**: shall mean any cyber incident or cyber security violation that results in unauthorized or illegitimate access or use by a person as well as an entity, of data, applications, services, networks and/or devices through bypass of the underlying cyber security protocols, policies and mechanisms resulting in the compromise of the confidentiality, integrity or availability of data/information maintained in a computer resource or cyber asset.
16. **Cyber Security Incident:** shall mean any real or suspected adverse cyber security event that violates, explicitly or implicitly, cyber security policy of Responsible Entity resulting in unauthorized access, denial of service or disruption, unauthorized use of computer resource for processing or storage of information or changes to data or information

without authorization, leading to harm to the power grid or its critical sub-sectoral elements Generation, Transmission and Distribution.

17. **Cyber Security Policy:** shall mean documented set of business rules and processes for protecting information, computer resources, networks, devices, Industrial Control Systems and other OT resources.
18. **Electronic Security Perimeter:** shall mean the logical border surrounding a network to which the Cyber Systems of Power Supply System are connected using a routable protocol.
19. **Information Security Division:** shall mean a division accountable for cyber security and protection of the Critical System of the Responsible Entity.
20. **Protected System:** shall mean any computer, computer system or computer network of the Responsible Entity notified under section 70 of the Act, in the official gazette by appropriate Government.
21. **Security Architecture:** shall mean a framework and guidance to implement and operate a system using the appropriate security controls with the goal to maintain the system's quality attributes like confidentiality, integrity, availability, accountability and assurance.
22. **Vulnerability:** shall mean intrinsic properties of something resulting in susceptibility to a risk source that can lead to an event with a consequence
23. **Vulnerability Assessment:** shall mean a process of identifying and quantifying vulnerabilities

4.0 Standards

Reference	Description
ISO/IEC 15408	Common Criteria Certification Standard
ISO/IEC 17011	General requirements for accreditation bodies accrediting conformity assessment bodies
ISO/IEC 17025	General requirements for the competence of testing and calibration laboratories
ISO/IEC 21827	Systems Security Engineering - Capability Maturity Model (SSE-CMM)
ISO/IEC 24748-1	Systems and software engineering — Life cycle management — Part 1: Guidelines for life cycle management.
ISO 27001/2	Information Security Management
ISO/ IEC 27019	Information technology — Security techniques — Information Security controls for the energy utility industry
ISO/IEC 61508	Functional Safety of Electrical / Electronic / Programmable Electronic Safety-related Systems
IEC 61850	Communication networks and systems for power utility automation
IEC 62351	Standards for Securing Power System Communications
IEC 62443	Cyber Security for Industrial Control Systems
IS 16335	Power Control Systems – Security Requirements.

5.0 Abbreviations

Abbreviations		Description
a)	BES	Bulk Electric System

b)	CDAC	Centre for Development of Advanced Computing
c)	CEA	Central Electricity Authority
d)	CERC	Central Electricity Regulatory Commission
e)	CERT	Computer Emergency Response Team
f)	CERT-In	Indian Computer Emergency Response Team
g)	CII	Critical Information Infrastructure
h)	CISO	Chief Information Security Officer
i)	CSK	Cyber Swachhta Kendra
j)	COTS	Commercial off-the Shelf
k)	ESP	Electronic Security perimeter
l)	ICS	Industrial Control Systems
m)	ICT	Information and Communications Technology
n)	IEC	International Electro Technical Commission
o)	ISAC	Information Sharing and Analysis Centre
p)	ISD	Information Security Division
q)	ISO	International Organization for Standardization
r)	ISMS	Information Security Management System
s)	IT	Information Technology
t)	FAT	Factory Acceptance Test
u)	NABL	National Accreditation Board for Testing and Calibration Laboratories
v)	NCIIPC	National Critical Information Infrastructure Protection Centre
w)	NLDC	National Load Dispatch Centre
x)	NPTI	National Power Training Institute
y)	NSCS	National Security Council Secretariat
z)	OEM	Original Equipment Manufacturer
aa)	OT	Operational Technology
bb)	RLDC	Regional Load Dispatch Centres
cc)	SAT	Site Acceptance Test
dd)	SERC	State Electricity Regulatory Commission
ee)	SCADA	Supervisory Control and Data Acquisition Systems
ff)	SIEM	Security Information and Event Management
gg)	SLA	Service Level Agreement
hh)	SLDC	State Load Dispatch Centre
ii)	QCI	Quality Council of India

CEA (Cyber Security in Power Sector) Guidelines, 2021

Article 1. Cyber Security Policy.

a. Cardinal Principles: The Responsible entity will strictly adhere to following cardinal principles while framing cyber security policy:

i. There is hard isolation of their OT Systems from any internet facing IT system.

ii. May keep only one of their IT systems with internet facing at any of their site/location if required which is isolated from all OT zones and kept in a separate room under the security and control of CISO.

iii. Downloading/Uploading of any data/information from their internet facing IT system is done only through an identifiable whitelisted device followed by scanning of both for any vulnerability/malware as per the SOP laid down and for all such activities digital logs are maintained and retained under the custody of CISO for at least 6 months. The log shall be readily to carry out the forensic analysis if asked by investigation agency.

iv. List of whitelisted IP addresses for each firewall is maintained by CISO and each firewall is configured for allowing communication with the whitelisted IP addresses only.

v. Communication between OT equipment/systems is done through the secure channel preferably of POWERTEL through the fibre optic cable. Security configuration of the communication channel is also to be ensured.

vi. All ICT based equipment/system deployed in infrastructure/system mandatorily CII are sourced from the list of the "Trusted Sources" as and when drawn by MoP/CEA.

b. The Responsible Entity shall be ISO/IEC 27001 certified (including sector specific controls as per ISO/IEC 27019).

c. The Responsible Entity shall have a Cyber Security Policy drawn upon the guidelines issued by NCIIPC.

d. The Responsible Entity shall ensure annual review of their Cyber Security Policy by subject matter expert and changes shall be made therein only after obtaining the due approval from Board of Directors.

e. The process of Access Management for all Cyber Assets owned or under control of the Responsible Entity shall be detailed in the Cyber Security Policy.

f. The Cyber Security Policy shall leverage state-of-art cyber security technologies and relevant processes at multiple layers to mitigate the cyber security risks.

g. The Responsible Entity shall be solely responsible to get Cyber Security Policy implemented through its Information Security Division (ISD).

h. The CISO shall record the reason(s) for exemption required, if any, in case, unable to comply with any of the provision(s) of the Cyber Security Policy. Any exception shall be allowed only after an approval of provisions of compensatory control(s) to mitigate residual cyber security risks.

i. The CISO shall record the exemptions sought in statement of applicability controls, while getting the ISO 27001 certified. All exemptions and its justification need to be in conformance with Cyber Security Policy of the Responsible Entity.
j. The Responsible Entity shall allocate sufficient Annual budget for enhancing cyber security posture, enhanced year over year.
k. The Responsible Entity shall work in collaboration with other Industry Stakeholders as well as Academia to promote R&D activity in the domain of cyber security.
l. The Responsible Entity shall ensure that cyber security issues are taken up as agenda items in their Board meetings once in every three months.

Article 2 Appointment of CISO.

a) The Responsible Entity shall mandatorily appoint a CISO and shall confirm to qualification, if any, **laid** by Quality Council of India (QCI). In absence, the work of CISO shall be looked upon by Alternate CISO. In case qualification for appointment of Alternate CISO has been relaxed for reasons recorded thereof, Alternate CISO has to mandatorily acquire the minimum required cyber security skill sets within six months from the date of his appointment.
b) The Responsible Entity shall regularly update details of CISO and Alternate CISO, with the Sectoral CERT, as well as on ISAC-Power Portal.
c) Roles and Responsibility of CISOs shall be as laid by CERT-In and ring-fenced to ensure cyber security of the Cyber Assets of the Responsible Entity.

Article 3: Identification of Critical Information Infrastructure (CII).

a) The Responsible Entity shall submit to NCIIPC through Sectoral CERT, details of Cyber Assets which uses a routable protocol to communicate outside the Electronic Security Perimeter drawn by the Responsible Entity or a routable protocol within a control centre and dial-up accessible Cyber Assets, within 30 days from the date of their commissioning in the System.
b) The Responsible Entity shall submit details of Critical Business Processes and underlying information infrastructure along with mapped impact and Risk Profile to NCIIPC and shall get their CIIs identified in consultation with NCIIPC. The process of the notification/declaration by Appropriate Government shall follow thereafter.
c) The Responsible Entity shall review their declared/notified CIIs at least once a year to examine changes if any in the functional dependencies, protocols and technologies or upon any change in security architecture. The Responsible Entity shall review their declared/notified CIIs once in every 6 months, in case if NCIIPC has directed them to constitute an Information Security Steering Committee.
d) The Responsible Entity shall ensure that all cyber assets of their identified/notified CIIs are recorded in the asset register and considered for risk assessment as well as for finalization of controls in statement of applicability.

Article 4. Electronic Security Perimeter

a) The Responsible Entity shall identify and document the Electronic Security Perimeter(s) and all Access Points to the perimeter(s).

b) The Responsible Entity shall follow procedure of identifying "Electronic Security Perimeter" in case of distributed and/or hybrid information infrastructure, as per IEC 62443 / IS16335 (as amended from time to time).
c) The Responsible Entity shall ensure that every Critical System resides within an Electronic Security Perimeter.
d) The Responsible Entity shall perform a cyber-Vulnerability Assessment of each electronic Access Points to the Electronic Security Perimeter(s) at least once in every 6 (six) months and/or after any change in Security Architecture.
e) The Responsible Entity shall ensure that all critical, high and medium vulnerabilities identified as a result of cyber Vulnerability Assessment shall be closed and verified for the effective closure.

Article 5. Cyber Security Requirements

a) The Responsible Entity shall have an Information Security Division (ISD), headed by CISO.
b) The Responsible Entity shall ensure that the ISD must be functional on 24x7x365 basis and is manned by sufficient numbers of Engineers having valid certificate of successful completion of course on cyber security of Power Sector from the Training Institutes designated by CEA.
c) The Responsible Entity shall ensure that ISD
   1) has on-boarded Cyber Swachhta Kendra(CSK) of CERT-In, if they have public IPs.
   2) has timely acted upon the advisories, guidelines and directive of NCIIPC, CSK, CERT-In and Sectoral CERTs,
   3) has deployed an Intrusion Detection System and Intrusion Prevention System capable of identifying behavioural anomaly in both IT as well as OT Systems.
   4) shares reports on incident response and targeted malware samples with CERT-In,
   5) updates the firmware/software with the digitally signed OEM validated patches only.
   6) enables only those ports and services that are required for normal operations. In case of any emergency the procedure as laid in Access management be followed.
   7) maintains firewall logs for the last 6 months duration. Firewall logs shall be analysed and all critical and high severity comments shall be addressed for effective closure.
   8) retains document of FAT, SAT test results and report/ certificate of cyber tests carried out for compliance of Government Orders and Cyber Security Audit.*
   9) maintains all cyber logs and cyber forensic records of any incident for at least** 90 days.

      * FAT, SAT must include comprehensive cyber security tests of the component/equipment/system to be delivered/delivered at site.
      ** 90 days from date of the commissioning of the system/recovery from any incident, whichever is later.

d) The Responsible Entity shall routinely audit and test security properties of the Critical System and must act upon, in case if any new vulnerabilities is identified through testing or by the equipment manufacturer.

e) The Responsible Entity shall design a secure architecture for control system appropriate for their process control environment*.
f) All State Load Dispatch Centres(SLDCs) shall comply with the directions issued by the National Load Dispatch Centre(NLDC) as well as Regional Load Dispatch Centres(RLDCs) U/s 29 (1) of the Electricity Act, 2003 to ensure stability and cyber security of grid operation and achieve efficiency in the grid operation. In case of any non-compliance, the Head of SLDC shall be responsible and shall be liable for Penalty as per the provision of CERC/SERC.

*There are so many different types of systems in existence and so many possible solutions, it is important that the selection process ensures that the level of protection is commensurate with the business risk and the Responsible Entity shall not rely on one single security measure for its defence. *(Reference IEC/TR62351-10* Edition1.0 2012-10 *Power systems management and associated information exchange –Data and communications security – Part 10: Security architecture guidelines).*

Article 6 Cyber Risk Assessment and Mitigation Plan

a) The Responsible Entity shall document in their Cyber Security Policy a Cyber Risk Assessment and Mitigation Plans drawn upon the best practises being followed in the Power Sector, and the same shall be approved by Board of Directors.
b) The Cyber Risk Assessment and Mitigation Plans shall clearly define the matrix for assessing the cyber risk of both IT and OT environment and risk acceptance criteria.
c) The Cyber Risk Assessment Plan shall be capable to demonstrate that repeated cyber security risk assessment delivers consistent, valid and comparable results.
d) The review of cyber risk assessment shall be carried out at least once in a Quarter. The actionable of risk treatment and mitigation shall be tracked in this review for their effectiveness.
e) The CISO shall be responsible for implementation and regular review, on the basis of internal and external feedbacks, of the Cyber Risk Assessment and Mitigation Plans.

Article 7 Phasing out of Legacy System

a) As the life cycle of the Power System Equipment/System is longer than that of IT Systems deployed therein, the Responsible Entity shall ensure that all IT technologies in the Power System Equipment/System should have the ability to be upgraded.
b) The Responsible Entity shall ensure that the Information Security Division shall draw the list of all communicable equipments/systems nearing end life or are left without support from OEM. Thereafter CISO shall identify equipment/systems to be phased out from the list drawn, firm up their replacement plan and put up the replacement plan for approval before the Board of Directors.
c) The CISO shall ensure that till equipments/systems nearing end life or left without support from OEM are not replaced, their cyber security is hardened and ensured through additional controls provisioned in consultation with the OEM or alternate Supplier(s)*.
*e.g. Use of CDAC developed AppSamvid and whitelisting of applications installed may be explored across all legacy systems.
d) The Responsible Entity shall document in their Cyber Security Policy a Standard Operating Procedure for safe and secure disposal of outlived or legacy devices.

Article 8. Cyber Security Training.

a) The Responsible Entity shall establish, document, implement, and maintain an annual cyber security training program for personnel having authorized cyber or authorized physical access (unescorted or escorted) to their Critical Systems.
b) The Responsible Entity shall review annually their cyber security training program and shall update it whenever necessary. Annual Review shall record evaluation of the effectiveness of the trainings held.
c) The Responsible Entity shall ensure that Cyber Security training program designed for their IT as well as OT O&M Personnel must include following topics and as per their functional requirements and security concerns additional topics shall be added:
   1) User authentication and authorization.
   2) Cyber Security and Protection mechanisms of IT/OT/ICS Systems.
   3) Introduction to various standards i.e. ISO/IEC:15408, ISO/IEC:24748-1, ISO: 27001, ISO: 27002, ISO 27019, IS 16335, IEC/ISO:62443.
   4) Training on implementation of ISO/IEC 27001 and awareness on IEC 62443.
   5) Vulnerability Assessment in the Critical System.
   6) Monitoring and preserving of electronic logs of access of Critical Assets.
   7) Detecting cyber-attacks on SCADA and ICS systems
   8) The handling of Critical System during cyber crisis.
   9) Action plans and procedures to recover or re-establish normal functioning of Critical Assets and access thereto following a Cyber Security Incident.
   10) Hands on SCADA operation at any of the Regional Load Dispatch Centre.
   11) Handling of risks involved in the procurement of COTS Products.

d) All Personnel engaged in O&M of IT & OT Systems shall mandatorily undergo courses on cyber security of Power Sector from any of the training institute designated by CEA, immediately within 90 days from the notification of CEA Guidelines on Cyber Security in Power Sector.
e) The Responsible Entity shall ensure that none of their newly hired or the current Personnel have access to the Critical System, prior to the satisfactory completion of cyber security training programme from the Training Institutes designated in India, except in specified circumstances such as cyber crisis or an emergency.
f) NPTI in consultation with CEA shall identify and design domain specific courses on Cyber Security for different target groups. The "Governing Board for PSO Training and Certification" shall approve the content, duration etc of these courses and shall review it Annually. NPTI shall conduct these courses at all of their branches on regular basis and shall maintain the list of the Participants successfully completing the course.

Article 9 Cyber Supply Chain Risk Management

a) The Responsible Entity shall ensure that, as and when Ministry of Power, Government of India notifies the Model Contractual Clauses on cyber security, these clauses are included in their every Bid invited for procurement of any ICT based components/equipments/System to be used for Power System.
b) The Responsible Entity shall ensure that all the Communicable Intelligent Equipments and the Service Level Agreements (SLAs) for their Critical Systems shall be sourced from the list of the "Trusted Sources" as and when drawn by MoP/CEA.

c) The Responsible Entity shall ensure that, in case, for the any Communicable Intelligent Devices, if no Trusted Source has been identified, then the successful bidder in compliance with the provisions made in MoP order dated 2.7.2020 and any other relevant MoP order has got the product cyber tested for any kind of embedded malware/Trojan/cyber threat and for adherence to Indian Standards at the designated lab.

d) The Responsible Entity shall ensure that the essential cyber security tests are carried out successfully during FAT, SAT as detailed in **Annexure A.** The equipment/System besides for functionality shall also be tested in the factory for vulnerabilities, design flaws, parts being counterfeit or tainted, so as to minimize problems during on-site-testing and installation. Cyber Security Conformance Testing are to be carried out in the designated Lab as listed in **Annexure-I of MoP Order No. 12/13/2020-T&R dt. 8th June, 2021(Order at Annexure-B).**

e) The Responsible Entity shall ensure that the Equipment/System supplied by the successful bidder shall accompany with a certificate[$, #] obtained by OEM from a certification body accredited to assess devices and process for conformances to IEC 62443-4 standards during design and manufacture. The Responsible Entity shall accept the certificate submitted along with the supplied Equipment/System only if it's in line with the Testing Protocol as notified by Ministry of Power, Government of India, from time to time.

f) The Responsible Entity in compliance to the requirement of Article 9(e) shall also accept, till the setting up of an adequate certification facility in the India, a digitally signed self-declaration of conformance to the IEC 62443-4 standards during design and manufacture of the equipment/system, if submitted by the OEM.

g) The Responsible Entity shall dispose all unserviceable or obsolete Communicable Intelligent Devices as per the procedure laid in their Cyber Risk Assessment and Mitigation Plans which shall be in line with the prevailing best practices.

$ The National & International certification may be specified in the tender for critical systems/sub-systems being procured by the Responsible Entity.

Certification Schemes:
Embedded Device Security Assurance Certification is for an individual product,
System Security Assurance Certification is for a set of products in a system (possibly from different vendors)
Security Development Lifecycle Assurance Certification is for the development processes that a manufacturer uses for developing products.

Article 10 Cyber Security Incident Report and Response Plan

a) The CISO of the Responsible Entity shall report in the formats prescribed by CERT-In, all Cyber Security Incidents, classified as reportable events.

b) Root cause analysis for all reportable events shall be carried out and corrective action taken, so as to ensure that any re-occurrence of such event can be managed with ease.

c) The Responsible Entity shall mandatorily define in their Cyber Security Policy, criteria(s) identified on the basis of impact analysis, for declaring the occurrence of

Cyber Security Incident(s) as a Cyber Crisis in the System owned or controlled by them.

d) The Responsible Entity shall mandatorily designate an Officer along with his/her standby by name and designation and empower them to declare an occurrence of the incident(s) as "Cyber Crisis". The contact details of these Officers shall be updated in the C-CMP within 15 days of changes if any due to transfer or superannuation etc.
e) The CISO shall ensure that during any Cyber Security Incident, ISD monitors and minutely records every details of cyber security events and incidents in both IT as well as the OT System owned or controlled by the Responsible Entity.
f) The CISO shall ensure that each cyber incident is handled strictly as per Cyber Security Incident Response Plan detailed in the latest C-CMP approved by the Board of Directors.
g) The Responsible Entity shall ensure that the efficacy of the Cyber Security Incident Response Plan is tested annually through mock drill(s) carried out, if feasible, as simulation exercise(s) or as table top exercise(s) with wider participation of their employees, in consultation with CERT-In and sectoral CERT. In case if any shortcoming is observed in the Cyber Security Incident Response Plan suitable changes shall be made in it.
h) The Responsible Entity shall ensure that the CISO compiles details of incident detection, incident handling, learnings from each incident and damage claims made if any and shall report to CERT-In as well as upload information on ISAC-Power Portal.

Article 11 Cyber Crisis Management Plan(C-CMP)

a) The Responsible Entity shall prepare a Cyber Crisis Management Plan and submit to their sectoral-CERT for review with intimation to Ministry of Power/CISO-MoP. Responsible Entity shall update their C-CMP on the basis of comments made by sectoral-CERT and then submit for vetting to CERT-In. The C-CMP shall be updated once again to include the observations made by CERT-In before seeking approval of Board of Directors for implementation of C-CMP.
b) The Responsible Entity shall ensure that the C-CMP is reviewed at least annually. The CISO shall ensure that all changes are made in C-CMP only with the due approval of Board of Directors and the changes made in C-CMP have been communicated through a verifiable means to all the concerned Personnel of the Responsible Entity.
c) The CISOs shall be the custodian of all the cyber security related documents including Cyber Crisis Management Plan, Risk Treatment Plan, Statement of Applicability of controls, and compliance to regulator's requirement.
d) The CISO shall be accountable for ensuring enforcement of C-CMP by Information Security Division of the Responsible Entity, during a cyber-crisis, as and when declared by the designated Officer. (refer Article 10(d))

Article 12: Sabotage Reporting%

a) The Responsible Entity shall incorporate procedure for identifying and reporting of sabotage in their Cyber Security Policy within 30 days from issue of the Guidelines, or grant of licence under the appropriate legal provisions to the Responsible Entity.
b) The CISO shall be held liable for non-reporting of identified sabotage(s) as per procedure laid for identifying and reporting of sabotage in the Cyber Security Policy of the Responsible Entity.

c) The CISO shall prepare a detailed report on disturbances or unusual occurrences, identified, suspected or determined to be caused by sabotage in the Critical System of the Responsible Entity, and shall submit the report to the Sectoral CERT as well as to CERT-In within 24 hours of its occurrence.

d) The CISO shall submit to NCIIPC within 24 hours of occurrence the report on every sabotage classified as cyber incidents(s) on "Protected System".

e) The CISO upon occurrence on every sabotage shall take custody of all log records as well as digital forensic records of affected Cyber Assets, Intrusion Detection System, Intrusion Protection System, SIEM and shall preserve them for at least 90 days and shall make them available as and when called upon for investigation by the concerned Agencies.

%Disturbances or unusual occurrences, suspected or determined to be caused by sabotage.
Sabotage e.g. can be a forced intrusion in un-manned/manned facility and taking control of operation of Critical System through a communicating device.

Article 13 Security and Testing of Cyber Assets

a) The Responsible Entity shall ensure security of all in-service phase as well as standby Cyber Assets through regular firmware/Software updates and patching, Vulnerability management, Penetration testing (of combined installations), securing configuration, supplementing security controls. CISO shall maintain details of update version of each firmware and software and their certification if received from OEMs.

b) The Responsible Entity shall carry out regularly Vulnerability Assessment of all Cyber Assets owned or under their control. If a Cyber Asset is found vulnerable to any exploits or upon any patch updates or major configuration changes, then further Penetration Testing may be carried out offline or in a suitably configured laboratory test-bed to determine other vulnerabilities that may have not been identified so far.

c) The Responsible Entity shall specify security requirement and evaluation criteria during each phase of their procurement Process.

d) The Responsible Entity shall ensure that all Cyber Assets being procured shall conform to the type tests as mentioned in the specification for type testing listed in the bid document. Type test reports of tests conducted in NABL accredited Labs or internationally accredited labs (with in last 5 years from the date of bid opening) shall be mandated to be submitted along with bid. In case, the submitted Type Test reports are not as per specification, the re-tests shall be conducted without any cost implication to the Responsible Entity.

e) The Responsible Entity shall ensure that all Communicable devices are tested for communication protocol as per the ISO/IEC/IS standards listed in **MoP Order No. 12/13/2020-T&R dated 8th June, 2021(Annexure-B).**

f) The Responsible Entity shall ensure that all Critical Systems designed with Open Source Software are adequately cyber secured.

g) The Responsible Entity as a best practise upon any incidence of Cyber Security Breach shall carry out cyber security tests at any lab designated for cyber testing by Ministry of Power. These tests shall be similar to Pre Commissioning Security Test and those essential for carrying out Post Incident Forensics Analysis.

Article 14 Cyber Security Audit

a) The Responsible Entity shall implement Information Security Management System (ISMS) covering all its Critical Systems.
b) The Responsible Entity shall through a CERT-In Empanelled Cyber Security OT Auditor shall get their IT as well as OT System audited at least once in every 6 (six) months and shall close all critical and high vulnerabilities within a period of one month and medium as well as low non-conformity before the next audit. Effective closure of all non-conformities shall be verified during the next audit.
c) The Cyber Security Audit shall be as per ISO/IEC 27001 along with sector specific standard ISO/IEC 27019, IS 16335 and other guidelines issued by appropriate Authority if any. These mentioned standards shall be current with all amendments if any and in case if any standard is superseded, the new standard shall be applicable. CISO shall ensure immediate closure of non-conformance, based on the criticality and by means all non-conformances are to be closed before the next audit.
d) The Responsible Entity shall ensure that CISO has all the required systems and documents in place, as mandated by NSCS for base line cyber security audit.

FAT & SAT

1. During FAT stage, the customer has to verify all types test reports / certificates including Communication protocol and security conformance tests of the devices offered for FAT.
2. FAT of SCADA involves testing as a whole system in the integrated scale down set up. For SCADA, Indian standard IS 15953: 2011 "SCADA System for Power System Applications" provides definition and guidelines for the specification, performance analysis and application of SCADA systems for use in electrical utilities (for transmission & Distribution) including guidance on Tests and inspections.
3. The SAT will be done at customer site as per the SAT document mutually agreed by buyer and supplier. For SAT also, guidance from IS 15953: 2011need to be applied.
4. IEC 61850-10-3 Communication Networks and Systems For Power Utility Automation-Functional testing of IEC 61850 systems (in draft stage - CDTR) covers testing of applications within substations covering

    a. A methodical approach to the verification and validation of a substation solution
    b. The use of IEC 61850 resources for testing in Edition 2.1
    c. Recommended testing practices for different use cases
    d. Definition of the process for testing of IEC 61850 based devices and systems using communications instead of hard wired system interfaces (ex. GOOSE and SV instead of hardwired interfaces)
    e. Use cases related to protection and control functions verification and testing.

    This standard may be used as a guidelines for FAT & SAT for Substation Automation System (SAS) based on IEC 61850.

Annexure - B

Annexure – 1

List of designated laboratories for cyber security conformance testing

Table -A. Field Equipment /Operational Technology (OT)

Sl. No.	Equipment	Communication Protocol Conformance Standards	Protocol Security Conformance Standards	Designated Laboratories
1	Remote Terminal Units (RTUs) & PLCs with IEC communications protocols	IEC 60870-5 -101 / IEC 60870-5 -104 (Test Details Annexure 2)	IEC 60870-5- 7 Security extension & IEC 62351 series (specifically IEC 62351-100 parts 1 & 3) (Test Details Annexure-2	Central Power Research Institute (CPRI), Prof Sir C V Raman Road, Sadashivanagar P O, Bengaluru – 560080, Karnataka
2	Intelligent Electronic Equipment / Numerical Protection Relays / Bay Control Units / Bay Protection Units, Gateways, Transformer Tap controller/ changer, etc. with IEC 61850 communication protocol	IEC 61850 – 5 to IEC 61850 – 10 (Test Details Annexure 2)		CPRI
3	Smart meters with IEC 62056 communication protocols	IEC 62056 series / DLMS & IS 15959 series and IS 16444 series (Test details Annexure 2)	IEC 62056 series / DLMS & IS 15959 series and IS 16444 series (Test Details Annexure 2)	1. CPRI 2. Electrical Research and Development Association (ERDA), ERDA Road, GIDC, Makarpura, Vadodara - 390 010 Gujarat 3. Yadav Measurements Pvt. Ltd. (YMPL) 373-375, RIICO Bhamashah Industrial Area Kaladwas 313003 Udaipur – Rajasthan

Information Technology (IT) Equipment (Main / Backup / Disaster recovery (DR) Control Centre / Substation control centre IT equipment)

All IT products procured /supplied shall have a valid Certificate of Common Criteria as per ISO/IEC 15408 issued by signatories of the Common Criteria Recognition Agreement (CCRA) (www.commoncriteriaportal.org).

Import/procurement/supplied from vendors sourcing from prior reference countries, the Certificate for Common Criteria shall be from Government Laboratories in India according to the IC3S scheme operated by Ministry of Electronics and Information Technology, which is a signatory to CCRA.

https://www.commoncriteria-india.gov.in/

Annexure - 2

Details of tests for various identified products

Remote Terminal Units (RTUs) (Sl. No. 1 of Table – A of Annexure – 1)

Test protocol:

Utilities / manufacturers will submit the sample along with all the required technical documentation for taking up testing to the designated laboratory.

Reference standards

1) IEC 60870-5-101 & IEC 60870-5-104 as applicable

2) IEC 60870-5-7 Telecontrol equipment and systems - Part 5-7: Transmission protocols - Security extensions to IEC 60870-5-101 and IEC 60870-5-104 protocols (applying IEC 62351)

3) IEC 62351-100-1 & IEC 62351-100-3 and other cross referenced standards.

Test cases

Extract from standard (IEC 62351-100-1)

The conformance test cases are divided into four clauses:

- Clause 5: Verification of configuration parameters. This clause contains the configuration parameters affecting the message contents and/or the protocol behaviour.
- Clause 6: Verification of communication. The goal of this clause is to verify that Device Under Test (DUT) is able to implement the security extension messages as described in IEC TS 60870-5-7.
- Clause 7: Verification of procedures. The goal of this clause is to verify that DUT is able to execute the security extension procedures as described in IEC TS 62351-5.
- Clause 8: Test result chart. This clause contains the results of the test cases listed in Clauses 6 and 7 for each supported value of the configuration parameters listed in Clause 5.

The test cases are organized in tables. They are numbered; their numbering syntax is: Subclause number (where the Table is located) + test case number.

In the column 'reference' each test case has a direct reference to IEC TS 62351-5 or IEC TS 60870-5-7 where the clause under test is defined.

Test cases are mandatory depending on the description in the column 'Required'. The following situations are possible:

M= Mandatory test case. The test is referencing a clause that is mandatory in IEC TS 62351-5 or IEC TS 60870-5-7.

Protocol Information Conformance Statement (PICS) x, x = Mandatory test case if the functionality is enabled in the PICS (by marking the applicable check box), with a reference to the section number of the PICS (x.x).

Conformance testing of security extension procedures

The security extension procedures can be summarized as follows:

- User management
- Update key maintenance
- Session key maintenance
- Challenge/Reply authentication
- Aggressive Mode authentication

Extract from standard (IEC 62351-100-3)

IEC 62351-3 defines the requirements related to the authentication/encryption protocol, procedures and methods to be implemented at TCP/IP (transport) level.

The conformance test cases are divided into three clauses:

- Clause 5: Verification of configuration parameters. This clause contains the parameters specified by the standards referencing IEC 62351-3 (see IEC 62351-3:2014/AMD1:2018, Clause 7) and affecting the protocol behaviour.
- Clause 6: Verification of IEC 62351-3 requirements. The goal of this clause is to verify that DUT is conformant to the requirements of the IEC 62351-3.
- Clause 7: Test result chart. This clause contains the results of the test cases listed in Clause 6 for each supported value of the configuration parameters listed in Clause 5.

The test cases are organized in tables. They are numbered, their numbering syntax is: Subclause number (where the table is located) + test case number.

In the column 'Reference' each test case has a direct reference to IEC 62351-3 where the clause under test is defined. PICS or Protocol Implementation eXtra Information for Testing (PIXIT) could be found in the "Reference" column for some test cases whenever the execution of the test case shall take into account specific parameter values declared in the PICS or PIXIT of the DUT.

Test cases are mandatory depending on the description in the column 'Required'. The following situations are possible:

M = Mandatory test case. The test is referencing to a clause that is mandatory in IEC 62351-3.

PICS

or

PIXIT = Mandatory test case if the functionality is enabled in the PICS or PIXIT by marking the applicable check box or declaring the applicable value.

Intelligent Electronic Devices (IEDs) (Sl. No. 2 of Table – A of Annexure – 1)

Utilities / manufacturers will submit the sample along with all the required technical documentation for taking up testing to the designated laboratory.

Reference standards

IEC 61850 series

Specifically IEC 61850-5, IEC 61850-6, IEC 61850-7, IEC 61850-8, IEC 61850-9 and IEC 61850-10

Test cases

Communication protocol conformance as per IEC 61850 -10. This part of standard defines methods and abstract test cases for conformance testing of client, server and sampled values devices used in power utility automation systems, the methods and abstract test cases for conformance testing of engineering tools used in power utility automation systems, and the metrics to be measured within devices according to the requirements defined in IEC 61850-5. Further this part of standard specifies standard techniques for testing of conformance of client, server and sampled value devices and engineering tools, as well as specific measurement techniques to be applied when declaring performance parameters. The use of these techniques will enhance the ability of the system integrator to integrate IEDs easily, operate IEDs correctly, and support the applications as intended.

Smart Meters (Sl. No. 3 of Table – A of Annexure – 1)

Utilities / manufacturers will submit the sample along with all the required technical documentation for taking up testing to the designated laboratory.

IEC 62056 series of standards (Electricity metering data exchange – The DLMS/COSEM suite) specifies details of communication protocol requirements, conformance testing and security requirements. The Part 5-3 (DLMS/COSEM application layer) specifies the DLMS/COSEM application layer in terms of structure, services and protocols for DLMS/COSEM clients and servers, and defines rules to specify the DLMS/COSEM communication profiles. It defines services for establishing and releasing application associations, and data communication services for accessing the methods and attributes of COSEM interface objects, defined in IEC 62056-6-2 using either logical name (LN) or short name (SN) referencing.

Clause 5 and sub clauses specifies security requirements. It cover security concepts, Identification and authentication, Cryptographic algorithms, Cryptographic keys – overview, Key used with symmetric key algorithms, Keys used with public key algorithms and Applying cryptographic protection.

Note: All above referred standards shall be latest with amendments if any at the time of submission of sample(s) for testing.

Annexure – 3

Testing Criteria

1) Supply from Trusted Sources

The sample size shall be as specified by CEA as per the approved criteria for Trusted Vendors

2) Supply from other than trusted vendors

The sample size shall be shall be 5% of the supply lot / ordered quantity (minimum one). The manufacturer shall submit request to the Nodal agency along with vendor's / manufacturer's certifications for supply chain management system practices and secure product development process implementations based on any one or more of standards ISO / IEC 27036, ISO / IEC 20243, IEC 62443 for verification.

After scrutiny of vendor's / manufacturer's certifications the supplier / utilities shall be asked to submit product to the designated laboratory for communication and cyber security conformance testing.

The supply lot shall stand rejected on failure to comply with the test requirements.

3) Supply from prior reference countries

The utility shall obtain prior permission from the Government of India for importing the product / system from prior reference countries.

The sample size shall be shall be 10 % of the supply lot / ordered quantity (minimum one). The manufacturer shall submit request to the Nodal agency along with vendor's / manufacturer's certifications for supply chain management system practices and secure product development process implementations based on any one or more of standards ISO / IEC 27036, ISO / IEC 20243, IEC 62443 for verification.

After scrutiny of vendor's / manufacturer's certifications the supplier / utilities shall be asked to submit product to the designated Government / Government controlled Autonomous laboratory for type tests (Annexure – 4) and communication & cyber security conformance testing.

The supply lot shall stand rejected on failure to comply with the test requirements.

Type Tests

Products imported from prior reference countries shall also undergo type testing as per following standards in addition to communication protocol and security conformance testing at the designated Government / Government controlled Autonomous laboratory:

Type test standards for RTUs

1. IEC 60870-1-2:1989 Telecontrol equipment and systems. Part 1: General considerations. Section Two: Guide for specifications.
2. IEC 60870-2-1:1995 Telecontrol equipment and systems - Part 2: Operating conditions - Section 1: Power supply and electromagnetic compatibility.
3. EC 60870-2-2:1996 Telecontrol equipment and systems - Part 2: Operating conditions -Section 2: Environmental conditions (climatic, mechanical and other non-electrical influences).
4. IEC 60870-3:1989 Telecontrol equipment and systems. Part 3: Interfaces (electrical characteristics)

Type test standard for IEDs / Numerical Protection Relays / Bay controls units

1. IEC 61850-3: 2013, Ed. 2 Communication networks and systems for power utility automation – Part 3: General requirements.

Type test standards for Smart meters

1. IS 16444: 2015 AC static direct connected watthour smart meter class 1 and 2 – Specification.
2. IS 16444 Part 2: 2017 AC static transformer operated watthour and var - Hour smart meters, class 0.2 S, 0.5 S and 1.0 S: Part 2 specification transformer operated smart meters.

Note:

1. All above referred standards shall be latest with amendments if any at the time of submission of sample(s) for testing.
2. Type tests generally covers functionality, environmental, mechanical, EMI/ EMC and electrical safety related tests.

National Disaster Management Guidelines

Chemical Disasters (Industrial)

National Disaster Management Guidelines

Chemical Disasters (Industrial)

National Disaster Management Authority
Government of India

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Vice Chairman
National Disaster Management Authority
Government of India

FOREWORD

Preparation of guidelines for various types of disasters forms an important part of the mandate of the National Disaster Management Authority (NDMA). Chemical Disaster (Industrial) is one such high priority subject, as it can be a highly traumatic event. At times, it can result in irreparable damage to the environment; both biotic and abiotic, and also cause fatality to a large number of population. Consequently, the work on preparation of comprehensive guidelines on Chemical disasters was undertaken on priority over a year back.

Formulation of these guidelines has involved active participation and contributions of 275 experts, including stakeholders like representatives of central ministries and departments, regulatory agencies, research and development organisations, professionals from scientific and technical institutes/academies like the National Safety Council and various DM institutes and apex industrial associations/consortia of the corporate sector. Help and advice of the officials at the functional level were also taken to incorporate practical aspects of the functioning.

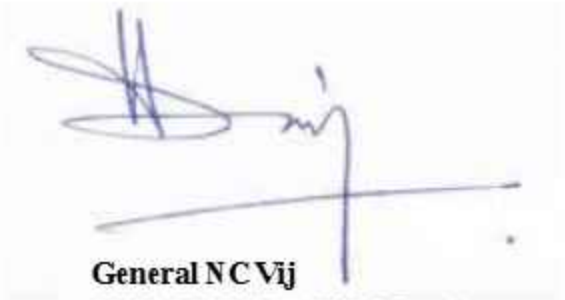
The work commenced with an Extended Group of approximately 60 experts, identifying 'the felt needs' and determining the critical objectives. A Core Group of 8 members, constituted out of this group, thereafter, prepared draft guidelines taking into account the operational, administrative, financial and legal aspects. These draft papers were reviewed extensively, a number of times by the Extended Group, and then finalized in a national workshop held at the Disaster Management Institute, Bhopal.

The underlying philosophy of these guidelines is to build on existing structures and mechanisms. The 'National Disaster Management Guidelines—Chemical Disasters' document calls for a proactive, participatory, well-structured, fail-safe, multi-disciplinary and multi-sectoral approach involving all stakeholder groups, aimed at refining and strengthening the national mechanisms in this field, from stages of planning to field operations. These guidelines contain all the details that are required by the planners and implementers and will help in the preparation of plans by the central ministries/departments and the states.

I take this opportunity to express my deep appreciation of the commitment of various stakeholder groups who extended their willing support and cooperation to our efforts. I am grateful to the members of the Core Group, who put in endless hours of work. I also wish to convey my gratitude to the members of the NDMA, Extended Group, and other experts whose contributions have resulted into the preparation

Contd.

of these guidelines. I would also like to commend the significant contributions made by the Ministry of Environment and Forests, the National Safety Council, Mumbai and the Disaster Management Institute, Bhopal in preparation of these guidelines. And finally, I am pleased to place on record my sincere appreciation for Lt Gen (Dr.) J.R. Bhardwaj, PVSM, AVSM, VSM, PHS (Retd), Member, NDMA, who guided and coordinated the entire exercise.



New Delhi
30 April 2007

General N C Vij
PVSM, UYSM, AVSM (Retd)

Member
National Disaster Management Authority
Government of India

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I am thankful to the Core Group Members for their untiring efforts in helping the NDMA in the formulation of the National Guidelines on Chemical Disaster Management. I would like to place on record the significant contribution made by the Ministry of Environment and Forests, New Delhi and National Safety Council, Mumbai for helping in designing the format of the document and providing lots of technical inputs from time-to-time. The Disaster Management Institute, Bhopal also deserves special recognition for providing inputs related to On-Site and Off-Site emergency plans.

I would also like to express my sincere thanks to the representatives of the other central ministries and departments concerned, regulatory agencies, R&D organisations, professionals from scientific and technical institutes/academics, technocrats from leading national institutions and apex industrial associations/consortiums of the corporate sectors for the valuable inputs that helped us in improving the content and presentation of the document.

The efforts of Dr. Rakesh Kumar Sharma, Scientist 'F' and Additional Director, Defence Research Laboratory, Tezpur, Assam, and Dr. Raman Chawla, Senior Research Officer, NDMA, in providing knowledge-based technical inputs to the core group, are highly appreciated. Thanks are also due to Mr. Rubaab Sood and the secretarial staff of the NDMA including Mr. Deepak Sharma and Mr. D.K. Ray for their dedicated work during the convening of various workshops, meeting and preparation of the final document.

Finally, I would like to express my gratitude to General N.C. Vij, PVSM, UYSM, AVSM (Retd), Vice Chairman, NDMA and all Members of the NDMA for their constructive criticism and suggestions that guided us in formulating these guidelines.

New Delhi
30 April 2007

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Abbreviations

ADPC	Asian Disaster Preparedness Centre
AERB	Atomic Energy Regulatory Board
AMAI	Alkali Manufacturers Association of India
APELL	Awareness and Preparedness for Emergencies at Local Level
ASME	American Society of Mechanical Engineers
ASSOCHAM	Associated Chambers of Commerce and Industry
BIS	Bureau of Indian Standards
BLEVE	Boiling Liquid Expanding Vapour Explosion
CA (EPPR) Rules	Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996
CAS	Crisis Alert System
CCG	Central Crisis Group
CCR	Central Control Room
CDM	Chemical Disaster Management
CETP	Common Effluent Treatment Plant
CFEES	Centre for Fire, Explosive and Environment Safety
CIF	Chief Inspector of Factories
CII	Confederation of Indian Industry
CIR	Community Information Representative
CLI	Central Labour Institute
CMVR	Central Motor Vehicles Rules
CPAP	Continuous Positive Air Pressure
CPCB	Central Pollution Control Board
CRR	Community Response Representative
CSIR	Council of Scientific and Industrial Research
DAE	Department of Atomic Energy
DCG	District Crisis Group
DCR	District Control Room
DCS	Distributed Control System
DDMA	District Disaster Management Authority
DDMAP	District Disaster Management Action Plans
DEA	Department of Economic Affairs
DGFASLI	Directorate General Factory Advice Service and Labour Institutes
DGFT	Director General Foreign Trade
DISH	Directorate of Industrial Safety and Health
DM	Disaster Management
DMI	Disaster Management Institute
DMIS	Disaster Management Information System
DMP	Disaster Management Plan
DRDO	Defence Research and Development Organisation

DRM	Disaster Risk Management
DTIE	Division of Technology, Industry & Economics
EIA	Environment Impact Assessment
EIP	Emergency Information Panel
EMP	Emergency Management Plan
ENVIS	Environmental Information Systems
EOC	Emergency Operations Centre
ERC	Emergency Response Centre
ERF	Environment Relief Fund
ERRIS	Environment Risk Reporting and Information Systems
ESIC	Employee State Insurance Corporation
FE	Functional Exercise
FICCI	Federation of Indian Chambers of Commerce and Industry
FSD	Full-Scale Drill
GIDC	Gujarat Industrial Development Corporation
GIS	Geographic Information System
GPS	Global Positioning System
HAZAN	Hazard Analysis
HAZCHEM	Hazardous Chemical
HAZMAT	Hazardous Material
HAZOP	Hazard and Operability Study
HPC	High Powered Committee
HPCL	Hindustan Petroleum Corporation Ltd
HSE	Health, Safety and Environment
IATA	International Air Transport Association
ICA	Indian Chemical Association
ICAO	International Civil Aviation Organization
ICC	Indian Chamber of Commerce
ICMA	Indian Chemical Manufacturers' Association (now called Indian Chemical Council)
ICMR	Indian Council of Medical Research
ICSC	International Chemical Safety Cards
IDLH	Immediately Dangerous to Life and Health
IDRN	India Disaster Resource Network
IICT	Indian Institute of Chemical Technology
IIM	Indian Institute of Management
IIT	Indian Institute of Technology
ILO	International Labour Organization
IMO	International Maritime Organization
IPCL	Indian Petrochemicals Corporation Limited
IPCS	International Programme on Chemical Safety
IRPTC	International Register for Potentially Toxic Chemicals
IS	Indian Standards
ISDR	International Strategy for Disaster Reduction
ITRC	Industrial Toxicology Research Centre

LAMP	Local Accident Mitigation and Prevention
LCG	Local Crisis Group
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
MAH Unit	Major Accident Hazard Unit
MAHC	Major Accident Hazard Control
MAHCAD	Major Accident Hazard Control Advisory Division
MARG	Mutual Aid Response Group
MARPOL	Maritime Pollution
MFR	Medical First Responders
MHA	Ministry of Home Affairs
MIS	Management Information System
MoA	Ministry of Agriculture
MoC & F	Ministry of Chemicals and Fertilizers
MoC & I	Ministry of Commerce and Industry
MoD	Ministry of Defence
MoEF	Ministry of Environment & Forests
MoF	Ministry of Finance
MoH & FW	Ministry of Health and Family Welfare
MoHI & PE	Ministry of Heavy Industries and Public Enterprises
MoLE	Ministry of Labour and Employment
MoP & NG	Ministry of Petroleum and Natural Gas
MoSRT & H	Ministry of Shipping, Road Transport and Highways
MSDS	Material Safety Data Sheet
MSIHC Rules	The Manufacture, Storage and Import of Hazardous Chemicals Rules,1989
NAC	National APELL Centre
NCDC	National Civil Defence College
NCL	National Chemical Laboratory
NCT	National Capital Territory
NDMA	National Disaster Management Authority
NDRF	National Disaster Response Force
NEC	National Executive Committee
NEERI	National Environmental Engineering Research Institute
NFSC	National Fire Service College
NGOs	Non-Governmental Organizations
NHAI	National Highway Authority of India
NICNET	National Informatics Centre Network
NIDM	National Institute of Disaster Management
NIOH	National Institute of Occupational Health
NOCs	No Objection Certificates
NSC	National Safety Council
OISD	Oil Industry Safety Directorate
PCC	Pollution Control Committee
PESO	Petroleum and Explosives Safety Organisation

PM	Preventive Maintenance
PMS	Pipeline Management System
PPE	Personal Protective Equipment
PPP	Public Private Partnership
PVOs	Private Voluntary Organisations
PWD	Public Works Department
QCI	Quality Council of India
QRMT	Quick Reaction Medical Team
QRT	Quick Reaction Team
QSP	Quick Start Programme
RC	Responsible Care
R&D	Research and Development
RLI	Regional Labour Institute
RTO	Regional Transport Officer
SAICM	Strategic Approach to International Chemical Management
SCG	State Crisis Group
SDMA	State Disaster Management Authority
SDRF	State Disaster Response Force
SEC	State Executive Committee
SMEs	Small and Medium Enterprises
SOLAS	Safety of Life at Sea
SOPs	Standing Operating Procedures
SPCB	State Pollution Control Board
STEL	Short Term Exposure Limit
TOR	Terms of Reference
TQ	Threshold Quantity
TREMCARD	Transport Emergency Card
TTE	Table Top Exercise
UN	United Nations
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
USAID	United States Agency for International Development
UTs	Union Territories
WAD	Waste Air Destruction
WEC	World Environment Centre
WHO	World Health Organization

Executive Summary

Background

The growth of chemical industries has led to an increase in the risk of occurrence of incidents associated with hazardous chemicals (HAZCHEM). A chemical industry that incorporates the best principles of safety, can largely prevent such incidents. Common causes for chemical accidents are deficiencies in safety management systems and human errors, or they may occur as a consequence of natural calamities or sabotage activities. Chemical accidents result in fire, explosion and/or toxic release. The nature of chemical agents and their concentration during exposure ultimately decides the toxicity and damaging effects on living organisms in the form of symptoms and signs like irreversible pain, suffering, and death. Meteorological conditions such as wind speed, wind direction, height of inversion layer, stability class, etc., also play an important role by affecting the dispersion pattern of toxic gas clouds. The Bhopal Gas tragedy of 1984—the worst chemical disaster in history, where over 2000 people died due to the accidental release of the toxic gas Methyl Isocyanate, is still fresh in our memories. Such accidents are significant in terms of injuries, pain, suffering, loss of lives, damage to property and environment. A small accident occurring at the local level may be a prior warning signal for an impending disaster. Chemical disasters, though low in frequency, have the potential to cause significant immediate or long-term damage.

A critical analysis of the lessons learnt from major chemical accidents exhibited various deficiencies. Laxity towards safety measures, non-conformation to techno-legal regimes and a low level of public consultation are a few such shortcomings. The scenario called for concerted and sustained efforts for effective risk reduction strategies and capacity development under a national authority to decrease the occurrence of such incidents and lessen their impact. Although tremendous efforts have been made to minimise such accidents and to improve emergency preparedness at all levels, substantial efforts are still required to predict the occurrence of disasters, assess the damage potential, issue warnings, and to take other precautionary measures to mitigate their effects. Another pressing need is to properly assess the potential of chemical emergencies and develop tools for emergency planning and response to minimise the damage in case of any eventuality.

Risks Posed by HAZCHEM

Increased industrial activities and the risks associated with HAZCHEM and enhanced vulnerability lead to industrial and chemical accidents. Chemical accidents may originate in the manufacturing or formulation facility, or during the process operations at any stage of the product cycle, material handling, transportation and storage of HAZCHEM. Vulnerability is sometimes compounded due to the location of Major Accident Hazard (MAH) industries closer to densely populated areas. Chemical and industrial accidents generally occur due to technical failures that can be anticipated. The risk associated with them can thus be predicted and reduced effectively by identification of risk areas, risk assessment and designing pre-operative measures. The occurrence of chemical accidents and probability thereof, manifesting in a disaster, remain a cause of concern.

The Genesis of National Disaster Management Guidelines—Chemical Disasters

There has been a paradigm shift in the government's focus from its rescue, relief, and restoration-centric approach to a planning, prevention/mitigation and preparedness approach. It has been realised that effective Chemical Disaster Management (CDM) is possible by the adoption of preventive and mitigation strategies as most chemical disasters are preventable in comparison to natural disasters that are difficult to predict and prevent.

With this renewed emphasis, the National Disaster Management Authority (NDMA) took up the task of strengthening CDM in recognition of the gravity of the risk posed by HAZCHEM. The main stakeholders in the management of chemical disasters are Ministry of Environment and Forests (MoEF; the nodal ministry); Ministry of Home Affairs (MHA); Ministry of Health and Family Welfare (MoH & FW); Ministry of Labour and Employment (MoLE); Ministry of Agriculture (MoA); Ministry of Shipping, Road Transport and Highways (MoSRT & H); Ministry of Defence (MoD); Ministry of Chemicals and Fertilizers (MoC & F); Ministry of Petroleum and Natural Gas (MoP & NG), Department of Atomic Energy (DAE); state governments and Union Territories (UTs) and the chemical industries. As a first step, a meeting of the stakeholders including representatives of Research and Development (R&D) organisations, professionals from scientific and technical institutes, academics, technocrats from leading national institutions and apex industrial associations/consortiums of corporate sectors was convened on 17 February 2006, with a view to pool the knowledge in this multidisciplinary field. A core group of experts was constituted from amongst these participants. Several meetings of the core group were subsequently held and a draft document was evolved for bridging the gaps that were identified. These deliberations acknowledged several initiatives taken up by the government and other stakeholders. The draft document was reviewed by a group of experts on 18 May 2006, for evolving a consensus among various stakeholders including the nodal ministry. Detailed inputs from MAH units and regulators were obtained during a meeting held during 7–8 September 2006, at Bhopal. The recommendations and action points that emerged out of these deliberations have resulted in the development of the National Guidelines for the Management of Chemical Disasters (hereinafter referred to as the Guidelines).

Structure of Guidelines

The present work is an important step in the direction of the development of plans for the management of chemical disasters. The Guidelines have been prepared to provide directions to ministries, departments and state authorities for the preparation of their detailed Disaster Management (DM) plans. These Guidelines call for a proactive, participatory, well-structured, fail-safe, multi-disciplinary and multi-sectoral approach at various levels.

The Guidelines consist of seven chapters; the details of which are as follows:

Chapter 1 provides an introductory brief of risks, vulnerabilities and consequences of chemical accidents; provides an account of causal factors of chemical disasters so as to restrict and contain them; and enlists major chemical accidents—their initiators, and impact on human lives and the environment. The aims and objectives of the Guidelines focus on all aspects of the DM cycle to assist the ministries and departments of the Government of India, state governments and other agencies to prepare DM plans.

Chapter 2 reviews the existing regulatory framework and practises. It furnishes an overview of the institutional framework with details of the monitoring mechanisms and compliance by central and state governments. It also provides an overview of the functioning of research institutes, autonomous bodies, professional institutes, Non-Governmental Organizations (NGOs) and MAH units, their compliance to statutory safeguards, and the efforts of the MoEF in setting up crisis management groups in industrial areas to ensure chemical safety. Various initiatives highlighting substantial work done in the area of emergency response and management systems in installations, storages and transport sectors are also illustrated. A bird's eye view of international best practises and developments within India is also given.

Chapter 3 gives an overview of the salient gaps identified in various aspects of the management of chemical accidents, transport accidents and medical emergencies.

The management of chemical disasters will aim at prevention and mitigation with the introduction of safer process technologies, improved performance of safety devices and reduction of human error. Immediate effects of a disaster can be mitigated through installing engineering systems like scrubbers, flares and venting systems. The various work areas and activities that can be undertaken within the framework of the Guidelines are described in chapters 4 to 6.

Chapter 4 includes comprehensive guidelines for a regulatory framework, code of practises, procedures and standards, testing and information, technical and technological information, preparedness including education, training, creation of appropriate infrastructure, capacity development, awareness generation, institutional framework, networking and communication, R&D, and response, relief and rehabilitation for CDM. The roles and responsibilities of various stakeholders at centre, state and district levels are also described. The salient highlights include:

- Strengthening of the present regulatory framework to meet the defined national policies and aspirations; augmentation of technical support functions.
- A supportive and technology neutral regulation framework.
- Legislation on land-use policy (buffer zone around chemical industry).
- Standardisation of national codes and practises.
- Emphasis on regular safely audit, identification and selection of professional organisations and their accreditation.
- Commissioning and decommissioning of chemical industries.
- Preparation of On-Site and Off-Site Plans.
- Regular testing of emergency plans.
- Need of medical first responders and medical inventory to deal with specialised chemical accidents at the installation site.
- Crisis management plans of hospitals to manage the victims of chemical emergencies.
- Concept of mobile hospital and mobile teams.
- Issues related to public health response, medical rehabilitation and harmful effects on the environment.
- Post-disaster documentation and analysis.

Chapter 5 comprises comprehensive guidelines for installations and storages (including isolated storages of HAZCHEM) that contain good engineering practises for safety, accident reporting, investigation and analysis checklists and safety promotional activities as important tools for effective CDM.

Chapter 6 deals with guidelines related to chemical accidents during transportation of HAZCHEM. The areas covered include:

- Preparation of a highway DM plan.
- Modification of rules pertaining to transport emergencies.
- Specific roles and responsibilities of MAH units, transporters, drivers, authorities and aspects related to emergency communication systems and training of various stakeholders.
- The need for the development of an efficient pipeline management system.

Chapter 7 sets out the approach to implementation of the Guidelines and also highlights the key points for ensuring the implementation of the plans prepared by the central ministries, departments and states. The strategy to be adopted for the important activities to be included in the Action Plan are given below:

- Putting in place a national mechanism for covering all major disasters and reporting mechanisms at the district level.
- Dovetailing regulations governing HAZCHEM safety with the Disaster Management Act, 2005 (DM Act, 2005).
- Establishing a risk management framework criterion for chemical assessment.
- Strengthening of the institutional framework for CDM and its integration with the activities of the NDMA, State Disaster Management Authorities (SDMAs), District Disaster Management Authorities (DDMAs) and other stakeholders.
- Renewed focus on model safety codes/ standards for prevention of accidents at industry level by matching processes and technologies for safety installations comparable with the best available in the world.
- Identifying infrastructure needs for preparing mitigation plans.
- Implementing a financial strategy for the allocation of funds for different national and state/district level mitigation projects.
- Establishing an efficient information network for dissemination of alerts, warning and response messages.
- Identifying/recognising training institutions.
- Strengthening the National Disaster Response Force (NDRF), fire services, medical first responders and other emergency responders.
- Revamping of home guards and civil defence for CDM.
- Developing a national medical emergency plan binding all government, private and public hospitals with unified, well-established triage and other emergency procedures.
- Developing highway DM plans for all the identified stretches, nodal points, and Standard Operating Procedures (SOPs) integrated in the driver's kit.
- Establishing a register of relevant national and international institutes and information exchange programmes.
- Establishing post-disaster documentation procedures, epidemiological surveys and minimum criteria for relief and rehabilitation.
- Sensitising the community on chemical disasters.
- Sensitising all stakeholders, especially the management of MAH units for a more proactive role in prevention of chemical

accidents by instituting regular internal audits of plant safety measures, actuation of On-Site emergency plans and establishment of mutual aid arrangements.

The MoEF, as the nodal ministry, will prepare a detailed Action Plan in accordance with these Guidelines with specific tasks, activities, targets and timeframes that will also form a part of the national DM plan.

In view of the expected time lapse between the formulation and approval of the DM plan, an interim arrangement has also been suggested, highlighting the following features:

- Baseline information on hazard identification and risk assessment in chemical installations and pipelines.
- Incorporation of Geographic Information System (GIS) technology.
- Identification and incorporation of legislative and institutional framework for disaster preparedness with specific and measurable indicators.
- Risk mapping.
- Development and improvement of relevant databases including isolated storages and warehouses.
- Preparation of a National Response Plan.
- Pooling of resources available on transport routes of chemicals.
- Crisis Alert System (CAS) and continued training programmes.

The activities mentioned above will be initiated with immediate effect and will be further intensified in due course of time. An institutional framework for the management of chemical disasters will be set up at the national level, which will integrate and strengthen the existing institutional mechanisms on CDM. For efficient and coordinated management, the state governments will issue guidelines for the preparation of district and local level plans in accordance with these Guidelines. The objective is to evolve an attainable and practical approach for the management of chemical disasters in India with the participation of all stakeholders including local communities for On-Site and Off-Site emergencies.

5 Guidelines for Industrial (Chemical) Installations and Storages

5.1 Industrial (Chemical) Installations

A prime area of concern is the strengthening of the industrial systems for the prevention and management of chemical accidents. Such provisions shall be established to continuously re-engineer (improve and upgrade) the system. As a part of government policy, it is envisaged that the present regulatory inspection and monitoring framework will evolve measures to encourage self-regulation, public consultation and PPP. These activities would develop credibility at all levels.

The important guidelines are listed below:

5.1.1 Good Engineering for Safety

This is applicable for the prevention and minimisation of all disasters—both man-made and natural. In the context of industrial disasters, good engineering is the first step in achieving safety. The setting up of new industries by an occupier shall be done in consultation with the state inspectorate, considering all parameters including geographical, seismological, demographic and environmental factors. The process engineering and control including detailed evaluation at the design stage are essential inputs for safety.

Engineering methods to control hazards include:

i) Change of processes: to shift to less hazardous processes.

ii) Change of material: to shift to less hazardous material.

iii) Change of equipment: to replace machinery before the expiry of residual life.

iv) Detailed engineering of each equipment under requirement, capacity, specifications and regular maintenance of history sheets for fault analysis.

v) Regular testing of critical equipment/ storage vessels through non-destructive testing (radiography, thickness survey, hydraulic testing etc.).

vi) Isolation and enclosures: Storages will be isolated and enclosed to minimise the impact of weather conditions (heat radiation, thermal and cryogenic stresses) and will be directly connected to containment including Waste Air Destruction (WAD) systems.

vii) Hazard and Operability Study (HAZOP) and Hazard Analysis (HAZAN) studies for early identification of hazards; regular structural audit.

viii) Management Information System (MIS) is a significant area for monitoring at the management level. It is divided into three categories:

a. Checking normal day-to-day operations; compliance of statutory requirements; monitoring reports; and reporting of exceptions to the top management.

b. This deals with emergency control systems (chemicals and fire contingency plans), training and retraining of employees, transporters, drivers and cleaners, stockists, distributors, retailers, community

leaders, consumers, first responders—the police, fire services, home guards, civil defence, NDRF, SDRF and medics/paramedics. This also covers HAZOP/HAZAN studies, regular appraisal and updating.

c. Provision, maintenance and regular upgrading of safety including PPE; maintenance of daily check charts of PPE, work permit system (including stoppage, start-up chemical manufacturing/storage equipment hardware).

5.1.2 Accident Reporting, Investigation and Analysis

i) The basic concept is the 'Principles of Examination'. The examination will aim at identification of operational difficulties, fault in design, and inspection procedures after an accident.

ii) There is a need to synthesise a prediction model that can spot problems/difficulties prospectively as well as retrospectively.

iii) To identify principal causes of accidents or near misses.

iv) To identify deficiencies in the process/operation/hardware/instrumentation.

v) To find out and critically evaluate unsafe practises requiring correction.

vi) To find out and finalise needs for engineering revision.

5.1.3 Safety Promotional Activities

Accident prevention needs proactive and reactive participation of all activities like:

i) Installation of sensors and monitors, their regular maintenance and calibration at the plant perimeter to trigger alarms to the plant personnel as well as public.

ii) Safety competitions, exhibitions, film/video shows, seminars, debates.

iii) Celebration of Safety Day/Week.

iv) Safety hoardings at strategic points.

v) Frequent visit to other model industries.

vi) Institution of chemical safety award system.

5.1.4 Other Areas of Attention

Efficacy of safety systems shall be checked daily and listed with special emphasis on the following:

i. Provisions of two-to-three tier safety.

ii. Early-warning system.

iii. Two-to-three tier power back-up system for safety of equipment/provision.

iv. Start-up and shutdown procedures.

v. Daily exceptional reporting for top management based on status of full preparedness/compliance according to latest internal safety audit; internal audit highlights; high accident potential jobs, actions or conditions to be dealt on priority basis. The audit shall indicate shortfalls according to accident potential.

vi. Best maintenance and preventive maintenance practises.

a. Regular improvisation of safety systems based on global success stories.

b. Toxicology (complete MSDS as ready reckoner for warnings/instructions).

c. Mock drills of warning alarm systems.

d. Instrumentation.

e. Written down preventive maintenance and breakdown maintenance practises and check listing of each on a daily basis.

f. Regular (daily basis) trials of stand by systems.

g. Key points to be kept in mind while setting SOPs for safety include:

   1. Use of danger and information tags.
   2. No substitutions of tags from one another.
   3. Information or instruction tag shall be used to convey special instructions for the equipment.
   4. The instruction tag shall not be used where a danger tag is required to identify a particular equipment as that equipment, if operated can cause an accident.
   5. The operator/shift officer shall assume responsibility for the use and removal of danger tags.
   6. Locking out of chemical plant equipment.
   7. Colour codes will be devised for locking.
   8. All locks will be placed on a breaker with a process until work is completed.
   9. The principle of isolation of equipment under maintenance repair without exception.

Based upon the actual inventory of HAZCHEM, adequacy of the preparedness and response is required to be established in the plant. It is essential to develop the DM capabilities both within the plant perimeter and in the vicinity on the basis of the dynamic quantitative risk assessment analysis. Meteorological data like wind direction shall be either obtained from concerned functionaries, or generated in-house for the proper management of chemical emergencies.

The best engineering practises practised the world over like those followed by the American Society of Mechanical Engineering (ASME) and others shall be modified and adapted in the Indian context under the authority of the BIS. Some of the major features of chemical safety procedures practised are shown in Annexure H for ready reference.

5.2 Storages

The storages of HAZMAT in an installation, or isolated storages are major sources of chemical disasters. The existing legal regulatory requirement provided through The Petroleum Act, 1934 and The Explosives Act, 1884, the Static and Mobile Pressure Vessels (Unfired) Rules 1981, the Gas Cylinder Rules, 2004, the MSIHC Rules, 1989, and the Factories Act, 1948, and various rules framed by the states give comprehensive guidelines to all installations and storages for the purpose of maintenance and operation of storage, tank farms and vessels. However, there are some glaring gaps with regard to safety, containment and neutralisation of toxic spill and release at the installation and storage site. Necessary provisions need to be enacted for fail-safe safety measures.

Important guidelines for installations and isolated storages are:

i) Factories/Storages having Off-Site consequences need to be treated at par with MAH factories in view of the probability of occurrence of accident due to the risks associated with bulk storage of HAZMAT.

ii) Standards in respect of design and construction with provisions for maintenance shall be laid down. The design shall be so formulated such that there would not be any effect of micrometeorological factors like temperature, pressure, humidity, air flow and protection from static charges.

iii) The storages of large inventories of HAZMAT should go with corresponding safety, containment measures, good engineering and environmental practises. Better safety and containment measures for safety release installations should be used, like valves, rupture discs and monitors etc., to protect the storages.

iv) At the installation level, storages require a risk assessment strategy addressing all the risk areas including the following components:

   a. Safety and security provisions.

   b. Pipelines transferring the HAZMAT to other plants/locations, or outside the premises.

   c. Instrumentation especially—Distributed Control Systems (DCSs).

v) Comprehensive guidelines are available for safe storages, testing and monitoring of storage vessels and areas, and for checking the residual life of vessels, pipelines and other equipment used in storage of HAZCHEMs. In addition, a testing system, its frequency and a certification system also exist. However, there is an urgent need of critical evaluation and review pertaining to the following areas:

   a. Defining and ensuring the limits of quantity of HAZMAT as per the capacity of storage facility.

   b. Simultaneous storage of non-compatible hazardous and toxic material.

   c. Restriction of keeping storage vessels open to the sky due to the impact of weather conditions on the content of storage vessels.

   d. The concept of residual life with regard to depletion of various tolerances etc., needs to be re-evaluated from time-to-time, as many other factors and stresses responsible for the breakdown of vessels appear with ageing.

   e. Proper and adequate provisions of safety to cater to thermal and cryogenic stresses will be taken care of during the designing mode.

   f. A full-scale containment and neutralisation system shall be established for HAZCHEM that are not manufactured but stored in bulk quantities for in-house use. Such HAZCHEM include liquids like ammonia in ice manufacturing, LPG, furnace oils, compressed gas including chlorine in the pulp and paper industry, oxygen in Common Effluent Treatment Plants (CETPs), hydrogen in vegetable oil manufacturing and other inflammable fuels used in industries.

   g. Special provisions including the usage of lightning arrestors for gases (such as hydrogen that can make an explosive mixture with air, running the possible risk of exploding) as lightning acts as a catalyst for such a reaction.

   h. Ensure availability of a stand-by power supply system which shall operate in the case of failure/disruption of the main power supply and simultaneously requiring containment/neutralisation of stored liquid/gaseous chemicals to a designated place.

Annexures

Annexure-A

Some Major Chemical Accidents in India (2002–06)

S. No.	Name of Unit	Date of Accident	Source	Death/Injury/Missing; Losses
1.	GACL, Vadodara, Gujarat	05.09.2002	Chlorine gas —explosion	4/20/nil
2.	IPCL, Gandhar, Gujarat	20.12.2002	Chlorine gas —release	Nil/18 workers & 300 villagers in Jageshwar affected/nil
3.	IOC Refineries, Digboi, Assam	07.03.2003	Fire in motor spirit tank	Nil;Product loss Rs11.55crore
4.	Ranbaxy Laboratories Ltd., Mohali, Punjab	11.06.2003	Toluene	2/19/nil
5.	BPCL Bottling Plant, Dhar, Madhya Pradesh	05.10.2003	LPG leak from tank lorry	Nil
6.	Orient Paper Mills, Amla, Shahdol, Madhya Pradesh	13.10.2003	Liquid chlorine	Nil/88/nil; 5 m pipe affected
7.	IDL Gulf Oil, Kukkatpally, Hyderabad, Andhra Pradesh	25.11.2003	Explosion	8/5/1
8.	Anil Enterprises, Zakhira, Rohtak, Haryana	28.04.2004	Fire in LPG fired oven	6/2/nil
9.	HIL Udyogmandal, Kerala	06.07.2004	Toluene fire	Nil
10.	Shyamlal Industries, GIDC, Vatva, Ahmedabad,Gujarat	12.04.2004	Benzene fire	Nil
11.	Chemical Factory, Dombivilli, Maharashtra	31.05.2004	Hexane release —fire	1/8/Nil
12.	Chemplast, Mettur, Tamil Nadu	18.07.2004	Chlorine leak	Nil/27/nil

13.	Gujarat Refinery, Vadodara, Gujarat	29.10.2004	Explosion in slurry settler	2/13/nil
14.	Ranbaxy Laboratories Ltd., Mohali, Punjab	30.10.2004	Fire in dryer room	1/2/nil
15.	Matrix Laboratory Ltd. Unit 1, Kazipally, Medak District, Andhra Pradesh	05.03.2005	Sodium hydride	8/nil/nil
16.	Gujarat Refinery, Gujarat	15.06.2005	Fire	Nil
17.	Coromondal Fertilizer Ltd., Ennore, Tamil Nadu	22.07.2005	Ammonia	Nil/5/nil
18.	Gulf Oil Corporation Ltd., Sanathnagam, Hyderabad, Andhra Pradesh	04.10.2005	Explosion/fire	2/2/nil
19.	Orchid Chemicals and Pharmaceuticals Ltd., Alathur, Kancheepuram District, Tamil Nadu	03.11.2005	Explosion with fire	2/4/nil
20.	Aurobindo Pharma Ltd., Unit-V, IDA Pashamylaram Medak Dist., Andhra Pradesh	28.11.2005	Explosion while drying cloxaciline sodium	1/4/nil
21.	Indian Oil Corporation Ltd., Mathura Refinery, Mathura, Uttar Pradesh	29.12.2005	Fire	1/nil/nIl
22.	Kanoria Chemicals and Industries Ltd. Renukoot, Sonebhadra, Uttar Pradesh	29.03.2006	Chlorine release	6/23/nil
23.	Anjana Explosives Ltd., Peddakaparthi Nalgonda District, Andhra Pradesh	18.07.2006	Spillage of hazchem	5/nil/nil
24.	Ravi Organics Ltd., Muzzaffarnagar, Uttar Pradesh	19.09.2006	Gas release	1/nil/nil
25.	Reliance Industries Refinery, Jamnagar, Gujarat	25.10.2006	Leaked hot vaccum gas oil catches fire in air	2/nil/nil

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Government of India

Ministry of Labour and Employment

NATIONAL POLICY ON SAFETY, HEALTH AND ENVIRONMENT AT WORK PLACE

1. PREAMBLE

1.1 The Constitution of India provide detailed provisions for the rights of the citizens and also lays down the Directive Principles of State Policy which set an aim to which the activities of the state are to be guided.

1.2 These Directive Principles provide

(a) for securing the health and strength of employees, men and women;

b) that the tender age of children are not abused;

c) that citizens are not forced by economic necessity to enter avocations unsuited to their age or strength;

d) just and humane conditions of work and maternity relief are provided; and

e) that the Government shall take steps, by suitable legislation or in any other way, to secure the participation of employee in the management of undertakings, establishments or other organisations engaged in any industry.

1.3 On the basis of these Directive Principles as well as international instruments, Government is committed to regulate all economic activities for management of safety and health risks at workplaces and to provide measures so as to ensure safe and healthy working conditions for every working man and woman in the nation. Government recognizes that safety and health of workers has a positive impact on productivity and economic and social development. Prevention is an integral part of economic activities

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as high safety and health standard at work is as important as good business performance for new as well as existing industries.

1.4 The formulation of policy, priorities and strategies in occupational safety, health and environment at work places, is undertaken by national authorities in consultation with social partners for fulfilling such objectives. A critical role is played by the Government and the social partners, professional safety and health organizations in ensuring prevention and in also providing treatment, support and rehabilitation services.

1.5 Government of India firmly believes that without safe, clean environment as well as healthy working conditions, social justice and economic growth cannot be achieved and that safe and healthy working environment is recognized as a fundamental human right. Education, training, consultation and exchange of information and good practices are essential for prevention and promotion of such measures.

1.6 The changing job patterns and working relationships, the rise in self employment, greater sub-contracting, outsourcing of work, homework and the increasing number of employees working away from their establishment, pose problems to management of occupational safety and health risks at workplaces. New safety hazards and health risks will be appearing along with the transfer and adoption of new technologies. In addition, many of the well known conventional hazards will continue to be present at the workplace till the risks arising from exposure to these hazards are brought under adequate control. While advancements in technology have minimized or eliminated some hazards at workplace, new risks can emerge in their place which needs to be addressed.

1.7 Particular attention needs to be paid to the hazardous operations and of employees in risk prone conditions such as migrant employees and various vulnerable groups of employees arising out of greater mobility in the

workforce with more people working for a number of employers, either consecutively or simultaneously.

1.8 The increasing use of chemicals, exposure to physical, chemical and biological agents with hazard potential unknown to people; the indiscriminate use of agro-chemicals including pesticides, agricultural machineries and equipment; industries with major accident risks; effects of computer controlled technologies and alarming influence of stress at work in many modern jobs pose serious safety, health and environmental risks.

1.9 The fundamental purpose of this National Policy on Safety, Health and Environment at workplace, is not only to eliminate the incidence of work related injuries, diseases, fatalities, disaster and loss of national assets and ensuring achievement of a high level of occupational safety, health and environment performance through proactive approaches but also to enhance the well-being of the employee and society, at large. The necessary changes in this area will be based on a co-ordinated national effort focused on clear national goals and objectives.

1.10 Every Ministry or Department may work out their detailed policy relevant to their working environment as per the guidelines on the National Policy.

2. GOALS:

The Government firmly believes that building and maintaining national preventive safety and health culture is the need of the hour. With a view to develop such a culture and to improve the safety, health and environment at work place, it is essential to meet the following requirements:-

2.1 providing a statutory framework on Occupational Safety and Health in respect of all sectors of industrial activities including the construction sector, designing suitable control systems of compliance, enforcement and incentives for better compliance.

2.2 providing administrative and technical support services.

2.3. providing a system of incentives to employers and employees to achieve higher health and safety standards .

2.4 providing for a system of non-financial incentives for improvement in safety and health.

2.5. establishing and developing the research and development capability in emerging areas of risk and providing for effective control measures.

2.6. Focusing on prevention strategies and monitoring performance through improved data collection system on work related injuries and diseases.

2.7 Developing and providing required technical manpower and knowledge in the areas of safety, health and environment at workplaces in different sectors.

2.8 Promoting inclusion of safety, health and environment, improvement at workplaces as an important component in other relevant national policy documents.

2.9 Including safety and occupational health as an integral part of every operation.

3. OBJECTIVES:

3.1 The policy seeks to bring the national objectives into focus as a step towards improvement in safety, health and environment at workplace. The objectives are to achieve:-

a) Continuous reduction in the incidence of work related injuries, fatalities, diseases, disasters and loss of national assets.

b) Improved coverage of work related injuries, fatalities and diseases and provide for a more comprehensive data base for facilitating better performance and monitoring.

c) Continuous enhancement of community awareness regarding safety, health and environment at workplace related areas.

d) Continually increasing community expectation of workplace health and safety standards.

e) Improving safety, health and environment at workplace by creation of "green jobs" contributing to sustainable enterprise development.

4. ACTION PROGRAMME

For the purpose of achieving the goals and objectives mentioned in paragraphs 2 and 3 above, the following action programme is drawn up and where necessary time bound action programme would be initiated, namely:-

4.1. Enforcement

4.1.1 by providing an effective enforcement machinery as well as suitable provisions for compensation and rehabilitation of affected persons;

4.1.2 by effectively enforcing all applicable laws and regulations concerning safety, health and environment at workplaces in all economic activities through an adequate and effective labour inspection system;

4.1.3 By establishing suitable schemes for subsidy and provision of loans to enable effective implementation of the policy;

4.1.4 by ensuring that employers, employees and others have separate but complementary responsibilities and rights with respect to achieving safe and healthy working conditions;

4.1.5 by amending expeditiously existing laws relating to safety, health and environment and bring them in line with the relevant international instruments;

4.1.6 by monitoring the adoption of national standards through regulatory authorities;

4.1.7 by facilitating the sharing of best practices and experiences between national and international regulatory authorities;

4.1.8 by developing new and innovative enforcement methods including financial incentives that encourage and ensure improved workplace performance;

4.1.9 by making an enabling legislation on Safety, Health and Environment at Workplaces;

4.1.10 by setting up safety and health committees wherever deemed appropriate;

4.2 National Standards

4.2.1 by developing appropriate standards, codes of practices and manuals on safety, health and environment for uniformity at the national level in all economic activities consistent with international standards and implementation by the stake holders in true spirit;

4.2.2 by ensuring stakeholders awareness of and accessibility to applicable policy, documents, codes, regulations and standards;

4.3 Compliance

4.3.1 by encouraging the appropriate Government to assume the fullest responsibility for the administration and enforcement of occupational safety, health and environment at workplace, provide assistance in identifying their needs and responsibilities in the area of safety, health and environment at workplace, to develop plans and programmes in accordance with the provisions of the applicable Acts and to conduct experimental and demonstration projects in connection therewith;

4.3.2 by calling upon the co-operation of social partners in the supervision of application of legislations and regulations relating to safety, health and environment at work place;

4.3.3 by continuous improvement of Occupational Safety and Health by systems approach to the management of Occupational Safety and Health including developing guidance on Occupational Safety and Health management systems, strengthening voluntary actions, including mechanisms for self-regulatory concept and establishing auditing mechanisms which can test and authenticate occupational safety and health management systems;

4.3.4 by providing specific measures to prevent catastrophes, and to co-ordinate and specify the actions to be taken at different levels, particularly in the industrial zones with high potential risks;

4.3.5 by recognising the best safety and health practices and providing facilitation for their adoption.

4.3.6 by providing adequate penal provisions as deterrent for violation of laws for the time being in force;

4.3.7 by encouraging all concerned to adopt and commit to "Responsible Care" and / or "Corporate Social Responsibility" to improve safety, health and environment at workplace performance;

4.3.8 by ensuring a suitable accreditation machinery to recognise institutions, professionals and services relating to safety, health and environment at workplace for uniformity and greater coverage as also authenticating safe management system;

4.3.9 by encouraging employers to ensure occupational safety and health management systems, establish them in efficient manner to improve workplace safety and health;

4.3.10 by specifically focusing on such occupational diseases like pneumoconiosis and silicosis; developing a framework for its prevention and control as well as develop technical standards and guidelines for the same;

4.3.11 by promoting safe and clean technology and progressively replacing materials hazardous to human health and environment;

4.4 Awareness

4.4.1 by increasing awareness on safety, health and environment at workplace through appropriate means;

4.4.2 by providing forums for consultations with employers' representatives, employees representatives and community on matters of national concern

relating to safety, health and environment at work place with the overall objective of creating awareness and enhancing national productivity;

4.4.3 by encouraging joint labour-management efforts to preserve, protect and promote national assets and to eliminate injuries and diseases arising out of employment;

4.4.4 by raising community awareness through structured, audience specific approach;

4.4.5 by continuously evaluating the impact of such awareness and information initiatives;

4.4.6 by maximizing gains from the substantial investment in awareness campaigns by sharing experience and learning;

4.4.7 by suitably incorporating teaching inputs on safety, health and environment at work place in schools, technical, medical, professional and vocational courses and distance education programme;

4.4.8 by securing good liaison arrangements with the International organisations;

4.4.9 by providing medical criteria wherever necessary which will assure insofar as practicable that no employee will suffer diminished health, functional capacity, or life expectancy as a result of his work place activities and that in the event of such occupational diseases having been contracted, is suitably compensated;

4.4.10 by providing practical guidance and encouraging employers and employees in their efforts to reduce the incidence of occupational safety and health risks at their places of employment and to impress upon employers and employees to institute new programmes and to improve existing programmes for providing safe and healthful working conditions, requiring employers to ensure that workers and their representatives are consulted, trained, informed and involved in all measures related to their safety and health at work;

4.5 Research and Development

4.5.1 by providing for research in the field of safety, health and environment at workplace, including the social and psychological factors involved, and by developing innovative methods, techniques including computer aided Risk Assessment Tools, and approaches for dealing with safety, health and environment at workplace problems which will help in establishing standards;

4.5.2 by exploring ways to discover latent diseases, establishing causal connections between diseases and work environmental conditions, updating list of occupational diseases and conducting other research relating to safety, health and environmental problems at workplace;

4.5.3 by establishing research priorities as per national requirements; exploring partnerships and improving communications with various national and international research bodies;

4.5.4 by ensuring a coordinated research approach and an optimal allocation of resources in Occupational Safety and Health sector for such purposes;

4.6 Occupational safety and health skills development

4.6.1 by building upon advances already made through employer and employee initiative for providing safe and healthy working conditions;

4.6.2 by providing for training programmes to increase the number and competence of personnel engaged in the field of occupational safety, health and environment at workplace;

4.6.3 by providing information and advice, in an appropriate manner, to employers and employees organisations, with a view to eliminating hazards or reducing them as far as practicable;.

4.6.4 by establishing occupational health services aimed at protection and promotion of health of employee and improvement of working conditions and by providing employee access to these services in different sectors of economic activities;

4.6.5 by integrating health and safety into vocational, professional and labour related training programmes as also management training including small business practices;

4.6.6 by adopting Occupational Safety and Health training curricula in workplace and industry programmes;

4.7 Data collection

4.7.1 by compiling statistics relating to safety, health and environment at work places, prioritising key issues for action, conducting national studies or surveys or projects through governmental and non-governmental organisations;

4.7.2 by reinforcing and sharing of information and data on national occupational safety, health and environment at work place information amongst different stake holders through a national network system on Occupational Safety and Health;

4.7.3 by extending data coverage relevant to work-related injury and disease, including measures of exposure, and occupational groups that are currently excluded, such as self-employed people;

4.7.4 by extending data systems to allow timely reporting and provision of information;

4.7.5 by developing the means for improved access to information;

4.8 Review

4.8.1 An initial review and analysis shall be carried out to ascertain the current status of safety, health and environment at workplace and building a national Occupational Safety and Health profile.

4.8.2 National Policy and the action programme shall be reviewed at least once in five years or earlier if felt necessary to assess relevance of the national goals and objectives.

5. Conclusion

5.1 There is a need to develop close involvement of social partners to meet the challenges ahead in the assessment and control of workplace risks by mobilising local resources and extending protection to such working population and vulnerable groups where social protection is not adequate.

5.2 Government stands committed to review the National Policy on Safety, Health and Environment at Workplace and legislations through tripartite consultation, improve enforcement, compilation and analysis of statistics; develop special programmes for hazardous operations and other focus sectors, set up training mechanisms, create nation-wide awareness, arrange for the mobilisation of available resources and expertise.

5.3 The National Policy and programme envisages total commitment and demonstration by all concerned stake holders such as Government and social partners. Our goals and objectives will be that through dedicated and concerted efforts consistent with the requirements of safety, health and environment at work place and thereby improving the quality of work and working life.

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GOVERNMENT OF KARNATAKA
DEPARTMENT OF FACTORIES, BOILERS, INDUSTRIAL SAFETY & HEALTH

CSMC/TFC/CR-13/2013-14 5482

Phone No : 080-26531200
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Directorate of Factories, Boilers, Industrial Safety & Health, 'Karmika Bhavana' 2nd floor, Near Bangalore Dairy, I.T.I.compound, Bannerghatta road, Bengaluru-29. Dated 23.09.2013.

To,
General Manager,
M/s NTPC Limited,
Kudgi Super Thermal Power Project,
Plot No. 4, Mallikarjun Nagar,
Navanagar Road, Bijapur-586 101

A 4479(PRJ) 17/10/2013

Sir,

Subject : Site Clearance for setting up of super thermal power project reg.

Reference : 1. Your letter dated 03.05.2013
2. Proceedings of Task force committee meeting held on 12.09.2013
3. Your reply mail dated 19.09.2013

* * *

We are pleased to inform you that the Task Force Committee in its meeting held on 12.09.2013 has reviewed the presentation documents, details of the safety systems adopted etc. and has concurred in principle to issue the Site Clearance for the proposal for the establishment of super thermal power project for generating electrical power of 3X800 MW at Near Kudgi village, Basavana bagewadi Taluk, Bijapur District.

The site clearance is issued subject to the following conditions:

1. The replacing of highly hazardous chlorine with available less hazardous alternate chemicals like chlorine dioxide, sodium hypo chlorite shall be considered.

2. The mobile hydrogen cylinder bank with manifold system shall be adopted in place of loose Hydrogen Cylinders

3. The safety check shall be prepared in storing, handling and usage of Hydrazine and its holding capacity shall be limited to a minimum required quantity

4. The exclusive safety, health and environment (SHE) department shall be formed under the direct control & supervision of the occupier. This department shall be supported by the senior level qualified and competent executives with adequate field staff.

5. The effective online monitoring system shall be adopted to assess the safe and healthy work environment with special trust to fugitive emition, it radiation, noise level etc.

6. No building or structure shall be constructed with obtaining a prior approval of plans by Director, Department of Factories, Boilers, Industrial Safety and Health.

7. The pre and periodical medical examination shall be carried out to all the category of employees including contract and casual. The medical surveillance shall be carried out by creating a base line health data and shall have the provision for updating the same on continuous basis.

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6. The mitigation measures as submitted [illegible] presentation and as suggested by the committee shall be incorporated in the on-site emergency plan. The same shall be submitted for scrutiny and approval.
7. The provisions of rule 50 to 251 of Building and Other Construction Workers (Regulation of Employment and condition of service) (Karnataka) Rules 2006 shall be complied to ensure occupational safety and health of the construction workers involved project. The compliance shall be furnished regularly to jurisdiction officers of our department and to the Director of Factories, Boilers, Industrial Safety and Health.

Suggestions:

1. The industry shall adopt the rain - harvesting system to harvest atleast 30% of the rain water.
2. The industry shall adopt solar charge system at least catering to street lighting and in other suitable areas like water heating in the canteen, etc.

All the above conditions and suggestions shall be complied and a report shall be submitted. The department reserves all the rights to modify or withdraw clearance issued at any point of time.

Your's Faithfully,

Chairman
Task Force Committee
and Director of Factories, Boilers,
Industrial Safety and Health, Bangalore.

True copy attached

Annexure- ....

GOVERNMENT OF KARNATAKA
DEPARTMENT OF FACTORIES, BOILERS INDUSTRIAL SAFETY & HEALTH

CSMS/TFC/CR—13/2013-14

Directorate of Factories, Boilers, Industrial Safety & Health, Karmika Bhavana 2nd floor, Near Bengaluru Dairy, ITI Compound Bannergatta Road Bengaluru -29 Date 23.09.2013

Phone No. 080-26531200
Fax No. 080-26531202

To
General Manager
M/s NTPC Limited
Kudgi Super Thermal Power Project

Sir,

Subject: Site Clearance setting up of super thermal power project-reg

Reference: 1. Your letter dtd. 03.05.2013
2. Proceedings of Task Force Committee Meeting held on 12.09.2013
3. Your reply mail dated 19.09.2013

We are pleased to inform that the Task Force Committee in its meeting held on 12.09.2013 has reviewed the presentation documents details of the safety systems adopted etc and has concurred in principle to issue the Site Clearance for the Initial location for the establishment of super thermal power project for generating electricity of 3x500 MW at New Kudgi village, Basavana Bagewadi,Bijapur District

The Site clearance is issued subject to the following conditions:

1. The replacing of highly hazardous chlorine with available less hazardous alternative chemicals like chlorine dioxide, sodium hypochlorite shall be considered.

2. The mobile hydrogen cylinder bank with manifold system shall be adopted in place of loose hydrogen cylinders.

3. The Safety check shall be prepared in storing, handling and usage of hydrazine and its handling capacity shall be limited to a minimum required quantity.

4. The exclusive safety health and environment (SHE) department shall be formed under the direct control and supervision of the occupy. This department shall be supported by he senior level qualified and competent executive with adequate field staff.

5. The effective online monitoring system shall be adopted to ensure the safe and healthy work environment with special trust to fugitive emission, its radiation noise level etc. No building

of structure shall be constructed with obtaining a prior approval of plans by Director, Department of Factories, Boilers, Industrial Safety & Health.

6. No building of structure shall be constructed with obtaining a prior approval of plans by Director, Deptt of factories, boilers, industrial safety and health.

7. The pre and periodical medical examination shall be carried out to all the category of employees including contract and casual. The medical surveillance shall be carried out by creating a base line health data and shall have the provision for updating the same and continuous basis.

8. The mitigation measures as submitted in the presentation and as suggested by committee shall be incorporated in the on site emergency plan. The same shall be submitted for scrutiny and approval.

9. The provision of rule no. 251 of Building and Other Construction Workers (Regulation for employment and condition of service) (Karnataka) Rules 2006 shall be compiled to ensure occupational safety and health of construction workers involved in the project. The compliance shall be regularly to jurisdiction officer of our department and to the director of factories, boilers, industrial safety and health.

SUGGESTIONS:

1. The industry shall adopt the rain-harvesting system to harvest at least 80% of the rain water.
2. The industry shall adopt solar energy system at least catering to street lighting to street light and in other suitable areas like water heating in the canteen, etc.

Yours faithfully

Chairman
Task Force Committee
And Director of Factories Boilers,
Industrial safety and Health, Bangalore

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BY REGD POST

STATE POLLUTION CONTROL BOARD, ODISHA

(Department of Forest & Environment, Govt. of Odisha)
Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII
Bhubaneswar – 751012

No. 2755 / Ind-II-NOC-5592 Date 28.02.14

OFFICE MEMORANDUM

In consideration of the application for obtaining Consent to Establish for **Derlipali Super Thermal Power Project of M/s. NTPC Ltd.**, the State Pollution Control Board has been pleased to convey its Consent to Establish under section 25 of Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 to set up of **Thermal Power Plant of capacity 1600 MW (2x800 MW, stage-I), At/Po-Derlipali** (Plot No. & Khata No. as mentioned in application form) in the district of **Sundargarh** with the following conditions.

GENERAL CONDITIONS

1. This Consent to establish is valid for the raw materials, product, manufacturing process and capacity mentioned in the application form. This order is valid for five years, which means the proponent shall commence construction of the project within a period of five years from the date of issue of this order. If the proponent fails to do substantial physical progress of the project within five years then a renewal of this consent to establish shall be sought by the proponent.
2. Adequate effluent treatment facilities are to be provided such that the quality of sewage and trade effluent satisfies the standards as prescribed under Environment Protection Rule, 1986 or as prescribed by the Central Pollution Control Board and/or State Pollution Control Board or otherwise stipulated in the special conditions.
3. All emission from the industry as well as the ambient air quality and noise shall conform to the standards as laid down under Environment (Protection) Act, 1986 or as prescribed by Central Pollution Control Board/State Pollution Control Board or otherwise stipulated in the special conditions.
4. Appropriate method of disposal of solid waste is to be adopted to avoid environmental pollution.
5. The industry shall comply to the provisions of Environment Protection Act, 1986 and the rules made there under with their amendments from time to time such as the Hazardous Waste Management, Handling and Transboundary Movement Rules 2008 and amendment thereof, Hazardous Chemical Rules, /Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 etc. and amendments there under. The industry shall also comply to the provisions of Public Liability Insurance Act, 1991, if applicable.
6. The industry shall apply for grant of Consent to operate under section 25/26 of Water(Prevention & Control of Pollution)Act, 1974 & Air (Prevention & Control of Pollution)Act, 1981 at least 3 (three) months before the commercial production and obtain Consent to Operate from this Board.
7. **This consent to establish is subject to atatutory and other clearances from Govt. of Odisha and/or Govt. of India, as and when applicable.**

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SPECIAL CONDITIONS : -

1. The proponent shall obtain environmental clearance for the proposal as per EIA notification, 2006 and the construction activity for the proposal shall commence after obtaining environmental clearance.
2. The proponent shall carry out the construction activity as per the approved lay out map. Any deviation in approved layout map during construction activity shall be treated as violation of consent condition and appropriate action (including revocation of consent to establish) shall be taken as per law. If the proponent desires to change the approved plant layout map, they can submit a modified plant layout map surrendering the previous one before going for physical construction.
3. The unit shall not use 390 acres land ear-marked for green belt development for other purpose.
4. The industry shall set up its own fly ash brick manufacturing unit along with establishment of unit-I so that fly ash generated from the unit-I can be utilized for fly ash brick making and which will be used for civil construction of unit-II.
5. The industry has proposed to use 30% imported high GCV coal. They shall keep adequate space for installation of flue gas de-sulphurization unit in case substantial increase in GLC concentration of SO_2 is observed.
6. The industry shall construct ash pond over 400 acres of area as earmarked in the revised land use break-up. Under no circumstance land earmarked for ash pond shall be used for any other purpose. Consent to operate for power plant shall only be considered when ash pond will be ready for ash disposal
2. The unit shall suitably divert all the public roads passing through the proposed project.
3. The unit shall develop thick green belt with high boundary wall along the boundary of the project as human habitations are close to the proposed site.
4. The unit shall include rain water harvesting proposal during execution of the project.
5. The unit shall submit year wise along with percentage wise fly ash utilisation plan to the Board in the end of the year.
6. The unit shall be based on zero discharge concepts and in no case any effluents shall be discharge to any water body.
7. The unit shall obtain necessary clearances such as forest clearance, wild life clearance, clearance from water resources department etc. from the appropriate authorities as applicable.
8. The unit shall adopt adequate safety measures in construction of ash dyke and detail constructional feature shall be submitted to the Board within one month from the date of issue of consent to establish.
9. The height of each stack of power plant boiler shall not be less than 275 meters from the ground. The power plant shall have two stacks for flue gas emission.
10. The unit shall install ESP in the stack attached to power plant boiler such that particulate matter emission shall not exceed 50 mg/Nm3. They should make provision for one spare field during the design of ESP. If more than one field of ESP fails, the plant should trip automatically through an interlocking system.

11. The unit shall provide port hole and platform at suitable location with safe approach to conduct emission monitoring at the stack.

12. **The unit shall provide dust extraction system at crusher house, boiler bunker to control dust emission. CHP shall be installed in a shed and coal carrying conveyor belts shall be covered.**

13. Separate energy meter shall be installed for all the pollution control equipments and the records shall be maintained for verification of the Board from time to time.

14. Necessary preventive measures shall be taken during construction phase so that the ambient air quality including noise shall conform to National Ambient Air Quality standards and standards for noise in industrial area as per Annexure-I. **The unit shall install adequate dust extraction as well as dust suppression system at all potential dust generating points to control fugitive dust emission and the ambient air quality inside the factory premises shall conform to the standard with reference to National Ambient Air Quality Standard prescribed by MoEF, Govt. of India dtd.16.11.2009 enclosed as Annexure – II.**

15. The construction material which has potential to be air borne, shall be transported in covered trucks.

16. The roads inside the plant premises shall be black topped. **Permanent high pressure water sprinkling system shall be installed for regular spraying of water on roads to minimize fugitive dust emission.**

17. The unit shall take adequate measures for controling of fugitive dust emission during transportation of fly ash for utilisation. Good housekeeping practices shall be followed to improve the work environment. All roads and shop floors shall be cleaned regularly.

18. **At least 6 continuous ambient air quality monitoring stations** around the industry shall be set up to monitor PM-10, PM-2.5, SO2, NOx, CO and other important parameters as given in as per Annexure – II above within at least to the distance in down wind direction and where maximum ground level concentration is anticipated. The exact location of the monitoring stations shall be finalized in consultation with the State Pollution Control Board. **The proponent shall install continuous online ambient air quality monitoring and stack monitoring system with display facility at the gate. A detail proposal to this effect shall be submitted.**

19. Pneumatic conveyor system shall be provided as dust collection system for ESP dust. Silos shall be provided for collection of bottom ash and fly ash. Conveyor belt shall be closed and bag filter shall be provided at transfer points of conveyor system to control fugitive emission.

20. Air pollution Control devices shall be maintained properly. Fabric bags and cages in bag house shall be checked regularly and replaced whenever required. Adequate availability of spares shall be ensured for immediate replacement.

21. All the wastewater generated shall be discharged to a common monitoring basin before it is reused in the plant for various process.

22. The Blow down shall meet the following standards before it is discharged to the common basin.

Boiler Blow Down :		
Suspended solids	-	100.0mg/l (max)
Oil & Grease	-	20.0 mg/l (max)
Copper (Total)	-	1.0 mg/l (max)
Iron (total)	-	1.0mg/l (max)

[3]

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Cooling Tower Blow Down		
Free available Chlorine	-	0.5 mg/l (Max)
Zinc	-	1.0 mg/l (Max)
Chromium (total)	-	2.0 mg/l (Max)
Phosphate	-	0.2 mg/l (Max)

23. The wastewater generated from leakages, blow downs and DM plant shall be treated individually to meet the prescribed standard of effluent discharge to inland surface water and stored in a common basin (i.e. guard pond) for utilization for plantation, dust suppression ash handling and green belt purpose inside the factory premises. Lining shall be provided in guard pond to prevent any seepage into ground to avoid ground water contamination. The proponent shall submit detail drawing with specification of ETP within 6 months.

24. The proponent shall provide garland drains around coal storage area followed by series of setting tanks to retain the solids, if any, in order to reduce the load on common monitoring basin.

25. The unit shall furnish details of the control measures at coal loading and unloading points.

26. The acidic water generated during boiler cleaning shall be propedy neutralized so that the pH of cleaning water remains within the range of 6.0 – 9.0. After neutralization this water can be discharged to the common monitoring basin.

27. Oil catch pits shall be provided in oil handling area of power plant for collection of spillage

28. The unit shall provide treatment system such as Reverse osmosis plant to treat the waste water generated from cooling tower blow down and reuse the same in the process.

29. The storm water drains shall be maintained separately without being mixed up with the industrial effluent or sewage effluent. The domestic effluent from the industry as well as the colony shall be treated in proper sewage treatment plant to meet the prescribed BIS standard (SS – 30mg/l, BOD – 20mg/l) before being discharged or utilized for green belt development.

30. **The industry shall adopt High Concentration Slurry Disposal (HCSD) method for ash disposal. A detail design of the ash disposal area, the dykes, run off and seepage collection system etc shall be made and submitted within 3 months from the date of issue of this consent to establish.** ✓

31. **A comprehensive ash utilization plan shall be prepared within the frame work of Fly Ash Notification, 2009 and its amendment thereof. The plan should explore all possible means of utilization with realistic timelines and utilization options. The ash utilization plan submitted by the proponent is not adequate. A detailed ash utilization plan is to be submitted keeping in view of less ash at the time of consent to operate application.** ✓

32. **The proponent shall take precautionary measures to prevent surface run off from ash disposal area during torrential rain. A detailed proposal to this effect is to be submitted within 3 months.** ?

33. Rain water harvesting structure shall be developed inside the plant premises as per concept and practices made by CPCB and maximum efforts shall be made to reuse harvested rain water, with a definite plan and programme to reduce the drawal of fresh water from water bodies.

34. The unit shall explore the possibility of disposal of fly ash in abandoned mine pit for complete utilization of fly ash. ?

35. The unit shall submit details of hazardous chemicals and storage facility and risk assessment to the Board.

36. **The industry shall comply with all the conditions stipulated under Charter on Corporate Responsibility for Environmental Protection (CREP) guidelines in a time bound manner as envisaged there in.**

37. A toe drain shall be provided around the ash mound. The seepage water collected in the toe drain shall be monitored every month with respect to pH, SS, O&G and fluoride and shall meet the following standards

    pH-6.5 to 8.5
    SS-100mg/l
    O&G-20mg/l and
    Flouride-2.0mg/l

    and the monitoring report shall be submitted to the Board quarterly.

38. Regular monitoring of runoff water from the disposal area and excess ash water shall be carried out with respect to pH, SS, O&G and fluoride content and monitoring report shall be submitted to the Board every quarter.

39. Ash pond shall be lined with HDPE or any other suitable impermeable lining such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.

40. The Project Proponent shall carry out detail hydrogeological study of the ash pond site incorporating soil analysis, ground water quality(fluoride& heavy metals), surface water quality(fluoride & heavy metals) and drainage network of the area and the change in hydrological status shall be monitored annually.

41. Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (F, Cd, Hg, Cr, As, Pb) and records shall be maintained and submitted to the Board. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.

42. The entire upstream face of the dyke shall be provided with stone pitching or brick lining or precast tile lining to prevent erosion of the slope by wave action during heavy wind.

43. The entire area of the ash dyke shall be provided with fencing and unauthorized entry within this ash pond area shall be strictly prohibited. Security guards shall be posted for vigilance of the ash dyke area round the clock. This is very important as there are chances of sabotage. The entire dyke perimeter shall have accessible roads. The entire dyke area shall be provided with street lights or flood lights for inspection during night time. A site office shall be constructed with a full time engineer responsible for inspection and monitoring of the ash dyke.

44. The industry shall construct a Sewage Treatment Plant (STP) for treatment of wastewater to be generated from domestic source and the treated sewage shall be discharged to the common monitoring basin.

45. The unit shall explore the possibility to use chlorine di-oxide for treatment of water instead of chlorine gas.

46. Plantation activity shall be planned in such a way so that trees will have better growth by the time the unit starts operation.

47. The proponent shall deploy vehicles which conform to the latest BIS emission specification. The proponent shall also to give a detail proposal to control noise pollution during construction phase. The proponent shall prepare pollution prevention and environment management plan for construction phase and operation phase separately and should submit to the Board three months prior to commencement of construction and operation respectively.

48. The rising temperature during summer in the area is a major concern. The unit shall conduct a detailed study on contribution of thermal heat to atmosphere due to the proposed project and its impact on ambient temperature during different season. The study should also investigate the heat island effect due to the project.

49. The industry shall provide screen at the water intake system of Hirakud reservoir for protection of aquatic life.

50. The industry shall set up a full-fledged environment monitoring laboratory and an environment management cell with qualified personnel for monitoring of pollutants and effective remedial measures in case of necessity. Head of the environmental management cell shall report to the unit head.

51. The civil construction shall be carried out with the fly ash bricks. If the fly ash bricks are not available locally the civil construction may carried out with other bricks with prior intimation to the concerned Regional Office of SPC Board. A statement indicating use of fly ash bricks during construction period shall be submitted to the Board every year for record.

52. The land on which the unit is proposed to be established the power plant shall be converted to industrial use Kisam by the competent authority. The copy of said land conversion document shall be submitted to the Board along with consent to operate application.

53. A green belt of adequate width and density preferably with local species along the periphery of the power plant shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% of the total land area shall be under permanent green cover. In such a manner that, atleast plantation shall be taken up at least in 20% of the total green belt area and progressively achieve 100% in a span of five years.

54. No production activity shall commence prior to installation of the pollution control devices. In case, it is found that the plant is operating without installation of appropriate pollution control equipment(s) and without permission for trial operation from the Board, a direction of closure shall be issued u/s 31-A of Air (PCP) Act, 1981 and /or u/s 33-A of Water (PCP) Act, 1974 without any further notice in this regard.

55. The Board may impose further conditions or modify the conditions stipulated in this order during installation and / or at the time of obtaining consent to operate and may revoke this clearance in case the stipulated conditions are not implemented and / or any information suppressed in the application form.

Encl: Approved layout Map & Annexures

MEMBER SECRETARY

To

Shri S. K. Reddy, General Manager,
Dertipali Super Thermal Power Project (DSTPP) of
M/s. NTPC Ltd.,
3rd & 4th Floor, Amba Tower, Hospital Road,
Sundargarh- 770001.

Memo No._____/Dt._____

Copy forwarded to:

1. District Magistrate & Collector, Sundargarh.
2. District Industries Centre, Sundargarh.
3. Director, Factories & Boiler, Bhubaneswar
4. Regional Officer, SPC Board, Rourkela.
5. Sr. Env. Engineer (Consent), SPC Board, Bhubaneswar.
6. DFO, Sundargarh.
7. Hazardous Waste Management Cell, SPC Board, Bhubaneswar.
8. Copy to Guard file.

SR. ENV. ENGINEER (N)

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ANNEXURE A/6

ಕರ್ನಾಟಕ ಸರ್ಕಾರ
ಕಾರ್ಖಾನೆಗಳು, ಬಾಯ್ಲರುಗಳು, ಕೈಗಾರಿಕಾ ಸಂಸ್ಥೆಗಳ ಮತ್ತು ಸ್ಥಾಪನೆಗಳ ಇಲಾಖೆ

ಸಂಖ್ಯೆ: ಕಾಖಾಸಂ/ಎಂಎಲ್/ಸಂಪಾದನೆ/ಪ್ರಕಟಣೆ-167/2015-16 ಸರ್ಕಾರಿ ಸಂಕೀರ್ಣ ಕಟ್ಟಡ,
ಕಾರ್ಮಿಕ ಭವನ, 12ನೇ ಮಹಡಿ, ಬಸವೇಶ್ವರ ವೃತ್ತ,
ಬೆಂಗಳೂರು-20, ದಿನಾಂಕ: 13.04.2016

ಸರ್ವೇಕರು, ಕಾರ್ಖಾನೆಗಳು, ಬಾಯ್ಲರುಗಳು, ಕೈಗಾರಿಕಾ ಸುರಕ್ಷತೆ ಮತ್ತು ಸ್ವಾಸ್ಥ್ಯ ಇಲಾಖೆ, ಬೆಂಗಳೂರು ಇವರ ಪತ್ರವ್ಯವಹಾರಗಳು

ವಿಷಯ: ಕಾರ್ಖಾನೆಗಳ ಅಧಿನಿಯಮ 1948ರ ಪ್ರಕರಣ 6(1) ಹಾಗೂ ಕರ್ನಾಟಕ ಕಾರ್ಖಾನೆಗಳ ನಿಯಮಾವಳಿಗಳು, 1969ರ 3ನೇ ನಿಯಮ).

ವಿಷಯ: ಕಾರ್ಖಾನೆಗಳ ಕಾಯ್ದೆ 1948ರ ಮೇರೆಗೆ ಮೆ: ಕೂಪರ್ ಸೂಪರ್ ಥರ್ಮಲ್ ಸಿಮಿತ ಪ್ರಾಜೆಕ್ಟ್ (ಎಸ್.ಟಿ.ಪಿ.ಪಿ.ವಿಭಾಗ), ದಿಣ್ಣಿಮಲ್ಲೂರು ಈ ಕಾರ್ಖಾನೆಯ ನಕ್ಷೆಗಳನ್ನು ಅನುಮೋದಿಸುವ ಕುರಿತು.

ಉಲ್ಲೇಖ: 1) ಅರ್ಜಿ ಪತ್ರಾಂಕ-ನ ದಿನಾಂಕ : 27.01.2016
2) ಸ್ಥಳ ತಪಾಸಣೆಯ ದಿನಾಂಕ : 05.02.2016.
3) ಅಂತಿಮ ಪರಿಶೋಧನೆಯ ದಿನಾಂಕ : 07.04.2016

ಮೇಲೆ ಕಂಡಂತೆ ಮೆಸರ್ಸ್ ಕೂಪರ್ ಥರ್ಮಲ್ ಪವರ್ ಪ್ರಾಜೆಕ್ಟ್ (ಎಸ್.ಟಿ.ಪಿ.ಪಿ.ವಿಭಾಗ), ದಿಣ್ಣಿಮಲ್ಲೂರು ಗ್ರಾಮ ಪಂಚಾಯತಿಯ ನಕ್ಷೆಗಳು ಕಾರ್ಖಾನೆಗಳ ಅಧಿನಿಯಮ 1948ರ ಪ್ರಕರಣ 6ರ ಅನ್ವಯ ಅದರಿಂದ ಘೋಷಿಸಲಾದ ನಿಯಮಾವಳಿಗಳಲ್ಲಿ ತಿಳಿಸಿರುವ ಅವಶ್ಯಕತೆಗಳಿಗನುಸಾರವಾಗಿ ಪರಿಶೀಲಿಸಿದ ಮೇರೆ ಇದು ಕಾರ್ಖಾನೆ ಸಂಬಂಧದವನ್ನು ಕೆಟ್ಟಿದ ಕಾರಣ ಯಂತ್ರ ವಿದ್ಯಾಗಾ ಇಂಧನ ಸಲಕರಣೆಗಳು ಅಳವಡಿಸಿರುವ ಕಾರ್ಖಾನೆಗಳು ಅಧಿನಿಯಮ 1948ರ ಪ್ರಕರಣ 6ಎ ಅಡಿಯಲ್ಲಿ ನೋಂದಣಿಯಾಗಿರಬೇಕಾಗಿರುವುದರಿಂದ ಅಧಿನಿಯಮದ ಪ್ರಕರಣ 6(4) ನೇ ನಿಯಮಕ್ಕೆಯನ್ವಯ ಅಧಿಸೂಚನೆ ಹೊರಡಿಸಲು ಅವಶ್ಯಕವಾಗಿರುವ ಮಾಸ್ತರ್ ಪ್ಲಾನ್ ಕೆಳಕಂಡ ಷರತ್ತುಗಳಿಗೆ ಅನುಸರ್ಗವಾಗಿ ಅನುಮೋದಿಸಿಕೊಳ್ಳಲು ಅನುಮೋದಿಸಲಾಗಿದೆ.

1. ಈದೇ ಕಛೇರಿಯ ಪತ್ರ ಸಂಖ್ಯೆ: ಎಸಿಎಂಎಲ್/ಎಸಿಎಂಎಲ್/ಟಿಎಲ್ಆರ್-13/2013-14, ದಿ: 13.09.2013 ರಂದೆ ನಿಭುಗಾರರ ಷರತ್ತುಗಳಂತೆ ಅಗ್ನಿಶಾಮಕ ಕ್ಲಿಯರೆನ್ಸ್ ದಾಖಲೆಯನ್ನು ಅನುಮೋದನೆಯನ್ನು ಪಡೆದ ಅಭಿವೃದ್ಧಿಯಾದ ರಸ್ತೆಯಿಂದಕ್ಕೆ ಬದಲಾಯಿಸಿಕೊಳ್ಳುವ ಮತ್ತು ಇತರೆ ಸದರಿ ಪತ್ರದಲ್ಲಿ ಸೂಚಿಸಿರುವ ಎಲ್ಲಾ ವಿಶೇಷತ್ವಗಳನ್ನು ಕಟ್ಟುನಿಟ್ಟಾಗಿ ಪಾಲಿಸುವುದು.

2. ಹಾಲಿ ಇಲಾಖೆಯಿಂದ ಅನುಮೋದನೆಗೊಂಡಿರುವ ಎಲ್ಲಾ ಕಟ್ಟಡ ಮತ್ತು ಯಂತ್ರ ವಿದ್ಯಾಗ ನಕ್ಷೆಗಳನ್ನು ಕೋಡೀಕರಿಸಿ ಯಾವುದೇ ಕಟ್ಟಡ ಮತ್ತು ಯಂತ್ರ ನಿರ್ಮಾಣ ಅನುಮೋದಿಸಿಕೊಳ್ಳದಿದ್ದಲ್ಲಿ ಅಥವಾ ಬದಲಾವಣೆಗೊಳ್ಳದಿದ್ದಲ್ಲಿ ಅವುಗಳಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ನಕ್ಷೆಗಳನ್ನು ಸಲ್ಲಿಸಿ ಅನುಮೋದನೆ ಪಡೆಯುವುದು.

3. ಕಾರ್ಖಾನೆಯಲ್ಲಿನ ಎಲ್ಲಾ ಕಟ್ಟಡ ಮತ್ತು ಸ್ಥಿರಸ್ಥಾಪನೆಗಳನ್ನು ಉಪಯೋಗಕ್ಕೆ ತೆಗೆದುಕೊಳ್ಳುವ ಪೂರ್ವದಲ್ಲಿ ಸ್ಥಳೀಯ ಎಸಿಎಲ್ ಅವಜಿನಿಯರ್‌ಗಳಿಂದ ದೃಢೀಕರಣ ಪ್ರಮಾಣ ಪತ್ರಗಳನ್ನು ನಮೂನೆ-1ಎ ನಂತೆ ಪ್ರತ್ಯೇಕವಾಗಿ ಪಡೆದು ಕೈಗಾರಿಕಾಧಿಕಾರಿಗಳಿಗೆ ಸಲ್ಲಿಸಿ, ನಂತರವೇ ಉಪಯೋಗಕ್ಕೆ ತೆಗೆದುಕೊಳ್ಳುವುದು.

[illegible]

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Govt Of Karnataka
Department Of Factories, Boilers, Industrial Security And Health

Office of the Director
Karmika Bhawana, II floor, Bannerghatta Road,
Bengaluru-29, Date: 13.04.2016

Proceedings of the Department of Factories, Boilers, Industrial Security and Health

Read with: Sec 6(1) of Factories Act 1948 and Rule 3 of Karnataka Factories Rules, 1969

Sub: Approval of factory drawings in respect of M/s. Kudgi Super Thermal Power Project (NTPC Limited) as per Factories Act 1948 –Reg.

Ref: 1) Application Form 1 dated 27.01.2016
2) Site Inspection dated 05.02.2016
3) Final Scrutiny dated 07.04.2016

The maps of M/s NTPC Limited, Kudgi Super Thermal Power Project, Vijayapura have been scrutinized as per the Factories Act 1948 and the Rules framed and conceived there under and the blue prints of the factory's buildings and machinery layouts have been approved subject to the conformity of all provisions conceived as per Factories Act 1948 concerned and clause 3(4) of Karnataka Factories Rules, 1969 and also conformity of following conditions:

1. To modify the use of hazardous chlorine chemical to minimum hazardous chlorine chemical and to strictly comply with all the conditions laid down in the letter as per the condition of this office letter no. CSMC/TFC/CR-13/2013-14 Date 23.09.2013.

2. To get those buildings and machinery layout maps approved which are not approved earlier or the maps involving modifications. Such maps should be submitted for approval.

3. Before starting use of all the buildings and structures of the factory, authentication certification should be separately obtained as per Form 1A from authorized Civil Engineers and submitted to the Field Officer. Then only these should be used.

Ninety nine maps as approved are sent enclosed herewith. Kindly acknowledge.

Director of Factories &
Boilers,
Bengaluru

To,
The Occupier,
M/s. Kudgi Super Thermal Power Project
NTPC Limited
Kudgi, Taluka: Basavana Bagewadi, Dist.: Vijayapura

For kind information please.

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ANNEXURE A/7

F. No. Z-13025/12/2015-LRC
Government of India
Ministry of Labour and Employment
****

Shram Shakti Bhawan, New Delhi
Dated: 23rd March, 2018

OFFICE MEMORANDUM

Sub:- The draft Labour Code on Occupational Safety, Health and Working Conditions, 2018. – inviting comments/suggestions/inputs Reg.

***

The undersigned is directed to say that the Ministry of Labour & Employment has been taking steps for simplification, amalgamation and rationalization of Central Labour Laws which is also in tandem with recommendations of 2nd National Commission on Labour. The various existing Acts are being proposed to be subsumed in four major Labour Codes viz., Code on Wages, Code on Industrial Relations, Code of Social Security and Code on Occupational Safety, Health and Working Conditions.

2. Now, the Ministry has prepared a preliminary draft on Code on Occupational Safety, Health and Working Conditions, 2018, by amalgamating 13 labour laws relating to safety and health standards, health and working conditions, welfare provisions for the employees and leave and hours of work. The following Acts have been merged.

(a) The Factories Act, 1948 (Act no. 63 of 1948)
(b) The Mines Act, 1952 (Act no. 35 of 1952)
(c) The Dock Workers (Safety, Health and Welfare) Act, 1986 (Act no. 54 of 1986)
(d) The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 (Act No. 27of1996)
(e) The Plantations Labour Act, 1951 (Act No. 69 of 1951)
(f) The Contract Labour (Regulation and Abolition) Act, 1970
(g) The Inter-State Migrant workmen (Regulation of Employment and Conditions of Service) Act, 1979
(h) The Working Journalist and other News Paper Employees (Conditions of Service and Misc. Provision) Act, 1955
(i) The Working Journalist (Fixation of rates of wages) Act, 1958
(j) The Motor Transport Workers Act, 1961
(k) Sales Promotion Employees (Condition of Service) Act, 1976

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(l) The Beedi and Cigar Workers (Conditions of Employment)Act, 1966
(m) The Cine Workers and Cinema Theatre Workers Act, 1981

3. Your specific inputs/suggestions are requested on the various aspects of the code including threshold/applicability, the registration/ licensing and processes there of, National/State Occupational Safety & Health Boards, the broad aspects on working and health conditions, safety standards, welfare measures, enforcement mechanism, penalties, rule making powers of the Central and State Governments and the various items incorporated in the three schedules.

4. The preliminary draft is enclosed for inviting comments/suggestions of the various stakeholders including general public. It is requested that the comments/suggestions to this Ministry by 22.04.2018 on the address, i.e. Under Secretary (LRC), Ministry of Labour & Employment, Room No. 17A, Shram Shakti Bhawan, Rafi Marg, New Delhi – 110 001 or through email: jk.singh68@nic.in. The suggestions/comments should be in the following format:

Format			
Section/Sub-section/Clause/Proviso of the code	Issue/problem identified in the relevant clause	Proposed change/correction that is suggested	Reason for the proposed change

(Anita Tripathi)
Deputy Secretary to the Government of India
Ph: 23711354

Encl: 65 pages of the Code

To
All stakeholders.

Draft

CODE ON OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS, 2018

Arrangement of Clauses:

Chapter I: Preliminary

1. Short title, extent and commencement
2. Definitions

Chapter II: Registration

3. Registration of certain establishments
4. Appeal
5. Notice by employer of commencement and cessation of operation

Chapter III: Duties of Employer and Employees, etc.

6. Duties of employer
7. Duties and responsibilities of owners, agents and managers in relation to mine
8. Duties of manufacturers
9. Duties of architects, project engineers and designers
10. Notice of certain accident
11. Notice of certain dangerous occurrences
12. Notice of certain diseases
13. Duties of employees
14. Rights of employee
15. Duty not to interfere with or misuse things

Chapter IV: Occupational Safety and Health

16. National Occupational Safety and Health Advisory Board
17. State Occupational Safety and Health Advisory Board
18. Occupational Safety and Health Standards
19. Research related activities
20. Safety and occupational health surveys
21. Statistics
22. Safety Committee and Safety Officers

Chapter V: **Health and Working Conditions**

23. Responsibility of employer for maintaining health and working conditions

Chapter VI: Welfare Provisions

24. Washing facilities in the establishment, etc.

Chapter VII: Hours of Work and Annual Leave with Wages

25. Weekly and daily working hours, etc.
26. Weekly and compensatory holidays
27. Extra wages for overtime
28. Night shifts
29. Prohibition of overlapping shifts
30. Restriction on double employment in factory and mine
31. Notice of periods of work
32. Annual leave with wages, etc.

Chapter VIII: Maintenance of Registers, Records and Returns etc.

33. Maintenance of registers and records and filing of returns

Chapter IX: Facilitators and other Authority

34. Appointment of Facilitators
35. Powers of Facilitators

36. Special powers of Facilitator in respect of factory, mines and dock work and building and other construction work
37. Secrecy of information by Chief Facilitator or Facilitator, etc.
38. Facilities to be afforded to the Facilitator
39. Powers of Special Officer to enter, measure, etc. in relation to mine
40. Medical Officer

Chapter X: Special Provision relating to Employment of Women
41. Applicability of the chapter
42. Restriction on employment of women
43. Prohibition on employment of women in dangerous operation

Chapter XI - Special Provisions for Contract Labour and Inter State Migrant Worker, etc.
PART-I Contract Labour and Inter State Migrant Worker
44. Applicability of this Part
45. Appointment of licensing officers
46. Licensing of contractors
47. Grant of licence
48. No fees or Commission or any cost to workers
49. Information regarding work order to be given to the appropriate Government
50. Revocation, suspension and amendment of license
51. Appeal
52. Liability of Principal Employer for welfare facilities
53. Effect of employing contract labour from a non-licensed Contractor
54. Responsibility of Payment of wages
55. Experience Certificate
56. Prohibition of employment of contract labour
57. Power tc exempt in special cases
58. Facilities to Inter- State Migrant workers
59. Displacement allowance
60. Journey allowance etc.
61. Past liabilities
PART- II Audio-Visual Workers
62. Prohibition of employment of audio-visual worker without agreement
PART- III Mines
63. Managers
64. Code not to apply in certain cases
65. Exemption from provision regarding employment
66. Decision of question whether a mine is under this Code
PART- IV Beedi and Cigar Workers
67. Licence to industrial premises and person
68. Appeals
69. Permission to work by employees outside industrial premises
70. Part not to apply to self employed persons in private dwelling houses
PART -V Building and other Construction Worker
71. Prohibition of employment of certain persons in certain building or other construction work
PART- VI Factory
72. Approval, licensing and registration of factories
73. Liability of owner of premises in certain circumstances
74. Power tc apply the Code tc certain premises
75. Dangerous operations
76. Constitution of Site Appraisal Committee
77. Compulsory disclosure of information by the occupier
78. Specific responsibility of the occupier in relation to hazardous processes
79. Power of Central Government to appoint Inquiry Committee
80. Emergency standards

81. Permissible limits of exposure of chemicals and toxic substances
82. Workers' participation in safety management
83. Right of workers to warn about imminent danger
84. Power to direct inquiry into cases of accident or disease in a factory
85. Appeal against the order of facilitator in case of factory
86. Power to make exempting rules and order

Chapter XII: Offences, Penalties and Procedure

87. General penalty for offences
88. Causing obstruction to deter Chief Facilitator or Facilitator from duty, etc.
89. Non-maintenance of register and records and non-filing of returns, etc. etc.
90. Contravention of provisions regarding employment of worker including women, audio-visual worker and contract labour, etc
91. Falsification of records, etc.
92. Penalty on disclosure of information
93. Penalty for wrongfully disclosing results of analysis of a sample of substance used or intended to be used
94. Penalty for contravention of the provisions of duties relating to hazardous processes
95. Penalty for contravention of the provisions of duties relating to safety provisions resulting in an accident
96. Failure to appoint manager in a mine
97. Offences by employees
98. Prosecution of owner, agent or manager of a mine
99. Exemption of owner, agent or manager of a mine or occupier of a factory from liability in certain cases
100. Offences by companies, etc.
101. Limitation of Prosecution and cognizance of offence
102. Jurisdiction of a court for entertaining proceedings, etc., for offence
103. Power of Court to make orders
104. Compounding of offences

Chapter XIII: Miscellaneous

105. Delegation of powers
106. Onus as to age
107. Onus of proving limits of what is practicable, etc.
108. Effect of law and agreements inconsistent with this Code
109. Power of the appropriate Government to direct inquiry in certain cases
110. Publication of reports
111. Powers of Central Government to give directions
112. General restriction on disclosure of information
113. Jurisdiction of civil courts barred
114. Protection of action taken in good faith
115. Power to exempt in special cases
116. Power to exempt during public emergency
117. Power to exempt public institution
118. Persons required to give notice, etc., legally bound to do so
119. Power to remove difficulties
120. Power of the appropriate Government to make rules
121. Power of the Central Government to make rules
122. Power of the State Government to make rules
123. Power of Central Government to make regulations in relation to mines and dock work
124. Prior publication of regulation and rules in relation to mine and dock work
125. Power to make regulation without previous publication
126. Bye-laws
127. Laying regulations, rules and bye laws before parliament
128. Laying of rules made by State Government
129. Repeal and Savings

The First Schedule

The Second Schedule

The Third Schedule

Draft

CODE ON OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS, 2018

A

Bill

to consolidate and amend the laws regulating the occupational safety, health and working conditions of the persons employed in an establishment and the matters connected therewith or incidental thereto.

BE it enacted by Parliament in the sixty-ninth Year of the Republic of India as follows:-

Chapter I
Preliminary

1. Short title, extent and commencement

1. This Act may be called the Code on Occupational Safety, Health and Working Conditions, 2018.
2. It extends to the whole of India:
   Provided that the provision of this Code in so for as are concerned with the beedi and cigar and plantation shall not be applicable in the state of Jammu and Kashmir.
3. It shall come into force on such date as the Central Government may, by notification appoint; and different dates may be appointed for different provisions of this Code and any reference in any such provision to the commencement of this Code shall be construed as a reference to the coming into force of that provision.

2. Definitions – (1) In this Code, unless the context otherwise requires,-

(a) **"adolescent"** shall have the meaning as assigned to it in clause (i) of section 2 of the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986 (61 of 1986);

(b)**"adult"** means a person who has completed his eighteenth year;

(c) **"agent"** when used in relation to a mine, means every person, superior to the manager and whether appointed as such or not, who, acting or purporting tc act on behalf of the owner, takes part in the management, control, supervision or direction of the mine or of any part thereof;

(d) **"appropriate Government"** means -

(i) in relation to an establishment carried on by or under the authority of the Central Government, railways, mines, oil fields, major ports, air transport services, telecommunication, banking and insurance company or a corporation or other authority established by a Central Act or a central public sector undertaking, subsidiary companies set up by the principal undertakings or autonomous bodies owned or controlled by the Central Government, the Central Government; and
(ii) in relation to any other establishment, the State Government of a State in which the other establishment is situate.

Explanation.- For removal of doubt, it is clarified that in respect of the contract labour supplied by a contractor for the purposes of an establishment, the appropriate Government for the establishment shall also be the appropriate Government for such contract labour;

(e) **"audio-visual"** production means audio-visual produced in wholly or partly in India including animation, cartoon depiction and audio-visual advertisement.

(f)**"audio-visual worker"** means a person, who is employed, directly or through any contractor, in or in connection with the audio-visual production to work as an artiste including actor, musician, singer, anchor, news reader or dancer or to do any work, skilled, unskilled, manual, supervisory, technical, artistic or otherwise, and his remuneration with respect to such employment in or in connection with the production of

audio-visual does not exceed, where remuneration is by way of monthly wages or where such remuneration is by way of lump sum, in each case, the amount notified in this regard by the Central Government;

(g) **"building or other construction work"** means the construction, alteration, repair, maintenance or demolition in relation to, buildings, streets, roads, railways, tramways, airfields, irrigation, drainage, embankment and navigation works, flood control works (including storm water drainage works), generation, transmission and distribution of power, water works (including channels for distribution of water), oil and gas installations, electric lines, internet towers, wireless, radio, television, telephone, telegraph and overseas communications, dams, canals, reservoirs, watercourses, tunnels, bridges, viaducts, aqua-ducts, pipelines, towers, cooling towers, transmission towers and such other work as may be specified in this behalf by the Central Government, by notification, but does not include any building or other construction work of any factory or mine or any building or other construction work employing less than ten workers or any building or other construction work related to residential property not being more than the amount as may be notified by the Central Government from time to time;

(h) **"building worker"** means a person who is employed to do any skilled, semi-skilled or unskilled, manual, technical or clerical work for hire or reward, whether the terms of employment be expressed or implied, in connection with any building or other construction work, but does not include any such person who is employed mainly in a managerial or supervisory or administrative capacity;

(i) "**cargo**" includes anything carried or to be carried in a ship or other vessel, or vehicle;

(j) **"competent person",** in relation to any provision of this Code, means a person or an institution recognised as such by the Chief Facilitator for the purposes of carrying out tests, examinations and inspections required to be done in an establishment having regard to-

(i) the qualifications and experience of the person and facilities available at his disposal; or
(ii) the qualifications and experience of the persons employed in such institution and facilities available therein;

(k) **"competent authority"** means any authority notified by the appropriate Government to perform all or any of the functions of the competent authority under this Code and for such areas as may be specified in the notification;

(l) **"contract labour"** means a worker who shall be deemed to be employed in or in connection with the work of an establishment when he is hired in or in connection with such work by or through a contractor, with or without the knowledge of the principal employer and includes inter-state migrant worker.

Explanation 1.-For removal of doubt, it is clarified that where in or in connection with the work of an establishment, a worker, who is regularly employed in an establishment of a contractor, is hired in or in connection with such work of the first said establishment by or through the contractor, with or without the knowledge of the principal employer, shall not be deemed as "contract labour" for the purposes of this clause.

Explanation 2.- For the purposes of Explanation 1, the expression "regularly employed in an establishment of a contractor", in case of a worker, means such worker who is employed by the contractor for any activity of his establishment and his employment is governed by mutually accepted standards of the conditions of employment (including engagement on permanent basis), and gets periodical increment in the pay, social security coverage and other welfare benefits in accordance with the law for the time being in force in such employment, but does not include part time employee;

(m)**"contractor",** in relation to an establishment, means a person, who –
(i) undertakes to produce a given result for the establishment, other than a mere supply of goods or articles of manufacture to such establishment, through contract labour; or
(ii) supplies contract labour for any work of the establishment as mere human resource;
and includes a sub-contractor;

(n) **"chief facilitator"** means a Chief Facilitator appointed under sub-section (3) of section 34;

(o) **"controlled industry"** means any industry the control of which by the Union has been declared by any Central Act to be expedient in the public interest;

(p) **"day"** means a period of twenty-four hours beginning at mid-night;

(q) **"dock work"** means any work in or within the vicinity of any port in connection with, or required, for, or incidental to, the loading, unloading, movement or storage of cargoes into or from ship or other vessel, port, dock, storage place or landing place, and includes –

(i) work in connection with the preparation of ships or other vessels for receipt or discharge of cargoes or leaving port; and

(ii) all repairing and maintenance processes connected with any hold, tank structure or lifting machinery or any other storage area on board the ship or in the docks;

(iii) chipping, painting or cleaning of any hold, tank, structure or lifting machinery or any other storage area in board the ship or in the docks;

(r) **"employee"** means, –

(i) in respect of an establishment, a person, excluding an apprentice engaged under the Apprentices Act, 1961, employed on wages by such establishment to do any skilled, semi-skilled, unskilled, manual, operational, supervisory, managerial, administrative, technical or clerical work for hire or reward, whether the terms of employment be express or implied; and

(ii) a person declared to be an employee by the appropriate Government;

but does not include any member of the Armed Forces of the Union:

Provided that notwithstanding anything contained in this clause, in case of a mine a person is said to be "employed" in a mine who works as the manager or who works under appointment by the owner, agent or manager of the mine or with the knowledge of the manager, whether for wages or not—

(a) in any mining operation (including the concomitant operations of handling and transport of minerals upto the point of dispatch and of gathering sand and transport thereof to the mine);

(b) in operations or services relating to the development of the mine including construction of plan therein but excluding construction of buildings, roads, wells and any building work not directly connected with any existing or future mining operations;

(c) in operating, servicing, maintaining or repairing any part of any machinery used in or about the mine;

(d) in operations, within the premises of the mine, of loading for dispatch of minerals;

(e) in any office of the mine;

(f) in any welfare, health, sanitary or conservancy services required to be provided under this Code relating to mine, or watch and ward, within the premises of the mine excluding residential area; or

(g) in any kind of work whatsoever which is preparatory or incidental to, or connected with, mining operations;

(s) **"employer"** means a person who employs employees in his establishment and where the establishment is carried on by any department of Central Government or State Government, the authority specified, by the head of such department, in this behalf or where no authority, is so specified the head of the department and in relation to an establishment carried on by a local authority, the Chief Executive of that authority, and includes, –

(i) in relation to an establishment which is a factory, the occupier of the factory;

(ii) in relation to any other establishment, the person who, or the authority which has ultimate control over the affairs of the establishment and where said affairs are entrusted to a manager or managing director, such manager or managing director;

(iii) in relation to mine, the owner of the mine; and

(iv) Contractor;

(t)**"establishment"** means a place where any industry, trade, business, manufacture, dock work or occupation is carried on including a factory, mine, motor transport undertaking, newspaper establishment, plantation, in which ten or more workers are employed;

(u) **"facilitator"** means a facilitator appointed under sub-section (1) of section 34;

(v) **"factory"** means any premises including the precincts thereof—

(i) whereon ten or more workers are working, or were working on any day of the preceding twelve months, and in any part of which a manufacturing process is being carried on with the aid of power, or is ordinarily so carried on, or

(ii) whereon twenty or more workers are working, or were working on any day of the preceding twelve months, and in any part of which a manufacturing process is being carried on without the aid of power, or is ordinarily so carried on,—

but does not include a mine, or a mobile unit belonging to the armed forces of the Union, railway running shed or a hotel, restaurant or eating place.

Explanation I.—For computing the number of workers for the purposes of this clause all the workers in 10 different groups and relays] in a day shall be taken into account;

Explanation II.—For the purposes of this clause, the mere fact that an Electronic Data Processing Unit or a Computer Unit is installed in any premises or part thereof, shall not be construed to make it a factory if no manufacturing process is being carried on in such premises or part thereof;

(w) **"family"**, when used in relation to a worker, means-

(i) his or her spouse, and

(ii) children including adopted children of the worker dependent upon him, who have not completed their eighteenth year,

and includes parents and widow sister, dependent upon him;

(x) **"godown"** means any warehouse or other place, by whatever name called, used for the storage of any article or substance required for any manufacturing process which means any process for, or incidental to, making, finishing or packing or otherwise treating any article or substance with a view to its use, sale, transport, delivery or disposal as finished products;

(y)**"hazardous process"** means any process or activity in relation to an industry specified in the First Schedule where, unless special care is taken, raw materials used therein or the intermediate or finished products, bye-products, hazardous substances, wastes or effluents thereof would—

(i) cause material impairment to the health of the persons engaged in or connected therewith, or

(ii) result in the pollution of the general environment:

Provided that the Central or State Government may, by notification, amend the First Schedule by way of addition, omission or variation of any industry specified in the said Schedule.

(z) **"hazardous substance"** means any substance as prescribed or preparation of which by reason of its chemical or physio-chemical properties or handling is liable to cause physical or health hazards to human being or may cause harm to other living creatures, plants, micro-organisms, property or the environment;

(za) **"industrial premises"** means any place or premises (not being a private dwelling house), including the precincts thereof, in which or in any part of which any industry, trade, business, occupation or manufacturing is being ordinarily carried on with or without the aid of power and includes a godown attached thereto;

(zb) "**industry**" means any systematic activity carried on by co-operation between an employer and worker (whether such worker is employed by such employer directly or by or through any agency, including a contractor) for the production, supply or distribution of goods or services with a view to satisfy human wants or wishes (not being wants or wishes which are merely spiritual or religious in nature), whether or not,—

(i) any capital has been invested for the purpose of carrying on such activity; or

(ii) such activity is carried on with a motive to make any gain or profit;

but does not include —

(i) any activity of the Government relatable to the sovereign functions of the Government including all the activities carried on by the departments of the Central Government dealing with defence research, atomic energy and space; and

(ii) any domestic service;

(zc) **"inter-State migrant worker"** means any person who is recruited by or through a contractor in one State under an agreement or other arrangement for employment in an establishment in another State;

(zd) **"machinery"** means any article or combination of articles assembled, arranged or connected and which is used or intended to be used for converting any form of energy to performing work, or which is used or intended to be used, whether incidental thereto or not, for developing, receiving, storing, containing, confining, transforming, transmitting, transferring or controlling any form of energy;

(ze) **"manufacturing process"** means any process for-

(i) making, altering, repairing, ornamenting, finishing, packing, oiling, washing, cleaning, breaking up, demolishing, or otherwise treating or adapting any article or substance with a view to its use, sale, transport, delivery or disposal; or

(ii) pumping oil, water, sewage or any other substance; or

(iii) generating, transforming or transmitting power; or

(iv) composing, printing, printing by letter press, lithography, offset, photogravure screen printing, 3-Dimensional printing, prototyping, flexography or other types of printing process or book binding; or

(v) constructing, reconstructing, repairing, refitting, finishing, or breaking up ships or vessels; or

(vi) preserving or storing any article in cold storage ; or

(vii) such other purposes as the Central Government may notify;

(zf) **"medical officer"** means the medical officer appointed under sub-section (1) of section 40;

(zg)**"mine"** means any excavation where any operation for the purpose of searching for or obtaining minerals has been or is being carried on and includes -

(i) all borings, bore holes, oil wells and accessory crude conditioning plants, including the pipe conveying mineral oil within the oilfields;

(ii) all shafts, in or adjacent to and belonging to a mine, whether in the course of being sunk or not;

(iii) all levels and inclined planes in the course of being driven;

(iv) all opencast workings;

(v) all conveyors or aerial ropeways provided for the bringing into or removal from a mine of minerals or other articles or for the removal of refuse there from;

(vi) all adits, livels, planes, machinery works, railways, tramways and sidings in or adjacent to and belonging to a mine;

(vii) all protective works being carried out in or adjacent to a mine;

(viii) all workshops and stores situated within the precincts of a mine and under the same management and used primarily for the purposes connected with that mine or a number of mines under the same management;

(ix) all power stations, transformer sub-stations, converter stations, rectifier stations and accumulator storage stations for supplying electricity solely or mainly for the purpose of working the mine or a number of mines under the same management;

(x) any premises for the time being used for depositing sand or other material for use in a mine or for depositing refuse from a mine or in which any operations in connection with such sand refuse or other material is being carried on, being premises exclusively occupied by the owner of the mine;

(xi) any premises in or adjacent to and belonging to a mine or which any process ancillary to the getting, dressing or preparation for sale of minerals or of coke is being carried on;

and includes a mine owned by the Government;

(zh) **"minerals"** means all substances which can be obtained from the earth by mining, digging, drilling, dredging, hydraulicing, quarrying, or by any other operation and includes mineral oils (which in turn include natural gas and petroleum);

(zi) **"motor transport undertaking"** means a motor transport undertaking employing motor transport worker and engaged in carrying passengers or goods or both by road for hire or reward, and includes a private carrier;

(zj) **"motor transport worker"** means a person who is employed in a motor transport undertaking directly or through an agency, whether for wages or not, to work in a professional capacity on a transport vehicle or to attend to duties in connection with the arrival, departure, loading or unloading of such transport vehicle and includes a driver, conductor, cleaner, station staff, line checking staff, booking clerk, cash clerk, depot clerk, time-keeper, watchman or attendant, but does not include—

(i) any such person who is employed in a factory ;
(ii) any such person to whom the provisions of any law for the time being in force regulating the conditions of service of persons employed in shops or commercial establishments apply;

(zk) **"newspaper"** means any printed periodical work containing public news or comments on public news and includes such other class of printed periodical work as may, from time to time, be notified in this behalf by the Central Government;

(zl) **"newspaper establishment"** means an establishment under the control of any person or body of persons, whether incorporated or not, for the production or publication of one or more newspaper or for conducting any news agency or syndicate and includes newspaper establishments specified as one establishment as below, namely:-

(1) two or more newspaper establishments under common control shall be deemed to be one newspaper establishment;

(2) two or more newspaper establishments owned by an individual and his or her spouse shall be deemed to be one newspaper establishment unless it is shown that such spouse is a sole proprietor or partner or a shareholder of a corporate body on the basis of his or her own individual funds;

(3) two or more newspaper establishments publishing newspapers bearing the same or similar title and in the same language in any place in India or bearing the same or similar title but in different languages in the same State or Union territory shall be deemed to be one newspaper establishment.

Explanation 1 – For the purposes of sub-clause (1) two or more establishments shall be deemed to be under common control-

(a) (i) where the newspaper establishments are owned by a common individual or individuals;

(ii) where the newspaper establishments are owned by firms, if such firms have a substantial number of common partners;

(iii) where the newspaper establishments are owned by bodies corporate, if one body corporate is a subsidiary of the other body corporate, or both are subsidiaries of a common holding company or a substantial number of their equity shares are owned by the same person or group of persons, whether incorporated or not;

(iv) where one establishment is owned by a body corporate and the other is owned by a firm, if a substantial number of partners of the firm together hold a substantial number of equity shares of the body corporate;

(v) where one is owned by a body corporate and the other is owned by a firm having bodies corporate as its partners if a substantial number of equity shares of such bodies corporate are owned, directly or indirectly, by the same person or group of persons, whether incorporated or not, or

(b) where there is functional integrality between concerned newspaper establishments.

Explanation 2. - For the purposes of this clause,-

(a) different departments, branches and centers of newspaper establishments shall be treated as parts thereof;
(b) a printing press shall be deemed to be a newspaper establishment if the principal business thereof is to print newspaper.

(zm) **"notification"** means a notification published in the Gazette of India or the official gazette of a state, as the case may be, and the expression "notify" with its grammatical variation and cognate expressions shall be construed accordingly;

(zn) **"occupier"** of a factory means the person who has ultimate control over the affairs of the factory:

Provided that-

(i) in the case of a firm or other association of individuals, any one of the individual partners or members thereof shall be deemed to be the occupier;
(ii) in the case of a company, any one of the directors shall be deemed to be the occupier;
(iii) in the case of a factory owned or controlled by the Central Government or any State Government, or any local authority, the person or persons appointed to manage the affairs of the factory by the Central Government, the State Government or the local authority, as the case may be, shall be deemed to be the occupier:

Provided further that in the case of a ship which is being repaired, or on which maintenance work is being carried out, in a dry dock which is available for hire, the owner of the dock shall be deemed to be the occupier for all purposes except the matters as may be prescribed by the Central Government which are directly related to the condition of ship for which the owner of ship shall be deemed to be the occupier;

(zo) **"office of the mine"** means an office at the surface of the mine concerned;

(zp) **"open cast working"** means a quarry, that is to say, an excavation where any operation for the purpose of searching for or obtaining minerals has been or is being carried on, not being a shaft or an excavation which extends below superjacent ground;

(zq) **"ordinarily employed"** with reference to any establishment or part thereof, means the average number of persons employed per day in the establishment or part thereof during the preceding calendar year obtained by dividing the number of man days worked by the number of working days excluding rest days and other non-working days.

(zr) **"owner", in relation to a mine**, means any person who is the immediate proprietor or lessee or occupier of the mine or of any part thereof and in the case of a mine the business whereof is being carried on by a liquidator or receiver, such liquidator or receiver; but does not include a person who merely receives a royalty, rent or fine from the mine, or is merely the proprietor of the mine, subject to any lease grant or licence for the working thereof, or is merely the owner of the soil and not interested in the minerals of the mine; but any contractor or sub-lessee for the working of a mine or any part thereof shall be jointly and severally liable under the provisions of the Code with the owner;

(zs) **"plantation" –**

(A) means any land used or intended to be used for -
(i) growing tea, coffee, rubber, cinchona or cardamom which admeasures five hectares or more

(ii) growing any other plant, which admeasures five hectares or more and in which persons are employed or were employed on any day of the preceding twelve months, if, after obtaining the approval of the Central Government, the State Government, by notification, so directs.

Explanation.—Where any piece of land used for growing any plant referred to in paragraph (i) or paragraph (ii) of this sub-clause admeasures less than five hectares and is contiguous to any other piece of land not being so used, but capable of being so used, and both such pieces of land are under the management of the same employer, then, for the purposes of this sub-clause, the piece of land first mentioned shall be deemed to be a plantation, if the total area of both such pieces of land admeasures five hectares or more; and

(B) also means any land which the state government may, by notification, declares and which is used or intended to be used for growing any plant referred to in paragraph (i) or paragraph (ii) of sub-clause (A), notwithstanding that it admeasures less than five hectares:

Provided that no such declaration shall be made in respect of such land which admeasures less than five hectares immediately before the commencement of this Code; and

(C) includes offices, hospitals, dispensaries, schools and any other premises used for any purpose connected with any plantation within the meaning of sub-clause (A) and sub-clause (B); but does not include factory on the premises;

(zt)**"prescribed"** means prescribed by rules made by the Central Government or the State Government, as the case may be, under this Code;

(zu) **"principal employer"**, where the contract labour is employed or engaged, means—

(i) in relation to any office or department of the Government or a local authority, the head of that office or department or such other officer as the Government or the local authority, as the case may be, may specify in this behalf;

(ii) in a factory, the owner or occupier of the factory and where a person has been named as the manager of the factory, the person so named;

(iii) in a mine, the owner or agent of the mine and where a person has been named as the manager of the mine, the person so named;

(iv) in relation to any other establishment, any person responsible for the supervision and control of the establishment.

(zv) **"producer"**, in relation to audio-visual production means the person by whom the arrangements necessary for producing such audio-visual (including the raising of finances and engaging audio-visual workers for producing audio-visual) are under-taken;

(zw) **"production"**, in relation to production of audio-visual, including any of the activities in respect of making thereof;

(zx) **"qualified medical practitioner"** means a medical practitioner who possesses any recognised medical qualification as defined in clause (h) of section 2 of the Indian Medical Council Act, 1956 (102 of 1956) and who is enrolled on a State Medical register as defined in clause (k) of that section;

(zy) **"relay"**- where work of the same kind is carried out by two or more sets of persons working during different periods of the day each of such sets is called a "relay " and each such periods is called a "shift";

(zz)**"sales promotion employees"** means any person by whatever name called (including an apprentice) employed or engaged in any establishment for hire or reward to do any work relating to promotion of sales or business, or both, but does not include any such person,-

(i) who, being employed or engaged in a supervisory capacity, draws wages exceeding fifteen thousand rupees per mensem or an amount as may be notified by the Central Government from time to time; or

(ii) who is employed or engaged mainly in a managerial or administrative capacity.

(zza) **"serious bodily injury"** means any injury which involves, or in all probability will involve, the permanent loss of any part or section of a body or the use of any part or section of a body, or the permanent loss of or

injury to the sight or hearing or any permanent physical incapacity or the fracture of any bone or one or more joints or bones of any phalanges of hand or foot;

(zzb) **"standards," "regulations" and "rules"** respectively means standards, regulations and rules made under this Code;

(zzc) **"week"** means a period of seven days beginning at midnight on Saturday night or such other night as may be approved in writing for a particular area by the Chief Facilitator ;

(zzd) **"worker"** means any person (except an apprentice as defined under clause (aa) of section 2 of the Apprentices Act, 1961) employed in any industry to do any manual, unskilled, skilled, technical, operational, clerical or supervisory work for hire or reward, whether the terms of employment be express or implied, and includes working journalists and sales promotion employees for the purposes of any proceeding under this Code in relation to an industrial dispute, includes any such person who has been dismissed, discharged or retrenched or otherwise terminated in connection with, or as a consequence of, that dispute, or whose dismissal, discharge or retrenchment has led to that dispute, but does not include any such person—

(i) who is subject to the Air Force Act, 1950, or the Army Act, 1950, or the Navy Act, 1957; or

(ii) who is employed in the police service or as an officer or other employee of a prison; or

(iii) who is employed mainly in a managerial or administrative capacity; or

(iv) who is employed in a supervisory capacity drawing wage of exceeding fifteen thousand rupees per month or an amount as may be notified by the Central Government from time to time.

Explanation.- For the purposes of this clause, the expression "industrial dispute" shall have the same meaning as assigned to it in clause (k) of section 2 of the Industrial Disputes Act 1947;

(zze) **"Working Journalist"** means a person whose principal avocation is that of a journalist and who is employed as such, either whole-time or part-time, in, or in relation to, one or more newspaper establishment, and includes an editor, a leader-writer, news editor, sub-editor, feature-writer, copy-tester, reporter, correspondent, cartoonist, news-photographer and proof-reader, but does not include any such person who is employed mainly in a managerial, supervisory or administrative capacity;

(2) A person working or employed in or in connection with mine is said to be working or employed-

(a) **"below ground"** if he is working or employed-

(i) in a shaft which has been or is in the course being sunk ; or

(ii) in any excavation which extends below superjacent ground ; and

(b) **"above ground "** if he is working in an open cast working or in any other manner not specified in clause (a).

Chapter II
Registration

3. Registration of certain establishments. – (1) Every employer of an establishment, employing ten or more employees, shall, register-

(a) such establishment to which this Code applies at its commencement; and

(b) such other establishment to which this Code may be applicable at any time after such commencement;

within a period of six months from such commencement or, as the case may be, from the date on which this Code becomes so applicable to such establishment, by making an application to the registering officer appointed by the appropriate government (hereinafter referred tc as the registering officer) for the registration of such establishment:

Provided that the registering officer may entertain any such application for registration after the expiry of such period on payment of such late fees as may be prescribed by the appropriate government.

(2) Every application under sub-section (1) shall be submitted in prescribed manner to the registering officer in such form and shall contain such particulars and shall be accompanied by such fees as may be prescribed by the appropriate government.

(3) After the receipt of an application under sub-section (1), the registering officer shall register the establishment and issue a certificate of registration to the employer thereof in such form and within such time and subject to such conditions as may be prescribed by the Central Government.

Provided that where an establishment is ministry, department, attached office or subordinate office of the Central Government or a State Government, then, the registration of the establishment is not required under this section.

Explanation – For the purposes of this sub-section, the expression "attached office or sub-ordinate office of the Central Government or a State Government" means such offices of the Central Government or State Government, as the case may be, -

(i) to whom any execution of policy of such Government has been decentralized for executive convenience; or
(ii) which are responsible for providing executive direction required in implementation of the policies laid down by the Ministry or department of the Government to which they are attached or subordinate; or
(iii) which generally function as field establishments or an agencies responsible for the detailed execution of the policies of the concerned Government; or

which, are, having regard to the nature of their responsibilities and functions, have been declared by the concerned Government to be the attached offices or subordinate offices .

(4) Where, after the registration of an establishment under this Code, any change occurs in the ownership or management or other particulars prescribed by the Central Government in respect of such establishment, the particulars regarding such change shall be intimated by the employer to the registering officer within thirty days of such change in such form as may be prescribed by the Central Government.

(5) The employer of an establishment shall, within thirty days of the closing of establishment –

(a) inform the closing of such establishment;
(b) certify payment of all dues to the workers,

to the registering officer in such manner as may be prescribed by the Central Government and the registering officer shall, on receiving such information and certificates remove such establishment, as the case may be, from the register of establishment maintained by him and cancel the registration certificate within thirty days.

(6) If an employer of an establishment-

(i) violates any provision of this Code applicable to such establishment; or
(ii) has misrepresented or misrepresents any fact relating to registration to the registering officer,

the registering officer may after providing employer an opportunity of being heard, revoke the registration of the establishment.

(7) No employer of an establishment-

(i) who has not registered the establishment under this section; or
(ii) the registration of such establishment has been cancelled under clause (5) or revoked under clause (6) and no appeal has been preferred against such revocation under section 4 or where such appeal has been preferred, such appeal has been dismissed,

shall employ in the establishment any employee.

4. Appeal- (1) Any person aggrieved by an order made under section 3 may, within thirty days from the date on which the order is communicated to him, prefer an appeal to an appellate officer who shall be a person notified in this behalf by the appropriate Government:

Provided that the appellate officer may entertain the appeal after the expiry of the said period of thirty days, if he is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

(2) On receipt of an appeal under sub-section (1), the appellate officer shall, after giving the appellant an opportunity of being heard, dispose of the appeal within a period of thirty days from the date of receipt of the appeal.

5. Notice by employer of commencement and cessation of operation:- No employer of an establishment being factory or mine or relating to contract labour or building or construction work shall use such establishment to commence the operation of any industry, trade, business, manufacture or occupation thereon without sending notice of such purpose in such form and manner and to such authority as may be prescribed by the appropriate Government and shall also intimate in the prescribed manner to such authority the cessation of such operation.

Chapter III
Duties of Employer and Employees, etc.

6. Duties of employer:

(1) Every employer shall ensure to his employees that work place is free from hazards that cause or are likely to cause injury or occupational disease to the employees, and shall comply with the Occupational Safety and Health standards made under this Code and of the regulations, rules, bye-laws and orders made there under.

(2) Every employer shall provide and maintain, as far as is reasonably practicable, a working environment that is safe and without risk to the health of the employees.

(3) Every employer or manager of an establishment shall furnish to every worker on his appointment in the establishment, a letter of appointment in the prescribed form and where a worker appointed on or before the commencement of this Code does not have an appointment letter furnished by his employer or manager, such worker shall, within three months of such commencement, be furnished with appointment letter in the form so prescribed.

(4) No employer shall levy or permit to be levied on any employee, any charge in respect of anything done or provided for maintenance of safety and health at work place including conduct of medical examination and investigation for the purpose of detecting occupational diseases.

(5) Without prejudice to the generality of the provisions of sub-section (1), (2), (3), (4) the duties of an employer shall particularly in respect of factory, mines, dock, building and other construction work or plantation include -

(a) the provision and maintenance of plant and systems of work in the workplace that are safe and without risks to health;

(b) the arrangements in the workplace for ensuring safety and absence of risks to health in connection with the use, handling, storage and transport of articles and substances;

(c) the provision of such information, instruction, training and supervision as are necessary to ensure the health and safety of all workers at work;

(d) the maintenance of all places of work in the workplace in a condition that is safe and without risks to health and the provision and maintenance of such means of access to, and egress from, such places as are safe and without such risks;

(e) the provision, maintenance or monitoring of such working environment in the workplace for the employees that is safe, without risks to health and adequate as regards facilities and arrangements for their welfare at work.

(6) Every employer relating to factory, mine, dock work, building or other construction work or plantation shall ensure and be responsible for the safety and health of persons who are on the work premises of the employer, with or without his knowledge.

7. Duties and responsibilities of owner, agent and manager in relation to mine.—(1) The owner and agent of every mine shall jointly and severally be responsible for making financial and other provisions and for taking such other steps as may be necessary for compliance with the provisions of this Code and the regulations, rules, bye-laws and orders made there under.

(2) The responsibility in respect of matters provided for in the rules, made by the Central Government under this Code in respect of mines –

(a) requiring the maintenance therein, wherein the women are employed or were employed on any day of the preceding twelve months, suitable rooms to be reserved for the use of children under the age of six years belonging to such women and for providing, either generally or with particular reference to the number of women employed in the mine, the number and standards of such rooms provided and the supervision to be exercised therein;

(b) for requiring the maintenance at or near pitheads of bathing places equipped with shower baths and of locker rooms for the use of men employed in mines and of similar and separate places and rooms for the use of women employed therein, and for providing, either generally or with particular reference to the number of men and women ordinarily employed in a mine, the number and standards of such place and rooms;

(c) for requiring the provision and maintenance in any mine specified in this behalf by the Chief Facilitator or Facilitator, wherein, more than two hundred and fifty persons are ordinarily employed, of a canteen or canteens for the use of such persons;

shall be exclusively complied with by the owner and agent of the mine and by such person (other than the mines manager) whom the owner or agent may appoint for securing compliance with the aforesaid provisions.

(3) If the compliance of any instructions given under sub-section (2) or given otherwise than through the manager under sub-section (3) of section 63, results in the contravention of the provisions of this Code or of the regulations, rules, bye-laws or orders made there under, every person giving such instructions shall also be liable for the contravention of the provisions concerned.

(4) Subject to the provisions of sub-sections (1), (2) and (3), the owner, agent and manager of every mine shall jointly or severally responsible to see that all operations carried on in connection with the mine are conducted in accordance with the provisions of this Code and of the regulations, rules, bye-laws and orders made there under.

(5) In the event of any contravention by any person whosoever of any of the provisions of this Code or of the regulations, rules, bye-laws or orders made there under, relating to mine, except those which specifically require any person to do any act or thing or prohibit any person from doing an act or thing, besides the person who contravenes, then, each of the following persons shall also be deemed to be guilty of such contravention unless he proves that he had used due diligence to secure compliance with the provisions and had taken reasonable means to prevent such contravention, namely:—

(i) the official or officials appointed to perform duties of supervision in respect of the provisions contravened;
(ii) the manager of the mine;
(iii) the owner and agent of the mine;
(iv) the person appointed, if any, to carry out the responsibility under sub-section (2).

(6) It shall not be a defence in any proceedings brought against the owner or agent of a mine under this section that the manager and other officials have been appointed in accordance with the provisions of this Code or that a person to carry the responsibility under sub-section (2) has been appointed.

8. Duties of manufacturers – (1) The Central Government shall make regulations after consultation with the National Occupational Safety and Health Advisory Board and such regulations shall be complied with by every person who designs, manufactures, imports or supplies any article for use in any factory.

(2) The regulations under sub-section (1) shall be made generally for governing the duties of manufacturers as regards articles and substances for use in factories and particularly to-

(a) ensure so far as is reasonably practicable, that the article is so designed and constructed in the factories as to be safe and without risks to the health of the workers when properly used;
(b) carry out or manage for the carrying out such tests and examination in the factories as may be considered necessary for the effective implementation of the provisions of clause (a);
(c) take out steps as may be necessary to ensure that adequate information will be made available-
    (i) in connection with the use of the article in any factory;
    (ii) about the use for which such article is designed and tested; and
    (iii) about any conditions necessary to ensure that the article, when put to such use, shall be safe, and without risks to the health of the workers:

Provided that where an article is designed or manufactured outside India, then such regulations shall contain provisions making obligatory on the part of the importer to see -

(A) that the article conforms to the same standards of such article manufactured in India; or
(B) if the standards adopted in the country outside India for the manufacture of such article is above the standards adopted in India, that article conforms to such standards in such country;
(C) if there is no standard of such article in India, then, the article confirms to the standard adopted in the country from where it is imported at its national level;

9. Duties of architects, project engineers and designers.—(1) It shall be the duty of the architect, project engineer or designer responsible for any building or other construction work or the design of any project or part thereof relating to such building or other construction work to ensure that, at the planning stage, due consideration is given to the safety and health aspects of the building workers and employees who are employed in the erection, operation and execution of such projects and structures as the case may be.

(2) Adequate care shall be taken by the architect, project engineer and other professionals involved in the project referred to in sub-section (1), not to include anything in the design which would involve the use of dangerous structures or other processes or materials, hazardous to health or safety of building workers and employees during the course of erection, operation and execution as the case may be.
(3) It shall also be the duty of the professionals, involved in designing the buildings structures or other construction projects, to take into account the safety aspects associated with the maintenance and upkeep of the structures and buildings where maintenance and upkeep may involve special hazards.

10. Notice of certain accident.- (1) Where at any place in an establishment, an accident occurs which causes death, or which causes any bodily injury by reason of which the person injured is prevented from working for period of forty-eight hours or more immediately following the accident or which is of such nature as may be prescribed, then,-

(i) employer or owner of such establishment if it is mine or where an agent of such mine takes part in management of the place where such accident occurs in the mine, then, such agent; or
(ii) employer in relation to such establishment if it is factory or relates to dock work; or
(iii) the employer of such establishment if it is plantation; or
(iv) employer of the establishment if it relates to building or other construction work; or
(v) employer in relation to any other establishment,

as the case may be, shall send notice thereof to such authorities, in such manner and within such time, as may be prescribed.

(2) Where a notice given under sub-section (1) relates to an accident causing death in an establishment, the authority to whom the notice is sent shall make an inquiry into the occurrence within one month of the receipt of the notice or if there is no such authority, the Chief Facilitator shall cause the Facilitator to make an inquiry within the said period.

11. Notice of certain dangerous occurrences.- Where in an establishment any dangerous occurrence of such nature as may be prescribed, occurs, whether causing any bodily injury or disability, or not, the employer shall send notice thereof to such authorities, and in such form and within such time, as may be prescribed.

12. Notice of certain diseases. -(1) Where any worker in an establishment contracts any disease specified in the Third Schedule the employer of the establishment shall send notice thereof to such authorities, and in such form and within such time, as may be prescribed.

(2) If any qualified medical practitioner attends on a person, who is or has been employed in an establishment, and who is, or is believed by the qualified medical practitioner, to be suffering from any disease specified in the Third Schedule, the medical practitioner shall without delay send a report in writing to the office of the Chief Facilitator in the form and manner and within such time as prescribed.

(3) If any qualified medical practitioner fails to comply with the provisions of sub-section (2), he shall be punishable with fine which may extend to ten thousand rupees.

(4) The Central Government may, by notification, add to or alter the Third Schedule and any such addition or alteration shall have effect as if it had been made by amendment of this Code.

13. Duties of employees- Every employee at work place shall –

(a) take reasonable care for the health and safety of himself and of other persons who may be affected by his acts or omissions at the work place;
(b) comply with the safety and health requirements specified in the Standards;
(c) co-operate with the employer in meeting the statutory obligations of the employer under the Code;
(d) if any situation which is unsafe or unhealthy comes to his attention, as soon as practicable, report such situation to his employer or to the health and safety representative for his workplace or section thereof, as the case may be, who shall report it to the employer;
(e) willfully interfere with, or misuse, or neglect any appliance, convenience or other thing provided work for the purpose of securing the health, safety and welfare of workers; and
(f) not do, willfully and without reasonable cause, anything, likely to endanger himself or others.

14. Rights of employee- (1) Every employee in an establishment shall have the right to obtain from the employer information relating to safety and health at work; and represent to the employer directly or through a member of the Safety Committee, if constituted by the employer for such purpose, regarding inadequate provision for protection of his safety or health in connection with the work activity in the workplace, and if not satisfied, to the Facilitator.
(2) (i) where the employees referred to in sub-section (1) in any work place have reasonable apprehension that there is a likelihood of imminent serious personal injury or death or imminent danger to health, they may bring the same to the notice of their employer directly or through a member of the Safety Committee referred to in sub-section (1) and simultaneously bring the same to the notice of the Facilitator.

(ii) The employer or any employee referred to in sub-section (1) shall take immediate remedial action if he is satisfied about the existence of such imminent danger and send a report forthwith of the action taken to the Facilitator.

(3) If the employer referred to in clause (ii) of sub-section (2) is not satisfied about the existence of any imminent danger as apprehended by his employees, he shall, nevertheless, refer the matter forthwith to the Facilitator whose decision on the question of the existence of such imminent danger shall be final.

15. Duty not to interfere with or misuse things -No person shall intentionally or recklessly interfere with, damage or misuse anything which is provided in the interest of health ,safety or welfare under this Code.

Chapter IV
Occupational Safety and Health

16. National Occupational Safety and Health Advisory Board:-(1) The Central Government shall, by notification, constitute the National Occupational Safety and Health Advisory Board (hereinafter in this Code referred to as the National Board) to discharge the functions conferred on it by or under this Code and to advise to the Central Government on the matters relating to –

(i) Standards, rules and regulations to be framed under this Code;
(ii) implementation of the provisions of this Code and the rules and regulations relating thereto;
(iii) the issues of policy relating to occupational safety and health referred to it, from time to time, by the Central Government; and
(iv) any other matter relating to this code referred to, from time to time, by the Central Government.

(2)The National Board shall consist of-

(i) Secretary, Ministry of Labour and Employment.....Chairperson (ex-officio);
(ii) Director General, Factory Advices Services and Labour Institutes, Mumbai.....Member (ex-officio);
(iii) Director General, Mines Safety, Dhanbad.....Member (ex-officio);
(iv) Chief Controller of Explosives, Nagpur.....Member (ex-officio);
(v) Chairman, Central Pollution Control Board, New Delhi.....Member (ex-officio);
(vi) Chief Labour Commissioner (Central), New Delhi.....Member (ex-officio);
(vii) Principal Secretaries dealing with labour matters of 4 States (by rotation as the Central Government may deem fit) .....Member (ex-officio):
(viii) Director General, Employee State Insurance Corporation, New Delhi.....Member (ex-officio);
(ix) Director General, Health Services, New Delhi.....Member (ex-officio);
(x) five representatives of employers.....Member (ex-officio);
(xi) five representatives of employees.....Member (ex-officio);
(xii) five eminent persons connected with the field of Occupational Safety and Health, or representatives from reputed research institutions or similar other discipline.... Member:
(xiii) Joint Secretary, Ministry of Labour and Employment-Member Secretary (ex-officio);

(3) The terms of office of the Members referred to in clause (vii), (x), (xi) and (xii) of sub-section (2) shall be of three years and the procedure of the National Board and the officers and staff thereof shall be such as may be prescribed.

(4) The Central Government may constitute as many technical Committees or advisory committees consisting of such number of members having such qualifications as may be prescribed, to assist the National Board in discharge of its function specified in sub-section (1).

17. State Occupational Safety and Health Advisory Board- (1)The State Government shall constitute a board to be called the State Occupational Safety and Health Advisory Board(herein after referred to as State Advisory Board) to advise the State Government on such matters arising out of the administration of this Code as may be referred to it.

(2) The constitution, procedure and other matters relating to such Advisory Board shall be such as may be prescribed by the State Government.

(3) The State Government may constitute as many technical Committees or advisory committee of such advisory Board including site appraisal committees, consisting of such number of members having such qualifications as may be prescribed, to assist the State Government or State Advisory Board in discharge of their functions relating to the area falling within their respective jurisdiction.

18. Occupational Safety and Health Standards – (1) The Central Government shall declare, by notification, standards on occupational safety and health for work places relating to factories, mines, dock work, building and other construction work and other establishments.
(2) In particular and without prejudice to the generality of the power to declare standards under sub-section (1), such standards shall relate to –

(a) Physical, chemical, biological and any other hazards to ensure to the extent feasible on the basis of the best available evidence or functional capacity, that no employee will suffer material impairment of health or functional capacity even if such employee has regular exposure to hazard dealt with by such standard for the period of his working life;
(b) the norms-
    (i) appraising the hazards to employees and users to which they are exposed;
    (ii) relevant symptoms and appropriate energy treatment and proper conditions and precautions of safe use or exposure;
    (iii) monitoring and measuring exposure of employees to hazards;
    (iv) medical examination and other tests which shall be made available, by the employer or at his cost, to the employees exposed to hazards; and
    (v) of hazard evaluation procedures like safety audit, hazard and operability study, fault free analysis, event free analysis and such other requirements;
(c) norms for medical examination including criteria for detection and reporting of occupational diseases to be extended to the worker even after he ceases to be in employment, if he is suffering from an occupational disease which arises out of or in course of employment;
(d) such aspects of occupational safety and health which the Central Government considers necessary on the report of the authority designated by such Government for such purpose relating to work places;
(e) such safety and health measures which may be required having regard to the specific conditions prevailing at the workplaces relating to mine, factory, building and other construction work, beedi and cigar, dock work or any other establishment notified, as the case may be; and
(f) matters specified in the Second Schedule to this Code.

(3)The Central Government, on the basis of the recommendation of National Occupational Safety and Health Advisory Board, after giving by notification, not less than forty five days previous notice of its intention so to do, may, by like notification, amend the Second Schedule to this Code.

(4) Every standard made under sub-section (1) and sub-section (2) and every notification issued under sub-section (3) shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the standard or notification or both Houses agree that the standard or notification should not be made, the standard or notification shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice tc the validity of anything previously done under that standard or notification.
(5) The State Government, for the purposes to which it is the appropriate Government, may, after prior approval of the Central Government, amend the standards made under sub-section (1) and sub-section (2) for their applicability in that state.
(6) Every amendment of the standards made by State Government under sub-section (4) shall be laid before the state legislature.

19. Research related activities - It shall be the duty of institutions in the field of occupational safety and health as notified by the Central Government to cause to conduct research, experiments and demonstrations relating to occupational safety and health and thereafter submit their recommendation to the appropriate government.

20. Safety and occupational health surveys.— At any time during the normal working hours of an establishment or at any other time as is found by him to be necessary, -

(a) the Chief Facilitator in the case of factory or mine; or
(b) the Director General of Factory Advice Service and Labour Institute in the case of factory; or
(c) the Director General of Mines Safety in the case of mine; or
(d) the Director General of Health Services in the case of factory or mine; or
(e) such other officer as may be authorised by the appropriate Government in the case of any other establishment or class of establishment;

after giving notice in writing to the occupier or manager of the factory or, as the case may be, to the manager of the mine or to any other person who for the time being purports to undertake safety and occupational health survey of such factory or mine or in the case of any other establishment or class of establishment to such person who is for the time being responsible for the safety and the occupational health of such other establishment or an establishment of such class of establishment, as the case may be, conduct survey of the factory or as the case may be of the mine or such other establishment or such an establishment of the class of establishment and such occupier or manager or such responsible person shall afford all facilities for such survey, including facilities for the examination and testing of plant and machinery and collection of samples and other data relevant to the survey.

(2) For the purpose of facilitating surveys under sub-section (1) every worker shall, if so required by the person conducting the survey, present himself to undergo such medical examination as may be considered necessary by such person and furnish all information in his possession and relevant to the survey.

(3) Any time spent by a worker for undergoing medical examination or furnishing information under sub-section (2) shall, for the purpose of calculating wages and extra wages for overtime work, be deemed to be time during which such worker worked in the establishment.

Explanation.—For the purposes of this section, the report, if any, submitted to the appropriate Government by the person conducting the survey under sub-section (1) shall be deemed to be a report submitted by a Facilitator under this Code.

21.Statistics:-(1) In order to further the purposes of this Code, the Central Government and the State Government shall develop and maintain an effective programme of collection, compilation and analysis of occupational safety and health statistics.

(2) To carry out the functions, the appropriate Government may promote, encourage or directly engage in programme of studies, information and communication concerning occupational safety and health statistics.

22. Safety Committee and Safety Officers.- (1) In every factory and establishment relating to building and other construction work wherein each five hundred workers or more, or in a mine wherein one hundred workers or more, are ordinarily employed, the employer shall constitute a Safety Committee consisting of such number of representatives of the employer and the workers as may be prescribed by the appropriate Government;

Provided that the number of persons representing the workers shall, in no case, be less than the persons representing the employer.

Provided further that the appropriate Government may, if it considers appropriate, also direct other establishments to set up Safety Committee or appoint Safety Officers.

(2) In every establishment referred to in sub-section (1), wherein such number of workers are employed as may be prescribed, the employer shall also appoint such number of safety officers, who shall possess such qualifications and perform such duties, as may be prescribed.

Chapter V
Health and Working Conditions

23. Responsibility of employer for maintaining health and working conditions – (1) The employer shall be responsible to maintain in his establishment the health and working conditions for the workers to provide them such standard of working atmosphere as may be prescribed by the Central Government.

(2) Without prejudice to the generality of the power conferred under sub-section (1), the Central Government may prescribe for providing all or any of the following matters in the establishment or class of establishment, as the case may be, namely: –

(i) cleanliness and hygiene;
(ii) ventilation, temperature and humidity;
(iii) environment free from dust, noxious gas, fumes and other impurities;
(iv) the adequate standard of humidification, artificially increasing the humidity of the air, ventilation and cooling of the air in work rooms;
(v) potable drinking water;

(vi) the adequate standards to prevent overcrowding and to provide sufficient space to workers or persons, as the case may be, employed therein;
(vii) adequate lighting;
(viii) sufficient arrangement for latrine and urinal accommodation to male, female and transgender separately for workers maintaining hygiene therein;
(ix) effective arrangements for treatment of wastes and effluents; and
(x) any other arrangement which the Central Government considers appropriate for providing decent working conditions to the workers employed in an establishment.

Chapter VI
Welfare Provisions

24. Welfare facilities in the establishment, etc. – (1) The employer shall be responsible to provide and maintain in his establishment welfare facilities for the workers of such standard as may be prescribed by the Central Government.

(2) Without prejudice to the generality of the power conferred under sub-section (1), the Central Government may prescribe for providing all or any of the following matters in the establishment or class of establishment, as the case may be, namely:-

(i) adequate and suitable facilities for washing to workers for both male and female separately;
(ii) bathing places and locker rooms for both male and female employees separately;
(iii) place of keeping clothing not worn during working hours and for the drying of wet clothing;
(iv) sitting arrangements for all workers obliged to work in a standing position;
(v) adequate standard of canteen or canteens and medical examination of workers thereof in an establishment employing one hundred or more workers including contract labour ordinarily employed;
(vi) creche having suitable room or rooms for the use of children under the age of six years at suitable location in every establishment wherein more than fifty workers are ordinarily employed;
(vii) readily accessible during all working hours adequate first-aid boxes or cupboards with contents; and
(viii) any other welfare measures which the Central Government considers, under the set of circumstances, as required for decent life of the workers.

(3) Without prejudice to the generality of the powers conferred under sub-section (1) and sub-section (2), the Central Government may also prescribe for the following matters, namely:-

(i) ambulance room in every factory, mine and other construction work wherein more than five hundred workers are ordinarily employed;
(ii) medical facilities at the operating centres and halting stations, uniforms, raincoats and other like amenities for protection from rain or cold for motor transport workers;
(iii) adequate, suitable and separate shelters or rest-rooms for male and female workers and lunch-room in every factory and mine wherein more than seventy five workers are ordinarily employed and in motor transport undertaking wherein worker is required to halt at night;
(iv) the employment of welfare officer in every factory, mine or plantation wherein two hundred fifty or more workers are ordinarily employed and the qualification, conditions of service and duties of such welfare officer;
(v) the provision for providing by the employer temporary living accommodation, free of charges and within the work site or as near to it as may be possible, to all building workers employed by him and for causing removal or demolition of such temporary living accommodation and for returning by the employer the possession of any land obtained by him for such purpose from Municipal Board or any other local authority;
(vi) for payment by the principal employer the expenses incurred on providing the accommodation to the contractor, where the building and other construction work is done through the contractor.

(4) Without prejudice to the generality of the powers conferred under sub-section (1) and sub-section (2), the State Government may also prescribe the manner in which the employer of the plantation shall provide for drinking water, housing facility, education facility for the children of workers, health facilities for the worker and his family and other amenities required for the protection of the plantation worker from rain or cold.

Chapter VII

Hours of Work and Annual Leave with Wages

25. Weekly and daily working hours, etc. – (1) No worker shall be required or allowed to work, in an establishment for more than –

(i) forty-eight hours in a week;
(ii) nine hours in a day subject to hours of work specified in clause (i); and
(iii) the periods of work in each day shall be so fixed that no period shall exceed five hours and there shall be half an hour of interval after each such period.

Provided that the period of work of a worker shall be so arranged that inclusive of his intervals for rest under this sub-section, it shall not spread over more than ten and half hours in any day:

Provided further that in the case of mines,-

(I) the persons employed below ground in a mine shall not be allowed to work for more than eight hours in any day;
(ii) no work shall be carried on below ground in any mine except by a system of shifts so arranged that the period of work for each shift is not spread over more than the daily maximum stipulated in clause (ii);
(iii) no person employed in a mine shall be allowed to be present in any part of a mine below ground except during the periods of work shown in respect of him in the register maintained under sub-section (1) of section 33.

(2) In case of overtime work to be performed by a worker in any establishment, total number of hours of overtime shall not exceed one hundred for any one quarter:

Provided that –

(i) the total number of hours of work in any day, including overtime shall not exceed ten;
(ii) the spread over, inclusive of intervals of rest, shall not exceed twelve hours in any one day;
(iii) the total number of hours of work in a week, including overtime, shall not exceed sixty;

Explanation.- For the purposes of this section, the expression "quarter" means a period of three consecutive months beginning on the 1st January, the 1st of April, the 1st of July or 1st October.

(3) Notwithstanding anything contained in sub-section (1) and sub-section (2), the hours of work in case of motor transport shall be such as may be prescribed taking into account that -

(i) the time during which a motor transport worker is at the disposal of the employer or of any other person, he shall be entitled to claim his services;
(ii) the running time of the transport vehicle during which the work will be done by him, the time spent during the subsidiary work and the mere attendance at terminals of less than fifteen minutes shall be included in the said hours of work.

Explanation.—For the purposes of this sub-section—

(a) "running time" in relation to a working day means the time from the moment a transport vehicle starts functioning at the beginning of the working day until the moment when the transport vehicle ceases to function at the end of the working day, excluding any time during which the running of the transport vehicle is interrupted for a period exceeding such duration as may be prescribed during which period the persons who drive, or perform any other work in connection with the transport vehicle are free to dispose of their time as they please or are engaged in subsidiary work;
(b) "subsidiary work" means work in connection with a transport vehicle, its passengers or its load which is done outside the running time of the transport vehicle, including in particular—
    (i) work in connection with accounts, the paying in of cash, the signing of registers, the handing in of service sheets, the checking of tickets and other similar work;
    (ii) the taking over and garaging of the transport vehicles;
    (iii) travelling from the place where a person signs on to the place where he takes over the transport vehicle and from the place where he leaves the transport vehicle to the place where he signs off;
    (iv) work in connection with the upkeep and repair of the transport vehicle; and
    (v) the loading and unloading of the transport vehicle;

(c) "period of mere attendance" means the period during which a person remains at his post solely in order to reply to possible calls or to resume action at the time fixed in the duty schedule.

(4) Notwithstanding anything contained in sub-section (1) and sub-section (2), the hours of work for working journalist shall, subject to a maximum of one hundred and forty-four hours work during any period of four consecutive weeks and a period of not less than twenty-four consecutive hours rest during any period of seven consecutive days, be as may be prescribed.

(5)Notwithstanding anything contained in sub-section (1) and sub-section (2), in case of a sales promotion employees-

(i) in addition to such holidays, casual leave or other kinds of leave as may be prescribed, every sales promotion employee shall be granted, if requested for –

(a) earned leave on full wages for not less than one-eleventh of the period spent on duty;

(b) leave on medical certificate on one-half of the wages for not less than one-eighteenth of the period of service;

(ii) the maximum limit up to which he may accumulate earned leave shall be such as may be prescribed;

(iii) the limit up to which the earned leave may be availed of at a time by him and the reasons for which such limit may be exceeded shall be such as may be prescribed;

(iv) he shall,—

(a) when he voluntarily relinquishes his post or retires from service, or

(b) when his services are terminated for any reason whatsoever (not being termination as punishment),

be entitled to cash compensation, subject to such conditions and restrictions as may be prescribed (including conditions by way of specifying the maximum period for which such cash compensation shall be payable), in respect of the earned leave earned by him and not availed of;

(v) where he dies while in service, his heirs shall be entitled to cash compensation for the earned leave earned by him and not availed of;

(vi) the cash compensation which will be payable to him or, as the case may be, his heirs in respect of any period of earned leave for which he or his heirs, as the case may be, is or are entitled to cash compensation under clause (iv) or clause (v), as the case may be, shall be an amount equal to the wages due to the sales promotion employee for such period.

(6) Notwithstanding anything contained in this section,-

(i) the appropriate Government may, taking into consideration the nature of work or other circumstances, relax total number of overtime hours in a quarter subject to a maximum of one hundred and twenty five hours in a quarter in any establishment or class or description of establishment;

(ii) the chief facilitator may,-

(a) approve that the maximum hours specified in clause (ii) of the proviso to sub-section (1) may be exceeded in order to facilitate the change of shifts; and

(b) for the reasons to be recorded in writing and subject to such conditions as he may deem fit to impose, permit the spread-over to extend over a period not exceeding fourteen hours in any day.

(7)Notwithstanding anything contained in the section the working hours of an adolescent worker shall be regulated in accordance with the provisions of the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986 (61 of 1986)

26. Weekly and compensatory holidays – (1) No worker shall be allowed to work in an establishment on more than six days in any one week–

Provided that in any motor transport undertaking, an employer may, in order to prevent any dislocation of a motor transport service, require a worker to work on any day of rest which is not a holiday so arranged that the worker does not work for more than ten days consecutively without a holiday for a whole day intervening.

(2) The appropriate Government may, by notification, exempt such workers as it thinks reasonable from the provisions of sub- section (1), subject to such conditions as may be prescribed.

(3) Where, as a result of the passing of an order or the making of a rule under the provisions of this Code exempting an establishment or the workers therein from the provisions of sub-section (2), a worker is deprived of any of the weekly holidays, the worker shall be allowed, within the month in which the holidays were due or within the two months immediately following that month, compensatory holidays of equal number to the holidays so deprived.

27. Extra wages for overtime.- There shall be paid wage at the rate of twice the ordinary rate of wages in respect of overtime work, where,-

(i) a worker works in an establishment for more than nine hours in any day or for more than forty-eight hours in any week;

(ii) in a mine a person works above ground for more than nine hours in any day, or works below ground for more than eight hours in any day or works for more than forty-eight hours in any week whether above ground or below ground;

and the period of overtime shall be calculated on a daily basis or weekly basis, whichever is more favourable to such person or, as the case may be, to such worker.

Explanation – For the purposes of this section, -

"ordinary rate of wage" means the basic wages plus dearness allowance or any other allowances which is considered as a part of wage.

28. Night shifts - Where a worker in a factory works on a shift which extends beyond midnight,-

(a) for the purposes of sections 26, a holiday for a whole day shall mean in his case a period of twenty-four consecutive hours beginning when his shift ends;

(b) the following day for him shall be deemed to be the period of twenty-four hours beginning when such shift ends, and the hours he has worked after midnight shall be counted in the previous day.

29. Prohibition of overlapping shifts - (1) The work shall not be carried on in any establishment by means of a system of shifts so arranged that more than one relay of workers is engaged in work of the same kind at the same time.

(2) The appropriate Government or subject to the control of the appropriate Government, the Chief Facilitator, may, by written order and for the reasons specified therein, exempt on such conditions as may be deemed expedient, any establishment or class or description of establishment or any department or section of an establishment or any category or description of workers therein from the provisions of sub-section (1):

Provided that no such exemption shall be given in case of mines or any department or section thereof or any category or description of workers therein.

30. Restriction on double employment in factory and mine- No worker shall be required or allowed to work in a mine or factory if he has already been working in any other such similar establishment within the preceding twelve hours, save in such circumstances as may be prescribed.

31. Notice of periods of work - (1) There shall be displayed and correctly maintained in every establishment a notice of periods of work, showing clearly for every day the periods during which workers may be required to work in accordance with the provisions as may be prescribed.

(2) The form of notice required by sub-section (1), the manner of maintaining such notice and the manner in which such notice shall be sent to the Facilitator shall be such as may be prescribed.

(3) Any proposed change in the system of work in any establishment which will necessitate a change in the notice referred to in sub-section (1) shall be intimated to the Facilitator before the change is made, and except with the previous sanction of the Facilitator, no such change shall be made until one week has elapsed since that last change.

32. Annual leave with wages, etc. – (1) Every person employed in an establishment shall be entitled for such leave with wages in such manner during a calendar year as may be prescribed subject to the condition that -

(i) he has worked ninety days or more in such calendar year;
(ii) he shall be entitled for one day leave for every twenty days of his work, and in the case of adolescent worker for fifteen days of his work, in such calendar year;
(iii) any period of layoff, maternity leave or annual leave availed by such person in such calendar year shall be counted for calculating the period of ninety days or more under clause (i), but he shall not earn leave for the period so counted;
(iv) any holidays falling between the leave availed by such person in a calendar year or prefixed or suffixed holiday shall be excluded from the period of leave so availed;
(v) in case of such person whose service commences otherwise than on the first day of January shall be entitled to leave with wages at the rate specified in clause (ii), if he was worked for one-fourth of the total number of days in the remainder of the calendar year;
(vi) in case such person is discharged or dismissed from service or quits employment or is superannuated or dies while in service, during the course of the calendar year, such person or heir or nominee, as the case may be, shall be entitled to wages in lieu of the quantum of leave to which such person was entitled immediately before his discharge, dismissal, quitting of employment, superannuation or death, calculated as specified in preceding clause, even such person has not worked for the required period under this sub-section making such person eligible to avail such leave, and such payment shall be made –
    (a) where such person is discharged or dismissed or quits employments before the expiry of the second working day from the date of such discharge, dismissal or quitting; and
    (b) where such person is superannuated or dies while in service, before the expiry of two months from the date of such superannuation or death;
(vii) if such person does not in any one calendar year take the whole of the leave allowed to him under this sub-section and the rules made there under, then, any leave not taken by him shall be added to the leave to be allowed to him in the succeeding calendar year so that –
    (a) the total number of days of leave that may be carried forward to a succeeding year shall not exceed thirty days; and
    (b) such person, who has applied for leave with wages but has not been given such leave in accordance with this sub-section and the rules made there under shall be entitled to carry forward the leave refused without any limit.

(2)The appropriate Government may by, notification, extend the provisions of sub-section (1) to any other establishment except railway establishment.

Chapter VIII
Maintenance of Registers, Records and Returns etc.

33. Maintenance of registers and records and filing of returns.- (1) An employer shall –
(a) maintain prescribed register, electronically or otherwise, containing prescribed particulars of workers employed by him including in respect of such workers,–
    (i) work performed by them;
    (ii) number of hours of work constituting normal working hours in a day;

(iii) day of rest allowed in every period of seven days;
(iv) wage paid and receipts given there for;
(v) leave, leave wages, overtime work, attendance and dangerous occurrences;
(vi) employment of adolescent; and
(vii) any other matter prescribed by the Central Government;
such workers;
(b) display notices at the working place of the workers in the manner and form as may be prescribed;
(c) issue wage slips to the workers, in electronic forms or otherwise; and
(d) file such return electronically or otherwise to the Facilitator in such manner as may be prescribed.

(2) The provisions of sub-section (1) shall not apply in respect of the employer to the extent he employs not more than five persons for agriculture or domestic purpose; but such employer, when demanded shall produce before the Facilitator, the reasonable proof towards the payment of wages to the persons so employed.

(3) The appropriate Government may prescribe the forms of returns which shall be filed by the establishments or the class of establishment in the prescribed manner.

(4) In this section, the expression "domestic purpose" means the purpose exclusively relating to the home or family affairs of the employer and does not include any affair relating to any establishment, industry, trade, business, manufacture or occupation.

CHAPTER IX
Facilitators and other Authority

34. Appointment of Facilitators – (1) The appropriate Government may, by notification, appoint such persons who possess the prescribed qualifications to be Facilitators for such purposes of such establishments or class or description of establishment and for such local or other limits of jurisdiction as may be specified in the notification.

(2) The Facilitators appointed under sub-section (1) shall, apart from other duties to be discharged by them under this Code, conduct such inspections including web based inspection in such manner as may be prescribed.

(3) The appropriate Government may, by notification, appoint any person or persons possessing the prescribed qualifications and experience to be Chief Facilitator for the purposes of such establishments or class or description of establishment and for such local limits of jurisdiction as may be specified in the notification and the Chief Facilitator may within the local limits of his jurisdiction exercise the powers of any Facilitator:
Provided that a Chief Facilitator may be appointed for the purposes of a state or more than one state or, as the case may be, or for the purposes of the whole of the Country.

(4) The appropriate Government may, by notification, appoint for the purposes of such establishments, as many Additional Chief Facilitators, Joint Chief Facilitators and Deputy Chief Facilitators or any other officer of any designation as it thinks appropriate, to exercise such powers of the Chief Facilitator within his jurisdiction as may be specified in the notification.

(5) Every Additional Chief Facilitator, Joint Chief Facilitator, Deputy Chief Facilitator and every other officer appointed under sub-section(3) shall, in addition to the powers of a Chief Facilitator specified in the notification by which the officer is appointed, exercise the powers of a Facilitator within such local limits as may be specified in the notification.

(6) No person shall be appointed under sub-section (1), sub-section (3), sub-section (4) or sub-section (8), or having been so appointed, shall continue to hold office, who is, or who becomes, directly or indirectly interested in a workplace or work activity or in any process or business carried on in any work place or in any plant or machinery connected therewith.

(7) The District Magistrate may exercise the powers and perform the duties of a Facilitator in case of a mine subject to the general or special orders of the Central Government:
Provided that nothing in this sub-section shall be deemed to empower a district magistrate to exercise the powers conferred by sub-section (2) of section 36 and section 127.

(8) The appropriate Government may also, by notification, appoint such public officers as it thinks fit to be additional Facilitators for exercising the powers and discharging the duties of Facilitator for all or any of the purposes of this Code within such local limits as it may assign to them respectively.

(9) Without prejudice to the other functions of the Facilitator under the Code, a Facilitator may in respect of any establishment, class or description of establishment, where the Chief Facilitator with the approval of the appropriate Government and subject to such restrictions or conditions as he may think fit to impose, by order in writing authorise the Facilitator to exercise such of the powers of the Chief Facilitator as may be specified in such order.

(10) Every Chief Facilitator, Additional Chief Facilitator, Joint Chief Facilitator, Deputy Chief Facilitator, Facilitator and every other officer appointed under this section shall be deemed to be a public servant within the meaning of the Indian Penal Code (XLV of 1860), and shall be officially subordinate to such authority as the appropriate Government may specify in this behalf.

35. Powers of Facilitators – (1)Subject to any rules made in this behalf, a Facilitator may, within the local limits for which he is appointed,–

(i) enter, with such assistance, being persons in the service of the Government, or any local or other public authority, or with an expert, as he thinks fit, any place which is used, or which he has reason to believe is used, as a work place;
(ii) make examination of the premises, plant, machinery, article, or any other relevant material;
(iii) inquire into any accident or dangerous occurrence, whether resulting in bodily injury, disability or death or not and take on the spot or otherwise statements of any person which he may consider necessary for such inquiry;
(iv) in respect of a plantation and subject to any rules made by the State Government in this behalf, within his jurisdiction, examine the crops grown in any plantation or any worker employed therein or require the production of any register or other document maintained in pursuance of this Code, and take on the spot or otherwise statement of any person which he may consider necessary for carrying out the purposes of this Code relating to plantation.
(v) require the production of any prescribed register or any other document relating to the work place or work activity;
(vi) search or seize, or take copies of, any register, record or other document or any portion thereof, as he may consider necessary in respect of any offence under this Code, which he has reason to believe, has been committed;
(vii) direct the concerned occupier or employer that any premises or any part thereof, or anything lying therein, shall be left undisturbed (whether generally or in particular respects) for so long as is necessary for the purpose of any inspection or inquiry;
(viii) take measurements, photographs and video graphs and make such recordings as he considers necessary for the purpose of any examination or inquiry, taking with him any necessary instruments or equipment;
(ix) take samples of any articles or substances found in any premises into which he has power to enter and of the air of the atmosphere in or in the vicinity of any such premises in the manner as may be prescribed;
(x) in case of any article or substance found in any premises, being an article or substance which appears to him as having caused or is likely to cause danger to the health and safety of the employees, direct it to be dismantled or subject it to any process or test (but not so as to damage or destroy it unless the same is, in the circumstances necessary, for carrying out the purposes of any provision of this Code) and take possession of any such article or substance or a part thereof, and detain it for so long as is necessary for such examination;
(xi) issue show cause notice relating to safety, health and welfare provisions arising under this Code, rules and regulation made there under;
(xii) prosecute, conduct or defend before any court any complaint or other proceeding arising under this Code, the rules and regulations made there under; and
(xiii) exercise such other powers as may be prescribed.

(2) Any person required to produce any document or to give any information required by a Facilitator under sub-section (1) shall be deemed to be legally bound to do so within the meaning of section 175 and section 176 of the Indian Penal Code (45 of 1860).

(3) The provisions of the Code of Criminal Procedure, 1973 (2 of 1974), shall, so far as may be, apply to such search or seizure under sub-section (1) as they apply to any search or seizure made under the authority of a warrant issued under section 94 of that Code.

36. Special powers of Facilitator in respect of factory, mines and dock work and building and other construction work.– (1) Without prejudice to the other powers of a Facilitator in this Code, a Facilitator in respect of a factory shall have the following special powers, namely:-

(a) where it appears to the Facilitator that conditions in a factory or part thereof are such that they may cause serious hazard by way of injury or death to the persons employed therein or to the general public in the vicinity, he may, by order in writing to the occupier of the factory, state the particulars in respect of which he considers the factory or part thereof to be the cause of such serious hazard and prohibit such occupier from employing any person in the factory or any part thereof other than the minimum number of persons necessary to attend to the minimum tasks till the hazard is removed;

(b) any order issued by the Facilitator under sub-clause (a) shall have effect for a period of three days until extended by the Chief Facilitator by a subsequent order;

(c) any person aggrieved by an order of the Facilitator under sub-clause (a), and the Chief Facilitator under sub-clause (b), shall have the right to appeal to the High Court;

(d) any person whose employment has been affected by an order issued under sub-clause (a), shall be entitled to wages and other benefits and it shall be the duty of the occupier to provide alternative employment to him wherever possible and in the manner prescribed;

(e) the provisions of sub-clause (d) shall be without prejudice to the rights of the parties under the Industrial Disputes Act, 1947 (14 of 1947);

(2) Without prejudice to the other powers of a Facilitator in this Code, a Facilitator in respect of mines shall have the following special powers, namely:-

(a) if, in respect of any matter for which no express provision is made by or under this Code, it appears to the Chief Facilitator or a Facilitator that any mine or part thereof or any matter, thing or practice in or connected with the mine, or with the control, supervision, management or direction thereof, is dangerous to human life or safety or defective so as to threaten or tend to, the bodily injury of any person, he may give notice in writing thereof to the owner, agent or manager of the mine and shall state in the notice the particulars in respect of which he considers the mine or part thereof or the matter, thing or practice to be dangerous or defective and require the same to be remedied within such time and in such manner as he may specify in the notice;

(b) where the owner, agent or manager of a mine falls to comply with the terms of a notice given under sub-clause (a) within the period specified therein, the Chief Facilitator or the Facilitator, as the case may be, may, by order in writing, prohibit the employment in or about the mine or any part thereof of any person whose employment is not in his opinion reasonably necessary for securing compliance with the terms of the notice;

(c) without prejudice to the provisions contained in sub-clause (a), the Chief Facilitator or the Facilitator, as the case may be, may, by order in writing addressed to the owner, agent or manager of a mine, prohibit the extraction or reduction of pillars or blocks of minerals in any mine or part thereof, if, in his opinion, such operation is likely to cause the crushing of pillars or blocks of minerals or the premature collapse of any part of the workings or otherwise endanger the mine or the life or safety of persons employed therein or if, in his opinion, adequate provision against the outbreak of fire or flooding has not been made by providing for the sealing off and isolation of the part of the mine in which such operation is contemplated and for restricting the area that might be affected by fire or flooding;

(d) if the Chief Facilitator, or a Facilitator authorised in this behalf by general or special order in writing by the Chief Facilitator, is of opinion that there is urgent and immediate danger to the life or safety of any

person employed in any mine or part thereof, he may, by order in writing containing a statement of the grounds of his opinion, prohibit until he is satisfied that the danger is removed, the employment in or about the mine or any part thereof of any person whose employment is not in his opinion reasonably necessary for the purpose of removing the danger;

(e) every person whose employment is prohibited under sub-clause (b) or sub-clause (d) shall be entitled to payment of full wages for the period for which he would have been, but for the prohibition in employment and the owner, agent or manager shall be liable for payment of such full wages of that person:

Provided that the owner, agent or manager may instead of paying such full wages provide such person with an alternative employment at the same wages which such person was receiving in the employment which was prohibited;

(f) where a notice has been given under sub-clause (a) or an order made under sub-clause (b), sub-clause (c) or sub-clause (d) by a Facilitator, the owner, agent or manager of the mine may, within ten days after the receipt of the notice or order, as the case may be, appeal against the same to the Chief Facilitator who may confirm, modify or cancel the notice or order;

(g) the Chief Facilitator or the Facilitator sending a notice under sub-clause (a) or making an order under sub-clause (b), sub-clause (c) or sub-clause (d) and the Chief Facilitator making an order (other than an order of cancellation in appeal) under sub-clause (f) shall forthwith report the same to the Central Government;

(h) if the owner, agent or manager of the mine objects to a notice sent under sub-clause (a) by the Chief Facilitator or to an order made by the Chief Facilitator under sub-clause (b) or sub-clause (c) or sub-clause (d) or sub-clause (f), he may, within twenty days after the receipt of the notice containing the requisition or of the order or after the date of the decision on appeal, as the case may be, send his objection in writing stating the grounds thereof to the Central Government which shall, ordinarily within a period of two months from the date of receipt of the objection decide the matter.

(i) every notice under sub-clause (a), or order under sub-clause (b), sub-clause (c), sub-clause (d) or sub-clause (f), to which objection is made under sub-clause (h), shall be complied with, pending the receipt at the mine of the decision of the Central Government:

Provided that the Central Government may, on the application of the owner, agent or manager, suspend the operation of a notice under sub-clause (a), pending its decision on the objection after hearing.

(j) nothing in this section shall affect the powers of a magistrate under section 144 of the Code of Criminal Procedure, 1973 (1 of 1974);

(k) where in respect of any matter relating to safety of mine for which express provision is made by or under this Code, the owner, agent or manager of a mine fails to comply with such provisions, the Chief Facilitator may give notice in writing requiring the same to be complied with within such time as he may specify in the notice or within such extended period of time as he may, from time to time, specify thereafter;

(l) where the owner, agent or manager fails to comply with the terms of a notice given under sub-clause (k) within the period specified in such notice or, as the case may be, within the extended period of time specified under that sub-clause, the Chief Facilitator may, by order in writing, prohibit the employment in or about the mine or any part thereof of any person whose employment is not, in his opinion, reasonably necessary for securing compliance with the terms of the notice;

(m) every person whose employment is prohibited under sub-clause (l), shall be entitled to payment of full wages for the period for which he would have been, but for the prohibition, in employment, and the owner, agent or manager shall be liable for payment of such full wages of that person:
Provided that the owner, agent or manager may, instead of paying such full wages, provide such person with an alternative employment at the same wages which such person was receiving in the employment which was prohibited under sub-clause (l);

(n) the provisions of sub-clauses (g), (h) and (i) shall apply in relation to a notice issued under sub-clause (k) or an order made under sub-clause (l) as they apply in relation to a notice under sub-clause (a) or an order under sub-clause (b);

(o) Chief Facilitator may, for reasons to be recorded in writing, reverse or modify any order passed by him under this Code or under any regulation, rule or bye-law made there under in relation to mine;

(p) no order prejudicial to the owner, agent or manager of a mine shall be made under this section unless such owner, agent or manager has been given a reasonable opportunity of making representation;

(q) the Central Government may reverse or modify any order passed under this Code in relation to mine.

(6) Without prejudice to the powers of a Facilitator elsewhere in this Code, a Facilitator in respect of dock work shall have the following special powers, namely:-

(a) if it appears to a facilitator that any place where any dock work is being carried on is in such a condition which is dangerous to life, safety or health, of dock workers, he may, in writing, serve on the owner or on the person in charge of such place an order prohibiting any dock work in such place until measures have been taken to remove the cause of the danger to his satisfaction;

(b) a Facilitator after serving an order under clause (a) shall endorse a copy thereof to the Chief Facilitator who may modify or cancel the order without waiting for an appeal;

(c) any person aggrieved by an order under clause (a) or clause (b) may, within fifteen days from the date on which the order is communicated to him, prefer an appeal to the Chief Facilitator or where such order is by the Chief Facilitator, to the Central Government and the Chief Facilitator or Central Government shall, after giving the appellant an opportunity of being heard, dispose of the appeal as expeditiously as possible:

Provided that the Chief facilitator or the Central Government may entertain the appeal after the expiry of the said period of fifteen days, if it is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time:

Provided further that an order under clause (a) shall be complied with, pending the decision of the Chief facilitator or such authority.

(7) Without prejudice to the other powers of a Facilitator elsewhere in this Code,-

(a) if it appears to the Facilitator that any site or place at which any building or other construction work is being carried on, is in such condition that it is dangerous to life, safety or health of building workers or the general public, he may, in writing serve on the employer of building workers or on the employer of the establishment or on the person in charge of such site or place an order prohibiting any building or other construction work at such site or place until measures have been taken to remove the cause of the danger to his satisfaction;

(b) a Facilitator serving an order under clause (a) shall endorse a copy to the Chief Facilitator;

(c) such prohibition order shall be complied with by the employer forthwith.

(8) Any person aggrieved by an order under clause (a) of sub-section (7), may, within fifteen days from the date on which the order is communicated to him, may prefer an appeal to the Chief Facilitator or where such order is by the Chief Facilitator, to the appropriate Government and the Chief Facilitator or the appropriate Government, as the case may be, shall, after giving the appellant an opportunity of being heard, dispose of the appeal as expeditiously as possible:

Provided that the Chief Facilitator or the appropriate Government, as the case may be, may entertain the appeal after the expiry of the said period of fifteen days if he or it, as the case may be, is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time:

Provided further that the prohibition, shall be complied with, subject to the decision of the Chief Facilitator or the appropriate Government.

37. Secrecy of information by Chief Facilitator or Facilitator, etc.-(1) No Chief Facilitator or Facilitator shall while in service or after leaving the service, disclose otherwise than in connection with the execution, or for the purposes, of this Code any information relating to any manufacturing or commercial business or any working process which may come to his knowledge in the course of his official duties:

Provided that no such prohibition of disclosure shall apply to any disclosure of information made with the previous consent in writing of the owner of such business or process or for the purposes of any legal proceedings pursuant to this Code or of any criminal proceeding which may be taken, whether pursuant to this Code or otherwise, or for the purposes of any report of such proceedings as aforesaid.

(2) All copies of, and extracts from, registers or other records appertaining to any mine and all other information acquired by the Chief Facilitator or a Facilitator of a mine or by any one assisting him, in the course of the inspection or survey of any mine under this Code or acquired by any person authorised under section 20 or section 39 in the exercise of his duties there under, shall be regarded as confidential and shall not be disclosed to any person or authority unless the Chief Facilitator or the Facilitator considers disclosure necessary to ensure the health, safety or welfare of any person employed in the mine or in any other mine adjacent thereto.

(3) Nothing in sub-section (2) shall apply to the disclosure of any such information (if so required) to—

(a) any court;
(b) any Committee or Board constituted under the Code;
(c) an official superior or the owner, agent or manager of the mine concerned;
(d) a Commissioner for employees' compensation appointed under the Employees' Compensation Act, 1923;
(e) the Controller, Indian Bureau of Mines;
(f) any registered or recognised trade union;
(g) any such officer, authority or organisation as may be specified in this behalf by the Central Government.

(4) No Chief Facilitator or Facilitator shall disclose the source of any complaint made to him regarding the contravention of the provisions of this Code and shall also not while making an inspection under this Code in pursuance of such complaint, disclose to the employer or contractor, agent, owner occupier, manager concerned or any of his representative that the inspection is being made in pursuance of such complaint:

Provided that nothing in this sub-section shall apply to any case in which the person who has made the complaint has consented to disclose his name.

38. Facilities to be afforded to the Facilitator.-Every employer, owner, agent or manager, as the case may be, in respect of an establishment shall afford the Chief Facilitator and every Facilitator having jurisdiction or every person prescribed all reasonable facilities for making any entry, inspection, survey, measurement, examination or inquiry under this Code.

39. Powers of Special Officer to enter, measure, etc. in relation to mine —Any person in the service of the Government duly authorised in this behalf by a special order in writing of the Chief Facilitator or of a Facilitator of mine may, for the purpose of surveying, leveling or measuring any mine or any output there from, after giving not less than three days' notice to the manager of such mine, enter the mine and may survey, level or measure the mine or any part thereof or any output there from at any time by day or night:

Provided that, where in the opinion of the Chief Facilitator or of a Facilitator an emergency exists, he may, by order in writing, authorise any such person to enter the mine for any of the aforesaid purposes without giving any such notice.

40. Medical Officer – (1) The appropriate Government may appoint qualified medical practitioners to be medical officers for the purposes of this Code in relation to factory, mines, plantation motor transport undertakings and any other establishment as may be prescribed to exercise such jurisdiction as may be prescribed:

Provided that the medical officers so appointed shall before entering into their office shall disclose to the appropriate government their interest in the concerned establishment.

(2) The medical officer shall perform such duties in connection with the matters specified in sub-section (3) as may be prescribed.

(3) The matters referred to in sub-section (2) shall be -

(a) the examination and certification of workers engaged in a mine or factory and any other establishment as may be prescribed in such dangerous occupations or processes as may be prescribed;
(b) the exercise of such medical supervision as may be prescribed where adolescents are, or are to be employed in any work in relations to workers employed in factory, mines, plantation and motor transport undertaking and any other establishment as may be prescribed;

(c) in respect of the illness of workers employed in factory and mines which are due to the effect of any process carried on or other conditions of work performed in the mines, factory and any other establishment as may be prescribed;

(d) the examination and certification of young persons employed in factory, mine, plantation, motor transport undertakings and any other establishment as may be prescribed: and

(e) in respect of young persons who are or are about to be employed in any factory, plantation, motor transport undertakings and any other establishment as may be prescribed in any work which is likely to cause injury to their health.

Chapter X

Special Provision relating to Employment of Women

41. Applicability of the chapter.- Notwithstanding anything contained in this Code, this chapter shall apply to employment of women in an establishment relating to factories, mines, plantation, beedi or cigar or both and building and other construction work.

42. Restriction on employment of women.– Without prejudice to any prohibition in any other law for the time being in force in this behalf and subject to the safety, holiday and working hours beyond 6 A.M to 7 P.M as may be prescribed by the appropriate Government, the women workers may be employed in an establishment.

43. Prohibition of employment of women in dangerous operation.- Where the appropriate Government considers that the employment of women is dangerous for their health and safety, in an establishment or class or any description of establishments, due to the operation carried out therein, such Government may in the prescribed manner, prohibit the employment of women for such operation.

Chapter XI – Special Provisions for Contract Labour and Inter State Migrant Worker, etc.

PART -I

Contract Labour and Inter-State Migrant Worker

44. Applicability of this Part.–(1)This Part shall apply to-

(i) every establishment in which twenty or more contract labour are employed or were employed on any day of the preceding twelve months through contractor;

(ii) every manpower supply contractor who employed on any day of the preceding twelve months twenty or more contract labour:

Provided that the appropriate Government may, after giving not less than two months' notice of its intention so to do, by notification, apply the provisions of this Part to any establishment or manpower supply contractor employing such number of workmen less than twenty as may be specified in the notification.

(2) (a) This Part shall not apply to the establishment in which work only of an intermittent or casual nature is performed.

(b) If a question arises whether work performed in an establishment is of an intermittent or casual nature, the appropriate Government shall decide that question after consultation with the National Board or, as the case may be, a State Advisory Board, and its decision shall be final.

Explanation.—For the purpose of this sub-section, work performed in an establishment shall not be deemed to be of an intermittent nature—

(i) if it was performed for more than one hundred and twenty days in the preceding twelve months, or

(ii) if it is of a seasonal character and is performed for more than sixty days in a year.

45. Appointment of licensing officers.-The appropriate Government may, by an order, herein after referred to as the licensing officers, appoint such persons, being Gazetted officers of the Government, as it thinks fit to be licensing officers and define the limits, within which the licensing officer shall exercise the powers conferred on him by or under this Part of the Code.

46. Licensing of contractors.-(1) No contractor to whom this Part applies shall –

(a) supply or engage contract labour in any establishment; or

(b) undertake or execute the work through contract labour;

except under and in accordance with a licence issued to him by a licensing officer after satisfying that the contractor fulfils such requisite qualifications or criteria as may be prescribed by the Central Government and such licence shall in addition to the prescribed particulars also specify the number of such contract labour who can be engaged and the amount of security deposited by the contractor.

(2) Where the contractor does not fulfil the requisite qualifications or criteria referred to in sub-section (1), the licensing officer may issue him the licence to supply or engage the contract labour, or execute the work through contract labour, under the concerned work order as specified in the licence for that work order and subject to the conditions as may be specified in the licence and such licence shall be renewable within the such period as may be prescribed.

(3) Subject to the provisions of this Part,-

(a) a licence under sub-section (1) may contain such conditions including, in particular, conditions as to hours of work, fixation of wages and other essential amenities in respect of contract labour as the appropriate Government may deem fit to impose in accordance with the rules, if any, made under section 121 and shall be issued on payment of such fees and on the deposit of bank guarantee as security for the due performance of the conditions, as may be prescribed:

Provided that the conditions under this clause shall not include any limitation for doing the work of a particular nature in an establishment;

(b) every contractor who provides or intends to provide contract labour for the purposes under clause (a) or clause (b) of sub-section (1) or sub-section (2) of this section in an establishment, shall obtain the licence, if for such establishment -

(i) the appropriate Government is the Central Government, from the licensing officer appointed by the Central Government; and

(ii) the appropriate Government is the state Government, from the licensing officer appointed by the state Government:

Provided that in case the contractor supplies or engages contract labour or undertakes or executes the work under sub-section (1) in more than one establishment situated in different states, then, he shall obtain the licence,-

(i) where for such establishments, Central Government is the appropriate Government from the licensing officer appointed by the Central Government having jurisdiction over the place where the head office of the contractor is situated; or

(ii) where for such establishments, state Government is the appropriate Government from the licensing officer appointed by the state Government having jurisdiction over the place where the head office of the contractor is situated.

47. Grant of licence.-(1) Every application for issuing a licence under sub-section (1) or sub-section (2) of section 46 shall be made in the prescribed form and manner and shall contain the particulars regarding the number of contract labour,nature of work for which contact labour is to be employed and such other particulars as may be prescribed.

(2)The licensing officer may make such investigation in respect of the application received under sub-section (1) and in making any such investigation the licensing officer shall follow such procedure as may be prescribed.

(3) The licence issued under sub-section (1) of section 46 shall be valid for a period of three years in respect of the number of contract labour specified therein and in case the contractor wants to increase the number of the contract labour, then, he shall apply in the prescribed manner for the renewal of the licence for such purpose to the licensing officer and if the licence is renewed by the licensing officer in the prescribed manner, the contract labour shall be increased to such extent by depositing such security deposit as specified in the renewed licence for the balance period.

48. No fees or Commission or any cost to workers.-The contractor shall not charge directly or indirectly, in

whole or in part, any fee or commission from the contract labour.

49. Information regarding work order to be given to the appropriate Government.- When a contractor receives work order from an establishment –

(i) for supply or engagement of contract labour in the establishment; or

(ii) by which he undertakes or executes work through contract labour in the establishment;

he shall, within such time and in such manner as may be prescribed, intimate the appropriate Government and if he fails to give such intimation within the time and manner so prescribed, then, the licensing officer may, after giving the holder of the licence an opportunity of showing cause, suspend or cancel the licence in the prescribed manner.

50. Revocation, suspension and amendment of licence.-(1) If the licensing officer is satisfied, either on a reference made to him in this behalf or otherwise, that--

(a) a licence granted under this Part has been obtained by misrepresentation or suppression of any material fact, or

(b) that the contractor has violated the provision of this Part or the rules made there under or any of the conditions of the licence, or

(c) the holder of a licence has, failed to comply with the conditions subject to which the licence has been granted or has contravened any of the provisions of this part or the rules made there under, without prejudice to any other penalty to which the contractor may be liable under this Part, the licensing officer may, after giving the contractor an opportunity of showing cause, revoke or suspend the licence.

(2) Subject to any rules that may be made in this behalf, the licensing officer may amend a licence granted under this Part.

51. Appeal.-(1) Any person aggrieved by an order made under section 46, section 47 or section 50 may, within thirty days from the date on which the order is communicated to him, prefer an appeal to an appellate authority who shall be a person notified in this behalf by the appropriate Government:

Provided that the appellate authority may entertain the appeal after the expiry of the said period of thirty days, if he is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

(2) On receipt of an appeal under sub-section (1), the appellate authority shall, after giving the appellant an opportunity of being heard dispose of the appeal within thirty days from the date on which the appeal is preferred.

52. Liability of Principal Employer for welfare facilities.- Welfare facilities relating to providing of canteens, rest rooms, drinking water and first aid as referred and prescribed under section 23 and section 24 shall be provided by the principal employer of the establishment to the contract labour who are employed in the establishment.

53. Effect of employing contract labour from a non-licenced contractor.-If the establishment is employing contract labour through the contractor who is required to obtain a licence, but he does not obtain licence, the contract labour so engaged through the contractor, shall be deemed to be employed by the principal employer and will be liable to discharge all responsibilities of a contractor.

54. Responsibility for payment of wages. —(1) A contractor shall be responsible for payment of wages to each contract labour employed by him and such wages shall be paid before the expiry of such period as may be prescribed.

(2) Every contractor shall, make the disbursement of wages referred to in sub-section (1) through bank transfer or electronic mode and inform the principal employer electronically the amounts so paid by such mode:

Provided that where it is not practicable to disburse such payment otherwise than in cash, then, it shall be disbursed in the presence of a representative duly authorised by the principal employer and it shall be the duty of such representative to certify the amounts so paid as wages in such manner as may be prescribed.

(3) In case the contractor fails to make payment of wages referred to in sub-section (1) within the prescribed period or makes short payment, then, the principal employer shall be liable to make payment of the wages in full or the unpaid balance due, as the case may be, to the concerned contract labour employed by the contractor and recover the amount so paid from the contractor either by deduction from any amount payable to the contractor under any contract or as a debt payable by the contractor.

(4) The appropriate Government, in the event the contractor does not pay the wages to the contract labour employed by him, shall pass the orders of making payment of such wages from the amount deposited by such contractor as security deposit under the licence issued by the licensing officer to the contractor, in the manner as prescribed.

55. Experience Certificate.- Every establishment concerned shall issue experience certificate to the contract labour annually, or at any other time demanded by the contract labour giving details of the work performed by the contract labour in the prescribed format.

56. Prohibition of employment of contract labour.- (1) Notwithstanding anything contained in this part, the appropriate Government may, after consultation with the National Board or, as the case may be, a State Board, prohibit, by notification, employment of contract labour in any process, operation or other work in any establishment.

(2) Before issuing any notification under sub-section (1) in relation to an establishment, the appropriate Government shall have regard to the conditions of work and benefits provided for the contract labour in that establishment and other relevant factors, such as-

(a) whether process, operation or other work is incidental to, or necessary for the industry, trade, business, manufacture or occupation that is carried on in the establishment.
(b) whether it is of perennial nature, that is to say, it is of sufficient duration having regard to the nature of industry, trade, business, manufacture or occupation carried on in that establishment;
(c) whether it is done ordinarily through regular workers in that establishment or an establishment similar thereto;
(d) whether it is sufficient to employ considerable number of whole-time workmen.

Explanation.-If a question arises whether any process or operation or other work is of perennial nature, the decision of the appropriate Government thereon shall be final.

57. Power to exempt in special cases.—The appropriate Government may, in the case of an emergency, direct, by notification, that subject to such conditions and restrictions, if any, and for such period or periods, as may be specified in the notification, all or any of the provisions of this Code or the rules made thereunder shall not apply to any establishment or class of establishments or any class of contractors.

58. Facilities to Inter- State Migrant workers.- It shall be the duty of every establishment employing inter-State migrant worker in connection with the work of that establishment to which this part applies,-

(i) to ensure suitable conditions of work to such worker having regard to the fact that they are required to work in a State different from their own State;
(ii) in case of fatal accident or serious bodily injury to any such worker, to report to the specified authorities of both the States and also the next of kin of the worker;

(iii) to provide and maintain suitable residential accommodation to such workmen during the period of their employment;
(iv) to provide the prescribed medical facilities and periodical medical examination to the such workmen, free of charge; and

59. Displacement allowance.- (1) There shall be paid by the contractor to every inter-State migrant worker at the time of recruitment, a displacement allowance equal to fifty percent of the monthly wages payable to him.

(2) The amount paid to a worker as displacement allowance under sub-section (1) shall not be refundable and shall be in addition to the wages or other amount payable to him.

60. Journey allowance etc.-A journey allowance of a sum not less than the fare from the place of residence of the inter-State migrant workers in his State to the place of work in the other State shall be payable by the contractor to the workers both for the outward and return journeys at the time of recruitment only and such worker shall be entitled to payment of wages during the period of such journeys as if he were on duty.

61. Past liabilities.-No suit or other proceeding shall lie in any court or before any authority for the recovery of debt or any part thereof relating to an inter-state migrant worker after the completion of his employment where it remains unsettled obligation to the contractor or the principal employer and such debt or part thereof shall, on the completion of the period of employment of such worker, be deemed to have been extinguished.

PART - II
Audio-Visual Workers

62. Prohibition of employment of audio-visual worker without agreement- (1) No person shall be employed as an audio-visual worker in connection with production of any audio-visual programme unless,-

(a) an agreement in writing is entered into -
(i) with such person by the producer of such audio-visual programme; or
(ii)by the producer of such audio-visual programmewith the contractor, where such person is employed through such contractor; and

(b) such agreement is registered with the competent authority by the producer of such audio-visual programme.

(2) Every agreement, referred to in sub-section (1) shall,-

(a) be in the prescribed form;
(b) specify the name and such other particulars as may be prescribed particulars with respect to, the person whose employment the agreement relates (hereafter in this section referred to as the employee);
(c) include, where such employee is employed through a contractor, a specific condition to the effect that in the event of the contractor failing to discharge his obligations under the agreement to the employee with respect to payment of wages or any other matter, the producer of the audio-visual programme shall also beliable to discharge such obligations and shall be entitled to be reimbursed with respect thereto by the contractor.

(3) A copy of the agreement referred to in sub-section (1) with respect to the employment of the employee shall, if such employee is entitled to the benefits of provident fund, also be forwarded by the producer of the audio-visual programme to the authority as prescribed.

(4) The agreement referred to in sub-section (1) shall include,-

(i) nature of assignment;
(ii) wages and other benefits (including provident fund, if any);
(iii) health and working condition;
(iv) safety;
(v) hours of work; and
(vi) welfare facilities;

and it shall be responsibility of the producer to provide the facilities specified in the agreement to the employee. The mode of payment of wages shall be through electronic mode.

PART -III
Mines

63. Managers.—(1) Save as may be otherwise prescribed, every mine shall be under a sole manager who shall have the prescribed qualifications and the owner or agent of every mine shall appoint a person having such qualifications to be the manager:

Provided that the owner or agent may appoint himself as manager if he possesses the prescribed qualifications.

(2) Subject to any instructions given to him by or on behalf of the owner or agent of the mine, the manager shall be responsible for the overall management, control, supervision and direction of the mine and all such instructions when given by the owner or agent shall be confirmed in writing forthwith.

(3) Except in case of an emergency, the owner or agent of a mine or anyone on his behalf shall not give, otherwise than through the manager, instructions affecting the fulfilment of his statutory duties, to a person, employed in a mine, who is responsible to the manager.

64. Code not to apply in certain cases.- (1) The provisions of this Code, except those contained in sections 35, 36, 38, 39, 42 and 43 shall not apply to-

(a) any mine or part- thereof in which excavation is being made for prospecting purposes only and not for the purpose of obtaining minerals for use or sale:

Provided that-

(i) not more than twenty persons are employed on any one day in connection with any such excavation;
(ii) the depth of the excavation measured from its highest to its lowest point nowhere exceeds six metres or, in the case of an excavation for coal, fifteen metres; and
(iii) no part of such excavation extends below super- jacent ground; or

(b) any mine engaged in the extraction of kankar, murrum, laterite, boulder, gravel, shingle, ordinary sand (excluding mouldings and, glass sand and other mineral sands), ordinary clay (excluding kaolin, china clay, white clay or fire clay), building stone, slate, road metal, earth, fullers earth (marl, chalk) and lime stone:

Provided that-

(i) the workings do not extend below superjacent ground ; or
(ii) where it is an open cast working-
(a) the depth of the excavation measured from its highest to its lowest point nowhere exceeds six metres ;
(b) the number of persons employed on any one day does not exceed fifty; and
(c) explosives are not used in connection with the excavation.

(2) Notwithstanding anything contained in sub-section (1), the Central Government may, if it is satisfied that, having regard to the circumstances obtaining in relation to a mine or part thereof or group or class of mines, it is necessary or desirable so to do, by notification in the Official Gazette, declare that any of the provisions of this Code, not set out in sub-section (1), shall apply to any such mine or part thereof or group or class of mines or any class of persons employed therein.

(3) Without prejudice to the provisions contained in sub-section (2), if at any time any of the conditions specified in the proviso to clause (a) or clause (b) of sub-section (1) is not fulfilled in relation to any mine referred to in that sub-section, the provisions of this Code not set out in sub-section (1), shall become

immediately applicable, and it shall be the duty of the owner, agent or manager of the mine to inform the prescribed authority in the prescribed manner and within the prescribed time about the non-fulfillment.

65. Exemption from provision regarding employment.—(1) In case of an emergency involving serious risk to the safety of the mine or of persons employed therein, or in case of an accident, whether actual or apprehended, or in case of any act of God or in case of any urgent work to be done to machinery, plant or equipment of the mine as the result of breakdown of such machinery plant or equipment, the manager may, subject to the provisions of sub- section (2) of section 36 and in accordance with the rules under section 87 relating to exemption from weekly day of rest, hours of work above ground, hours of work below ground and notices regarding hours of work relating to mines, permit persons to be employed in contravention of **section 12, section 25, section 30 and sub-section (1) of section 31** on such work as may be necessary to protect the safety of the mine or of the persons employed therein:

Provided that, in case of any urgent work to be done to machinery, plant or equipment under this section, the manager may take the action permitted by this section, although the production of mineral would thereby be incidentally affected, but any action so taken shall not exceed the limits necessary for the purpose of avoiding serious interference with the ordinary working of the mine.

(2) Every case in which action has been taken by the manager under sub-section (1), shall be recorded together with the circumstances relating thereto and a report thereof shall also be made to the Chief Facilitator or the Facilitator.

66. Decision of question whether a mine is under this Code.—If any question arises as to whether any excavation or working (or premises in or adjacent to and belonging to a mine, on which any process ancillary to the getting, dressing or preparation for sale of minerals or of coke is being carried on) is a mine within the meaning of this Code, the Central Government may decide the question, and a certificate signed by a Secretary to the Central Government shall be conclusive on the point.

PART -IV
Beedi and Cigar Workers

67. Licence to industrial premises and person – (1) Save as otherwise provided in this Part, no employer shall use or allow to be used any place or premises as an industrial premises unless he holds a valid licence issued under this Part and no such premises shall be used except in accordance with the terms and conditions of such licence.

(2) Any person who intends to use or allows to be used any place or premises specified in sub-section (1) shall make an application in writing to the competent authority, in such form on payment of such fees as may be prescribed, for a licence to use, or allow to be used, such premises as an industrial premises.

(3) The application shall specify the maximum number of employees proposed to be employed at any time of the day in the place or premises and shall be accompanied by a plan of the place or premises prepared in such manner as may be prescribed.

(4) The competent authority shall, in deciding whether to grant or refuse a licence, have regard to the following matters:—

(a) the suitability of the place or premises which is proposed to be used for the manufacture of beedi or cigar or both;

(b) previous experience of the applicant or he has employed experienced person or has entered into agreement with the experience person for employment for the period of licence;

(c) the financial resources of the applicant including his financial capacity to meet the demands arising out of the provisions of the laws for the time being in force relating to welfare of labour;

(d) whether the application is made bona fide on behalf of the applicant himself or in benami of any other person;

(e) welfare of the labour in the locality, the interest of the public generally and such other matters as may be prescribed.

(5) (a) A licence granted under this section shall be valid for three yearand may be renewed thereafter.

(b) An application for the renewal of a licence granted under this Code shall be made at least thirty days before the expiry of the period thereof, on payment of such fees as may be prescribed, and where such an application has been made, the licence shall be deemed to continue, notwithstanding the expiry of the period thereof, until the renewal of the licence, or, as the case may be, the rejection of the application for the renewal thereof.

(c) The competent authority shall, in deciding whether to renew a licence or to refuse a renewal thereof, have regard to the matters specified in sub-section (3).

(6) The competent authority shall not grant or renew a licence unless it is satisfied that the provisions of this Code and the rules made thereunder have been complied with.

(7) The competent authority may, after giving the holder of a licence an opportunity of being heard, cancel or suspend any licence granted or renewed under this Code if it appears to it that such licence has been obtained by misrepresentation or fraud or that the licencee has contravened or failed to comply with any of the provisions of this Code or the rules made thereunder or any of the terms or conditions of the licence.

(8) The State Government may issue in writing to a competent authority such directions of a general character as that Government may consider necessary in respect of any matter relating to the grant or renewal of licences under this section.

(9) Subject to the foregoing provisions of this section, the competent authority may grant or renew licences under this Part on such terms and conditions as it may determine and where the competent authority refuses to grant or renew any licence, it shall do so by an order communicated to the applicant, giving the reasons in writing for such refusal.

68. Appeals.—Any person aggrieved by the decision of the competent authority refusing to grant or renew a licence or cancelling or suspending a licence may, within such time and on payment of such fees as may be prescribed, appeal to such authority as the State Government may, by notification, specify in this behalf, and such authority may by order confirm, modify or reverse any order refusing to grant or renew a licence or cancelling or suspending a licence.

69. Permission to work by employees outside industrial premises- (1) The State Government may permit the wetting or cutting of beedi or tobacco leaves by employees outside the industrial premises on an application made to it by the employer on behalf of such employees.

(2) The employer shall maintain in the prescribed form a record of the work permitted under sub-section (1) to be carried on outside the industrial premises.

(3) Save as otherwise provided in this section, no employer shall require or allow any manufacturing process connected with the making of beedi or cigar or both to be carried on outside the industrial premises:

Provided that nothing in this sub-section shall apply to any labour who is given raw material by an employer or a contractor for being made into beedi or cigar or both at home.

70. Part not to apply to self-employed persons in private dwelling houses.- Nothing contained in this Part shall apply to the owner or occupier of a private dwelling house who carries on any manufacturing processes in such private dwelling house with the assistance of the members of his family living with him in such dwelling house and dependent on him:

Provided that the owner or occupier thereof is not an employee of an employer to whom this Part applies.

Explanation.— For the purposes of this section,-

(i) "family" does not include child, as defined in the Child and Adolescent (Prohibition and Regulation) Act, 1986 (61 of 1986),for this section.
(ii) **"private dwelling house"** means a house in which persons engaged in the manufacture of beedi or cigar or both reside;

Part -V

Building and other Construction Workers

71. Prohibition of employment of certain persons in certain building or other construction work:-No person about whom the employer knows or has reason to believe that he is a deaf or he has a defective vision or he has a tendency to giddiness shall be required or allowed to work in any such operation of building or other construction work which is likely to involve a risk of any accident either to the building worker himself or to any other person.

Part -VI

Factories

72. Approval, licensing and registration of factories.—(1) The State Government may make rules—

(a) requiring, for the purposes of this Part, the submission of plans of any class or description of factories to the Chief Facilitator or the State Government;

(b) requiring the previous permission in writing of the State Government or the Chief Facilitator to be obtained for the site on which the factory is to be situated and for the construction or extension of any factory or class or description of factories;

(c) requiring for the purpose of considering applications for such permission the submission of plans and specifications;

(d) prescribing the nature of such plans and specifications and by whom they shall be certified;

(e) requiring the registration and licensing of factories or any class or description of factories, and prescribing the fees payable for such registration and licensing and for the renewal of licences;

(f) requiring that no licence shall be granted or renewed unless the notice specified in section 5 has been given.

(2) If on an application for permission referred to in clause (b) of sub-section (1) accompanied by the plans and specifications required by the rules made under clause (c) of that sub-section, sent to the State Government or Chief Facilitator in the mode prescribed including electronic mode, no order is communicated to the applicant within three months from the date on, which it is so sent, the permission applied for in the said application shall be deemed to have been granted.

(3) Where a State Government or a Chief Facilitator refuses to grant permission to the site, construction or extension of a factory or to the registration and licensing of a factory, the applicant may within thirty days of the date of such refusal appeal to the Central Government if the decision appealed from was of the State Government and to the State Government in any other case.

Explanation.—A factory shall not be deemed to be extended within the meaning of this section by reason only of the replacement of any plant or machinery or within such limits as may be prescribed, of the addition of any plant or machinery if such replacement or addition does not reduce the minimum clear space required for safe working around the plant or machinery or adversely affect the environmental conditions from the evolution or emission of steam, heat or dust or fumes injurious to health.

73. Liability of owner of premises in certain circumstances.- (1) Where in any premises separate buildings are leased to different occupiers for use as separate factories, the owner of the premises shall be responsible for provision and maintenance of—

(i) common facilities and services such as approach roads, drainage, water supply, lighting and sanitation;

(ii) adequate staircases;

(iii) precaution in case of fire;

(iv) ensuring structural stability;

(v) hoists and lifts; and

(vi) any other common facilities as may be prescribed.

(2) Where in any premises, independent or self-contained, floors or flats, compartments, rooms, sheds are used as separate factories, the owner of the premises shall be responsible for the provision and maintenance of–

(i) latrines, urinals and washing facilities;
(ii) safety of machinery and plant installed in the common place or location of an occupier;
(iii) safe means of access to floors or flats, compartments, rooms, galas, sheds and maintenance and cleanliness of staircases and common passages;
(iv) precautions in case of fire;
(v) hoists and lifts;
(vi) prohibition of the common passages, balconies, verandas, access space, staircases and such other common spaces for use of any activity not intended in such spaces;
(vii) ensuring structural stability; and (viii) any other common facilities provided in the premises.

(3) The owner of premises shall be responsible for provision, maintenance or arrangement for any other facility which may be required but not specified in sub-sections (1) and (2) above.

(4) The Chief Inspector shall have, subject to the control of the appropriate Government, the power to issue orders to the owner of the premises referred to in sub-sections (1) and (2) in respect of the carrying out of the provisions of canteens, shelter, rest rooms and creches.

(5) In respect of sub-section (3) while computing for the purposes of any of the provisions of this Code, the total number of workers employed in the whole of the premises shall be deemed to be in a single factory.

(6) The owner of the premises shall be liable for any contravention of any of the provisions of this section, as if he were the occupier or manager of a factory, and shall be punishable in accordance with the provisions of section 98.

Explanation.—For the purposes of this section, "owner" shall include promoter, co-operative society, trust, receiver, special officer, as the case may be.

74. Power to apply the Code to certain premises.—(1) The state Government may, by notification in the Official Gazette, declare that all or any of the provisions of this Part shall apply to any place wherein a manufacturing process is carried on with or without the aid of power or is so ordinarily carried on, notwithstanding that—

(i) the number of persons employed therein is less than ten, if working with the aid of power and less than twenty if working without the aid of power, or
(ii) the persons working therein are not employed by the owner thereof but are working with the permission of, or under agreement with, such owner:

Provided that the manufacturing process is not being carried on by the owner only with the aid of his family.

(2) After a place is so declared, it shall be deemed to be a factory for the purposes of this Code, and the owner shall be deemed to be the occupier, and any person working therein, a worker.

Explanation.—For the purposes of this section, "owner" shall include a lessee or mortgagee with possession of the premises.

75. Dangerous operations.-Where the State Government is of opinion that any manufacturing process or operation carried on in a factory exposes any persons employed in it to a serious risk of bodily injury, poisoning or disease, it may order or make rules applicable to any factory or class or description of factories in which manufacturing process or operation is carried on -

(a) specifying the manufacturing process or operation and declaring it to be dangerous;
(b) prohibiting or restricting the employment of womenin the manufacturing process or operation;
(c) providing for the periodical medical examination for persons employed or seeking to be employed, in the manufacturing process or operation, and prohibiting the employment of persons not certified as fit for such employment and requiring the payment by the occupier of the factory of fees for such medical examination;
(d) providing for the protection of all persons employed in the manufacturing process or operation or in the vicinity of the places where it is carried on;

(e) prohibiting, restricting or controlling the use of any specified materials or processes in connection with the manufacturing process or operation;
(f) requiring the provision of additional welfare amenities and sanitary facilities and the supply of protective equipment and clothing, and laying down the standards thereof, having regard to the dangerous nature of the manufacturing process or operation.

76. Constitution of Site Appraisal Committee.- (1) The State Government may, for purposes of advising it to consider applications for grant of permission for the initial location of a factory involving a hazardous process or for the expansion of any such factory, appoint a Site Appraisal Committee consisting of-

(a) the Chief Facilitator of the State who shall be its Chairman;
(b) a representative of the Central Board for the Prevention and Control of Water Pollution appointed by the Central Government under section 3 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);
(c) a representative of the Central Board for the Prevention and Control of Air Pollution referred to in section 3 of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981);
(d) a representative of the State Advisory Board appointed under section 4 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974);
(e) a representative of the State Advisory Board for the Prevention and Control of Air Pollution referred to in section 5 of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981);
(f) a representative of the Department of Environment in the State;
(g) a representative of the Meteorological Department of the Government of India;
(h) an expert in the field of occupational health; and
(i) a representative of the Town Planning Department of the State Government, and not more than five other members who may be co-opted by the State Government who shall be-
    (i) a scientist having specialized knowledge of the hazardous process which will be involved in the factory,
    (ii) a representative of the local authority within whose jurisdiction the factory is to be established, and
    (iii) not more than three other persons as deemed fit by the State Government.

(2) The Site Appraisal Committee shall examine an application for the establishment of a factory involving hazardous process and make its recommendation to the State Government within a period of ninety days of the receipt of such application in the prescribed form.

(3) Where any process relates to a factory owned or controlled by the Central Government or to a corporation or company owned or controlled by the Central Government, the State Government shall co-opt in the Site Appraisal Committee a representative nominated by the Central Government as a member of that Committee.

(4) The Site Appraisal Committee shall have power to call for any information from the person making an application for the establishment or expansion of a factory involving a hazardous process.

(5) Where the State Government has granted approval to an application for the establishment or expansion of a factory involving a hazardous process, it shall not be necessary for an applicant to obtain a further approval from the Central Board or the State Advisory Board established under the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) and the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981).

77. Compulsory disclosure of information by the occupier.—(1) The occupier of every factory involving a hazardous process shall disclose in the manner prescribed all information regarding dangers, including health hazards and the measures to overcome such hazards arising from the exposure to or handling of the materials or substances in the manufacture, transportation, storage and other processes, to the workers employed in the factory, the Chief Facilitator, the local authority within whose jurisdiction the factory is situate and the general public in the vicinity.

(2) The occupier shall, at the time of registering the factory involving a hazardous process, lay down a detailed policy with respect to the health and safety of the workers employed therein and intimate such policy to the

Chief Facilitator and the local authority and, thereafter, at such intervals as may be prescribed, inform the Chief Facilitator and the local authority of any change made in the said policy.

(3) The information furnished under sub-section (1) shall include accurate information as to the quantity, specifications and other characteristics of wastes and the manner of their disposal.

(4) Every occupier shall, with the approval of the Chief Facilitator, draw up an on-site emergency plan and detailed disaster control measures for his factory and make known to the workers employed therein and to the general public living in the vicinity of the factory the safety measures required to be taken in the event of an accident taking place.

(5) Every occupier of a factory shall, if such factory proposes to engage in a hazardous process at any time after such commencement, within a period of thirty days before the commencement of such process, inform the Chief Facilitator of the nature and details of the process in such form and in such manner as may be prescribed.

(6) Where any occupier of a factory contravenes the provisions of sub-section (5), the licence issued under section 72 to such factory shall, notwithstanding any penalty to which the occupier of factory shall be subjected to under the provisions of this Code, be liable for cancellation.

(7) The occupier of a factory involving a hazardous process shall, with the previous approval of the Chief Facilitator, lay down measures for the handling, usage, transportation and storage of hazardous substances inside the factory premises and the disposal of such substances outside the factory premises and publicise them in the manner prescribed among the workers and the general public living in the vicinity.

78. Specific responsibility of the occupier in relation to hazardous processes.—Every occupier of a factory involving any hazardous process shall—

(a) maintain accurate and up-to-date health records or, as the case may be, medical records, of the workers in the factory who are exposed to any chemical, toxic or any other harmful substances which are manufactured, stored, handled or transported and such records shall be accessible to the workers subject to such conditions as may be prescribed;

(b) appoint persons who possess qualifications and experience in handling hazardous substances and are competent to supervise such handling within the factory and to provide at the working place all the necessary facilities for protecting the workers in the manner prescribed:

Provided that where any question arises as to the qualifications and experience of a person so appointed, the decision of the Chief facilitator shall be final;

(c) provide for medical examination of every worker—

(i) before such worker is assigned to a job involving the handling of, or working with, a hazardous substance, and

(ii) while continuing in such job, and after he has ceased to work in such job, at intervals not exceeding twelve months, in such manner as may be prescribed.

79. Power of Central Government to appoint Inquiry Committee.—(1) The Central Government may, in the event of the occurrence of an extraordinary situation involving a factory engaged in a hazardous process, appoint an Inquiry Committee to inquire into the standards of health and safety observed in the factory with a view to finding out the causes of any failure or neglect in the adoption of any measures or standards prescribed for the health and safety of the workers employed in the factory or the general public affected, or likely to be affected, due to such failure or neglect and for the prevention and recurrence of such extraordinary situations in future in such factory or elsewhere.

(2) The Committee appointed under sub-section (1) shall consist of a Chairman and two other members and the terms of reference of the Committee and the tenure of office of its members shall be such as may be determined by the Central Government according to the requirements of the situation.

(3) The recommendations of the Committee shall be advisory in the nature.

80. Emergency standards.- (1) Where the Central Government is satisfied that no standards of safety have been prescribed in respect of a hazardous process or class of hazardous processes, or where the standards so prescribed are inadequate, it may direct the Director-General of Factory Advice Service and Labour Institutes or any Institution specialised in matters relating to standards of safety in hazardous processes, to lay down emergency standards for enforcement of suitable standards in respect of such hazardous processes.

(2) The emergency standards laid down under sub-section (1) shall, until they are incorporated in the rules made under this Code, be enforceable and have the same effect as if they had been incorporated in the rules made under this Code.

81. Permissible limits of exposure of chemicals and toxic substances.- The maximum permissible limits of exposure of chemical and toxic substances in manufacturing process in any factory shall be of the value as may be prescribed by the State Government.

82. Workers' participation in safety management.-(1) The occupier shall, in every factory where a hazardous process takes place, or where hazardous substances are used or handled, set up a Safety Committee consisting of equal number of representatives of workers and management to promote co-operation between the workers and the management in maintaining proper safety and health at work and to review periodically the measures taken in that behalf.
Provided that the State Government may, by order in writing and for reasons to be recorded, exempt the occupier of any factory or class of factories from setting up such Committee.

(2) The composition of the Safety Committee, the tenure of office of its members and their rights and duties shall be such as may be prescribed.

83. Right of workers to warn about imminent danger.- (1) Where the workers employed in any factory engaged in a hazardous process have reasonable apprehension that there is a likelihood of imminent danger to their lives or health due to any accident, they may, bring the same to the notice of the occupier, agent, manager or any other person who is in-charge of the factory or the process concerned directly or through their representatives in the Safety Committee and simultaneously bring the same to the notice of the Facilitator.

(2) It shall be the duty of such occupier, agent, manager or the person in-charge of the factory or process to take immediate remedial action if he is satisfied about the existence of such imminent danger and send a report forth-with of the action taken to the nearest Facilitator.

(3) If the occupier, agent, manager or the person in-charge referred to in sub-section (2) is not satisfied about the existence of any imminent danger as apprehended by the workers, he shall, nevertheless, refer the matter forth-with to the nearest Facilitator whose decision on the question of the existence of such imminent danger shall be final.

84. Power to direct inquiry into cases of accident or disease in a factory.-(1) The appropriate Government may, if it considers it expedient so to do, appoint a competent person to inquire into the causes of any accident occurring in a factory or into any case where a disease specified in the Third Schedule has been, or is suspected to have been, contacted in a factory, and may also appoint one or more persons possessing legal or special knowledge to act as assessors in such inquiry.

(2) The person appointed to hold an inquiry under this section shall have all the powers of a Civil Court under the Code of Civil Procedure, 1908 (V of 1908), for the purposes of enforcing the attendance of witnesses and compelling the production of documents and material objects and may also, so far as may be necessary for the purposes of the inquiry, exercise any of the powers of an Facilitator under this Code; and every person required by the person making the inquiry to furnish any information, shall be deemed to be legally bound so to do within the meaning of section 176 of the Indian Penal Code (45 of 1860).

(3) The person holding an inquiry under this section shall make a report to the appropriate Government stating the cause of the accident, or as the case may be, disease, and any attendant circumstances, and adding any observations which he or any of the assessors may think fit to make.

(4) The appropriate Government may, if it thinks fit, cause to be published any report made under this section or any extracts there from.

(5) The appropriate Government may make rules for regulating the procedure of inquires under this section.

85. Appeal against the order of facilitator in case of factory - (1) The employer of an establishment or the manager of a factory or the occupier of the factory on whom an order in writing by a Facilitator has been served under the provisions of this Code may, within thirty days of the service of the order, appeal against it to the prescribed authority, and such authority may, subject to rules made in this behalf by the appropriate Government, confirm, modify or reverse the order.

(2) Subject to rules made in this behalf by the appropriate Government (which may prescribe classes of appeals which shall not be heard with the aid of assessors), the appellate authority may, or if so required in the petition of appeal shall, hear the appeal with the aid of assessors, one of whom shall be appointed by the appellate authority and the other by such body representing the establishment or the factory concerned as may be prescribed:

Provided that if no assessor is appointed by such body before the time fixed for hearing the appeal, or if the assessor so appointed fails to attend the hearing at such time, the appellate authority may, unless satisfied that the failure to attend is due to sufficient cause, proceed to hear the appeal without the aid of such assessor or, if it thinks fit, without the aid of any assessor.

(3) Subject to such rules as the appropriate Government may make in this behalf and subject to such conditions as to partial compliance or the adoption of temporary measures as the appellate authority may in any case think fit to impose, the appellate authority may, if it thinks fit, suspend the order appealed against pending the decision of the appeal.

86. Power to make exempting rules and order.-(1) The State Government may make rules defining the persons who hold positions of supervision or management or are employed in a confidential position in a factory or empowering the Chief Facilitator to declare any person, other than a person defined by such rules, as a person holding position of supervision or management or employed in a confidential position in a factory if, in the opinion of the Chief Facilitator, such person holds such position or is so employed, and the provisions of this Chapter, other than the provisions of section 42, shall not apply to any person so defined or declared.

(2) The State Government may make rules in respect of the such categories of workers in factories and specified in the rules providing for the exemption, to such extent and subject to such conditions as may be notified by the State Advisory Board.

(3) In making rules under this section, the State Government shall not exceed the following limits of work inclusive of overtime; namely:-

(i) the total number of hours of work in any day shall not exceed ten;
(ii) the spread over, inclusive of intervals for rest, shall not exceed twelve hours in any one day;
(iii) the total number of hours of work in a week, including overtime, shall not exceed sixty;
(iv) the total number of hours of overtime shall not exceed one hundred for any one quarter.

Explanation- "Quarter" means a period of three consecutive months beginning on the 1st of January, the 1st of April, the 1st of July or the 1st of October.

(4) The State Government or, subject to the control of the State Government, the Chief Facilitator may, by written order exempt, on such conditions as it or he may deem expedient, any or all of the adult workers in any factory or group or a class or description of factories from any or all of the provisions of section 25 and 26 on the ground that the exemption is required to enable the factory or factories to deal with an exceptional pressure of work.

(5) Any exemption granted under sub-section (4) shall be subject to the following conditions, namely-

(i) the total number of hours of work in any day shall not exceed twelve;

(ii) the spread over, inclusive of intervals for rest, shall not exceed thirteen hours in any one day;
(iii) the total number of hours of work in any week, including overtime, shall not exceed sixty;
(iv) no worker shall be allowed to work overtime, for more than seven days at a stretch and the total number of hours of overtime work in any quarter shall not exceed one hundred and fifteen:

"Provided that the State Government or the Chief Facilitator may, subject to the prior approval of the State Government, by order, further enhance the total number of hours of overtime work in any quarter to one hundred and twenty-five in the public interest.".

Chapter XII
Offences, Penalties and Procedure

87. General penalty for offences.- Save as is otherwise expressly provided in this Code, if in, or in respect of, any establishment, there is any contravention of the provisions of this Code and rules, or of any standards, made thereunder or of any order in writing given under the Code or such rules or standards, the occupier or manager or employer of the establishment, as the case may be, shall be guilty of an offence and be punishable with imprisonment for a term which may extend to three months or with fine which may extend to one lakh rupees, or with both, and if the contravention is continued after the conviction, then, with further fine which may extend to two thousand rupees for each day till the contravention is so continued.

88. Causing obstruction to deter Chief Facilitator or Facilitator from duty, etc. - (1) Any, who willfully prevents or causes obstruction-

(i) to a Chief Facilitator or Facilitator or an officer of the appropriate Government or a person authorized to discharge, or entrusted with, any duty or to exercise any powers from discharging any duty or exercising any power under this Code or the rules made thereunder; or
(ii) refuses entry to the Chief Facilitator or the Facilitator to any place where such Chief Facilitator or Facilitator is entitled to enter under this Code or the rules made thereunder; or
(iii) fails to produce any document which he is required to produce under, or fails to comply with any requisition or order issued to him by or under, the provisions of this Code or the rules made thereunder,

then, he shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to one lakh rupees, or with both.

(2) If any person who has been convicted of any offence punishable under sub-section (1) is again convicted of an offence under that sub-section, then, he shall be punishable on a second or subsequent conviction with imprisonment for a term which may extend to six months, or with fine which shall not be less than one lakh rupees but which may extend to two lakh rupees, or with both.

89. Non-maintenance of register, records and non-filing of returns, etc. –(1) Any person, who is required under this Code or the rules or regulations or bye-laws made thereunder or of any order made under the Code or such rules or regulations or bye-laws,-

(i) to maintain any register or other document or to file returns, omits or fails to maintain such register or document or to file such returns; or

(ii) to produce any register or plan or record or report or any other document, omits or fails to produce such register or plan or record or report or such other document, then, he shall be punished with fine which may extend to one lakh rupees.

(2) Any, person, who is required under this Code or the rules or regulations or bye-laws made thereunder to maintain the register or record or any other document or to file return in a manner specified therein and fails to comply with such requirement or manner, as the case may be, then, he shall be punished with fine which may be extended to fifty thousand rupees.

(3) If any person, who has been convicted of any offence punishable under sub-section (1) or sub-section (2) is again convicted of an offence under the respective said sub-section, then, he shall be punished on a second or subsequent conviction, with fine which shall not be less than fifty thousand rupees but which may extend to two lakh rupees, or with both.

90. Contravention of provisions regarding employment of worker including women, audio-visual worker and contract labour, etc.- (1) Any person, who, save as permitted by or under this Code contravenes.-

(i) any provision of this Code or of any rule, regulation or bye-laws; or
(ii) any order made under the provision referred to under clause (i) prohibiting, restricting or regulating the employment of workers including women, audio-visual worker and contract labour,

then, he shall be punishable with fine which may extend to one lakh rupees.

(2) If any person who has been convicted of any offence punishable under sub-section (1) is again found guilty of an offence under that sub-section, then, he shall be punishable on a second or subsequent conviction with imprisonment for a term which may extend to three months, or with fine which may extend to two lakh rupees, or with both.

91. Falsification of records, etc. –(1) Any person, who produces false records or counterfeits or knowingly makes a false statement regarding any document in connection with compliance of any of the provisions of this Code or any rules, regulations or bye-laws or of any order made there under, then, he shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to one lakh rupees, or with both;

(2) If any person who has been convicted of any offence punishable under sub-section (1) is again convicted of an offence under that sub-section, then, he shall be punishable on a second or subsequent conviction with imprisonment for a term which may extend to six months, or with fine which shall not be less than one lakh rupees but which may extend to two lakh rupees, or with both.

92. Penalty on disclosure of information - (1) If the Chief Facilitator or Facilitator or any other person referred to in section 37 or section 112 discloses, contrary to the provisions of that section, any such information as is referred to in that section without the consent of the appropriate Government, he shall be punishable with imprisonment for a term which may extend to six months, or with fine which may extend to one lakh rupees, or with both.

(2) No court shall proceed to the trial of any offence under this section except with the previous sanction of the appropriate Government.

93. Penalty for wrongfully disclosing results of analysis of a sample of substance used or intended to be used.- Whoever, except in so far as it may be necessary for the purposes of a prosecution for any offence punishable under this Code, publishes or discloses to any person the results of an analysis, of a sample of substance used or intended to be used shall be punishable with imprisonment for a term, which may extend to six months or with fine, which may extend to fifty thousand rupees or with both.

94. Penalty for contravention of the provisions of duties relating to hazardous processes - (1) If, a person, who fails to comply with or contravenes any of the duties under clauses (a) to (e) of sub-section (5) of section 6 or clause (d) of section 13 in so far as such duty relates to hazardous processes shall, in respect of such failure or contravention, be punishable with an imprisonment for a term which may extend to two years and with fine which may extend to five lakh rupees, and in case the failure or contravention continues, with additional fine which may extend to twenty five thousand rupees for every day during which such failure or contravention continues, after the conviction for the first such failure or contravention.

(2) If the failure or contravention referred to in sub-section (1) continues beyond a period of one year after the date of conviction, the offender shall be punishable with imprisonment for a term which may extend to three years, or with a fine of twenty lakh rupees, or with both.

95.Penalty for contravention of the provisions of duties relating to safety provisions resulting in an accident.- If a person fails to comply with or contravenes any duties under this Code or the rules made therunder and such non-compliance or contravention has resulted in an accident causing death or serious bodily injury to any

person within the establishment, then, he shall be punishable with fine which shall not be less than five lakh rupees in the case of an accident causing death, and two lakh rupees in the case of an accident causing bodily injury:

Provided that while imposing the fine under this section, the court may direct that a portion of the fine, which shall not be less than fifty percent thereof, shall be given to the victim or the legal heirs of the victim, in the case of his death (in accordance with their rights which the court deems fit), as the case may be, as compensation.

Explanation.-In this section "serious bodily injury" means an injury which involves, or in all probability will involve, the permanent loss of the use of, or permanent injury to, any limb or the permanent loss of, or injury to sight or hearing, or the fracture of any bone, but shall not include, the fracture of bone or joint (not being fracture of more than one bone or joint) of and phalanges of the hand or foot.

96. Failure to appoint manager in a mine.- Any person, who in contravention of the provisions of section 63, fails to appoint a manager, then, he shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to one lakh rupees, or with both.

97. Offences by employees.- (1) Subject to the provisions of section 13, except clause (d) thereof, if any employee employed in a workplace contravenes any provision of this Code or any rules or orders made thereunder, imposing any duty or liability on employee, he shall be punishable with fine which may extend to ten thousand rupees.

(2) Where an employee is convicted of an offence punishable under sub-section (1) the employer of the establishment shall not be deemed to be guilty of an offence in respect of that contravention, unless it is proved that he failed to take all reasonable measures for its prevention.

98. Prosecution of owner, agent or manager of a mine.- No prosecution shall be instituted against any owner, agent or manager of a mine for any offence under this Code except at the instance of the Chief Facilitator or of the district magistrate or of Facilitator authorised in this behalf by general or special order in writing by the Chief Facilitator :

Provided that the Chief Facilitator or the district magistrate or the Facilitator as so authorised shall before instituting such prosecution satisfy himself that the owner, agent or manager of a mine had failed to exercise due diligence to prevent the commission of such offence.

Provided further that in respect of an offence committed in the course of the technical direction and management of a mine, the district magistrate shall not institute any prosecution against an owner, agent or manager of a mine without the previous approval of the Chief Facilitator.

99. Exemption of owner, agent or manager of a mine or occupier of a factory from liability in certain cases.- Where the owner, agent or manager of the mine or employer or occupier of the factory is charged with an offence punishable under this Code he shall be entitled, upon complaint duly made by him and on giving to the prosecutor not less than three clear days' notice in writing of his intention so to do, to have any other person whom he charges as the actual offender brought before the Court at the time appointed for hearing the charge; and if, after the commission of the offence has been proved, the owner, agent or manager of the mine or occupier or manager of the factory, as the case may be, proves to the satisfaction of the Court -

(a) that he has exercised due diligence to enforce the execution of this Code, and
(b) that the said other person committed the offence in question without his knowledge, consent or connivance,

that other person shall be convicted of the offence and shall be liable to the like punishment as if he was the owner, agent or manager of the mine or occupier or manager of the factory, as the case may be, and the

owner, agent or manager of a mine or the occupier or the manager of the factory shall be, discharged from any liability under this Code in respect of such offence:

Provided that in seeking to prove as aforesaid the owner, agent or manager of a mine or the occupier or manager of the factory, as the case may be, may be examined on oath, and his evidence and that of any witness whom he calls in his support, shall be subject to cross-examination on behalf of the person he charges as the actual offender and by the prosecutor:

Provided further that, if the person charged as the actual offender by the owner, agent or manager of the mine or occupier or manager of the factory as the case may be, cannot be brought before the court at the time appointed for hearing the charge, the court shall adjourn the hearing from time to time for a period not exceeding three months and if by the end of the said period the person charged as the actual offender cannot still be brought before the court, the court shall proceed to hear the charge against the owner, agent or manager of the mine or occupier or manager of the factory, as the case may be, and shall, if the offence be proved, convict him.

100. Offences by companies, etc. – (1) Where an offence under this Code has been committed by a company, every person who, at the time the offence was committed, was in charge of, and was responsible to, the company for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly:

Provided that nothing contained in this sub-section shall render any such person liable to any punishment, if he proves that the offence was committed without his knowledge or that he had exercised all due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1) where any offence under this Code has been committed by a company and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of any director, manager, company secretary or other officer of the company, such director, manager, company secretary or other officer shall be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

Explanation.—For the purposes of this section,—

(a) "company" means any body corporate and includes a firm or other association of individuals; and

(b) "director", means,-

(i) in relation to a firm a partner thereof; or

(ii) the owner of a mine being a firm or other association of individuals or a company; or

(iii) in case of association of individuals other than specified in sub-clause (ii), any of its members.

101. Limitation of Prosecution and cognizance of offence - (1) No court shall take cognizance of any offence punishable under this Code, unless a complaint in respect thereof is made within three months of the date on which the alleged commission of the offence came to the knowledge of the Facilitator and a complaint is filed in that regard thereby:

Provided that where the offence consists of disobeying a written order made by a Facilitator, complaint thereof may be made within six months from the date on which the offence is alleged to have been committed.

(2) No court inferior to that of a Metropolitan Magistrate or a Judicial Magistrate of the First Class shall try any offence punishable under this Code.

Explanation. - For the purposes of this section,-

(a) in the case of a continuing offence, the period of limitation shall be computed with reference to every point of time during which the offence continues;

(b) where for the performance of any act, time is granted or extended on an application made by the employer of an establishment, the period of limitation shall be computed from the date on which the time so granted or extended expired.

102. Jurisdiction of a court for entertaining proceedings, etc., for offence.-For the purposes of conferring jurisdiction on any court in relation to an offence under this Code or the rules, regulation or bye-laws made thereunder in connection with an establishment, the place where the establishment is for the time being situate, shall be deemed to be the place where such offence has been committed.

103. Power of Court to make orders. - (1) Where the owner, occupier, agent or manager of a mine or a factory, as the case may be, is convicted of an offence punishable under this Code, the Court may, in addition to awarding him any punishment, by order in writing, require him within a period specified in the order (which may be extended by the Court from time to time on application made in this behalf) to take such measures as may be so specified for remedying the matters in respect of which the offence was committed.

(2) Where an order is made under sub-section (1), the owner, occupier, agent or manager of the mine or the factory or a mine or factory, as the case may be, shall not be liable under this Code in respect of the continuance of the offence during the period or extended period, if any, but if on the expiry of such period or extended period the order of the Court has not been fully complied with, the owner, agent or manager, as the case may be, shall be deemed to have committed a further offence and shall be punishable with imprisonment for a term which may extend to six months, or with fine which may extend to one hundred rupees for every day after such expiry on which the order has not been complied with, or with both.

104. Compounding of offences.- (1) Notwithstanding anything contained in the Code of Criminal Procedure, 1973, any offence punishable under this Code, not being an offence punishable with imprisonment only, or with imprisonment and also with fine, may, on an application of the accused person, either before or after the institution of any prosecution, be compounded by a Gazetted officer, as the appropriate Government may, by notification, specify, for a sum of fifty percent of the maximum fine provided for such offence, in the manner as may be prescribed.

(2) Nothing contained in sub-section (1) shall apply to an offence committed by a person for the second time or thereafter within a period of five years from the date –

(a) of commission of a similar offence which was earlier compounded;

(b) of commission of similar offence for which such person was earlier convicted.

(3) Every officer referred to in sub-section (1) shall exercise the powers to compound an offence, subject to the direction, control and supervision of the appropriate Government.

(4) Every application for the compounding of an offence shall be made in such manner as may be prescribed.

(5) Where any offence is compounded before the institution of any prosecution, no prosecution shall be instituted in relation to such offence, against the offender in relation to whom the offence is so compounded.

(6) Where the compcsition of any offence is made after the institution of any prosecution, such composition shall be brought by the officer referred to in sub-section (1) in writing, to the notice of the Court in which the prosecution is pending and on such notice of the composition of the offence being given, the person against whom the offence is so compounded shall be discharged.

(7) Any person who fails to comply with an order made by the officer referred to in sub-section (1), shall be liable to pay a sum equivalent to twenty percent of the maximum fine provided for the offence, in addition to such fine.

Chapter XIII
Miscellaneous

105. Delegation of powers- The Central Government may, by notification, direct that any power exercisable by it under this Code or rules made there under shall, in relation to such matters and subject to such conditions, if any, as may be specified in the notification, be exercisable also by the State Government or by such officer or authority subordinate to the State Government as may be specified in the notification.

106. Onus as to age.—(1) When any offence is committed under this Code involving an issue of a certain age of a person and such person is in the opinion of the court prima facie under such age, the burden shall be on the accused to prove that such person is not under such age.

(2) The prescribed medical authority shall, while examining a worker for issuing the certificate of age for the purposes of this Code, take into account the Aadhar card of the worker, and in the absence thereof, the date of birth certificate from school or the matriculation or equivalent certificate from the concerned examination Board of the worker, if available, and in the absence thereof, the birth certificate of the worker given by a corporation or a municipal authority or a Panchayat, and only in the absence of any of the methods specified in this sub-section, the age shall be determined by such medical authority through an ossification test or any other latest medical age determination test.

107. Onus of proving limits of what is practicable, etc. -In any proceeding for an offence for the contravention of any provision of this Code or rules made there under consisting of a failure to comply with a duty or requirement to do something, it shall be for the person who is alleged to have failed to comply with such duty or requirement, to prove that it was not reasonably practicable or as the case may be, all practicable measures were taken to satisfy the duty or requirement.

108. Effect of law and agreements inconsistent with this Code.—(1) The provisions of this Code shall have effect notwithstanding anything inconsistent therewith contained in any other law for the time being in force or in the terms of any award, agreement or contract of service whether made before or after the commencement of this Code.

Provided that where under any such award, agreement, contract of service or otherwise an employee is entitled to benefits in respect of any matters which are more favourable to him than those to which he will be entitled to under this Code, the employee shall continue to be entitled to the more favourable benefits in respect of that matter notwithstanding that he receives benefits in respect of other matters under this Code.

(2) Nothing contained in this Code shall be construed as precluding any employee from entering into an agreement with an employer for granting him rights or privileges in respect of any matter which are more favourable to him than those to which he would be entitled under this Code.

109. Power of the appropriate Government to direct inquiry in certain cases -

(1) The appropriate Government may, in the event of the occurrence of an accident which has caused or had the potentiality to cause serious danger to employees and other persons within, and in the vicinity of the workplace or whether immediate or delayed, or any occupational disease as specified in the Standards, which has been or is suspected to have been contracted, in epidemic proportions, appoint one or more persons possessing legal or special knowledge to act as assessors in such inquiry in order to inquire into the causes of the accident and disease, fix responsibilities and suggest a plan of action for the future to prevent such accidents or diseases.

(2) The appropriate Government may direct a Chief Facilitator or any other officer under the control of the Government concerned or appoint a committee to undertake a survey on the situation relating to safety or health at work at any workplace or class of workplaces or into the effect of work activity on the health of the employees and other persons within and in the vicinity of the workplace.

(3) The officer or the committee referred to in sub-section (2) -

(a) may, at any time during the normal working hours of the workplace, or at any other time as found by him or the committee to be necessary, after giving notice in writing, undertake such survey and the employer shall make available all records and afford all facilities for such survey including facilities for the examination and testing of plant and collection of samples and other data relevant to the survey;

(b) for the purpose of facilitating a survey under this sub-section, every employee shall, if so required by the officer or the committee conducting the survey present himself to undergo such medical examination as may be considered necessary by such officer and furnish all such information in his possession of the employee and relevant to the survey as may be considered necessary by the officer or the committee conducting the survey.

(c) Any time spent by an employee for undergoing medical examination or furnishing information under clause (b) shall, for the purpose of calculating wages and extra wages for overtime work, be deemed to be time during which such employee worked.

(4) The officer directed or committee appointed under sub-section (2) to hold an inquiry, shall have the powers of a Civil Court under the code of Civil Procedure, 1908 (V of 1908), for the purposes of enforcing the attendance of witnesses and compelling the production of documents and material objects, and may also so far as may be necessary for the purposes of the inquiry, exercise such powers of a Facilitator under this Code as may be necessary; and every person required by the officer or committee to furnish any information shall be deemed to be legally bound so to do within the meaning of section 176 of the Indian Penal Code (45 of 1860).

(5) The officer or committee holding an inquiry under this section shall make a report to the Government concerned.

(6) The Central Government may make rules for regulating the procedure of inquiries and other related matters under this section.

110. Publication of reports.- The appropriate Government, if it thinks fit, may cause to be published any report submitted to it by the National Board or State Advisory Board, as the case may, or any extracts from any report submitted to it under this Code.

111. Powers of Central Government to give directions.-The Central Government may give directions to a State Government as to the carrying into execution of the provisions of this Code.

112. General restriction on disclosure of information - (1) No person shall in respect of the factory or the mine, as the case may be, disclose otherwise than in connection with enforcement or for the purposes of any of the relevant statutory provisions, any information relating to any manufacturing or commercial business or any working process which may come to his knowledge in the course of his official duties under any of the relevant statutory provisions or which has been disclosed to him in connection with, or for the purposes of any of the relevant statutory provisions.

(2) Nothing in sub-section (1) shall apply to any disclosure of information made with the previous consent in writing of the owner of the business or process or for the purposes of any legal proceeding (including adjudication or arbitration), pursuant to any of the relevant statutory provisions or of any criminal proceeding or proceeding before a tribunal under this Code which may be taken, whether pursuant to any of the relevant statutory provisions or otherwise, or for the purposes of any report of such proceedings as aforesaid.

113. Jurisdiction of civil courts barred.—No civil court shall have jurisdiction in respect of any matter to which any provision of this Code applies and no injunction shall be granted by any civil court in respect of anything which is done or intended to be done by or under this Code.

114. Protection of action taken in good faith.- (1) No suit, prosecution or other legal proceeding shall lie against any person for anything which is in good faith done or intended to be done in pursuance of this Code or any rule or regulation or bye-law order made there under.

(2) No prosecution or other legal proceeding shall lie against the Government, any Board or Committees constituted under this Code or any member of such Board or any officer or employee of the Government or the Board or any other person authorised by the Government or any Board or committee, for any damage caused or likely to be caused by anything which is in good faith done or intended to be done in pursuance of this Code or any rule or regulation or bye-laws order made or issued there under.

115. Power to exempt in special cases.- The appropriate Government may, by notification in the Official Gazette and subject to such conditions and restrictions, if any, and for such period or periods as may be specified in the notification, direct that all or any of the provisions of this Code or the rules or the regulations made thereunder shall not apply to or in relation to any establishment or class or description of establishments.

116. Power to exempt during public emergency - In case of a public emergency, the appropriate Government may, by notification, exempt any work place or work activity or class or description thereof from all or any of the provisions of this Code for such period and subject to such conditions as it may think fit:
Provided that no such notification shall be made for a period exceeding three months at a time.

Explanation.– For the purposes of this section 'public emergency' means a grave emergency whereby the security of India or any part of the territory thereof is threatened, whether by war or external aggression or internal disturbance.

117. Power to exempt public institution.- The appropriate Government may exempt, subject to such conditions as it may consider necessary, any workshop or workplace where a manufacturing process is carried on and which is attached to a public institution maintained for the purposes of education, training, research or information, from all or any of the provisions of this Code:

Provided that no such exemption shall be granted from the provisions relating to hours of work and holidays unless the persons having the control of the institution submit, for the approval of the appropriate Government, a scheme of the regulation of the hours of employment, intervals for meals, and holidays of the persons employed in or attending the institution or who are inmates for the institution, and the appropriate Government is satisfied that the provisions of the scheme are not less favourable than the corresponding provisions of this Code.

118. Persons required to give notice, etc., legally bound to do so.- Every person required to give any notice or to furnish any information to any authority in relation to the provisions of this Code shall be legally bound to do so within the meaning of section 176 of the Indian Penal Code (45 of 1860).

119. Power to remove difficulties.- (1) If any difficulty arises in giving effect to the provisions of this Code, the Central Government may, by order published in the Official Gazette, make such provisions not inconsistent with the provisions of this Code, as appears to it to be necessary or expedient for removing the difficulty:

Provided that no such order shall be made after the expiry of two years from the date on which this Code comes into force.

(2) Every order made under this section shall, as soon as may be after it is made, be laid before each House of Parliament.

120. Power of the appropriate Government to make rules.-(1) The appropriate Government may, subject to the condition of previous publication and by notification, make rules for carrying out the purposes of this Code.

(2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:-

(a) to prescribe the substance as hazardous substance under clause (z) of sub-section (1) of section 2;
(b) the late fee under the proviso to sub-section (1) of section 3;
(c) the manner of submitting application under sub-section (2) of section 3 and the form of such application and the particulars to be contained therein and the fees to be accompanied therewith;
(d) the form and manner of sending the notice and the authority to whom the notice shall be sent and the manner of intimating the authority under section 5;
(e) the form of letter of appointment under sub-section (3) of section 6;
(f) the nature of bodily injury and the form of notice and the time within which the notice shall be sent under sub-section (1) of section 10;
(g) nature of dangerous occurrence and the form of notice, the time within which and the authority to which notice shall be given under section 11;
(h) the form of notice related to certain diseases and the time within which the notice shall be sent to the authority under sub-section (1) of section 12;
(i) the form and manner of the report and the time within which such report shall be sent to the office of the Chief Facilitator under sub-section (2) of section 12;

(j) the representatives of the employer and the workers in the Safety Committee under sub-section (1) of section 22;
(k) the number of workers and the qualifications, duties and number of safety officers under sub-section (2) of section 22;
(l) conditions under sub-section (2) of section 28;
(m) circumstances under section 30;
(n) provisions under sub-section (1) of section 31;
(o) the form and manner of maintaining and the manner of sending the notice under sub-section (2) of section 31;
(p) the leave with wages which the person employed shall be entitled and the manner in which the person shall be entitled during a calendar year under sub-section (1) of section 32;
(q) the register and the particulars of workers under clause (a) of sub-section (1) of section 33;
(r) the manner and form of displaying notices under clause (b) of sub-section (1) of section 33;
(s) the manner of filing return to the Facilitator under clause (d) of sub-section (1) of section 33;
(t) the forms of return and the manner of filing the returns under sub-section (3) of section 33;
(u) the manner of inspection including web based inspection under sub-section (2) of section 34;
(v) the qualification and experience of Chief Facilitator under sub-section (3) of section 34;
(w) rules under sub-section (1) of section 35;
(x) the register to be produced under clause (v) of sub-section (1) of section 35;
(y) the manner of taking sample under clause (ix) of sub-section (1) of section 35;
(z) the powers under clause (xi) of sub-section (1) of section 35;
(aa) the manner of providing alternative employment under clause (d) of sub-section (1) of section 36;
(bb) any other establishment and the jurisdiction under sub-section (1) of section 40;
(cc) duties of medical officer under sub-section (2) of section 40;
(dd) other establishment and the dangerous occupation or processes under clause (a) of sub-section (3) of section 40;
(ee) medical supervision under clause (b) of sub-section (3) of section 40;
(ff) any other establishment under clause (c) of sub-section (3) of section 40;
(gg) any other establishment under clause (d) of sub-section (3) of section 40;
(hh) any other establishment under clause (e) of sub-section (3) of section 40;
(ii) safety, holiday and working hours beyond 6 A.M to 7 P.M under section 42;
(jj) manner of prohibiting the employment of women under section 43;
(kk) the particulars under sub-section (1) of section 46;
(ll) the time within which the licence shall be renewed under sub-section (2) of section 46;
(mm) fees under clause (a) of sub-section (3) of section 46;
(nn) the form and manner of application and the other particulars which such application shall contain under sub-section (1) of section 47;
(oo) the procedure to be followed under sub-section (2) of section 47;
(pp) manner of application for renewal of the licence and the manner of renewing licence under sub-section (3) of section 47;
(qq) the time and manner of intimation and the manner of cancelling licence under clause (ii) of section 49;
(rr) rules under under sub-section (2) of section 50;
(ss) the period before which the wages shall be paid under sub-section (1) of section 54;
(tt) the manner of certifying the amounts paid as wages under proviso to sub-section (2) of section 54;
(uu) the time of make payment under sub-section (3) of section 54;
(vv) the manner of passing orders by the appropriate Government under sub-section (4) of section 54;
(ww) the format of issuing experience certificate under section 55;
(xx) the medical facilities under clause (iv) of section 58;
(yy) the manner of compounding of offence under sub-section (1) of section 105;
(zz) the manner of making application under sub-section (4) of section 105;
(aaa) any other matter which is required to be, or may be, prescribed under this Code.

121. Power of the Central Government to make rules.-(1) The Central Government may, subject to the conditions of previous publication and by notification, make rules for carrying out the purposes of this Code.
(2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:-

(a) form of certificate of registration, the time within which and the conditions subject to which such certificates shall be issued under sub-section (3) of section 3;
(b) other particulars and form under sub-section (4) of section 3;
(c) the manner of informing closing and certifying payment to the registering officer under sub-section (5) of section 3;
(d) rules under sub-section (2) of section 7;
(e) procedure of National Board and the officers and staff thereof under sub-section (3) of section 16;
(f) the number of members and their qualifications under sub-section (4) of section 16;
(g) standards of working atmosphere under sub-section (1) of section 23;
(h) rule for the matters specified in sub-section (2) of section 23;
(i) standard for welfare facilities for the workers under sub-section (1) of section 24;
(j) rule for the matters specified in sub-section (2) of section 24;
(k) the hours of work for working journalist under sub-section (4) of section 25;
(l) other kinds of leave under clause (i) of sub-section (5) of section 25;
(m) the maximum period of accumulating leave under clause (ii) sub-section (5) of section 25;
(n) the limit upto which the earn leave may be availed of at a time and the reasons for which such leave may be exceeding under clause (iii) of sub-section (5) of section 25;
(o) the conditions and restrictions under clause (iv) of sub-section (5) of section 25;
(p) other matter under sub-clause (vii) of clause (a) of sub-section (1) of section 33;
(q) requisite qualifications or criteria under sub-section (1) section 46;
(r) form of agreement under clause(a) of sub-section (2) section 62;
(s) authority under sub-section (3) section 62;
(t) the matter which may be save under sub-section (1) section 63;
(u) the qualifications of sole manager under sub-section (1) of section 63;
(v) the authority to be informed about the non-fulfillment and the manner in which and time within which such authority shall be so informed under sub-section (3) of section 64;
(w) qualification under clause (g) of section 123;
(x) any other matter under clause (bb) of section 123;
(y) other language or languages under sub-section (5) of section 126;

122. Power of the State Government to make rules.-(1) The State Government may, subject to the condition of previous publication and by notification, make rules for the matters relating to the factories, plantation and any other matter for the carrying out the provision of this Code by the State Government.
(2) In particular and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:-

(a) the constitution, procedure and other matters relating to State Advisory Board under sub-section (2) of section 17;
(b) the number of members and their qualifications under sub-section (3) of section 17;
(c) the manner in which the employer of the plantation shall provide for drinking water, housing facility, education facility for the children of workers, health facility and other amenities required for the protection of the plantation worker from rain or cold under sub-section (4) of section 24;
(d) the form of application and the payment of fees under sub-section (2) of section 67;
(e) the manner of preparing the plan of the place of premises under sub-section (3) of section 67;
(f) other matter under clause (e) of sub-section (4) of section 67;
(g) fees under clause (b) of sub-section (5) of section 67;
(h) the time of filing appeal and the fees under section 68;
(i) the form of maintaining record sub-section (2) of section 69;
(j) rules under sub-section (1) of section 72;
(k) mode under sub-section (2) of section 72;
(l) limit under explanation to section 72;
(m) any other common facilities under clause (vi) of sub-section (1) of section 73;
(n) form of application under sub-section (2) of section 76;

(o) the manner of disclosing information under sub-section (1) of section 77;
(p) the interval of informing Chief Facilitator and the local authority under sub-section (2) of section 77;
(q) the form and manner of informing Chief Facilitator under sub-section (5) of section 77;
(r) the manner of publicizing among the workers and the general public living in the vicinity under sub-section (7) of section 77;
(s) conditions under clause (a) of section 78;
(t) the manner of providing necessary facilities for protecting the workers under clause (b) of section 78;
(u) the manner of medical examination of a worker under sub-clause (ii) of clause (c) of section 78;
(v) the value of the maximum prescribed limit of exposure of chemical and toxic substances in manufacturing process in any factory under section 81;
(w) the composition of safety committee, the tenure of office of its members and their rights and duties under sub-section (2) of section 81;
(x) the authority under sub-section (1) of section 85;
(y) the body representing the factory concerned under sub-section (2) of section 85;
(z) rules under sub-section (1) of section 86;
(aa) rules under sub-section (2) of section 86;
(bb) any other matter which has to be or may be prescribed.

123. Power of Central Government to make regulations in relation to mines and dock work - The Central Government may, by notification in the Official Gazette, make regulations consistent with this Code for all or any of the following purposes, namely:-

(a) for prescribing the qualifications required for appointment as Chief Facilitator or Facilitator;
(b) for prescribing and regulating the duties and powers of the Chief Facilitator and of Facilitators in regard to the inspection of mines under this Code;
(c) for prescribing the duties of owners, agents and managers of mines and of persons acting under them, and for prescribing the qualifications (including age) of agents and managers of mines and of persons acting under them;
(d) for requiring facilities to be provided for enabling managers of mines and other persons acting under them to efficiently discharge their duties ;
(e) for regulating the manner of ascertaining, by examination or otherwise, the qualifications of managers of mines and persons acting under them, and the granting and renewal of certificates of competency;
(f) for fixing the fees, if any, to be paid in respect of such examinations and of the grant and renewal of such certificates;
(g) for determining the circumstances in which and the conditions subject to which it shall be lawful for more mines than one to be under a single manager, or for any or mines to be under a manager not having the prescribed qualifications;
(h) for providing for inquiries to be made under this Code, including any inquiry relating to misconduct or incompetence on the part of any person holding a certificate under this Code and for the suspension or cancellation of any such certificate and for providing, wherever necessary, that the person appointed to hold an inquiry shall have all the powers of a civil court under the Code of Civil Procedure, 1908, for the purpose of enforcing the attendance of witnesses and compelling the production of documents and material objects;
(i) for regulating, subject to the provisions of the Indian Explosives Act, 1884, and of any rules made there under, the storage, conveyance and use of explosives;
(j) for prohibiting, restricting or regulating the employment of women in mines or in any class of mines or on particular kinds of labour which are attended by danger to the life, safety or health of such persons and for limiting the weight of any single load that may be carried by any such person;
(k) for providing for the safety of the persons employed in a mine, their means of entrance there into and exit there from, the number of shafts or outlets to be furnished, and the fencing of shafts, pits, outlets, pathways and subsidences ;
(l) for prohibiting the employment in a mine either as manager or in any other specified capacity of any person except persons paid by the owner of the mine and directly answerable to the owner or manager of the mine ;
(m) for providing for the safety of the roads and working places in mines, including the siting, maintenance and extraction or reduction of pillars or blocks of minerals and the maintenance of

sufficient barriers between mine and mine;

(n) for the inspection of workings and sealed off fire- areas in a mine, and for the restriction of workings in the vicinity of the sea or any lake or river or any other body of surface water, whether natural or artificial, or of any public road or building, and for requiring due precaution to be taken -against the irruption or inrush of water or other liquid matter into, outbreak of fire in or premature collapse of, any workings;

(o) for providing for the ventilation of mines and the action to be -taken in respect of dust, fire, and inflammable and noxious gases, including precautions against spontaneous combustion, underground fire and coal dust;

(p) for regulating, subject to the provisions of the Indian Electricity Act, 1910, (9 of 1910) and of any rules made thereunder, the generation, storage, transformation, trans- mission and use of electricity in mines and for providing for the care and the regulation of the use of all electrical apparatus and electrical cables in mines and of all other machinery and plant therein;

(q) "for regulating the use of machinery in mines, for providing for the safety of persons employed on or near such machinery and on haulage roads and for restricting the use of certain classes of locomotives underground;

(r) for providing for proper lighting of mines and regulating the use of safety lamps therein and for the search of persons entering a mine in which safety lamps are in use ;

(s) for providing against explosions or ignitions of inflammable gas or dust or irruptions of or accumulations of water in mines and against danger arising there from and for prohibiting, restricting or regulating the extraction of minerals in circumstances likely to result in the premature collapse of workings or to result in or to aggravate the collapse of workings or irruptions of water or ignitions in mines;

(t) for specifying type of accidents for the purposes of notice under section 10 and for specifying the notices of accidents and dangerous occurrences, and the notices, reports and returns of mineral output, persons employed and other matters provided for by regulations, to be furnished by owners, agents and managers of mines, and for prescribing the forms of such notices, returns and reports, the persons and authorities to whom they are to be furnished, the particulars to be contained in them, and the time within which they are to be submitted;

(u) for requiring owners, agents and managers of mines to have fixed boundaries for the mines, for prescribing the plans and sections and field notes connected there with to be kept by them and the manner and places in which such plans, sections and field notes are to be kept for purposes of record and for the submission of copies thereof to the Chief Facilitator; and for requiring the making of fresh surveys and plans by them, and in the event of non-compliance, for having the survey made and plans prepared through any other agency and for the recovery of expenses thereof in the same manner as an arrear of land revenue;

(v) for regulating the procedure on the occurrence of accidents or accidental explosions or ignitions in or about, mines; for dealing effectively with the situation.

(w) for specifying the form of, and the particulars to be contained in, the notice to be given by the owner, agent or manager of a mine under section 5 ;

(x) for specifying the notice to be given by the owner, agent or manager of a mine before mining operations are commenced at or extended to any point within forty five meters of any railway subject to the provisions of the Indian Railways Act, 1890 (9 of 1890) or of any public roads or other works as the case may be, which are maintained by the Government or any local authority;

(y) for the protection from injury, in respect of any mine when the workings are discontinued, of property vested in the Government or any local authority or railway company as defined in the Indian Railways Act, 1890 (9 of 1890);

(z) for requiring protective works to be constructed by the owner, agent or manager of a mine before the mine is closed, and in the event of non-compliance, for getting such works executed by any other agency and for recovering the expenses thereof from such owner in the same manner as an arrear of land revenue;

(aa) for requiring the fencing of any mine or part of a mine or any quarry, incline, shaft, pit or outlet, whether the same is being worked or not, or any dangerous or prohibited area, subsidence, haulage, tramline or pathway, where such fencing is necessary for the protection of the public ; and

(bb) any other matter which has to be or may be prescribed.

124. Prior publication of regulation and rules in relation to mine and dock work -. (1) The power to make rules and regulations conferred by sections 121 and 123 relating to mine and dock work is subject to the condition of the regulations and rules being made after previous publication in the following manner, namely:-

(a) the date to be specified after a draft of regulations or rules proposed to be made will be taken under consideration, shall not be less than three months from the date on which the draft of the proposed regulations or rules is published for general information.
(b) no regulation or rule shall be made unless the draft thereof has been referred to the National Occupational Safety Health Advisory Board constituted under sub-section (1) of section 16 and unless that Committee has had a reasonable opportunity of reporting as to the expediency of making the same and as to the suitability of its provisions.
(c) regulations and rules shall be published in the Official Gazette and, on such publication, shall have effect as if enacted in this Code.
(d) the provisions of clause (a), (b) and (c) shall not apply to the first occasion on which rules referred to in clause (d) or clause (e) of section 121 are made.

125.Power to make regulation without previous publication.- Notwithstanding anything contained in section 124, regulations under section 123 may be made without previous publication and without reference to the National Occupational Safety Health Advisory Board constituted under sub-section (1) of section 16 if the Central Government is satisfied that for the prevention of apprehended danger or the speedy remedy of conditions likely to cause danger it is necessary in making such regulations to dispense with the delay that would result from such publication and reference;

Provided that any regulations so made shall be sent to the said National Occupational Safety Health Advisory Board for information and shall not remain in force for more than one year from the making thereof.

126. Bye-laws. (1) The owner, agent or manager of a mine may, and shall, if called upon to do so by the Chief Facilitator or Facilitator, frame and submit to the Chief Facilitator or Facilitator a draft of such bylaws, not being inconsistent with this Code or any regulations or rules for the time being in force, governing the use of any particular machinery or the adoption of a particular method of working in the mine as such owner, agent or manager may deem necessary to prevent accidents and provide for the safety, convenience and discipline of the persons employed in the mine.

(2) If any such owner, agent or manager-

(a) fails to submit within two months a draft of bye-laws after being called upon to do so by the Chief Facilitator or Facilitator, or

(b) submits a draft of bye-laws which is not in the opinion of the Chief Facilitator or Facilitator sufficient, the Chief Facilitator or Facilitator may-

(i) propose a draft of such bye-laws as appear to him to be sufficient, or
(ii) propose such amendments in any draft submitted to him by the owner, agent or manager as will, in his opinion, render it sufficient, and shall send such draft bye-laws or draft amendments to the owner, agent or manager as the case may be, for consideration.

(3) If within a period of two months from the date on which any draft bye-laws or draft amendments are sent by the Chief Facilitator or Facilitator to the owner, agent or manager under the provisions of sub- section (2), the Chief Facilitator or Facilitator and the owner, agent or manager are unable to agree as to the terms of the bye-laws to be made under sub-section (1), the Chief Facilitator or Facilitator shall refer the draft bye-laws for settlement to the technical Committee constituted under sub-section (4) of section 16 in respect of mines.

(4) (a) When such draft bye-laws have been agreed to by the owner, agent or manager and the Chief Facilitator or Facilitator, or, when they are unable to agree, have been settled by the "Committee constituted under sub-section (4) of section 16 in respect of mines, a copy of the draft bye-laws shall be sent by the Chief Facilitator or Facilitator to the Central Government for approval.

(b) The Central Government may make such modification of the draft bye-laws as it thinks fit.

(c)Before the Central Government approves the draft bye-laws, whether with or without modifications, there

shall be published, in such manner as the Central -Government may think best adapted for informing the persons affected, notice of the proposal to make the bye-laws and of the place where copies of the draft bye-laws may be obtained, and of the time (which shall not be less than thirty days) within which any objections with reference to the draft bylaws, made by or on behalf of persons affected should be sent to the Central Government.

(d) Every objection shall be in writing and shall state-

(i) the specific grounds of objections, and

(ii) the omissions, additions or modifications asked for.

(e) The Central Government shall consider any objection made within the required time by or on behalf of persons appearing to it to be affected, and may approve the bye-laws either in the form in which they were published or after making such amendments thereto as it thinks fit.

(5) The bye-laws, when so approved by the Central Government, shall have effect as if enacted in this Code, and the owner, agent or manager of the mine shall cause a copy of the bye-laws, in English and in such other language or languages as may be prescribed, to be posted up in some conspicuous place at or near the mine, where the bye-laws may be conveniently read or seen by the persons employed; and, as often as the same become defaced, obliterated or destroyed, shall cause them to be renewed with all reasonable dispatch.

(6) The Central Government may, by order in writing rescind, in whole or in part, any bye-law so made, and thereupon such bye-law shall cease to have effect accordingly.

127. Laying regulations, rules and bye laws before parliament. - Every rule, regulation and bye-laws made by the Central Government under this Code shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the regulation, rule or bye-law or both Houses agree that the regulation, rule or bye-law should not be made, the regulation, rule or bye-law shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that regulation, rule or bye-law, as the case may be.

128. Laying of rules made by State Government.- Every rule made by the State Government under this Code shall be laid, as soon as may be, after it is made, before the State Legislative.

129. Repeal and Savings– (1) The following Acts are hereby repealed, namely:-

(n) The Factories Act, 1948 (Act no. 63 of 1948)
(o) The Mines Act, 1952 (Act no. 35 of 1952)
(p) The Dock Workers (Safety, Health and Welfare) Act, 1986 (Act no. 54 of 1986)
(q) The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 (Act No. 27of1996)
(r) The Plantations Labour Act, 1951 (Act No. 69 of 1951)
(s) The Contract Labour (Regulation and Abolition) Act, 1970
(t) The Inter-State Migrant workmen (Regulation of Employment and Conditions of Service) Act, 1979
(u) The Working Journalist and other News Paper Employees (Conditions of Service and Misc. Provision) Act, 1955
(v) The Working Journalist (Fixation of rates of wages) Act, 1958
(w) The Motor Transport Workers Act, 1961
(x) Sales Promotion Employees (Condition of Service) Act, 1976
(y) The Beedi and Cigar Workers (Conditions of Employment)Act, 1966
(z) The Cine Workers and Cinema Theatre Workers Act, 1981

(2) Every Chief Inspector, Additional Chief Inspector, Joint Chief Inspector, Deputy Chief Inspector, Inspector and every other officer appointed for the purposes under any of the provisions of the enactments repealed by this Code, shall be deemed to have been appointed under this Code for such purposes under this Code.

(3) Notwithstanding such repeal, anything done or any action taken under the enactments so repealed (including any rule, regulation, notification, nomination, appointment, order or direction made there under) shall be deemed to have been done or taken under the corresponding provisions of this Code and shall be in force to the extent they are not contrary to the provisions of this Code till they are repealed by the Central Government.

(4) Without prejudice to the provisions of sub-section (2), provisions of section 6 of the General Clauses Act, 1897 (10 of 1897) shall apply to the repeal of such enactment.

FIRST SCHEDULE
[See Section 2(y)]
List of Industries involving hazardous processes

1. Ferrous Metallurgical Industries
    -Integrated Iron and Steel
    -Ferrow-alloys
    -Special Steels
2. Non-ferrous metallurgical Industries
    -Primary Metallurgical Industries, namely, zinc, lead, copper, manganese and aluminium
3. Foundries (ferrous and non-ferrous)
    -Castings and forgings including cleaning or smoothening/roughening by sand and shot blasting
4. Coal (including coke) industries
    -Coal, Lignite, Coke, etc.
    -Fuel Gases (including Coal Gas, Producer Gas, Water Gas)
5. Power Generating Industries
6. Pulp and paper (including paper products) Industries
7. Fertiliser Industries
    -Nitrogenous
    -Phosphatic
    -Mixed
8. Cement Industries
    -Portland Cement (including slag cement, puzzolona cement and their products)
9. Petroleum Industries
    -Oil Refining
    -Lubricating Oils and Greases
10. Petro-chemical Industries
11. Drugs and Pharmaceutical Industries
    -Narcotics, Drugs and Pharmaceuticals
12. Fermentation Industries (Distilleries and Breweries)
13. Rubber (Synthetic) Industries
14. Paints and Pigment Industries
15. Leather Tanning Industries
16. Electro-plating Industries
17. Chemical Industries
    -Coke Oven by-products and Coaltar Distillation products
    -Industrial Gases (nitrogen, oxygen, acetylene, argon, carbon, dioxide, hydrogen, sulphur dioxide, nitrous oxide, halogenated hydrocarbon, ozone, etc.)
    -Industrial Carbon
    -Alkalies and Acids
    -Chromates and dichromates
    -Leads and its compounds
    -Electrochemicals (metallic sodium, potassium and magnesium, chlorates, perchlorates and peroxides)
    -Electrothermal produces (artificial abrasive, calcium carbide)
    -Nitrogenous compounds (cyanides, cyanamides and other nitrogenous compounds)
    -Phosphorous and its compounds
    -Halogens and Halogenated compounds (Chlorine, Fluorine, Bromine and Iodine)
    -Explosives (including industrial explosives and detonators and fuses)
18. Insecticides, Fungicides, Herbicides and other Pesticides Industries
19. Synthetic Resin and plastics

20. Man made Fibre (Cellulosic and non-cellulosic) Industry
21. Manufacture and repair of electrical accumulators
22. Glass and Ceramics
23. Grinding or glazing of metals
24. Manufacture, handling and processing of asbestos and its products
25. Extraction of oils and fats from vegetable and animal sources
26. Manufacture, handling and use of benzene and substances containing benzene
27. Manufacturing processes and operations involving carbon disulphide
28. Dyes and Dyestuff including their intermediates
29. Highly flammable liquids and gases

THE SECOND SCHEDULE

[See Section 18(2)(f)]

List of matters:

(i) fencing of machinery;
(ii) work on or near machinery in motion;
(iii) employment of adolescents on dangerous machines;
(iv) striking gear and devices for cutting off power;
(v) self acting machines;
(vi) casing of new machinery;
(vii) prohibition of employment of women and children near cotton openers;
(viii) hoists and lifts;
(ix) lifting machines, chains, ropes and lifting tackles;
(x) revolving machinery;
(xi) pressure plant;
(xii) floors, stairs and means of access;
(xiii) pits, sumps, openings in floors and other similar indentation of area;
(xiv) safety officers
(xv) protection of eyes;
(xvi) precautions against dangerous fumes, gases, etc.;
(xvii) precautions regarding the use of portable electric light;
(xviii) explosive or inflammable dust, gas, etc.;
(xix) safety committee;
(xx) power to require specifications of defective parts or tests of stability;
(xxi) safety of buildings and machinery;
(xxii) maintenance of buildings;
(xxiii) prohibition in certain cases of danger;
(xxiv) notice in respect of accidents;
(xxv) court of inquiry in case of accidents;
(xxvi) safety management in plantation;
(xxvii) the general requirement relating to the construction, equipments and maintenance for the safety of working places on shore, ship, dock, structure and other places at which any dock work is carried on;
(xxviii) the safety of any regular approaches over a dock, wharf, quay or other places which dock worker have to use for going for work and for fencing of such places and projects;
(xxix) the efficient lighting of all areas of dock, ship, any other vessel, dock structure or working places where any dock work is carried on and of all approaches to such places to which dock workers are required to go in the course of their employment;
(xxx) adequate ventilation and suitable temperature in every building or an enclosure on ship where dock workers are employed;
(xxxi) the fire and explosion preventions and protection;
(xxxii) safe means of access to ships, holds, stagings, equipment, appliances and other working places;

(xxxiii) the Construction, maintenance and use of lifting and other cargo handling appliances and services, such as, pallets containing or supporting loads and provision of safety appliances on them, if necessary;

(xxxiv) the safety of workers employed in freight container terminals of other terminals for handing unitized cargo;

(xxxv) the fencing of machinery, live electrical conductors, steam pipes and hazardous openings;

(xxxvi) the construction, maintenance and use of staging;

(xxxvii) the rigging and use of ship's derricks;

(xxxviii) the testing, examination, inspection and certification as appropriate of' loose gears including chains and ropes and of slings and other lifting devices used in the dock work;

(xxxix) the precautions to be taken to facilitate escape of workers when employed in a hold, bin, hopper or the like or between decks of a hold while handing coal of other bulk cargo;

(xl) the measures to be taken in order to prevent dangerous methods of' working in the stacking, unstacking, stowing and unstowing of cargo or handing in connection therewith;

(xli) the handling of dangerous substances and working, in dangerous or harmful environments and the precautions to be taken in connection with such handling;

(xlii) the work in connection with cleaning, chipping painting, operations and precautions to be taken in connection with such work;

(xliii) the employment of persons for handling cargo, handling appliances, power operated batch covers or other power operated ship's equipment such as, door in the hull of a ship, ramp, retraceable car deck or similar equipment or to give signals to the drivers of such machinery;

(xliv) the transport of dock workers;

(xlv) the precautions to be taken to protect dock workers against harmful effects of excessive noise, vibration and air pollution at the work place;

(xlvi) protective equipment and protective clothing;

(xlvii) the sanitary, washing and welfare facilities;

(xlviii) the medical supervision;

(xlix) the ambulance rooms, first aid and rescue facilities and arrangements for the removal of dock workers to the nearest place of treatment;

(l) the investigation of occupational accidents, dangerous occurrences and diseases, specifying such diseases and the forms of' notices, the persons and authorities to whom, they are to be furnished, the particulars to be contained in them and the time within which they are to be submitted; and

(li) the submission of statement of accidents, man-days lost, volume of cargo handled and particulars of dock workers.

(lii) the safe means of access to, and the safety of, any working place, including the provision of suitable and sufficient scaffolding at various stages when work cannot be safely done from the ground or from any part of a building or from a ladder or such other means of support;

(liii) the precautions to be taken in connection with the demolition of the whole or any substantial part of a building or other structure under the supervision of a competent person child the avoidance of danger from collapse of any building or other structure while removing any part of the framed building or other structure by shoring or otherwise;

(liv) the handling or use of explosive under the control of competent persons so that there is no exposure to the risk of injury from explosion cr from flying material;

(lv) the erection installation, use and maintenance of transporting equipment, such as locomctives, trucks, wagons and other vehicles and trailers and appointment of competent persons to drive or operate such equipment;

(lvi) the erection, installation, use and maintenance of hoists, lifting appliances and lifting gear including periodical testing and examination and heat treatment where necessary, precautions to be taken while raising or lowering loads, restrictions on carriage of persons and appointment of competent persons on hoists or other lifting appliances;

(lvii) the adequate and suitable lighting of every workplace and approach thereto, of every place where raising or lowering operations with the use of hoists, lifting appliances or lifting gears are in progress and of all openings dangerous to building workers employed;

(lviii) the precautions to be taken to prevent inhalation of dust, fumes, gases or vapours during any grinding, cleaning, spraying or manipulation of any material and steps to be taken to secure and maintain adequate ventilation of every working place cr confined space;

(lix) the measures to be taken during stacking or unstacking, stowing or unstowing of materials or goods or handling in connection therewith;

(lx) the safeguarding of machinery including the fencing of every fly-wheel and every moving part of prime mover and every part of transmission or other machinery, unless it is in such a position or of such construction as to be safe to every worker working only of the operations and as if it were securely fenced:

(lxi) the safe handling and use of plant, including tools and equipment operated by compressed air:

(lxii) the precaution to be taken in case of fire;

(lxiii) the limits of weight to be lifted or moved by workers;

(lxiv) the safe transport of workers to or from any workplace by water and provision of means for rescue from drowning;

(lxv) the steps to be taken to prevent danger to workers from live electric wires or apparatus including electrical machinery and tools and from overhead wires;

(lxvi) the keeping of safety nets, safety sheets and safety belts where the special nature or the circumstances of work render them necessary for the safety of the workers;

(lxvii) the standards to be complied with regard to scaffolding, ladders and stairs, lifting appliances. ropes, chains and accessories, earth moving equipment and floating operational equipments;

(lxviii) the precautions to be taken with regard to pile driving, concrete work, work with hot asphalt, tar or other similar things, insulation work, demolition operations, excavation, underground construction and handling materials;

(lxix) the safety policy, that is to say, a policy relating to steps to be taken to ensure the safety and health of the building workers, the administrative arrangements therefore and the matters connected therewith, to be framed by the employers and contractors for tile operations to be carried on in a building or other construction work;

(lxx) emergency standards for enforcement of suitable standards in respect of hazardous processes in a factory;

(lxxi) the maximum permissible threshold limits of exposure of chemical and toxic substances in manufacturing processes (whether hazardous or otherwise) in any factory;

(lxxii) lightning;

(lxxiii) any other matter which is the Central Government considers under the circumstance for better working condition for safety at the work place.

THE THIRD SCHEDULE

[See section 12]

List of Notifiable Diseases

1. Lead poisoning, including poisoning by any preparation or compound of lead or their sequelae.
2. Lead-tetra-ethyle poisoning.
3. Phosphorus poisoning or its sequelae.
4. Mercury poisoning or its sequelae.
5. Manganese poisoning or its sequelae.
6. Arsenic poisoning or its sequelae.
7. Poisoning by nitrous fumes.
8. Carbon bisulphide poisoning.
9. Benzene poisoning, including poisoning by any of its homologues, their nitro or amido derivatives or its sequelae.
10. Chrome ulceration or its sequelae.
11. Anthrax.
12. Silicosis.
13. Poisoning by halogens or halogen derivatives of the hydrocarbons of the aliphatic series.

14. Pathological manifestations due to—
    (a) radium or other radio-active substances;
    (b) X-rays.
15. Primary epitheliomatous cancer of the skin.
16. Toxic anaemia.
17. Toxic jaundice due to poisonous substances.
18. Oil acne or dermatitis due to mineral oils and compounds containing mineral oil base.
19. Byssionosis.
20. Asbestosis.
21. Occupational or contact dermatitis caused by direct contract with chemicals and paints. These are of two types, that is, primary irritants and allergic sensitizers.
22. Noise induced hearing loss (exposure to high noise levels).
23. Beriyllium poisoning.
24. Carbon monoxide poisoning.
25. Coal miners' pneumoconiosis.
26. Phosgene poisoning.
27. Occupational cancer.
28. Isocyanates poisoning.
29. Toxic nephritis.

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ANNEXURE A/8

रजिस्ट्री सं० डी० एल०—(एन)04/0007/2003—20 REGISTERED NO. DL—(N)04/0007/2003—20

भारत का राजपत्र
The Gazette of India

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असाधारण
EXTRAORDINARY
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PART II — Section 1
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No. 62] NEW DELHI, TUESDAY, SEPTEMBER 29, 2020/ASVINA 7, 1942 (SAKA)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके।
Separate paging is given to this Part in order that it may be filed as a separate compilation.

MINISTRY OF LAW AND JUSTICE
(Legislative Department)

New Delhi, the 29th September, 2020/Asvina 7, 1942 (Saka)

The following Act of Parliament received the assent of the President on the 28th September, 2020 and is hereby published for general information:—

THE OCCUPATIONAL SAFETY, HEALTH AND WORKING CONDITIONS CODE, 2020

No. 37 OF 2020

[28*th September*, 2020.]

An Act to consolidate and amend the laws regulating the occupational safety, health and working conditions of the persons employed in an establishment and for matters connected therewith or incidental thereto.

BE it enacted by Parliament in the Seventy-first Year of the Republic of India as follows:—

CHAPTER I
PRELIMINARY

Short title, commencement and application.

1. (*1*) This Act may be called the Occupational Safety, Health and Working Conditions Code, 2020.

(*2*) It shall come into force on such date as the Central Government may, by notification appoint; and different dates may be appointed for different provisions of this Code and any reference in any such provision to the commencement of this Code shall be construed as a reference to the coming into force of that provision.

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(*3*) It shall not apply to the offices of the Central Government, offices of the State Government and any ship of war of any nationality:

Provided that the Code shall apply in case of contract labour employed through contractor in the offices of the Central Government or in the offices of the State Government, where, the Central Government or, as the case may be, the State Government is the principal employer.

Definitions.

2. (*1*) In this Code, unless the context otherwise requires,—

(*a*) "adolescent" shall have the same meaning as assigned to it in clause (*i*) of section 2 of the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986; 61 of 1986.

(*b*) "adult" means a person who has completed his eighteenth year of age;

(*c*) "agent" when used in relation to a mine, means every person, whether appointed as such or not, who, acting or purporting to act on behalf of the owner, takes part in the management, control, supervision or direction of such mine or of any part thereof;

(*d*) "appropriate Government" means—

(*i*) in relation to, establishments [other than those specified in sub-clause (*ii*)] carried on by or under the authority of the Central Government or concerning any such controlled industry as may be specified in this behalf by the Central Government or the establishment of railways including metro railways, mines, oil field, major ports, air transport service or telecommunication service, banking company or any insurance company (by whatever name called) established by a Central Act or a corporation or other authority established by a Central Act or a Central public sector undertaking or subsidiary companies set up by the Central public sector undertakings or autonomous bodies owned or controlled by the Central Government, including establishment of contractors for the purposes of such establishment, corporation or other authority, Central public sector undertakings, subsidiary companies or autonomous bodies, as the case may be, the Central Government:

Provided that in the case of Central Public Sector Undertakings the appropriate Government shall continue to be the Central Government even if the holding of the Central Government reduces to less than fifty per cent. equity of the Central Government in that Public Sector Undertakings after the commencement of this Code; and

(*ii*) in relation to a factory, motor transport undertaking, plantation, newspaper establishment and establishment relating to beedi and cigar including the establishments not specified in clause (*i*), the concerned State Government where it is situated.

Explanation.—For the removal of doubts it is hereby clarified that State Government shall be the appropriate Government in respect of occupational safety, health and working conditions in a factory situated in that State;

(*e*) "audio-visual production" means audio-visual produced wholly or partly in India and includes—

(*i*) animation, cartoon depiction, audio-visual advertisement;

(*ii*) digital production or any of the activities in respect of making thereof; and

(*iii*) features films, non-feature films, television, web-based serials, talk shows, reality shows and sport shows;

(*f*) "audio-visual worker" means a person, who is employed, directly or through any contractor, in or in connection with the audio-visual production to work as an

artist including actor, musician, singer, anchor, news reader, dancer, dubbing artist or stunt person or to do any work, skilled, unskilled, manual, supervisory, technical, artistic or otherwise, and his remuneration with respect to such employment in or in connection with the production of audio-visual does not exceed, where remuneration is by way of monthly wages or where such remuneration is by way of lump sum, in each case, such amount as may be notified by the Central Government:

10 of 1949.

39 of 1989.

5 of 1970.

40 of 1980.

(*g*) "banking company" means a banking company as defined in clause (*c*) of section 5 of the Banking Regulation Act, 1949 and includes the Export-Import Bank of India, the Industrial Reconstruction Bank of India, the Small Industries Development Bank of India established under section 3 of the Small Industries Development Bank of India Act, 1989, the Reserve Bank of India, the State Bank of India, a corresponding new bank constituted under section 3 of the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970, a corresponding new bank constituted under section 3 of the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1980;

(*h*) "building or other construction work" means the construction, alteration, repairs, maintenance or demolition in relation to buildings, streets, roads, railways, tramways, airfields, irrigation, drainage, embankment and navigation works, flood control works (including storm water drainage works), generation, transmission and distribution of power, water works (including channels for distribution of water), oil and gas installations, electric lines, internet towers, wireless, radio, television, telephone, telegraph and overseas communications, dams, canals, reservoirs, watercourses, tunnels, bridges, viaducts, aqua-ducts, pipelines, towers, cooling towers, transmission towers and such other work as may be specified in this behalf by the Central Government, by notification, but does not include building or other construction work which is related to any factory or mine and the building or other construction work where such work is for own residential purposes of an individual or group of individuals for their own residence and the total cost of such work does not exceed rupees fifty lakhs or such higher amount and employing more than such number of workers as may be notified by the appropriate Government;

(*i*) "building worker" means a person who is employed to do any highly skilled, skilled, semi-skilled or unskilled, manual, technical or clerical work for hire or reward, whether the terms of such employment are express or implied, in connection with any building or other construction work, but does not include any such person who is employed mainly in a managerial or supervisory or administrative capacity;

(*j*) "cargo" includes anything carried or to be carried in a ship or other vessel, or vehicle;

(*k*) "Chief Inspector-cum-Facilitator" means a Chief Inspector-cum-Facilitator appointed under sub-section (*5*) of section 34;

(*l*) "competent person", means a person or an institution recognised as such by the Chief Inspector-cum-Facilitator for the purposes of carrying out tests, examinations and inspections required to be done in an establishment having regard to—

(*i*) the qualifications and experience of the person and facilities available at his disposal; or

(*ii*) the qualifications and experience of the persons employed in such institution and facilities available therein:

Provided that in case of mines the competent person includes such other person who is authorised by the manager referred to in section 67 to supervise or perform any work, or to supervise the operation of machinery, plant or equipment and is responsible for such duties assigned to him and also includes a shot firer or blaster;

(*m*) "contract labour" means a worker who shall be deemed to be employed in or in connection with the work of an establishment when he is hired in or in connection with such work by or through a contractor, with or without the knowledge of the principal employer and includes inter-State migrant worker but does not include a worker (other than part time employee) who is regularly employed by the contractor for any activity of his establishment and his employment is governed by mutually accepted standards of the conditions of employment (including engagement on permanent basis), and gets periodical increment in the pay, social security coverage and other welfare benefits in accordance with the law for the time being in force in such employment;

(*n*) "contractor", in relation to an establishment, means a person, who—

(*i*) undertakes to produce a given result for the establishment, other than a mere supply of goods or articles of manufacture to such establishment, through contract labour; or

(*ii*) supplies contract labour for any work of the establishment as mere human resource,

and includes a sub-contractor;

(*o*) "controlled industry" means any industry the control of which by the Central Government has been declared under any Central Act in the public interest;

(*p*) "core activity of an establishment" means any activity for which the establishment is set up and includes any activity which is essential or necessary to such activity:

Provided that the following shall not be considered as essential or necessary activity, if the establishment is not set up for such activity, namely:—

(*i*) sanitation works, including sweeping, cleaning, dusting and collection and disposal of all kinds of waste;

(*ii*) watch and ward services including security services;

(*iii*) canteen and catering services;

(*iv*) loading and unloading operations;

(*v*) running of hospitals, educational and training Institutions, guest houses, clubs and the like where they are in the nature of support services of an establishment;

(*vi*) courier services which are in nature of support services of an establishment;

(*vii*) civil and other constructional works, including maintenance;

(*viii*) gardening and maintenance of lawns and other like activities;

(*ix*) housekeeping and laundry services, and other like activities, where these are in nature of support services of an establishment;

(*x*) transport services including, ambulance services;

(*xi*) any activity of intermittent nature even if that constitutes a core activity of an establishment;

(*q*) "day" means a period of twenty-four hours beginning at mid-night;

(*r*) "District Magistrate", in relation to any mine, means the District Magistrate or the Deputy Commissioner, as the case may be, who is vested with the executive powers of maintaining law and order in the revenue district in which the mine is situated:

Provided that in case of a mine, which is situated partly in one district and partly in another, the District Magistrate for the purpose shall be the District Magistrate authorised in this behalf by the Central Government;

(*s*) "dock work" means any work in or within the vicinity of any port in connection with, or required for, or incidental to, the loading, unloading, movement or storage of cargoes into or from ship or other vessel, port, dock, storage place or landing place, and includes—

(*i*) work in connection with the preparation of ships or other vessels for receipt or discharge of cargoes or leaving port;

(*ii*) all repairing and maintenance processes connected with any hold, tank structure or lifting machinery or any other storage area on board the ship or in the docks; and

(*iii*) chipping, painting or cleaning of any hold, tank, structure or lifting machinery or any other storage area on board the ship or in the docks;

(*t*) "employee" means,—

(*i*) in respect of an establishment, a person (other than an apprentice engaged under the Apprentices Act, 1961) employed on wages by an establishment to do any skilled, semi-skilled, unskilled, manual, operational, supervisory, managerial, administrative, technical, clerical or any other work, whether the terms of employment be express or implied; and

52 of 1961.

(*ii*) a person declared to be an employee by the appropriate Government,

but does not include any member of the Armed Forces of the Union:

Provided that notwithstanding anything contained in this clause, in case of a mine a person is said to be "employed" in a mine who works as the manager or who works under appointment by the owner, agent or manager of the mine or with the knowledge of the manager, whether for wages or not—

(*a*) in any mining operation (including the concomitant operations of handling and transport of minerals up to the point of dispatch and of gathering sand and transport thereof to the mine);

(*b*) in operations or services relating to the development of the mine including construction of plant therein but excluding construction of buildings, roads, wells and any building work not directly connected with any existing or future mining operations;

(*c*) in operating, servicing, maintaining or repairing any part of any machinery used in or about the mine;

(*d*) in operations, within the premises of the mine, of loading for dispatch of minerals;

(*e*) in any office of mine;

(*f*) in any welfare, health, sanitary or conservancy services required to be provided under this Code relating to mine, or watch and ward, within the premises of the mine excluding residential area; or

(*g*) in any kind of work, whatsoever, which is preparatory or incidental to, or connected with, mining operations;

(*u*) "employer" means a person who employs, whether directly or through any person, or on his behalf, or on behalf of any person, one or more employees in his establishment and where the establishment is carried on by any Department of the Central Government or the State Government, the authority specified, by the head of

such Department, in this behalf or where no authority, is so specified, the head of the Department and in relation to an establishment carried on by a local authority, the Chief Executive of that authority, and includes,—

(*i*) in relation to an establishment which is a factory, the occupier of the factory;

(*ii*) in relation to mine, the owner of the mine, agent or manager referred to in section 67;

(*iii*) in relation to any other establishment, the person who, or the authority which has ultimate control over the affairs of the establishment and where said affairs are entrusted to a manager or managing director, such manager or managing director;

(*iv*) contractor; and

(*v*) legal representative of a deceased employer;

(*v*) "establishment" means—

(*i*) a place where any industry, trade, business, manufacturing or occupation is carried on in which ten or more workers are employed: or

(*ii*) motor transport undertaking, newspaper establishment, audio-video production, building and other construction work or plantation, in which ten or more workers are employed; or

(*iii*) factory, for the purpose of Chapter II, in which ten or more workers are employed, notwithstanding the threshold of workers provided in clause (*w*): or

(*iv*) a mine or port or vicinity of port where dock work is carried out:

Provided that in sub-clauses (*i*) and (*ii*), the threshold of worker specified therein shall not be applicable in case of such establishment or class of establishments, in which such hazardous or life threatening activity is being carried on, as may be notified by the Central Government:

Provided further that notwithstanding any threshold provided in the definition of factory in clause (*w*), for the purposes of Chapter II, the establishment specified in sub-clause (*i*) or sub-clause (*ii*) or sub-clause (*iii*) shall be deemed to be the establishment within the meaning of this clause though the number of employees employed are ten or more;

(*w*) "factory" means any premises including the precincts thereof—

(*i*) whereon twenty or more workers are working, or were working on any day of the preceding twelve months, and in any part of which a manufacturing process is being carried on with the aid of power, or is ordinarily so carried on: or

(*ii*) whereon forty or more workers are working, or were working on any day of the preceding twelve months, and in any part of which a manufacturing process is being carried on without the aid of power, or is ordinarily so carried on,

but does not include a mobile unit belonging to the armed forces of the Union, railways running shed or a hotel, restaurant or eating place:

Provided that where under any law for the time being in force in a State immediately before the commencement of this Code, the number of workers specified is more or less than the number specified in clause (*i*) or clause (*ii*), then, the number specified under the law of the State shall prevail in that State till it is amended by the competent Legislature.

Explanation I.—For computing the number of workers for the purposes of this clause all the workers (in different groups and relays) in a day shall be taken into account.

Explanation II.—For the purposes of this clause, the mere fact that an Electronic Data Processing Unit or a Computer Unit is installed in any premises or part thereof, shall not be construed as factory if no manufacturing process is being carried on in such premises or part thereof;

(*x*) "family", when used in relation to a worker, means—

(*i*) spouse;

(*ii*) children including adopted children of the worker who are dependent upon him and have not completed the age of eighteen years; and

(*iii*) parents, grand-parents, widowed daughter and widowed sister dependent upon such worker.

Explanation.—For the purposes of this clause, such dependents shall not be included who are, for the time being, getting such income from such sources, as may be prescribed by the appropriate Government;

(*y*) "godown" means any warehouse or other place, by whatever name called, used for the storage of any article or substance required for any manufacturing process which means any process for, or incidental to, making, finishing or packing or otherwise treating any article or substance with a view to its use, sale, transport, delivery or disposal as finished products;

(*z*) "hazardous" means involving danger or potential danger;

(*za*) "hazardous process" means any process or activity in relation to an industry or plantation specified in the First Schedule where, unless special care is taken, raw materials used therein or the intermediate or finished products, bye-products, hazardous substances, wastes or effluents thereof or spraying of any pesticides, insecticides or chemicals used therein, as the case may be, would—

(*i*) cause material impairment to the health of the persons engaged in or connected therewith, or

(*ii*) result in the pollution of the general environment;

(*zb*) "hazardous substance" means any substance or such quantity of the substance as may be prescribed by the appropriate Government or preparation of which by reason of its chemical or physio-chemical properties or handling is liable to cause physical or health hazards to human being or may cause harm to other living creatures, plants, micro-organisms, property or the environment;

(*zc*) "industrial premises" means any place or premises (not being a private dwelling house), including the precincts thereof, in which or in any part of which any industry, trade, business, occupation or manufacturing is being ordinarily carried on with or without the aid of power and includes a godown attached thereto;

(*zd*) "industry" means any systematic activity carried on by co-operation between an employer and worker (whether such worker is employed by such employer directly or by or through any agency, including a contractor) for the production, supply or distribution of goods or services with a view to satisfy human wants or wishes (not being wants or wishes which are merely spiritual or religious in nature), whether or not,—

(*i*) any capital has been invested for the purpose of carrying on such activity; or

(*ii*) such activity is carried on with a motive to make any gain or profit,

but does not include—

(*a*) institutions owned or managed by organisations wholly or substantially engaged in any charitable, social or philanthropic services; or

(*b*) any activity of the appropriate Government relatable to the sovereign functions of the appropriate Government including all the activities carried on by the Departments of the Central Government dealing with defence research, atomic energy and space; or

(*c*) any domestic service; or

(*d*) any other activity as may be notified by the Central Government:

(*ze*) "Inspector-cum-Facilitator" means an Inspector-cum-Facilitator appointed under sub-section (*1*) of section 34;

(*zf*) "inter-State migrant worker" means a person who is employed in an establishment and who—

(*i*) has been recruited directly by the employer or indirectly through contractor in one State for employment in such establishment situated in another State; or

(*ii*) has come on his own from one State and obtained employment in an establishment of another State (hereinafter called destination State) or has subsequently changed the establishment within the destination State,

under an agreement or other arrangement for such employment and draws wages not exceeding the amount of rupees eighteen thousand per month or such higher amount as may be notified by the Central Government from time to time;

(*zg*) "machinery" means any article or combination of articles assembled, arranged or connected and which is used or intended to be used for converting any form of energy to perform work, or which is used or intended to be used, whether incidental thereto or not, for developing, receiving, storing, containing, confining, transforming, transmitting, transferring or controlling any form of energy;

(*zh*) "major port" means a major port as defined in clause (*8*) of section 3 of the Indian Ports Act, 1908; 15 of 1908.

(*zi*) "manufacturing process" means any process for—

(*i*) making, altering, repairing, ornamenting, finishing, packing, oiling, washing, cleaning, breaking up, demolishing, or otherwise treating or adapting any article or substance with a view to its use, sale, transport, delivery or disposal; or

(*ii*) pumping oil, water, sewage or any other substance; or

(*iii*) generating, transforming or transmitting power; or

(*iv*) composing, printing, printing by letter press, lithography, offset, photogravure screen printing, three Dimensional or four Dimensional printing, prototyping, flexography or other types of printing process or book binding; or

(*v*) constructing, reconstructing, repairing, refitting, finishing or breaking up ships or vessels; or

(*vi*) preserving or storing any article in cold storage; or

(*vii*) such other processes as the Central Government may notify;

(*zj*) "medical officer" means the medical officer appointed under sub-section (*1*) of section 42;

(*zk*) "metro railway" means the metro railway as defined in sub-clause (*i*) of clause (*1*) of section 2 of the Metro Railways (Operation and Maintenance) Act, 2002; 60 of 2002.

(*zl*) "mine" means any excavation where any operation for the purpose of searching for or obtaining minerals has been or is being carried on and includes—

(*i*) all borings, bore holes, oil wells and accessory crude conditioning plants, including the pipe conveying mineral oil within the oilfields;

(*ii*) all shafts, in or adjacent to and belonging to a mine, whether in the course of being sunk or not;

(*iii*) all levels and inclined planes in the course of being driven;

(*iv*) all open cast workings;

(*v*) all conveyors or aerial ropeways provided for bringing into or removal from a mine of minerals or other articles or for the removal of refuse therefrom;

(*vi*) all adits, levels, planes, machinery, works, railways, tramways and sidings in or adjacent to and belonging to a mine;

(*vii*) all protective works being carried out in or adjacent to a mine;

(*viii*) all workshops and stores situated within the precincts of a mine and under the same management and used primarily for the purposes connected with that mine or a number of mines under the same management;

(*ix*) all power stations, transformer sub-stations, converter stations, rectifier stations and accumulator storage stations for supplying electricity solely or mainly for the purpose of working the mine or a number of mines under the same management;

(*x*) any premises for the time being used for depositing sand or other material for use in a mine or for depositing refuse from a mine or in which any operations in connection with such sand refuse or other material is being carried on, being premises exclusively occupied by the owner of the mine;

(*xi*) any premises in or adjacent to and belonging to a mine on which any process ancillary to the getting, dressing or preparation for sale of minerals or coke is being carried on;

(*xii*) a mine owned by the Government;

(*zm*) "minerals" means all substances which can be obtained from the earth by mining, digging, drilling, dredging, hydraulicing, quarrying or by any other operation and includes mineral oils (such as natural gas and petroleum);

(*zn*) "motor transport undertaking" means a motor transport undertaking employing motor transport worker and engaged in carrying passengers or goods or both by road for hire or reward, and includes a private carrier;

(*zo*) "motor transport worker" means a person who is employed in a motor transport undertaking directly or through an agency, whether for wages or not, to work in a professional capacity on a transport vehicle or to attend the duties in connection with the arrival, departure, loading or unloading of such transport vehicle and includes a driver, conductor, cleaner, station staff, line checking staff, booking clerk, cash clerk, depot clerk, time-keeper, watchman or attendant, but does not include any such person—

(*i*) who is employed in a factory;

(*ii*) to whom the provisions of any other law for the time being in force regulating the conditions of service of persons employed in shops or commercial establishments apply:

(*zp*) "newspaper" means any printed periodical work containing public news or comments on public news and includes such other class of printed periodical work as may, from time to time, be notified in this behalf by the Central Government:

(*zq*) "newspaper establishment" means an establishment under the control of any person or body of persons, whether incorporated or not, for the production or publication of one or more newspapers or for conducting any news agency or syndicate and includes following newspaper establishments which shall be deemed to be one establishment, namely:—

(*i*) two or more newspaper establishments under common control;

(*ii*) two or more newspaper establishments owned by an individual and his or her spouse unless it is shown that such spouse is a sole proprietor or partner or a shareholder of a corporate body on the basis of his or her own individual funds;

(*iii*) two or more newspaper establishments publishing newspapers bearing the same or similar title and in the same language in any place in India or bearing the same or similar title but in different languages in the same State or Union territory.

Explanation 1.—For the purposes of sub-clause (*i*) two or more establishments shall be deemed to be under common control where—

(*a*) (*i*) the newspaper establishments are owned by a common individual or individuals;

(*ii*) the newspaper establishments are owned by firms, if such firms have a substantial number of common partners;

(*iii*) the newspaper establishments are owned by bodies corporate, if one body corporate is a subsidiary of the other body corporate, or both are subsidiaries of a common holding company or a substantial number of their equity shares are owned by the same person or group of persons, whether incorporated or not;

(*iv*) one establishment is owned by a body corporate and the other is owned by a firm, if a substantial number of partners of the firm together hold a substantial number of equity shares of the body corporate;

(*v*) one is owned by a body corporate and the other is owned by a firm having bodies corporate as its partners if a substantial number of equity shares of such bodies corporate are owned, directly or indirectly, by the same person or group of persons, whether incorporated or not, or

(*b*) there is functional integrality between concerned newspaper establishments.

Explanation 2.—For the purposes of this clause,—

(*i*) different departments, branches and centres of newspaper establishments shall be treated as parts thereof;

(*ii*) a printing press shall be deemed to be a newspaper establishment if the principal business thereof is to print newspaper;

(*zr*) "notification" means a notification published in the Gazette of India or the Official Gazette of a State, as the case may be, and the expression "notify" with its grammatical variations and cognate expressions shall be construed accordingly;

(*zs*) "occupier" of a factory means the person who has ultimate control over the affairs of the factory:

Provided that—

(*i*) in the case of a firm or other association of individuals, any one of the individual partners or members thereof;

(*ii*) in the case of a company, any one of the directors, except any independent director within the meaning of sub-section (*6*) of section 149 of the Companies Act, 2013; 18 of 2013.

(*iii*) in the case of a factory owned or controlled by the Central Government or any State Government, or any local authority, the person or persons appointed to manage the affairs of the factory by the Central Government, the State Government or the local authority or such other authority as may be prescribed by the Central Government,

shall be deemed to be the occupier:

Provided further that in the case of a ship which is being repaired, or on which maintenance work is being carried out, in a dry dock which is available for hire, the owner of the dock shall be deemed to be the occupier for all purposes except the matters as may be prescribed by the Central Government which are directly related to the condition of ship for which the owner of ship shall be deemed to be the occupier:

(*zt*) "office of the mine" means an office at the surface of the mine concerned;

(*zu*) "open cast working" means a quarry, that is to say, an excavation where any operation for the purpose of searching for or obtaining minerals has been or is being carried on, not being a shaft or an excavation which extends below superjacent ground;

(*zv*) "ordinarily employed" with reference to any establishment or part thereof, means the average number of persons employed per day in the establishment or part thereof during the preceding calendar year obtained by dividing the number of man days worked by the number of working days excluding rest days and other non-working days;

(*zw*) "owner", in relation to a mine, means any person who is the immediate proprietor or lessee or occupier of the mine or of any part thereof and in case of a mine the business whereof is being carried on by a liquidator or receiver, such liquidator or receiver; but does not include a person who merely receives a royalty, rent or fine from the mine, or is merely the proprietor of the mine, subject to any lease grant or licence for the working thereof, or is merely the owner of the soil and not interested in the minerals of the mine: but any contractor or sub-lessee for the working of a mine or any part thereof shall be subject to this Code in like manner as if he were an owner but not so as to exempt the former from any liability;

(*zx*) "plantation" means—

(*a*) any land used or intended to be used for—

(*i*) growing tea, coffee, rubber, cinchona or cardamom which admeasures five hectares or more;

(*ii*) growing any other plant, which admeasures five hectares or more and in which persons are employed or were employed on any day of the preceding twelve months, if, after obtaining the approval of the Central Government, the State Government, by notification, so directs.

Explanation.—Where any piece of land used for growing any plant referred to in this sub-clause admeasures less than five hectares and is

contiguous to any other piece of land not being so used, but capable of being so used, and both such pieces of land are under the management of the same employer, then, for the purposes of this sub-clause, the former piece of land shall be deemed to be a plantation, if the total area of both such pieces of land admeasures five hectares or more; and

(*b*) any land which the State Government may, by notification, declare and which is used or intended to be used for growing any plant referred to in sub-clause (*a*), notwithstanding that it admeasures less than five hectares:

Provided that no such declaration shall be made in respect of such land which admeasures less than five hectares immediately before the commencement of this Code; and

(*c*) offices, hospitals, dispensaries, schools and any other premises used for any purpose connected with any plantation within the meaning of sub-clause (*a*) and sub-clause (*b*); but does not include factory on the premises;

(*zy*) "prescribed" means prescribed by rules made by the appropriate Government under this Code;

(*zz*) "principal employer", where the contract labour is employed or engaged, means—

(*i*) in relation to any office or Department of the Government or a local authority, the head of that office or Department or such other officer as the Government or the local authority, may specify in this behalf;

(*ii*) in a factory, the owner or occupier of the factory and where a person has been named as the manager of the factory, the person so named;

(*iii*) in a mine, the owner or agent of the mine;

(*iv*) in relation to any other establishment, any person responsible for the supervision and control of the establishment;

(*zza*) "producer", in relation to audio-visual production, means the company, firm or other person by whom the arrangements necessary for producing such audio-visual (including the raising of finances and engaging audio-visual workers for producing audio-visual) are undertaken.

Explanation.—For the purposes of this clause, the expressions "company" and "firm" have the same meaning as respectively assigned to them in the Companies Act, 2013 and the Indian Partnership Act, 1932; 18 of 2013. 9 of 1932.

(*zzb*) "qualified medical practitioner" means a medical practitioner who possesses any recognised medical qualification as defined in clause (*i*) of section 2 of the Indian Medical Council Act, 1956 and who is enrolled on a Indian Medical Register as defined in clause (*e*) and on a State Medical Register as defined in clause (*f*) of the said section: 102 of 1956.

(*zzc*) "railway" means the railway as defined in clause (*31*) of section 2 of the Railways Act, 1989; 24 of 1989.

(*zzd*) "relay" means a set of two or more persons carrying out the same kind of work during different periods of the day and each such period is called a "shift";

(*zze*) "sales promotion employees" means any person by whatever name called employed or engaged in any establishment for hire or reward to do any work relating to promotion of sales or business, or both, but does not include any such person who,—

(*i*) being employed or engaged in a supervisory capacity, draws wages exceeding eighteen thousand rupees per mensem or an amount as may be notified by the Central Government from time to time; or

(*ii*) is employed or engaged mainly in a managerial or administrative capacity.

(*zzf*) "Schedule" means the Schedule appended to this Code;

(*zzg*) "serious bodily injury" means any injury which involves, or in all probability will involve, the permanent loss of any part or section of a body or the use of any part or section of a body, or the permanent loss of or injury to the sight or hearing or any permanent physical incapacity or the fracture of any bone or one or more joints or bones of any phalanges of hand or foot;

(*zzh*) "standards", "regulations", "rules", "bye-laws" and "orders" respectively means standards, regulations, rules, bye-laws and orders made or declared, as the case may be, under this Code;

(*zzi*) "telecommunication service" means the telecommunication service as defined in clause (*k*) of sub-section (*1*) of section 2 of the Telecom Regulatory Authority of India Act, 1997;

24 of 1997.

(*zzj*) "wages" means all remuneration whether by way of salaries, allowances or otherwise, expressed in terms of money or capable of being so expressed which would, if the terms of employment, express or implied, were fulfilled, be payable to a person employed in respect of his employment or of work done in such employment, and includes,—

(*i*) basic pay;

(*ii*) dearness allowance; and

(*iii*) retaining allowance, if any,

but does not include—

(*a*) any bonus payable under any law for the time being in force, which does not form part of the remuneration payable under the terms of employment;

(*b*) the value of any house-accommodation, or of the supply of light, water, medical attendance or other amenity or of any service excluded from the computation of wages by a general or special order of the appropriate Government;

(*c*) any contribution paid by the employer to any pension or provident fund, and the interest which may have accrued thereon;

(*d*) any conveyance allowance or the value of any travelling concession;

(*e*) any sum paid to the employed person to defray special expenses entailed on him by the nature of his employment;

(*f*) house rent allowance;

(*g*) remuneration payable under any award or settlement between the parties or order of a court or Tribunal;

(*h*) any overtime allowance;

(*i*) any commission payable to the employee;

(*j*) any gratuity payable on the termination of employment;

(*k*) any retrenchment compensation or other retirement benefit payable to the employee or any *ex gratia* payment made to him on the termination of employment:

Provided that, for calculating the wages under this clause, if payments made by the employer to the employee under sub-clauses (*a*) to (*i*) exceeds

one-half, or such other per cent. as may be notified by the Central Government, of the all remuneration calculated under this clause, the amount which exceeds such one-half, or the per cent. so notified, shall be deemed as remuneration and shall be accordingly added in wages under this clause:

Provided further that for the purpose of equal wages to all genders and for the purpose of payment of wages, the emoluments specified in sub-clauses (*d*), (*f*), (*g*) and (*h*) shall be taken for computation of wages.

Explanation.—Where an employee is given in lieu of the whole or part of the wages payable to him, any remuneration in kind by his employer, the value of such remuneration in kind which does not exceed fifteen per cent. of the total wages payable to him, shall be deemed to form part of the wages of such employee:

(*zzk*) "week" means a period of seven days beginning at midnight on Saturday night or such other night as may be approved in writing for a particular area by the Chief Inspector-cum-Facilitator;

(*zzl*) "worker" means any person employed in any establishment to do any manual, unskilled, skilled, technical, operational, clerical or supervisory work for hire or reward, whether the terms of employment be express or implied, and includes working journalists and sales promotion employees, but does not include any such person—

(*i*) who is subject to the Air Force Act, 1950, or the Army Act, 1950, or the Navy Act, 1957; or 45 of 1950. 46 of 1950. 62 of 1957.

(*ii*) who is employed in the police service or as an officer or other employee of a prison; or

(*iii*) who is employed mainly in a managerial or administrative capacity; or

(*iv*) who is employed in a supervisory capacity drawing wage exceeding eighteen thousand rupees per month or an amount as may be notified by the Central Government from time to time;

(*zzm*) "Working Journalist" means a person whose principal avocation is that of a journalist and who is employed as such, either whole-time or part-time, in, or in relation to, one or more newspaper establishment, or other establishment relating to any electronic media or digital media such as newspaper or radio or other likemedia and includes an editor, a leader-writer, news editor, sub-editor, feature-writer, copy-tester, reporter, correspondent, cartoonist, news-photographer and proof-reader, but does not include any such person who is employed mainly in a managerial, supervisory or administrative capacity;

(*2*) For the purposes of this Code, a person working or employed in or in connection with mine is said to be working or employed—

(*a*) "below ground" if he is working or employed—

(*i*) in a shaft which has been or is in the course being sunk; or

(*ii*) in any excavation which extends below superjacent ground; and

(*b*) "above ground" if he is working in an opencast working or in any other manner not specified in clause (*a*).

CHAPTER II

REGISTRATION

Registration of certain establishments.

3. (*1*) Every employer of any establishment,—

(*a*) which comes into existence after the commencement of this Code: and

(*b*) to which this Code shall apply,

shall, within sixty days from the date of such applicability of this Code, make an application electronically to the registering officer appointed by the appropriate Government (hereinafter referred to as the registering officer) for the registration of such establishment:

Provided that the registering officer may entertain any such application for registration after the expiry of such period on payment of such late fees as may be prescribed by the appropriate Government.

(*2*) Every application under sub-section (*1*) shall be submitted to the registering officer in such manner, in such form, containing such particulars including the information relating to the employment of inter-State migrant workers and shall be accompanied by such fees as may be prescribed by the appropriate Government.

(*3*) After the receipt of an application under sub-section (*1*), the registering officer shall register the establishment and issue a certificate of registration electronically to the employer thereof in such form and within such time and subject to such conditions as may be prescribed by the Central Government:

Provided that if the registering officer fails to register an establishment under the application so made or to entertain the application within the prescribed period, then, such establishment shall be deemed to have been registered under this Code immediately on the expiration of such period and the electronic certificate of registration shall be auto generated and the responsibility of such failure shall be on the registering officer.

(*4*) Any change in the ownership or management or in any particulars referred to in sub-section (*2*) which occurs after the registration of an establishment under this Code, shall be intimated by the employer electronically to the registering officer within thirty days of such change in such form as may be prescribed by the Central Government and thereafter the registering officer shall make amendment in the certificate of registration electronically in such manner as may be prescribed by the Central Government.

(*5*) The employer of an establishment shall, within thirty days of the closing of the establishment—

(*a*) inform the closing of such establishment; and

(*b*) certify payment of all dues to the workers employed in such establishment,

to the registering officer in such manner as may be prescribed by the Central Government and the registering officer shall, on receiving such information and certificate remove such establishment from the register of establishments maintained by him and cancel the registration certificate of the establishment within sixty days from the receipt of such information :

Provided that if the registering officer fails to cancel the registration certification of the establishment under this sub-section within such sixty days, then, the registration certificate of such establishment shall be deemed to have been cancelled under this Code immediately on the expiration of such period of sixty days and the cancellation of registration certificate shall be auto generated and the responsibility of such failure shall be on the registering officer.

(*6*) If an employer of an establishment—

(*a*) has obtained the registration of his establishment by misrepresentation or suppression of any material fact, or

(*b*) has obtained the registration of his establishment so fraudulently or otherwise that the registration has become useless or ineffective to run the establishment.

then, in case of clause (*a*) such misrepresentation or suppression of any material fact shall be deemed to be the contravention of the provisions of this Code for prosecution of the employer under section 94 without affecting the registration and running of the establishment and in case of clause (*b*) the registering officer may, after giving an opportunity to the employer of the establishment to be heard, revoke the registration by an order and such process for revocation shall be completed by the registering officer within sixty days from coming into his notice the facts specified in clause (*b*).

(*7*) No employer of an establishment who—

(*a*) has not registered the establishment under this section; or

(*b*) has not preferred appeal under section 4 against the cancellation of the registration certificate of the establishment under sub-section (*5*) or revocation of the registration of the establishment under sub-section (*6*) or the appeal so preferred has been dismissed,

shall employ any employee in the establishment.

(*8*) Notwithstanding anything contained in this Code, where any establishment, to which this Code applies, has already been registered under any—

(*a*) Central Labour law; or

(*b*) any other law which may be notified by the Central Government and which applies to the establishment which is in existence at the time of the commencement of this Code,

shall be deemed to have been registered under the provisions of this Code, subject to the condition that the registration holder provides the details of registration to the concerned registering officer within such time and in such form as may be prescribed.

Appeal.

4. (*1*) Any person aggrieved by an order made under section 3 may, within thirty days from the date on which the order is communicated to him, prefer an appeal to an appellate officer who shall be a person notified in this behalf by the appropriate Government:

Provided that the appellate officer may entertain the appeal after the expiry of the said period of thirty days, if he is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

(*2*) On receipt of an appeal under sub-section (*1*), the appellate officer shall, after giving the appellant an opportunity of being heard, dispose of the appeal within a period of thirty days from the date of receipt of such appeal.

Notice by employer of commencement and cessation of operation.

5. (*1*) No employer of an establishment being factory or mine or relating to contract labour or building or other construction work shall use such establishment to commence the operation of any industry, trade, business, manufacturing or occupation thereon without sending notice of such purpose in such form and manner and to such authority and within such time as may be prescribed and shall also intimate the cessation thereof to the said authority in such manner as may be prescribed by the appropriate Government.

(*2*) The notice or intimation under sub-section (*1*) shall be given electronically.

CHAPTER III

DUTIES OF EMPLOYER AND EMPLOYEES, ETC.

Duties of employer.

6. (*1*) Every employer shall.—

(*a*) ensure that workplace is free from hazards which cause or are likely to cause injury or occupational disease to the employees;

(*b*) comply with the occupational safety and health standards declared under section 18 or the rules, regulations, bye-laws or orders made under this Code:

(*c*) provide such annual health examination or test free of costs to such employees of such age or such class of employees of establishments or such class of establishments, as may be prescribed by the appropriate Government:

(*d*) provide and maintain, as far as is reasonably practicable, a working environment that is safe and without risk to the health of the employees;

(*e*) ensure the disposal of hazardous and toxic waste including disposal of e-waste:

(*f*) issue a letter of appointment to every employee on his appointment in the establishment, with such information and in such form as may be prescribed by the appropriate Government and where an employee has not been issued such appointment letter on or before the commencement of this Code, he shall, within three months of such commencement, be issued such appointment letter;

(*g*) ensure that no charge is levied on any employee, in respect of anything done or provided for maintenance of safety and health at workplace including conduct of medical examination and investigation for the purpose of detecting occupational diseases;

(*h*) relating to factory, mine, dock work, building or other construction work or plantation, ensure and be responsible for the safety and health of employees, workers and other persons who are on the work premises of the employer, with or without his knowledge, as the case may be.

(*2*) Without prejudice to the generality of the provisions of sub-section (*1*), the duties of an employer shall particularly in respect of factory, mines, dock, building or other construction work or plantation include—

(*a*) the provision and maintenance of plant and systems of work in the workplace that are safe and without risk to health:

(*b*) the arrangements in the workplace for ensuring safety and absence of risk to health in connection with the use, handling, storage and transport of articles and substances:

(*c*) the provision of such information, instruction, training and supervision as are necessary to ensure the health and safety of all employees at work;

(*d*) the maintenance of all places of work in the workplace in a condition that is safe and without risk to health and the provision and maintenance of such means of access to, and egress from, such places as are safe and without such risk:

(*e*) the provision, maintenance or monitoring of such working environment in the workplace for the employees that is safe, without risk to health as regards facilities and arrangements for their welfare at work.

Duties and responsibilities of owner, agent and manager in relation to mine.

7. (*1*) The owner and agent of every mine shall jointly and severally be responsible for making financial and other provisions and for taking such other steps as may be necessary for compliance with the provisions of this Code and the rules, regulations, bye-laws and orders made thereunder, relating to mine.

(*2*) In the event of any contravention by any person whosoever of any of the provisions of this Code or of the rules, regulations, bye-laws or orders made thereunder, relating to mine, except those which specifically require any person to do any act or thing or prohibit any person from doing an act or thing, besides the person who contravenes, then, each of the following persons shall also be deemed to be guilty of such contravention unless he

proves that he had used due diligence to secure compliance with the provisions and had taken reasonable means to prevent such contravention, namely:—

(*a*) the official or officials appointed to perform duties of supervision in respect of the provisions contravened;

(*b*) the manager of the mine;

(*c*) the owner and agent of the mine;

(*d*) the person appointed, if any, to carry out the responsibility under section 24.

(*3*) It shall not be a defence in any proceedings brought against the owner or agent of a mine under this section that the manager and other officials have been appointed in accordance with the provisions of this Code or that a person to carry the responsibility under section 24 has been appointed.

Duties of designers, manufacturers, importers or suppliers.

8. (*1*) Every person who designs, manufactures, imports or supplies any article for use in any establishment shall—

(*a*) ensure so far as is reasonably practicable, that the article is so designed and constructed in the establishment as to be safe and without risk to the health of the workers when properly used;

(*b*) carry out or arrange for the carrying out of such tests and examination in the establishment as may be considered necessary for the effective implementation of the provisions of clause (*a*);

(*c*) take steps as may be necessary to ensure that adequate information will be available—

(*i*) in connection with the use of the article in any establishment;

(*ii*) about the use for which such article is designed and tested; and

(*iii*) about any conditions necessary to ensure that the article, when put to such use, shall be safe, and without risk to the health of the workers:

Provided that where an article is designed or manufactured outside India, then it shall be obligatory on the part of the importer to see—

(*A*) that the article conforms to the same standards of such article manufactured in India; or

(*B*) if the standards adopted in the country outside India for the manufacture of such article is above the standards adopted in India, that the article conforms to such standards in such country;

(*C*) if there is no standard of such article in India, then, the article conforms to the standard adopted in the country from where it is imported at its national level.

(*2*) The designer, manufacturer, importer or supplier shall also comply with such duties as the Central Government may, in consultation with the National Occupational Safety and Health Advisory Board referred to in sub-section (*1*) of section 16, by regulations specify.

(*3*) Every person, who undertakes to design or manufacture any article and substance for use in any factory, may carry out or arrange for the carrying out of necessary research with a view to the discovery and, so far as is reasonably, practicable, the elimination or minimisation of any risks to the health or safety of the workers to which the design or manufacture of article and substance may give rise to such risk.

(*4*) Nothing contained in sub-sections (*1*) and (*2*) shall be construed to require a person to repeat the testing, examination or research which has been carried out otherwise than by him or at his instance in so far as it is reasonable for him to rely on the results thereof for the purposes of the said sub-sections.

(*5*) Any duty imposed on any person by sub-sections (*1*) and (*2*) shall extend only to things done in the course of business carried on by him and to matters within his control.

(*6*) Every person,—

(*a*) who erects or installs any article for use in a factory, shall ensure, so far as practicable, that such article so erected or installed does not make it unsafe or a risk to health when that article is used by the persons in such factory;

(*b*) who manufactures, imports or supplies any substance for use in any factory shall—

(*i*) ensure, so far as practicable, that such substance when used in the factory does not make it unsafe or a risk to health of persons working in such factory;

(*ii*) carry out or arrange for carrying out of such tests and examination in relation to such substance as may be necessary;

(*iii*) take such steps as are necessary to secure that the information about the results of tests carried out in connection with the use of the substance as referred to in sub-clause (*ii*) is available in a factory along with conditions necessary to ensure its safe use and no risks to health:

(*c*) who undertakes the manufacture of any substance for use in any factory shall carry out or arrange for carrying out of any necessary research with a view to discover and, so far as practicable, to ensure the elimination or minimisation of any risks to health or safety to which the substance may give rise out of such manufacture or research:

(*7*) For the purposes of this section, an article and substance is not to be regarded as properly used, if they are used without regard to any information or advice relating to their use which has been made available by the person who has designed, manufactured, imported or supplied the article and substance.

Explanation.—For the purpose of this section—

(*a*) "article" shall include plant and machinery;

(*b*) "substance" means any natural or artificial substance whether in a solid or liquid form or in the form of a gas or vapour; and

(*c*) "substance for use in any factory" means such substance, whether or not intended for use by persons working in a factory.

Duties of architect, project engineer and designer.

9. (*1*) It shall be the duty of the architect, project engineer or designer responsible for any building or other construction work or the design of any project or part thereof relating to such building or other construction work to ensure that, at the planning stage, due consideration is given to the safety and health aspects of the building workers and employees who are employed in the erection, operation and execution of such projects and structures as the case may be.

(*2*) Adequate care shall be taken by the architect, project engineer and other professionals involved in the project referred to in sub-section (*1*), not to include anything in the design which would involve the use of dangerous structures or other processes or materials, hazardous to health or safety of building workers and employees during the course of erection, operation and execution as the case may be.

(3) It shall also be the duty of the professionals, involved in designing the buildings structures or other construction projects, to take into account the safety aspects associated with the maintenance and upkeep of the structures and buildings where maintenance and upkeep may involve such hazards as may be notified by the appropriate Government.

Notice of certain accident.

10. (1) Where at any place in an establishment, an accident occurs which causes death, or which causes any bodily injury by reason of which the person injured is prevented from working for a period of forty-eight hours or more immediately following the accident or which is of such nature as may be prescribed by the appropriate Government, then,—

(a) employer or owner or agent or manager referred to in section 67 of such establishment if it is mine; or

(b) employer or manager in relation to such establishment if it is factory or relates to dock work; or

(c) the employer of a plantation or an establishment relating to building or other construction or any other establishment,

shall send notice thereof to such authorities, in such manner and within such time, as may be prescribed by the appropriate Government.

(2) Where a notice given under sub-section (1) relates to an accident causing death in a plantation or an establishment relating to building or other construction work or any other establishment, the authority to whom the notice is sent shall make an inquiry into the occurrence within two months of the receipt of the notice or if there is no such authority, the Chief Inspector-cum-Facilitator shall cause the Inspector-cum-Facilitator to make an inquiry within the said period.

Notice of certain dangerous occurrences.

11. Where in an establishment there is any dangerous occurrence of such nature, (whether causing any bodily injury or disability, or not) the employer shall send notice thereof to such authorities, and in such form and within such time, as may be prescribed by the appropriate Government.

Notice of certain diseases.

12. (1) Where any worker in an establishment contracts any disease specified in the Third Schedule, the employer of the establishment shall send notice thereof to such authorities, and in such form and within such time, as may be prescribed by the appropriate Government.

(2) If any qualified medical practitioner attends on a person, who is or has been employed in an establishment, and who is, or is believed by the qualified medical practitioner, to be suffering from any disease specified in the Third Schedule, the medical practitioner shall without delay send a report in writing to the office of the Chief Inspector-cum-Facilitator in such form and manner and within such time as may be prescribed by the appropriate Government.

(3) If any qualified medical practitioner fails to comply with the provisions of sub-section (2), he shall be punishable with penalty which may extend to ten thousand rupees.

Duties of employee.

13. Every employee at workplace shall,—

(a) take reasonable care for the health and safety of himself and of other persons who may be affected by his acts or omissions at the workplace;

(b) comply with the safety and health requirements specified in the standards;

(c) co-operate with the employer in meeting the statutory obligations of the employer under this Code;

(d) if any situation which is unsafe or unhealthy comes to his attention, as soon as practicable, report such situation to his employer or to the health and safety representative and in case of mine, agent or manager referred to in section 67, safety officers or an official for his workplace or section thereof, as the case may be, who

shall report it to the employer in the manner as may be prescribed by the appropriate Government;

(*e*) not wilfully interfere with or misuse or neglect any appliance, convenience or other thing provided at workplace for the purpose of securing the health, safety and welfare of workers;

(*f*) not do, wilfully and without reasonable cause, anything, likely to endanger himself or others; and

(*g*) perform such other duties as may be prescribed by the appropriate Government.

Rights of employee.

14. (*1*) Every employee in an establishment shall have the right to obtain from the employer information relating to employee's health and safety at work and represent to the employer directly or through a member of the Safety Committee as constituted under section 22, if constituted by the employer for such purpose, regarding inadequate provision for protection of his safety or health in connection with the work activity in the workplace, and if not satisfied, to the Inspector-cum-Facilitator.

(*2*) Where the employee referred to in sub-section (*1*) in any workplace has reasonable apprehension that there is a likelihood of imminent serious personal injury or death or imminent danger to health, he may bring the same to the notice of his employer directly or through a member of the Safety Committee referred to in sub-section (*1*) and simultaneously bring the same to the notice of the Inspector-cum-Facilitator.

(*3*) The employer or any employee referred to in sub-section (*1*) shall take immediate remedial action if he is satisfied about the existence of such imminent danger and send a report forthwith of the action taken to the Inspector-cum-Facilitator in such manner as may be prescribed by the appropriate Government.

(*4*) If the employer referred to in sub-section (*3*) is not satisfied about the existence of any imminent danger as apprehended by his employees, he shall, nevertheless, refer the matter forthwith to the Inspector-cum-Facilitator whose decision on the question of the existence of such imminent danger shall be final.

Duty not to interfere with or misuse things.

15. No person shall intentionally or recklessly interfere with, damage or misuse anything which is provided in the interest of health, safety or welfare under this Code.

CHAPTER IV

OCCUPATIONAL SAFETY AND HEALTH

National Occupational Safety and Health Advisory Board.

16. (*1*) The Central Government shall, by notification, constitute the National Occupational Safety and Health Advisory Board (hereinafter in this Code referred to as the National Board) to discharge the functions conferred on it by or under this Code and to advise the Central Government on the matters relating to—

(*a*) standards, rules and regulations to be declared or framed under this Code;

(*b*) implementation of the provisions of this Code and the standards, rules and regulations relating thereto;

(*c*) the issues of policy and programme relating to occupational safety and health referred to it, from time to time, by the Central Government; and

(*d*) any other matter in respect of this Code referred to it, from time to time, by the Central Government.

(*2*) The National Board shall consist of—

(*a*) Secretary, Ministry of Labour and Employment—Chairperson *ex officio*;

(*b*) Director General, Factory Advice Service and Labour Institutes, Mumbai—Member *ex officio*;

(*c*) Director General, Mines Safety, Dhanbad—Member *ex officio*;

(*d*) Chief Controller of Explosives, Nagpur—Member *ex officio*;

(*e*) Chairman, Central Pollution Control Board, New Delhi—Member *ex officio*;

(*f*) Chief Labour Commissioner (Central), New Delhi—Member *ex officio*;

(*g*) Principal Secretaries dealing with labour matters of four States (by rotation as the Central Government may deem fit)—Member *ex officio*;

(*h*) Director General, Employee's State Insurance Corporation, New Delhi—Member *ex officio*;

(*i*) Director General, Health Services, New Delhi—Member *ex officio*;

(*j*) five representatives of employers—Member *ex officio*;

(*k*) five representatives of employees—Member *ex-officio*;

(*l*) a representative of professional body associated with the matter for which standards, rules, policies being framed—Member;

(*m*) five eminent persons connected with the field of Occupational Safety and Health, or representatives from reputed research institutions or similar other discipline—Member;

(*n*) special invitees from the State Government or the Government of Union territory for seeking inputs in specific matters or industry or sector which is predominant in that State or Union territory—Member;

(*o*) Joint Secretary, Ministry of Labour and Employment—Member Secretary *ex officio*.

(*3*) The terms of office of the Members referred to in clauses (*g*), (*j*), (*k*), (*l*) and (*m*) of sub-section (*2*) shall be of three years and the procedure for their nomination, and discharge of their functions shall be such as may be prescribed by the Central Government.

(*4*) The Central Government may, in consultation with the National Board, determine the number, nature and categories of other officers and employees required to assist the National Board in the efficient discharge of its functions and terms and conditions of service of such officers and employees of the National Board shall be such as may be prescribed by the Central Government.

(*5*) The Central Government may constitute as many technical committees or advisory committees consisting of such number of members having such qualifications as may be prescribed by the Central Government, to assist the National Board in discharge of its function specified in sub-section (*1*).

(*6*) The National Board shall consult the State Governments whose Principal Secretaries are the Members of the National Board as required under clause (*g*) of sub-section (*2*) of section 16 and in case of specific issues relating to plantation, factories and like other issues, the State Government concerned may be invited by the National Board as special invitee for obtaining their inputs on such issues.

State Occupational Safety and Health Advisory Board.

17. (*1*)The State Government shall constitute a Board to be called the State Occupational Safety and Health Advisory Board (hereinafter referred to as "State Advisory Board") to advise the State Government on such matters arising out of the administration of this Code as may be referred to it by the State Government.

(*2*) The constitution, procedure and other matters relating to State Advisory Board shall be such as may be prescribed by the State Government.

(3) The State Government may constitute as many technical committees or advisory committees of the State Advisory Board including site appraisal committees, consisting of such number of members and having such qualifications as may be prescribed, to assist the State Government or State Advisory Board in discharge of their functions relating to the area falling within their respective jurisdictions.

Occupational safety and health standards

18. (1) The Central Government shall declare, by notification, standards on occupational safety and health for workplaces relating to factory, mine, dock work, *beedi* and cigar, building and other construction work and other establishments.

(2) In particular and without prejudice to the generality of the power to declare standards to be followed under sub-section (1), such standards shall relate to—

(*a*) physical, chemical, biological and any other hazards to be dealt with for the working life of employee to ensure to the extent feasible on the basis of the best available evidence or functional capacity, that no employee will suffer material impairment of health or functional capacity even if such employee has regular exposure to such hazards;

(*b*) the norms—

(*i*) appraising the hazards to employees and users to whom such hazards are exposed;

(*ii*) relating to relevant symptoms and appropriate energy treatment and proper conditions and precautions of safe use or exposure;

(*iii*) for monitoring and measuring exposure of employees to hazards;

(*iv*) for medical examination and other tests which shall be made available, by the employer or at his cost, to the employees exposed to hazards; and

(*v*) for hazard evaluation procedures like safety audit, hazard and operability study, fault free analysis, event free analysis and such other requirements;

(*c*) medical examination including criteria for detection and reporting of occupational diseases to be extended to the employees even after he ceases to be in employment, if he is suffering from an occupational disease which arises out of or in the course of employment;

(*d*) such aspects of occupational safety and health relating to workplaces which the Central Government considers necessary on the report of the authority designated by such Government for such purpose;

(*e*) such safety and health measures as may be required having regard to the specific conditions prevailing at the workplaces relating to mine, factory, building and other construction work, *beedi* and cigar, dock work or any other establishments notified; and

(*f*) matters specified in the Second Schedule to this Code.

(3) Notwithstanding anything contained in section 131, the Central Government may, on the basis of the recommendation of the National Board and after notifying its intention so to do for not less than forty-five days', by notification, amend the Second Schedule.

(4) The State Government may, with the prior approval of the Central Government, by notification amend the standards made under sub-section (1) and sub-section (2) for the establishment for which it is the appropriate Government situated in the State.

Research related activities.

19. It shall be the duty of such institutions in the field of occupational safety and health as the Central or State Government may notify to conduct research, experiments and demonstrations relating to occupational safety and health and thereafter submit their recommendations to the Central Government or the State Government, as the case may be:

Provided that the State Government shall consult National Board before notifying conduct of research, experiments and demonstration relating to occupational safety and health.

Safety and occupational health surveys.

20. (*1*) At any time during the normal working hours of an establishment or at any other time as he may deem necessary,—

(*a*) the Chief Inspector-cum-Facilitator in the case of factory or mine; or

(*b*) the Director General of Factory Advice Service and Labour Institute in the case of factory; or

(*c*) the Director General of Mines Safety in the case of mine; or

(*d*) the Director General of Health Services in the case of factory or mine; or

(*e*) such other officer as may be authorised by the appropriate Government in the case of any other establishment or class of establishments,

after giving notice in writing to the employer, conduct survey of the factory or mine or such other establishment or class of establishments and such employer shall afford all facilities for such survey, including facilities for the examination and testing of plant and machinery and collection of samples and other data relevant to the survey.

Explanation.—For the purposes of this sub-section, the expression "employer" includes manager for the factory or in the case of any other establishment or class of establishments such person who is for the time being responsible for the safety and the occupational health of such other establishment or class of establishments, as the case may be.

(*2*) For the purpose of facilitating surveys under sub-section (*1*) every worker shall, if so required by the person conducting the survey, present himself to undergo such medical examination as may be considered necessary by such person and furnish all information in his possession which is relevant to the survey.

(*3*) Any time spent by a worker for undergoing medical examination or furnishing information under sub-section (*2*) shall, for the purpose of calculating wages and extra wages for overtime work, be deemed to be working hour for him.

Explanation.—For the purposes of this section, the report submitted to the appropriate Government by the person conducting the survey under sub-section (*1*) shall be deemed to be a report submitted by an Inspector-cum-Facilitator under this Code.

Collection of statistics and portal for inter-State migrant workers.

21. (*1*) For the purposes of this Code, the Central Government and the State Government shall collect, compile and analyse occupational safety and health statistics in such form and manner as may be prescribed.

(*2*) The Central Government and the State Governments shall maintain the database or record, for inter-State migrant workers, electronically or otherwise in such portal and in such form and manner as may be prescribed by the Central Government:

Provided that an inter-State migrant worker may register himself as an inter-State migrant worker on such portal on the basis of self-declaration and Aadhaar:

Provided further that the workers who have migrated from one State to any other State and are self-employed in that other State may also register themselves on that portal.

Explanation.—For the purposes of this sub-section, the expression "Aadhaar" shall have the same meaning as assigned to it in clause (*a*) of section 2 of the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016.

18 of 2016.

Safety Committee and safety officers.

22. (*1*) The appropriate Government may, by general or special order, require any establishment or class of establishments to constitute in the prescribed manner a Safety Committee consisting of representatives of employers and workers engaged in such establishment in such manner that the number of representatives of workers on the Committee shall not be less than the number of representatives of the employer and the representatives of the workers shall be chosen in such manner and for such purpose as may be prescribed by the appropriate Government.

(*2*) In every establishment which is a—

(*a*) factory wherein five hundred workers or more: or

(*b*) factory carrying on hazardous process wherein two hundred fifty workers or more: or

(*c*) building or other construction work wherein two hundred fifty workers or more; or

(*d*) mine wherein one hundred workers or more, are ordinarily employed,

the employer shall also appoint such number of safety officers, who shall possess such qualifications and perform such duties, as may be prescribed by appropriate Government.

CHAPTER V

HEALTH, SAFETY AND WORKING CONDITIONS

Responsibility of employer for maintaining health, safety and working conditions.

23. (*1*) The employer shall be responsible to maintain in his establishment such health, safety and working conditions for the employees as may be prescribed by the Central Government.

(*2*) Without prejudice to the generality of the power conferred under sub-section (*1*), the Central Government may prescribe for providing all or any of the following matters in the establishment or class of establishments, namely:—

(*i*) cleanliness and hygiene;

(*ii*) ventilation, temperature and humidity;

(*iii*) environment free from dust, noxious gas, fumes and other impurities;

(*iv*) adequate standard of humidification, artificially increasing the humidity of the air, ventilation and cooling of the air in work rooms;

(*v*) potable drinking water;

(*vi*) adequate standards to prevent overcrowding and to provide sufficient space to employees or other persons, as the case may be, employed therein;

(*vii*) adequate lighting;

(*viii*) sufficient arrangement for latrine and urinal accommodation to male, female and transgender employee separately and maintaining hygiene therein;

(*ix*) effective arrangements for treatment of wastes and effluents; and

(*x*) any other arrangement which the Central Government considers appropriate.

CHAPTER VI

WELFARE PROVISIONS

Welfare facilities in the establishment, etc.

24. (*1*) The employer shall be responsible to provide and maintain in his establishment such welfare facilities for the employees as may be prescribed by the Central Government, including,—

(*i*) adequate and suitable facilities for washing to male and female employees separately;

(*ii*) bathing places and locker rooms for male, female and transgender employees separately;

(*iii*) place of keeping clothing not worn during working hours and for the drying of wet clothing;

(*iv*) sitting arrangements for all employees obliged to work in a standing position;

(*v*) facilities of canteen in an establishment for employees thereof, wherein one hundred or more workers including contract labourers are ordinarily employed:

(*vi*) in case of mines, medical examination of the employees employed or to be employed in the mines, before their employment and at specific intervals;

(*vii*) adequate first-aid boxes or cupboards with contents readily accessible during all working hours; and

(*viii*) any other welfare measures which the Central Government considers, under the set of circumstances, as required for decent standard of life of the employees.

(*2*) Without prejudice to the generality of the powers referred to under sub-section (*1*), the Central Government may also prescribe for the following matters, namely:—

(*i*) ambulance room in every factory, mine, building or other construction work wherein more than five hundred workers are ordinarily employed:

(*ii*) medical facilities at the operating centres and halting stations, uniforms, raincoats and other like amenities for protection from rain or cold for motor transport workers;

(*iii*) adequate, suitable and separate shelters or rest-rooms for male, female and transgender employees and lunch-room in every factory and mine wherein more than fifty workers are ordinarily employed and in motor transport undertaking wherein employee is required to halt at night;

(*iv*) the appointment of welfare officer in every factory, mine or plantation wherein two hundred and fifty or more workers are ordinarily employed and the qualification, conditions of service and duties of such welfare officer;

(*v*) for providing by the employer temporary living accommodation, free of charges and within the work site or as near to it as may be possible, to all building workers employed by him and for causing removal or demolition of such temporary living accommodation and for returning by the employer the possession of any land obtained by him for such purpose from Municipal Board or any other local authority;

(*vi*) for payment by the principal employer the expenses incurred on providing the accommodation to the contractor, where the building or other construction work is done through the contractor;

(*vii*) any other matter which may be prescribed.

(*3*) The Central Government may make rules to provide for the facility of creche having suitable room or rooms for the use of children under the age of six years of the employees at suitable location and distance either separately or along with common facilities in establishments wherein more than fifty workers are ordinarily employed:

Provided that an establishment can avail common crèche facility of the Central Government, State Government, municipality or private entity or provided by non-Governmental organisation or by any other organisation or group of establishments may pool their resources for setting up of common crèche in the manner as they may agree for such purpose.

CHAPTER VII

HOURS OF WORK AND ANNUAL LEAVE WITH WAGES

Daily and weekly working hours, leave, etc.

25. (*1*) No worker shall be required or allowed to work, in any establishment or class of establishment for more than—

(*a*) eight hours in a day; and

(*b*) the period of work in each day under clause (*a*) shall be so fixed, as not to exceed such hours, with such intervals and spread overs , as may be notified by the appropriate Government:

Provided that subject to clause (*a*) in the case of mines,—

(*i*) the persons employed below ground in a mine shall not be allowed to work for more than such hours as may be notified by the Central Government in any day;

(*ii*) no work shall be carried on below ground in any mine except by a system of shifts so arranged that the period of work for each shift is not spread over more than the daily maximum hours as notified under clause (*i*);

(*iii*) no person employed in a mine shall be allowed to be present in any part of a mine below ground except during the periods of work shown in respect of him in the register maintained under clause (*a*) of section 33:

Provided further that subject to clause (*a*) that the hours of work in case of motor transport worker shall include—

(*i*) the time spent in work done during the running time of the transport vehicle;

(*ii*) the time spent in subsidiary work; and

(*iii*) period of mere attendance at terminals of less than fifteen minutes.

Explanation.—For the purposes of this sub-section—

(*a*) "running time" in relation to a working day means the time from the moment a transport vehicle starts functioning at the beginning of the working day until the moment when the transport vehicle ceases to function at the end of the working day, excluding any time during which the running of the transport vehicle is interrupted for a period exceeding such duration as may be prescribed by the Central Government during which period the persons who drive, or perform any other work in connection with the transport vehicle are free to dispose of their time as they please or are engaged in subsidiary work;

(*b*) "subsidiary work" means the work in connection with a transport vehicle, its passengers or its load which is done outside the running time of the transport vehicle, including in particular—

(*i*) the work in connection with accounts, paying of cash, signing of registers, handover of service sheets, the checking of tickets and other similar work;

(*ii*) taking over and garaging of the transport vehicles;

(*iii*) travelling from the place where a person signs on to the place where he takes over the transport vehicle and from the place where he leaves the transport vehicle to the place where he signs off;

(*iv*) work in connection with the upkeep and repair of the transport vehicle; and

(*v*) the loading and unloading of the transport vehicle;

(*c*) "period of mere attendance" means the period during which a person remains at his post solely in order to reply to possible calls or to resume action at the time fixed in the duty schedule.

(*2*) Notwithstanding anything contained in sub-section (*1*), the hours of work for working journalist shall, subject to a maximum of one hundred and forty-four hours of work during any period of four consecutive weeks and a period of not less than twenty-four consecutive hours of rest during any period of seven consecutive days, be such as may be prescribed by the Central Government.

(*3*) Notwithstanding anything contained in sub-sections (*1*) and (*2*), a sales promotion employee or the working journalist,—

(*i*) in addition to such holidays, casual leave or other kinds of leave as may be prescribed by the Central Government, shall be granted, if requested for—

(*a*) earned leave on full wages for not less than one-eleventh of the period spent on duty;

(*b*) leave on medical certificate on one-half of the wages for not less than one-eighteenth of the period of service;

(*ii*) may accumulate earned leave up to such maximum limit as may be prescribed by the Central Government;

(*iii*) shall be entitled for the limit up to which the earned leave may be either encashed or availed of at a time by him and the reasons for which such limit may be exceeded shall be such as may be prescribed by the Central Government;

(*iv*) shall.—

(*a*) when he voluntarily relinquishes his post or retires from service; or

(*b*) when his services are terminated for any reason whatsoever (not being termination as punishment),

be entitled to cash compensation, subject to such conditions and restrictions as may be prescribed by the Central Government (including conditions by way of specifying the maximum period for which such cash compensation shall be payable), in respect of the earned leave earned by him and not availed of;

(*v*) who dies while in service, his heirs shall be entitled to cash compensation for the earned leave earned by him and not availed of his heirs shall be paid the cash compensation in respect of any period of earned leave for which he or his heirs, is or are entitled to cash compensation under clause (*iv*) or clause (*v*), which shall be an amount equal to the wages due to him for such period.

(*4*) Notwithstanding anything contained in this section, the working hours of an adolescent worker shall be regulated in accordance with the provisions of the Child and Adolescent Labour (Prohibition and Regulation) Act, 1986. 61 of 1986.

Weekly and compensatory holidays.

26. (*1*) No worker shall be allowed to work in an establishment for more than six days in any one week:

Provided that in any motor transport undertaking, an employer may, in order to prevent any dislocation of a motor transport service, require a worker to work on any day of weekly holiday which is not a holiday so arranged that the worker does not work for more than ten days consecutively without a holiday for a whole day intervening.

(*2*) The appropriate Government may, by notification, exempt such workers as it thinks fit from the provisions of sub-section (*1*), subject to such conditions as may be prescribed.

(3) Where, as a result of the passing of an order or the making of a rule under the provisions of this Code exempting an establishment or the workers therein from the provisions of sub-section (1), a worker is deprived of any of the weekly holidays, the worker shall be allowed, within the month in which the holidays were due or within the two months immediately following that month, compensatory holidays of equal number to the holidays, so deprived.

Extra wages for overtime.

27. There shall be paid wages at the rate of twice the rate of wages in respect of overtime work, where a worker works in an establishment or class of establishment for more than such hours of work in any day or in any week as may be prescribed by the appropriate Government and the period of overtime work shall be calculated on a daily basis or weekly basis, whichever is more favourable to such worker:

Provided that a worker shall be required to work overtime by the employer subject to the consent of such worker for such work:

Provided further that the appropriate Government may prescribe the total number of hours of overtime.

Night shifts.

28. Where a worker in an establishment works on a shift which extends beyond midnight,—

(*a*) for the purposes of section 26, a weekly holiday for a whole day shall mean in his case a period of twenty-four consecutive hours beginning when his shift ends;

(*b*) the following day for him shall be deemed to be the period of twenty-four hours beginning when such shift ends, and the hours he has worked after midnight shall be counted in the previous day.

Prohibition of overlapping shifts.

29. (1) The work shall not be carried on in any establishment by means of a system of shifts so arranged that more than one relay of workers is engaged in work of the same kind at the same time.

(2) The appropriate Government or subject to the approval of the appropriate Government, the Chief Inspector-cum-Facilitator, may, by written order and for the reasons specified therein, exempt on such conditions as may be deemed expedient, any establishment or class of establishments or any department or section of an establishment or any category or description of workers therein from the provisions of sub-section (1):

Provided that the provisions of this sub-section shall not apply to mines.

Restriction on double employment in factory and mine.

30. No worker shall be required or allowed to work in a mine or factory if he has already been working in any other such similar establishment within the preceding twelve hours, save in such circumstances as may be prescribed by the appropriate Government.

Notice of periods of work.

31. (1) There shall be displayed and correctly maintained in every establishment a notice of periods of work, showing clearly for every day the periods during which workers may be required to work in accordance with the provisions of this Code.

(2) The form of notice required by sub-section (1), the manner of display of such notice and the manner in which such notice shall be sent to the Inspector-cum-Facilitator shall be such as may be prescribed by the appropriate Government.

(3) Any proposed change in the system of work in any establishment which will necessitate a change in the notice referred to in sub-section (1) shall be intimated to the Inspector-cum-Facilitator before the change is made, and except with the previous sanction of the Inspector-cum-Facilitator, no such change shall be made until one week has elapsed since that last change.

Annual leave with wages, etc.

32. (*1*) Every worker employed in an establishment shall be entitled for leave in a calendar year with wages subject to the following conditions, namely:—

(*i*) that he has worked one hundred and eighty days or more in such calendar year;

(*ii*) that he shall be entitled for one-day leave for every twenty days of his work, in the case of adolescent worker for fifteen days of his work, and in case of worker employed below ground mine, at the rate of one day for every fifteen days of his work, in such calendar year;

(*iii*) any period of layoff, maternity leave or annual leave availed by such worker in such calendar year shall be counted for calculating the period of one hundred and eighty days or more under clause (*i*), but he shall not earn leave for the period so counted;

(*iv*) any holidays falling between the leave availed by such worker (in a calendar year or prefixed or suffixed holiday) shall be excluded from the period of leave so availed;

(*v*) in case of such worker whose service commences otherwise than on the first day of January shall be entitled to leave with wages at the rate specified in clause (*ii*), if he has worked for one-fourth of the total number of days in the remainder of the calendar year;

(*vi*) in case such worker is discharged or dismissed from service or quits employment or is superannuated or dies while in service, during the course of the calendar year, such worker or his heir or nominee, shall be entitled to wages in lieu of the quantum of leave to which such worker was entitled immediately before his discharge, dismissal, quitting of employment, superannuation or death, calculated as specified in preceding clauses, even if such worker has not worked for the required period under this sub-section making such worker eligible to avail such leave, and such payment shall be made—

(*a*) where such worker is discharged or dismissed or quits employment before the expiry of the second working day from the date of such discharge, dismissal or quitting; and

(*b*) where such worker is superannuated or dies while in service, before the expiry of two months from the date of such superannuation or death;

(*vii*) if such worker does not in any one calendar year take the whole of the leave allowed to him under this sub-section and the rules made thereunder, then, any leave not taken by him shall be added to the leave to be allowed to him in the succeeding calendar year so that—

(*a*) the total number of days of leave that may be carried forward to a succeeding year shall not exceed thirty days; and

(*b*) such worker, who has applied for leave with wages but has not been given such leave in accordance with this sub-section and the rules made thereunder shall be entitled to carry forward the leave refused without any limit;

(*viii*) without prejudice to clause (*vi*) such worker shall be entitled on his demand for encashment of leave at the end of calendar year;

(*ix*) such worker shall be entitled, where his total number of leave exceeds thirty days under sub-clause (*a*) of clause (*vii*), to encash such exceeded leave.

(*2*) The appropriate Government may, by notification, extend the provisions of sub-section (*1*) to any other establishment except railway establishment.

(3) The provisions of sub-section (1) shall not operate to the prejudice of any right to which a person employed in a mine may be entitled under any other law or under the terms of any award, agreement or contract of service:

Provided that if such award, agreement or contract of service, provides for longer annual leave with wages than that provided in sub-section (1), the quantum of leave, which the person employed shall be entitled to, shall be in accordance with such award, agreement or contract of service but leave shall be regulated in accordance with the provisions of sub-section (1) with respect of matters not provided for in such award, agreement or contract of service:

Provided further that where the Central Government is satisfied that the leave rules applicable to persons employed in any mine provide benefits which in its opinion are not less favourable than those provided for in sub-section (1) it may, by order in writing and subject to such conditions as may be specified therein exempt the mine from all or any of the provisions of sub-section (1).

CHAPTER VIII

MAINTENANCE OF REGISTERS, RECORDS AND RETURNS

Maintenance of registers, records and filing of returns.

33. An employer of an establishment shall—

(*a*) maintain register in prescribed form, electronically or otherwise, containing such particulars of workers as may be prescribed by the appropriate Government including,—

(*i*) work performed by them;

(*ii*) number of hours of work constituting normal working hours in a day;

(*iii*) day of rest allowed in every period of seven days;

(*iv*) wage paid and receipts given therefor;

(*v*) leave, leave wages, overtime work, attendance and dangerous occurrences; and

(*vi*) employment of adolescent;

(*b*) display notices at the work place of the workers in such manner and form as may be prescribed by the appropriate Government;

(*c*) issue wage slips to the workers, in electronic forms or otherwise; and

(*d*) file such return electronically or otherwise to the Inspector-cum-Facilitator in such manner and during such periods as may be prescribed by the appropriate Government.

CHAPTER IX

INSPECTOR-CUM-FACILITATORS AND OTHER AUTHORITY

Appointment of Inspector-cum-Facilitators.

34. (1) The appropriate Government may, by notification, appoint Inspector-cum-Facilitators for the purposes of this Code who shall exercise the powers conferred on them under this Code throughout their respective jurisdiction specified in the notification.

(2) The Inspector-cum-Facilitators appointed under sub-section (1) shall, apart from other duties to be discharged by them under this Code, conduct such inspections as specified in sub-section (3).

(3) The appropriate Government may—

(*i*) for the purposes of inspection referred to in sub-section (2), by notification, lay down an inspection scheme which may provide for the generation of web-based

inspection and calling of information under this Code, electronically and such scheme shall, *inter alia*, have provisions to cater to special circumstances for assigning inspection and calling for information from establishment or any other person besides web-based inspections; and

(*ii*) without prejudice to the provisions of sub-section (*2*), by notification, under the scheme, provide for the randomised selection of establishment and the Inspector-cum-Facilitator for inspection.

(*4*) Without prejudice to the powers of the appropriate Government under this section, the inspection scheme referred to in sub-section (*3*) may be designed taking into account, *inter alia*, the following factors, namely:—

(*a*) assignment of unique number, to each establishment (which will be same as the registration number allotted to the establishment registered under section 3), unique number to each Inspector-cum-Facilitator and to each inspection in such manner as may be notified by the appropriate Government;

(*b*) timely uploading of inspection reports in such manner and subject to such conditions as may be notified in the scheme;

(*c*) provisions for special inspections based on such parameters as may be notified by the appropriate Government; and

(*d*) the characteristics of employment, the nature of work, and characteristics of the workplaces based on such parameters as may be notified by the appropriate Government.

(*5*) The appropriate Government may, by notification, appoint any person or persons possessing the prescribed qualifications and experience to be Chief Inspector-cum-Facilitator for the purposes of such establishments or class of establishments and for such local limits of jurisdiction as may be specified in the notification:

Provided that a Chief Inspector-cum-Facilitator may be appointed for the purposes of a State or more than one States or for the purposes of the whole of the Country.

(*6*) The appropriate Government may, by notification, appoint for the purposes of establishments as may be notified by that Government, as many Additional Chief Inspector-cum-Facilitators, Joint Chief Inspector-cum-Facilitators and Deputy Chief Inspector-cum-Facilitators or any other officer of any designation as it thinks appropriate, to exercise such powers of the Chief Inspector-cum-Facilitator within his jurisdiction, as may be specified in the notification.

(*7*) Every Additional Chief Inspector-cum-Facilitator, Joint Chief Inspector-cum-Facilitator, Deputy Chief Inspector-cum-Facilitator and every other officer appointed under sub-section (*6*) shall, in addition to the powers of a Chief Inspector-cum-Facilitator specified in the notification by which the officer is appointed, exercise the powers of an Inspector-cum-Facilitator within such local limits as may be specified in the notification.

(*8*) No person shall be appointed under this section or having been so appointed, shall continue to hold office, who is, or who becomes, directly or indirectly interested in a workplace or work activity or in any process or business carried on in any workplace or in any plant or machinery connected therewith.

(*9*) The appropriate Government may also, by notification, appoint such public officers as it thinks fit to be Inspector-cum-Facilitators in addition to existing Inspector-cum-Facilitator for exercising the powers and discharging the duties of Inspector-cum-Facilitator for all or any of the purposes of this Code within such local limits as may be specified in such notification.

(*10*) Without prejudice to the other functions of the Inspector-cum-Facilitator under this Code, an Inspector-cum-Facilitator may in respect of any establishment or class of establishments in local area or areas of his jurisdiction where the Chief Inspector-cum-Facilitator with the approval of the appropriate Government and subject to such restrictions or conditions as he may think fit to impose, by order in writing authorise the Inspector-cum-Facilitator to exercise such of the powers of the Chief Inspector-cum-Facilitator as may be specified in such order:

Provided that the Chief Inspector-cum-Facilitator, with the approval of the appropriate Government, may by order in writing, prohibit the exercise, by any Inspector-cum- Facilitator or any class of Inspector-cum-Facilitators specified in such order, of any such power by such Inspector-cum-Facilitator or class of Inspector-cum-Facilitators.

(*11*) Every Chief Inspector-cum-Facilitator, Additional Chief Inspector-cum-Facilitator, Joint Chief Inspector-cum-Facilitator, Deputy Chief Inspector-cum-Facilitator, Inspector-cum-Facilitator and every other officer appointed under this section shall be deemed to be a public servant within the meaning of section 21 of the Indian Penal Code, and shall be officially subordinate to such authority as the appropriate Government may specify in this behalf.

45 of 1860.

Powers of Inspector-cum-Facilitators.

35. (*1*) Subject to any rules made in this behalf, an Inspector-cum-Facilitator may—

(*i*) enter, with such assistance of persons, being persons in the service of the Government, or any local or other public authority, or with an expert, as he thinks fit, any place which is used, or which he has reason to believe, is used as a work place;

(*ii*) inspect and examine the establishment, any premises, plant, machinery, article, or any other relevant material;

(*iii*) inquire into any accident or dangerous occurrence, whether resulting in bodily injury, disability or death or not and take on the spot or otherwise statement of any person which he may consider necessary for such inquiry;

(*iv*) subject to any rules made by the State Government in this behalf, within his jurisdiction, examine the crops grown in any plantation or any worker employed therein or require the production of any register or other document maintained in pursuance of this Code, and take on the spot or otherwise statement of any person which he may consider necessary for carrying out the purposes of this Code relating to plantation;

(*v*) supply information and sensitise the employers and workers regarding the provisions of this Code and compliance thereof;

(*vi*) require the production of any register or any other document relating to the workplace or work activity;

(*vii*) search or seize, or take copies of, any register, record or other document or any portion thereof, as he may consider necessary in respect of any offence under this Code, which he has reason to believe, has been committed;

(*viii*) direct the concerned occupier or employer that any premises or any part thereof, or anything lying therein, shall be left undisturbed (whether generally or in particular respects) for so long as is necessary for the purpose of any inspection or inquiry;

(*ix*) take measurements, photographs and videographs and make such recordings as he considers necessary for the purpose of any examination or inquiry;

(*x*) take samples of any articles or substances found in any establishment or premises into which he has power to enter and of the air of the atmosphere in or in the vicinity of any such establishment or premises in such manner as may be prescribed by the appropriate Government;

(*xi*) in case of any article or substance found in any establishment or premises, being an article or substance which appears to him as having caused or is likely to cause danger to the health and safety of the employees, direct it to be dismantled or subject it to any process or test (but not so as to damage or destroy it unless the same is, in the circumstances necessary, for carrying out the purposes of any provision of this Code) and take possession of any such article or substance or a part thereof, and detain it for so long as is necessary for such examination;

(*xii*) issue show cause notice relating to safety, health and welfare provisions arising under this Code, rules, regulations and bye-laws made thereunder;

(*xiii*) prosecute, conduct or defend before any court any complaint or other proceeding arising under this Code, the rules and regulations made thereunder; and

(*xiv*) exercise such other powers and perform such other duties as may be prescribed by the appropriate Government.

(*2*) Any person required to produce any document or to give any information required by an Inspector-cum-Facilitator under sub-section (*1*) shall be deemed to be legally bound to do so within the meaning of section 175 and section 176 of the Indian Penal Code. 45 of 1860.

(*3*) The provisions of the Code of Criminal Procedure, 1973, shall, so far as may be, apply to such search or seizure under sub-section (*1*) as they apply to any search or seizure made under the authority of a warrant issued under section 94 of the said Code. 2 of 1974.

Powers and duties of District Magistrate.

36. The District Magistrate shall, within the local limits of his jurisdiction, exercise such powers and duties of the Inspector-cum-Facilitator in respect of mines as may be prescribed by the Central Government.

Third party audit and certification.

37. (*1*) The appropriate Government may, by notification, formulate a scheme to empanel experts possessing such qualifications and experience as may be prescribed for the purpose of such start-up establishments or class of establishments, as may be specified in the notification.

(*2*) The experts empanelled under sub-section (*1*), shall,—

(*a*) be assigned the third party audit and certification in a randomised manner, by the appropriate Government through a web-based scheme;

(*b*) carry out the audit and certification in the manner and for the purpose specified in the scheme referred to in sub-section (*1*);

(*c*) perform such duties as may be specified in such scheme and submit his report to the concerned employer and to the Inspector-cum-Facilitator.

Special powers of Inspector-cum-Facilitator in respect of factory, mines, dock work and building or other construction work.

38. (*1*) Without prejudice to the other powers of an Inspector-cum-Facilitator in this Code, an Inspector-cum-Facilitator,—

(*A*) shall have the following special powers in respect of a factory, namely:—

(*a*) where it appears to the Inspector-cum-Facilitator that conditions in a factory or part thereof are such that they may cause serious hazard or imminent danger by way of injury or death to the persons employed therein or to the general public in the vicinity, he may, by order in writing to the occupier of the factory, state the particulars in respect of which he considers the factory or part thereof to be the cause of such serious hazard or imminent danger and prohibit such occupier from employing any person in the factory or any part thereof other than the minimum number of persons necessary to attend to the minimum tasks till the hazard or danger is removed;

(*b*) any order issued by the Inspector-cum-Facilitator under sub-clause (*a*) shall have effect for a period of three days until extended by the Chief Inspector-cum-Facilitator by a subsequent order;

(*c*) any person aggrieved by an order of the Inspector-cum-Facilitator under sub-clause (*a*), and the Chief Inspector-cum-Facilitator under sub-clause (*b*), shall have the right to appeal to the High Court;

(*d*) any person whose employment has been affected by an order issued under sub-clause (*a*), shall, without prejudice to the rights of the parties under the Industrial Disputes Act, 1947, be entitled to wages and other benefits and it shall be the duty of the occupier to provide alternative employment to him wherever possible in such manner as may be prescribed by the appropriate Government;

14 of 1947.

(*B*) shall have the following special powers in respect of mines, namely:—

(*a*) if, in respect of any matter for which no express provision is made by or under this Code, it appears to the Chief Inspector-cum-Facilitator or an Inspector-cum-Facilitator that any mine or part thereof or any matter, thing or practice in or connected with the mine, or with the control, supervision, management or direction thereof, is dangerous to human life or safety or is defective so as to threaten or tend to cause, the bodily injury of any person, he may give notice in writing thereof to the employer of the mine stating therein the particulars in respect of which he considers the mine or part thereof or the matter, thing or practice to be dangerous or defective and require the same to be remedied within such time and in such manner as he may specify in the notice;

(*b*) where the employer of a mine fails to comply with the terms of a notice given under sub-clause (*a*) within the period specified therein, the Chief Inspector-cum-Facilitator or the Inspector-cum-Facilitator may, by order in writing, prohibit the employment in or about the mine or any part thereof of any person whose employment is not in his opinion reasonably necessary for securing compliance with the terms of the notice;

(*c*) without prejudice to the provisions contained in sub-clause (*a*), the Chief Inspector-cum-Facilitator or the Inspector-cum-Facilitator may, by order in writing addressed to the employer of a mine, prohibit the extraction or reduction of pillars or blocks of minerals in the mine or part thereof, if, in his opinion, such operation is likely to cause the crushing of pillars or blocks of minerals or the premature collapse of any part of the workings or otherwise endanger the mine or the life or safety of persons employed therein or if, in his opinion, adequate provision against the outbreak of fire or flooding has not been made by providing for the sealing off and isolation of the part of the mine in which such operation is contemplated and for restricting the area that might be affected by fire or flooding;

(*d*) if the Chief Inspector-cum-Facilitator or an Inspector-cum-Facilitator authorised, by general or special order in writing by the Chief Inspector-cum-Facilitator, is of opinion that there is urgent and immediate danger to the life or safety of any person employed in any mine or part thereof, he may, by order in writing containing a statement of the grounds of his opinion, prohibit until he is satisfied that the danger is removed, the employment in or about the mine or any part thereof of any person whose employment is not in his opinion reasonably necessary for the purpose of removing the danger;

(*e*) every person whose employment is prohibited under sub-clause (*b*) or sub-clause (*d*) shall be entitled to payment of full wages for the period for which he would have been, but for the prohibition, in employment and the employer shall be liable for payment of such full wages of that person:

Provided that the employer may instead of paying such full wages provide such person with an alternative employment at the same wages which such person was receiving in the employment which was prohibited;

(*f*) where a notice has been given under sub-clause (*a*) or an order is made under sub-clause (*b*) or sub-clause (*c*) or sub-clause (*d*) by an Inspector-cum-Facilitator, the employer of the mine may, within ten days after the receipt of the notice or order, as the case may be, appeal against the same to the Chief Inspector-cum-Facilitator who may confirm, modify or cancel the notice or order:

(*g*) the Chief Inspector-cum-Facilitator or the Inspector-cum-Facilitator sending a notice under sub-clause (*a*) or making an order under sub-clause (*b*) or sub-clause (*c*) or sub-clause (*d*) and the Chief Inspector-cum-Facilitator making an order (other than an order of cancellation in appeal) under sub-clause (*f*) shall forthwith report the same to the Central Government;

(*h*) if the employer of the mine objects to a notice sent under sub-clause (*a*) by the Chief Inspector-cum-Facilitator or the Inspector-cum-Facilitator or to an order made by the Chief Inspector-cum-Facilitator or the Inspector-cum-Facilitator under sub-clause (*b*) or sub-clause (*c*) or sub-clause (*d*) or sub-clause (*f*), as the case may be, he may, within twenty days after the receipt of the notice containing the requisition or of the order or after the date of the decision on appeal, as the case may be, send his objection in writing stating the grounds thereof to the Central Government which shall, ordinarily within a period of one month from the date of receipt of the objection, decide the matter:

(*i*) every notice under sub-clause (*a*), or order under sub-clause (*b*) or sub-clause (*c*) or sub-clause (*d*) or sub-clause (*f*), to which objection is made under sub-clause (*h*), shall be complied with, pending the objection with the concerned Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator of the mine, for the decision of the Central Government:

Provided that the Central Government may, on the application of the employer, suspend the operation of a notice under sub-clause (*a*), pending its decision on the objection;

(*j*) nothing in this section shall affect the powers of a magistrate under section 144 of the Code of Criminal Procedure, 1973; 2 of 1974.

(*k*) where in respect of any matter relating to safety of mine for which express provision is made by or under this Code, the employer of a mine fails to comply with such provisions, the Chief Inspector-cum-Facilitator may give notice in writing requiring the same to be complied with within such time as he may specify in the notice or within such extended period of time as he may, from time to time, specify thereafter;

(*l*) where the employer fails to comply with the terms of a notice given under sub-clause (*k*) within the period specified in such notice or within the extended period of time specified under that sub-clause, the Chief Inspector-cum-Facilitator may, by order in writing, prohibit the employment, in or about the mine or any part thereof, of any person whose employment is not, in his opinion, reasonably necessary for securing compliance with the terms of the notice;

(*m*) every person whose employment is prohibited under sub-clause (*l*), shall be entitled to payment of full wages for the period for which he would have been, but for the prohibition, in employment, and the owner, agent or manager referred to in section 67 shall be liable for payment of such full wages of that person:

Provided that the employer may, instead of paying such full wages, provide such person with an alternative employment at the same wages which such person was receiving in the employment which was prohibited under sub-clause (*l*);

(*n*) the provisions of sub-clauses (*g*), (*h*) and (*i*) shall apply in relation to a notice issued under sub-clause (*k*) or an order made under sub-clause (*l*) as they apply in relation to a notice or an order under sub-clause (*b*);

(*o*) the Chief Inspector-cum-Facilitator may, for reasons to be recorded in writing, reverse or modify any order passed by him under this Code or under any regulation, rule or bye-law made thereunder in relation to mine;

(*p*) no order prejudicial to the owner, agent or manager of a mine shall be made under this section unless such owner, agent or manager has been given a reasonable opportunity of making representation;

(*q*) the Central Government may reverse or modify any order passed by Chief Inspector-cum-Facilitator under this Code or under any regulation, rule or bye-laws thereunder in relation to mine;

(*C*) shall have the following special powers in respect of dock work namely:—

(*a*) if it appears to an Inspector-cum-Facilitator that any place where any dock work is being carried on is in such a condition that it is dangerous to life, safety or health, of workers employed in dock work, he may, in writing, serve on the employer, an order prohibiting any dock work, in such place, until measures have been taken to remove the cause of the danger to his satisfaction;

(*b*) an Inspector-cum-Facilitator after serving an order under clause (*a*) shall endorse a copy thereof to the Chief Inspector-cum-Facilitator who may modify or cancel the order without waiting for an appeal;

(*c*) any person aggrieved by an order under clause (*a*) or clause (*b*) may, within fifteen days from the date on which the order is communicated to him, prefer an appeal to the Chief Inspector-cum-Facilitator or where such order is by the Chief Inspector-cum-Facilitator, to the Central Government and the Chief Inspector-cum-Facilitator or the Central Government shall, after giving the appellant an opportunity of being heard, dispose of the appeal within sixty days:

Provided that the Chief Inspector-cum-Facilitator or the Central Government may entertain the appeal after the expiry of the said period of fifteen days, if he or it is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time:

Provided further that an order under clause (*a*) or an order modified under clause (*b*) shall be complied with, pending the decision of the Chief Inspector-cum-Facilitator or the Central Government.

(*2*) Without prejudice to the other powers of an Inspector-cum-Facilitator elsewhere in this Code,—

(*a*) if it appears to the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator that any site or place at which any building or other construction work is being carried on, is in such condition that it is dangerous to life, safety or health of building workers or the general public, he may, in writing serve, on the employer of building workers working at such site or place or on the employer of the establishment in which such site or place is situated or on the person in charge of such site or place, an order prohibiting any building or other construction work at such site or place until measures have been taken to remove the cause of the danger to his satisfaction;

(*b*) an Inspector-cum-Facilitator serving an order under clause (*a*) shall endorse a copy of the order to the Chief Inspector-cum-Facilitator;

(*c*) such prohibition order made by the Inspector-cum-Facilitator shall be complied with by the employer forthwith.

(3) Any person aggrieved by an order under clause (a) of sub-section (2), may, within fifteen days from the date on which the order is communicated to him, prefer an appeal to the Chief Inspector-cum-Facilitator or where such order is by the Chief Inspector-cum-Facilitator, to the appropriate Government and the Chief Inspector-cum-Facilitator or the appropriate Government, as the case may be, shall, after giving the appellant an opportunity of being heard, dispose of the appeal within sixty days:

Provided that the Chief Inspector-cum-Facilitator or the appropriate Government may, entertain the appeal after the expiry of the said period of fifteen days if it is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time:

Provided further that the order under clause (a) of sub-section (2), shall be complied with, subject to the decision of the Chief Inspector-cum-Facilitator or the appropriate Government as the case may be.

Secrecy of information by Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator, etc.

39. (1) All copies of, and extracts from, registers or other records pertaining to any establishment and all other information relating to any manufacturing or commercial business or any working process acquired by the Chief Inspector-cum-Facilitator or an Inspector-cum-Facilitator or by any one assisting him, in the course of the inspection or survey of any establishment under this Code or acquired by any officer authorised under section 20 in the exercise of his duties thereunder, shall be regarded as confidential and shall not, while in service or after leaving the service, be disclosed to any person or authority unless the Chief Inspector-cum-Facilitator or the Inspector-cum-Facilitator considers disclosure necessary to ensure the health, safety or welfare of any person employed in establishment.

(2) Nothing in sub-section (1) shall apply to the disclosure of any such information to—

(a) any court;

(b) any Committee or Board constituted under this Code;

(c) an official superior or the employer of the establishment concerned:

(d) a Commissioner for employees' compensation appointed under the Employees' Compensation Act, 1923; 8 of 1923.

(e) the Controller, Indian Bureau of Mines; and

(f) any such officer, authority or authorised person as may be specified in this behalf by the appropriate Government.

(3) Notwithstanding anything contained in the Right to Information Act, 2005, no Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator shall disclose the source of any complaint, made to him regarding the contravention of the provisions of this Code without the consent of the complainant and shall also not while making an inspection under this Code in pursuance of such complaint, disclose to the employer concerned or any of his representative that the inspection is being made in pursuance of such complaint. 22 of 2005.

Facilities to be afforded to Inspector-cum-Facilitator.

40. Every employer of an establishment shall afford the Chief Inspector-cum-Facilitator and every Inspector-cum-Facilitator having jurisdiction or every person authorised by the Chief Inspector-cum-Facilitator all reasonable facilities for making any entry, inspection, survey, measurement, examination or inquiry under this Code.

Powers of special officer to enter, measure, etc., in relation to mine.

41. Any person in the service of the Government duly authorised in this behalf by a special order in writing of the Chief Inspector-cum-Facilitator or of an Inspector-cum-Facilitator may, for the purpose of surveying, leveling or measuring any mine or any output therefrom, after giving not less than three days' notice to the manager of such mine, enter the mine and may survey, level or measure the mine or any part thereof or any output therefrom at any time by day or night:

Provided that, where in the opinion of the Chief Inspector-cum-Facilitator or of an

Inspector-cum-Facilitator an emergency exists, he may, by order in writing, authorise any such person to enter the mine for any of the aforesaid purposes without giving any such notice.

Medical officer.

42. (*1*) The appropriate Government may appoint medical practitioners having prescribed qualification to be medical officers for the purposes of this Code in relation to factory, mines, plantation, motor transport undertakings and in any other establishment as may be prescribed:

Provided that the medical officers so appointed shall before entering into their office shall disclose to the appropriate Government their interest in the concerned establishment.

(*2*) The medical officer shall perform the following duties, namely:—

(*a*) the examination and certification of workers in a mine or factory or in such other establishment engaged in such dangerous occupations or processes as may be prescribed:

(*b*) the exercise of such medical supervision for any factory, mines, plantation, motor transport undertaking and for such other establishment as may be prescribed by the appropriate Government where cases of illness have occurred which it is reasonable to believe are due to the nature of any process carried on or other conditions of work prevailing in such establishments;

(*c*) the examination and certification of adolescent for the purpose of ascertaining his fitness for employment in factory, plantation, motor transport undertakings and in any other establishment as may be prescribed by the appropriate Government in any work which is likely to cause injury to their health.

CHAPTER X

SPECIAL PROVISION RELATING TO EMPLOYMENT OF WOMEN

Employment of women.

43. Women shall be entitled to be employed in all establishments for all types of work under this Code and they may also be employed, with their consent before 6 a.m. and beyond 7 p.m. subject to such conditions relating to safety, holidays and working hours or any other condition to be observed by the employer as may be prescribed by the appropriate Government.

Adequate safety of employment of women in dangerous operation.

44. Where the appropriate Government considers that the employment of women is dangerous for their health and safety, in an establishment or class of establishments or in any particular hazardous or dangerous processes in such establishment or class of establishments, due to the operation carried out therein, such Government may in the prescribed manner, require the employer to provide adequate safeguards prior to the employment of women for such operation.

CHAPTER XI

SPECIAL PROVISIONS FOR CONTRACT LABOUR AND INTER-STATE MIGRANT WORKER, ETC.

PART I

CONTRACT LABOUR

Applicability of this Part.

45. (*1*) This Part shall apply to—

(*i*) every establishment in which fifty or more contract labour are employed or were employed on any day of the preceding twelve months through contract:

(*ii*) every manpower supply contractor who has employed, on any day of the preceding twelve months, fifty or more contract labour.

(2) This Part shall not apply to the establishment in which work only of an intermittent or casual nature is performed:

Provided that if a question arises as to whether work performed in an establishment is of an intermittent or casual nature, the appropriate Government shall decide that question after consultation with the National Board or a State Advisory Board and its decision thereon shall be final.

Explanation.—For the purpose of this sub-section, work performed in an establishment shall not be deemed to be of an intermittent nature—

(*i*) if it was performed for more than one hundred and twenty days in the preceding twelve months; or

(*ii*) if it is of seasonal character and is performed for more than sixty days in a year.

Appointment of designated authority.

46. The appropriate Government may, by an order, appoint such persons, being Gazetted officers of the Government, as it thinks fit to be designated as authority under sub-section (*1*) of section 119 and specify the limits of their jurisdiction and vest with such powers and duties including dealing with issuance and revocation of licences electronically as may be specified therein.

Licensing of contractors.

47. (*1*) No contractor to whom this Part applies shall—

(*a*) supply or engage contract labour in any establishment; or

(*b*) undertake or execute the work through contract labour,

except under and in accordance with a licence issued to him by the authority referred to in sub-section (*1*) of section 119 in accordance with the provisions of that section after satisfying that the contractor fulfills such requisite qualifications or criteria as may be prescribed by the Central Government and such licence shall, in addition to the requisite particulars and conditions specified in sub-section (*3*), specify the number of such contract labour who can be supplied or engaged and the amount of security to be deposited by the contractor.

(*2*) Where the contractor does not fulfil the requisite qualifications or criteria referred to in sub-section (*1*), the authority referred to in sub-section (*1*) of section 119 may issue him a "work specific licence" electronically renewable within such period as may be prescribed by the Central Government to supply or engage the contract labour, or execute the work through contract labour, only for the concerned work order as may be specified in such licence and subject to such conditions as may be specified in such licence.

(*3*) Subject to the provisions of this Part,—

(*a*) a licence under sub-section (*1*) may contain such conditions including, in particular, conditions as to hours of work, fixation of wages and other essential amenities in respect of contract labour as may be prescribed by the appropriate Government;

(*b*) the licence referred to in sub-section (*1*) or sub-section (*2*), shall be obtained from, if for such establishment the appropriate Government is—

(*i*) the Central Government, the authority referred to in sub-section (*1*) of section 119 designated by that Government; and

(*ii*) the State Government, the authority referred to in sub-section (*1*) of section 119 designated by that Government:

Provided that where the contractor is desirous of obtaining licence for supplying or engaging contract labour or undertaking or executing the contract works under sub-section (*1*) or sub- section (*2*) in more than one States or for the whole of India, then, he

may obtain the licence from the authority referred to in sub-section (*1*) of section 119 designated by the Central Government for such purpose and the provisions of that section shall apply:

Provided further that before issuing such licence the authority referred to in the first proviso shall consult the concerned State or States authorities designated under sub-section (*1*) of section 119, electronically before issuing licence for the establishments for which the appropriate Government is the State Government.

Procedure for issue or renewal of licence.

48. (*1*) Subject to the provisions of section 119, every application for issuing a licence under section 119 for the purposes of sub-section (*1*) or sub-section (*2*) of section 47 shall be made electronically in such form and manner and shall contain such particulars regarding the number of contract labour, nature of work for which contract labour is to be employed and such other particulars including the information relating to the employment of inter-State migrant workers as may be prescribed by the appropriate Government.

(*2*) Subject to the provisions of section 119, the authority referred to in sub-section (*1*) thereof shall follow such procedure as may be prescribed by the appropriate Government.

(*3*) Subject to the provisions of section 119, the licence issued for the purposes of sub-section (*1*) of section 47 shall be valid for a period of five years in respect of the number of contract labour specified therein and in case the contractor wants to increase the number of the contract labour, he shall apply in the prescribed manner for the amendment to the licence for such purpose to the authority referred to in sub-section (*1*) of section119 and if the licence is so amended, the number of contract labour shall be increased to such extent by depositing such security deposit as specified in the amended licence for the balance period.

(*4*) Subject to the provisions of section 119, the licence issued for the purposes of sub-section (*1*) of section 47 shall contain responsibility of the contractor as may be prescribed by the appropriate Government.

No fees or commission or any cost to workers.

49. The contractor shall not charge directly or indirectly, in whole or in part, any fee or commission from the contract labour.

Information regarding work order to be given to the appropriate Government.

50. (*1*) When a contractor receives work order from an establishment either to supply contract labour in the establishment or to execute the contract through contract labour in the establishment he shall, within such time and in such manner as may be prescribed, intimate to the authority referred to in section 119.

(*2*) Where the contractor fails to give intimation under sub-section (*1*), the designated authority may, after giving the holder of the licence an opportunity of showing cause, suspend or cancel the licence in such manner as may be prescribed by the appropriate Government.

Revocation, suspension and amendment of licence.

51. (*1*) If the authority referred to in sub-section (*1*) of section 119 is satisfied, either on a reference made to him in this behalf or otherwise, that—

(*a*) a licence granted for the purposes of this Part has been obtained by misrepresentation or suppression of any material fact, or

(*b*) the holder of a licence has, failed to comply with the conditions subject to which the licence has been granted or has contravened any of the provisions of this Part or the rules made thereunder, then,

without prejudice to any other penalty to which the contractor may be liable under this Code, the authority referred to in sub-section (*1*) of section 119 may, after giving the contractor an opportunity of showing cause, revoke or suspend the licence in accordance with the procedure as may be prescribed by the Central Government.

(2) Subject to any rules that may be made in this behalf, the authority referred to in sub-section (1) of section 119 may amend a licence granted for the purposes of this Part.

Appeal.

52. (1) Any person aggrieved by an order made under section 47, section 48 or section 51 may, within thirty days from the date on which the order is communicated to him, prefer an appeal to an appellate authority prescribed by the appropriate Government under sub-section (6) of section 119:

Provided that the appellate authority may entertain the appeal after the expiry of the said period of thirty days, if he is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

(2) On receipt of an appeal under sub-section (1), the appellate authority shall, after giving the appellant an opportunity of being heard, dispose of the appeal within thirty days from the date on which the appeal is preferred.

Liability of principal employer for welfare facilities.

53. Welfare facilities specified under section 23 and section 24 shall be provided by the principal employer of the establishment to the contract labour who are employed in such establishment.

Effect of employing contract labour from a non-licenced contractor.

54. Where any principal employer of an establishment is employing contract labour through a contractor who is required to obtain a licence under this Part, but he has not obtained such licence, then, such employment shall be deemed to be in contravention of the provision of this Code.

Responsibility for payment of wages.

55. (1) A contractor shall be responsible for payment of wages to each contract labour employed by him and such wages shall be paid before the expiry of such period as may be prescribed by the appropriate Government.

(2) Every contractor shall, make the disbursement of wages referred to in sub-section (1) through bank transfer or electronic mode and inform the principal employer electronically the amount so paid by such mode:

Provided that where it is not practicable to disburse payment in the mode specified in this section, then, the payment shall be made in such manner as may be prescribed by the appropriate Government.

(3) In case the contractor fails to make payment of wages referred to in sub-section (1) within the prescribed period or makes short payment, then, the principal employer shall be liable to make payment of the wages in full or the unpaid balance due, as the case may be, to the concerned contract labour employed by the contractor and recover the amount so paid from the contractor either by deduction from any amount payable to the contractor under any contract or as a debt payable by the contractor.

(4) The appropriate Government, in the event the contractor does not pay the wages to the contract labour employed by him, shall pass the orders of making payment of such wages from the amount deposited by such contractor as security deposit under the licence issued by the licensing officer to the contractor, in such manner as may be prescribed by such Government.

Experience certificate.

56. Every concerned contractor shall issue, on demand, experience certificate, in such form as may be prescribed by the appropriate Government, to the contract labour giving details of the work performed by such contract labour.

Prohibition of employment of contract labour.

57. (1) Notwithstanding anything contained in this Part, employment of contract labour in core activities of any establishment is prohibited:

Provided that the principal employer may engage contract labour through a contractor to any core activity, if—

(*a*) the normal functioning of the establishment is such that the activity is ordinarily done through contractor; or

(*b*) the activities are such that they do not require full time workers for the major portion of the working hours in a day or for longer periods, as the case may be;

(*c*) any sudden increase of volume of work in the core activity which needs to be accomplished in a specified time.

(*2*) (*a*) The appropriate Government may, by notification, appoint a designated authority to advise that Government on the question whether any activity of an establishment is a core activity or otherwise:

(*b*) if a question arises as to whether any activity of an establishment is a core activity or otherwise, the aggrieved party may make an application in such form and manner as may be prescribed, to the appropriate Government for decision;

(*c*) the appropriate Government may refer any such question *suo motu* or refer the application to the designated authority, which on the basis of relevant material in its possession, or after making such an enquiry as it deems fit, shall report to the appropriate Government, within such period and thereafter the appropriate Government shall decide the question within such period as may be prescribed.

Power to exempt in special cases.

58. The appropriate Government may, in the case of an emergency, direct, by notification, that subject to such conditions and restrictions, if any, and for such period, as may be specified in the notification, all or any of the provisions of this Code or the rules made thereunder shall not apply to any establishment or class of establishments or any class of contractors.

PART II

INTER-STATE MIGRANT WORKERS

Applicability of Part II.

59. This Part shall apply to every establishment in which ten or more inter-State migrant workers are employed or were employed on any day of the preceding twelve months.

Facilities to inter-State migrant workers.

60. It shall be the duty of every contractor or the employer, of an establishment employing inter-State migrant workers in connection with the work of that establishment—

(*i*) to ensure suitable conditions of work to such worker having regard to the fact that he is required to work in a State different from his own State;

(*ii*) in case of fatal accident or serious bodily injury to any such worker, to report to the specified authorities of both the States and also the next of kin of the worker;

(*iii*) to extend all benefits to such worker which are available to a worker of that establishment including benefits under the Employees' State Insurance Act, 1948 or the Employees' Provident Funds and Miscellaneous Provisions Act, 1952 or any other law for the time being in force and the facility of medical check-up as available to a worker under clause (*c*) of sub-section (*1*) of section 6.

34 of 1948.
19 of 1952.

Journey allowance.

61. The employer shall pay, to every inter-State migrant worker employed in his establishment, in a year a lump sum amount of fare for to and fro journey to his native place from the place of his employment, in the manner taking into account the minimum service for entitlement, periodicity and class of travel and such other matters as may be prescribed by the appropriate Government.

Benefits of public distribution system, etc.

62. The appropriate Government shall make schemes to provide—

(*a*) option to an inter-State migrant worker for availing benefits of public distribution system either in his native State or the destination State where he is employed; and

(*b*) for portability of the benefits of the inter-State migrant worker working for building or other construction work out of the building and other construction cess fund in the destination State where such inter-State migrant worker is employed.

Toll free helpline.

63. The appropriate Government may provide facility of toll free helpline to the inter-State migrant workers in such manner as may be prescribed by that Government.

Study of inter-State migrant workers.

64. The appropriate Government may provide for study of inter-State migrant workers in such manner as may be prescribed by that Government.

Past liabilities.

65. No suit or other proceeding shall lie in any court or before any authority for the recovery of debt or any part thereof relating to an inter-State migrant worker after the completion of his employment where it remains unsettled obligation to the contractor or the principal employer and such debt or part thereof shall, on the completion of the period of employment of such worker, be deemed to have been extinguished.

PART III

AUDIO-VISUAL WORKERS

Prohibition of employment of audio-visual worker without agreement.

66. (*1*) No person shall be employed as an audio-visual worker in or in connection with production of any audio-visual programme unless,—

(*a*) an agreement in writing is entered into—

(*i*) with such person by the producer of such audio-visual programme: or

(*ii*) with such person by the producer of such audio-visual programme with the contractor, where such person is employed through such contractor: or

(*iii*) with such person by the contractor or other person through whom such person is employed; and

(*b*) such agreement is registered with the competent authority, to be notified by the appropriate Government, by the producer of such audio-visual programme.

(*2*) Every agreement. referred to in sub-section (*1*) shall,—

(*a*) be in the prescribed form;

(*b*) specify the name and such other particulars as may be prescribed by the appropriate Government with respect to, such person to be employed under the agreement as audio-visual worker;

(*c*) include, where such audio-visual worker is employed through a contractor, a specific condition to the effect that in the event of the contractor failing to discharge his obligations under the agreement to the audio-visual worker with respect to payment of wages or any other matter, the producer of the audio-visual programme shall also be liable to discharge such obligations and shall be entitled to be reimbursed with respect thereto by the contractor.

(*3*) A copy of the agreement referred to in sub-section (*1*) with respect to the employment of the audio-visual worker shall, if such audio-visual worker is covered under the provision of an enactment for the time being in force for providing the benefit of provident fund to him, also be forwarded by the producer of the audio-visual programme to such authority as may be prescribed by the appropriate Government.

(*4*) Notwithstanding anything contained in Chapters V, VI and VII. the agreement referred to in sub-section (*1*) shall include,—

(*i*) nature of assignment;

(*ii*) wages and other benefits (including provident fund, if covered under the Employees' Provident Fund and Miscellaneous Provisions Act, 1952);

19 of 1952.

(*iii*) health and working conditions;

(*iv*) safety;

(*v*) hours of work;

(*vi*) welfare facilities; and

(*vii*) dispute resolution process or mechanism, the constitution and other details of which shall be prescribed by the appropriate Government:

Provided that in case of failure of the resolution of the dispute in such dispute resolution process or mechanism, either party in the dispute may invoke the jurisdiction of the Industrial Tribunal established by the appropriate Government under section 7A of the Industrial Disputes Act, 1947 and for such purpose such dispute shall be deemed to be industrial dispute within the meaning of that Act and it shall be the responsibility of the producer of the audio-visual programme to provide the facilities specified in the agreement to the audio-visual worker and the payment of wages shall be through electronic mode.

14 of 1947.

PART IV

MINES

Managers.

67. (*1*) Save as may be otherwise prescribed, every mine shall be under a sole manager who shall have such qualifications as may be prescribed by the Central Government and the owner or agent of every mine shall appoint a person having such qualifications to be the manager:

Provided that the owner or agent may appoint himself as manager if he possesses the prescribed qualifications.

(*2*) Subject to any instructions given to him by or on behalf of the owner or agent of the mine, the manager shall be responsible for the overall management, control, supervision and direction of the mine and all such instructions when given by the owner or agent shall be confirmed in writing forthwith.

(*3*) Except in case of an emergency, the owner or agent of a mine or anyone on his behalf shall not give, otherwise than through the manager, instructions affecting the fulfilment of his statutory duties, to a person, employed in a mine, who is responsible to the manager.

Code not to apply in certain cases.

68. (*1*) The provisions of this Code, except those contained in sections 35, 38, 40, 41 and 44, shall not apply to—

(*a*) any mine or part thereof in which excavation is being made for prospecting purposes only and not for the purpose of obtaining minerals for use or sale subject to such conditions relating to number of employees, depth of excavation and other matters as may be prescribed by the Central Government:

(*b*) any mine engaged in the extraction of kankar, murrum, laterite, boulder, gravel, shingle, ordinary sand (excluding mouldings and glass sand and other mineral sands), ordinary clay (excluding kaolin, china clay, white clay or fire clay), building stone, slate, road metal, earth, fullers earth (marl, chalk) and lime stone subject to such conditions relating to workings, open cast workings and explosives as may be prescribed by the Central Government.

(*2*) Notwithstanding anything contained in sub-section (*1*), the Central Government may declare that the provisions of this Code shall apply to such mine or part thereof as may be prescribed by the Central Government.

(3) Without prejudice to the provisions contained in sub-section (2), if at any time any of the conditions specified in clause (a) or clause (b) of sub-section (1) is not fulfilled in relation to any mine referred to in that sub-section, the provisions of this Code not set out in sub-section (1), shall become immediately applicable, and it shall be the duty of the employer of the mine to inform about such non-fulfilment to such authority in such manner and within such time as may be prescribed by the Central Government.

Exemption from provision regarding employment.

69. (1) In case of an emergency involving serious risk to the safety of the mine or of persons employed therein, or in case of an accident, whether actual or apprehended, or in case of any act of God or in case of any urgent work to be done to machinery, plant or equipment of the mine as a result of breakdown of such machinery plant or equipment, the manager may, subject to the provision of clause (B) of sub-section (1) of section 38 and in accordance with the provisions of section 25 relating to exemption from hours of work above ground, hours of work below ground and notification regarding hours of work and weekly day of rest relating to mines under section 26, permit persons to be employed in contravention of sections 25 and 30 and sub-section (1) of section 31 on such work as may be necessary to protect the safety of the mine or of the persons employed therein:

Provided that in case of any urgent work to be done to machinery, plant or equipment under this section, the manager may take the action permitted by this section, although the production of mineral would thereby be incidentally affected, but any action so taken shall not exceed the limits necessary for the purpose of avoiding serious interference with the ordinary working of the mine.

(2) Every case in which action has been taken by the manager under sub-section (1), shall be recorded together with the circumstances relating thereto and a report thereof shall also be made to the Chief Inspector-cum-Facilitator or the Inspector-cum-Facilitator.

Employment of persons below eighteen years of age.

70. (1) No person below eighteen years of age shall be allowed to work in any mine or part thereof.

(2) Notwithstanding anything contained in sub-section (1), apprentices and other trainees, not below sixteen years of age, may be allowed to work, under proper supervision, in a mine or part thereof by the manager as referred to in section 67:

Provided that in the case of trainees, other than apprentices, prior approval of the Chief Inspector-cum-Facilitator or an Inspector-cum-Facilitator shall be obtained before they are allowed to work.

(3) The Central Government may prescribe the provisions for medical examination of apprentice, other trainee and employee in the mine to ensure their fitness to work and to prevent the persons below sixteen years of age to work as apprentice or trainee and those who are not adults to work as such employee.

Explanation.—In this section, "apprentice" means an apprentice as defined in clause (a) of section 2 of the Apprentices Act, 1961. 52 of 1961.

Exemption to certain persons.

71. The Central Government may make rules to provide for exemption to certain persons or category of persons employed in mines from the provisions of sub-section (1) of section 25, sub-section (1) of section 26, section 30 and sub-section (1) of section 31.

Establishment, maintenance of rescue services and vocational training.

72. The Central Government may prescribe vocational training and rescue and recovery services for persons employed in a mine.

Decision of question whether a mine is covered under this Code.

73. If any question arises as to whether any excavation or working or premises in or adjacent to and belonging to a mine, on which any process ancillary to the getting, dressing or preparation for sale of minerals or of coke is being carried on in a mine within the meaning of this Code, the Central Government may decide the question, and a certificate signed by a Secretary to the Government of India in the Ministry of Labour and Employment shall be conclusive proof thereof.

PART V

BEEDI AND CIGAR WORKERS

Licence to industrial premises and person.

74. (*1*) Save as otherwise provided in this Part, no employer shall use or allow to use any place or premises as an industrial premises unless he holds a valid licence issued under section 119 for the purposes of this Part and no such premises shall be used except in accordance with the terms and conditions of such licence.

(*2*) Subject to the provisions of section 119, any person who intends to use or allows to use any place or premises specified in sub-section (*1*) shall make an application to the authority referred to in sub-section (*1*) of section 119, in such form and on payment of such fees as may be prescribed by the State Government, for a licence to use, or allow to use, such premises as an industrial premises.

(*3*) Subject to the provisions of section 119, the application shall specify the maximum number of employees proposed to be employed at any time of the day in the place or premises and shall be accompanied by a plan of the place or premises prepared in such manner as may be prescribed by the State Government.

(*4*) Subject to the provisions of section 119, the authority referred to in sub-section (*1*) thereof shall, in deciding whether to grant or refuse to grant a licence, have regard to the following matters, namely:—

(*a*) the suitability of the place or premises which is proposed to be used for the manufacture of beedi or cigar or both;

(*b*) previous experience of the applicant or he has employed experienced person or has entered into agreement with the experienced person for employment for the period of licence;

(*c*) the financial resources of the applicant including his financial capacity to meet the demands arising out of the provisions of the laws for the time being in force relating to welfare of labour;

(*d*) whether the application is made *bona fide* on behalf of the applicant himself or in *benami* of any other person;

(*e*) welfare of the labour in the locality, the interest of the public generally and such other matters as may be prescribed by the State Government.

(*5*) Subject to the provisions of section 119, a licence granted under the said section for the purposes of this section shall be valid for five years and may be renewed thereafter.

(*6*) Subject to the provisions of section 119, an application for the renewal of a licence for the purposes of this Part shall be made at least thirty days before the expiry of the period thereof, on payment of such fees as may be prescribed by the State Government, and where such an application has been made, the licence shall be deemed to continue, notwithstanding the expiry of the period thereof, until the renewal of the licence, or, as the case may be, the rejection of the application for the renewal thereof:

Provided that the authority referred to in sub-section (*1*) of section 119 shall not grant or renew a licence unless it is satisfied that the provisions of this Part and the rules made thereunder have been complied with:

Provided further that the authority referred to in sub-section (*1*) of section 119 shall renew or refuse to renew the licence within such period as may be prescribed by the State Government and in deciding whether to renew a licence or to refuse a renewal thereof shall have regard to the matters specified in sub-section (*4*).

(*7*) Subject to the provisions of section 119, the authority referred to in sub-section (*1*) thereof may, after giving the holder of a licence an opportunity of being heard, cancel or suspend any licence granted or renewed under section 119 for the purposes of this Part, if it appears to it that such licence has been obtained by misrepresentation or fraud or that the licence has contravened or failed to comply with any of the provisions of this Part or the rules made thereunder or any of the terms or conditions of the licence.

(*8*) The State Government may issue in writing to an authority referred to in sub-section (*1*) of section 119 such directions of a general character as that Government may consider necessary in respect of any matter relating to the grant or renewal of licence under section 119 relating to this section.

(*9*) Subject to section 119 and the foregoing provisions of this section, the authority referred to in sub-section (*1*) of section 119 may grant or renew licence relating to this Part on such terms and conditions as it may determine and where such authority refuses to grant or renew any licence, it shall do so by an order communicated to the applicant, giving the reasons in writing for such refusal.

Appeals.

75. Any person aggrieved by the decision of the authority referred to in sub-section (*1*) of section 119 refusing to grant or renew a licence, or cancelling or suspending a licence, relating to this Part may, within such time and on payment of such fees as may be prescribed, appeal to the appellate authority referred to in sub-section (*6*) of section 119, and such authority may by order confirm, modify or reverse any order refusing to grant or renew a licence, or cancelling or suspending a licence, relating to this Part.

Permission to work by employees outside industrial premises.

76. (*1*) The State Government may permit the wetting or cutting of beedi or tobacco leaves by employees outside the industrial premises on an application made to it by the employer on behalf of such employees, subject to such conditions as may be prescribed.

(*2*) The employer shall maintain the record of the work permitted under sub-section (*1*), to be carried on outside the industrial premises, in such form as may be prescribed.

(*3*) Save as otherwise provided in this section, no employer shall require or allow any manufacturing process connected with the making of beedi or cigar or both to be carried on outside the industrial premises:

Provided that nothing in this sub-section shall apply to any worker who is given raw material by an employer or a contractor to make beedi or cigar or both at home.

Part not to apply to self-employed persons in private dwelling houses.

77. Nothing contained in this Part shall apply to the owner or occupier of a private dwelling house, not being an employee of an employer to whom this Part applies, who carries on any manufacturing process in such private dwelling house with the assistance of the members of his family living with him in such dwelling house and dependent on him.

Explanation.—For the purposes of this section,—

(*i*) "family" does not include child, as defined in the Child and Adolescent (Prohibition and Regulation) Act, 1986, for this section; 61 of 1986.

(*ii*) "private dwelling house" means a house in which persons engaged in the manufacture of beedi or cigar or both reside.

PART VI

BUILDING OR OTHER CONSTRUCTION WORKERS

Prohibition of employment of certain persons in certain building or other construction work.

78. No person, about whom the employer knows or has reasons to believe that he is a deaf or he has a defective vision or he has a tendency to giddiness, shall be required or allowed to work in any such operation of building or other construction work which is likely to involve a risk of any accident either to the building worker himself or to any other person.

PART VII

FACTORIES

Approval and licensing of factories.

79. (*1*) The appropriate Government may make rules in respect of factory or class or description of factories for—

(*a*) the submission of plans including specifications, nature and certification thereof;

(*b*) the previous permission for the site on which the factory is to be situated and for the construction or extension thereof; and

(*c*) subject to the provision of sub-section 119, licensing and renewal thereof including fees to be payable for such, licensing and renewal, if required, as the case may be.

(*2*) If on an application for permission referred to in clause (*b*) of sub-section (*1*) accompanied by the plans and specifications required by the rules made under clause (*a*) of that sub-section, sent to the State Government or Chief Inspector-cum-Facilitator in the electronic mode, no order is communicated to the applicant within such period not exceeding thirty days, the permission applied for in the said application shall be deemed to have been granted.

(*3*) Where a State Government or a Chief Inspector-cum-Facilitator refuses to grant permission to the site, construction or extension of a factory and licensing of a factory, the applicant may within thirty days of the date of such refusal appeal to the Central Government if the decision appealed from was of the State Government and to the State Government in any other case.

Explanation.—A factory shall not be deemed to be extended within the meaning of this section by reason only of the replacement of any plant or machinery or within such limits as may be prescribed, of the addition of any plant or machinery if such replacement or addition does not reduce the minimum clear space required for safe working around the plant or machinery or adversely affect the environmental conditions from the evolution or emission of steam, heat or dust or fumes injurious to health.

Liability of owner of premises in certain circumstances.

80. Where any premises or separate buildings are leased to different occupiers for use as separate factories, the owner of the premises and occupiers of the factories utilising such common facilities which include safety and fire prevention and protection, access, hygiene, occupational health, ventilation, temperature, emergency preparedness and response, canteens, shelter, rest rooms and crèches shall jointly and severally be responsible for provision and maintenance of such common facilities and services as may be prescribed by the appropriate Government.

Power to apply Code to certain premises.

81. (*1*) The appropriate Government may, by notification, declare that all or any of the provisions of this Part shall apply to any place wherein a manufacturing process is carried on with or without the aid of power or is ordinarily carried on irrespective of the number of workers working in the factory.

(*2*) After a place is so declared, it shall be deemed to be a factory for the purposes of this Code, and the owner shall be deemed to be the occupier, and any person working therein, a worker.

Explanation.—For the purposes of this section, "owner" shall include a lessee or mortgagee with possession of the premises.

Dangerous operations.

82. The appropriate Government may by rules make the provisions relating to any factory or class or description of factories in which manufacturing process or operation is carried on which exposes any of the persons employed in it to a serious risk of bodily injury, poisoning or disease, for—

(*a*) specifying the manufacturing process or operation and declaring it to be dangerous;

(*b*) prohibiting or restricting the employment of pregnant women in the manufacturing process or operation;

(*c*) the periodical medical examination before, or at any time during the employment to ascertain the fitness of a worker or employee for such employment on the cost of the occupier; and

(*d*) welfare amenities, sanitary facilities, protective equipment and clothing, and any other requirement necessary for dangerous operations.

Constitution of site appraisal committee.

83. (*1*) The appropriate Government may, constitute one or more site appraisal committees consisting of a chairman and other members, for such purpose as may be prescribed including to consider and to give recommendations on an application for grant of permission for the initial location of a factory involving a hazardous process or for the expansion of such factory.

(*2*) The site appraisal committee referred to in sub-section (*1*) shall make its recommendation within a period of thirty days of the receipt of the application for any of the purpose referred to in the said sub-section in such form, as may be prescribed.

Compulsory disclosure of information by occupier.

84. (*1*) The occupier of every factory involving a hazardous process shall disclose in the manner prescribed by the State Government all information regarding dangers, including health hazards and the measures to overcome such hazards arising from the exposure to or handling of the materials or substances in the manufacture, transportation, storage and other processes, to the workers employed in the factory, the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator, the local authority within whose jurisdiction the factory is situate and the general public in the vicinity.

(*2*) The occupier shall, at the time of registering the factory involving a hazardous process, lay down a detailed policy with respect to the health and safety of the workers employed therein and intimate such policy to the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator and the local authority and, thereafter, at such intervals as may be prescribed by the State Government, inform the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator and the local authority of any change made in the said policy.

(*3*) The information furnished under sub-section (*1*) shall include accurate information as to the quantity, specifications and other characteristics of wastes and the manner of their disposal.

(*4*) Every occupier shall, with the approval of the Chief Inspector-cum-Facilitator, draw up an on-site emergency plan and detailed disaster control measures for his factory and make known to the workers employed therein and to the general public living in the vicinity of the factory the safety measures required to be taken in the event of an accident taking place.

(*5*) Every occupier of a factory shall, if such factory proposes to engage in a hazardous process at any time after the commencement of this Code, within a period of thirty days before the commencement of such process, inform the Chief Inspector-cum-Facilitator about the nature and details of the process in such form and in such manner as may be prescribed by the State Government.

(6) Where any occupier of a factory contravenes the provisions of sub-section (5), the licence issued under section 79 to such factory shall, notwithstanding any penalty to which the occupier of factory shall be subjected to under the provisions of this Code, be liable for cancellation.

(7) The occupier of a factory involving a hazardous process shall, with the previous approval of the Chief Inspector-cum-Facilitator, lay down measures for the handling, usage, transportation and storage of hazardous substances inside the factory premises and the disposal of such substances outside the factory premises and publicise them in the manner prescribed by the State Government among the workers and the general public living in the vicinity.

Specific responsibility of the occupier in relation to hazardous processes.

85. Every occupier of a factory involving any hazardous process shall—

(*a*) maintain accurate and up-to-date health records or, as the case may be, medical records, of the workers in the factory who are exposed to any chemical, toxic or any other harmful substances which are manufactured, stored, handled or transported and such records shall be accessible to the workers subject to such conditions as may be prescribed by the State Government;

(*b*) appoint persons who possess prescribed qualifications and experience in handling hazardous substances and are competent to supervise such handling within the factory and to provide at the working place all the necessary facilities for protecting the workers in the manner prescribed by the State Government:

Provided that where any question arises as to the qualifications and experience of a person so appointed, the decision of the Chief Inspector-cum-Facilitator shall be final;

(*c*) provide for medical examination of every worker—

(*i*) before such worker is assigned to a job involving the handling of, or working with, a hazardous substance; and

(*ii*) while continuing in such job, and after he has ceased to work in such job, at intervals not exceeding twelve months, in such manner as may be prescribed by the State Government.

National Board to inquire into certain situations.

86. (*1*) The Central Government may, in the event of the occurrence of an extraordinary situation involving a factory engaged in a hazardous process, direct the National Board to inquire into the standards of health and safety observed in the factory with a view to finding out the causes of any failure or neglect in the adoption of any measures or standards prescribed by the State Government for the health and safety of the workers employed in the factory or the general public affected, or likely to be affected due to such failure or neglect and for the prevention of recurrence of such extraordinary situations in future in such factory or elsewhere.

(*2*) The recommendations of the National Board shall be advisory in the nature.

Emergency standards.

87. (*1*) Where the Central Government is satisfied that no standards of safety have been prescribed in respect of a hazardous process or class of hazardous processes, or where the standards so prescribed are inadequate, it may direct the Directorate General Occupational Safety and Health formerly known as the Directorate General of Factory Advice Service and Labour Institutes or any Institution authorised in matters relating to standards of safety in hazardous processes, to lay down emergency standards for enforcement of suitable standards in respect of such hazardous processes.

(*2*) The emergency standards laid down under sub-section (*1*) shall, until they are incorporated in the rules made under this Code, be enforceable and have the same effect as if they had been incorporated in the rules made under this Code.

Permissible limits of exposure of chemicals and toxic substances.

88. The maximum permissible limits of exposure of chemical and toxic substances in manufacturing process in any factory shall be of the value as may be prescribed by the State Government.

Right of workers to warn about imminent danger.

89. (*1*) Where the workers employed in any factory engaged in a hazardous process have reasonable apprehension that there is a likelihood of imminent danger to their lives or health due to any accident, they may, bring the same to the notice of the occupier, agent, manager or any other person who is in-charge of the factory or the process concerned directly or through their representatives in the Safety Committee and simultaneously bring the same to the notice of the Inspector-cum-Facilitator.

(*2*) It shall be the duty of such occupier, agent, manager or the person in-charge of the factory or process to take immediate remedial action if he is satisfied about the existence of such imminent danger and send a report forthwith of the action taken to the Inspector-cum-Facilitator.

(*3*) If the occupier, agent, manager or the person in-charge referred to in sub-section (*2*) is not satisfied about the existence of any imminent danger as apprehended by the workers, he shall, nevertheless, refer the matter forthwith to the Inspector-cum-Facilitator whose decision on the question of the existence of such imminent danger shall be final.

Appeal against the order of Inspector-cum-Facilitator in case of factory.

90. The appropriate Government may prescribe provisions providing the manner in which and the appropriate authority to whom the manager or occupier of the factory may make appeal against the order of the Inspector-cum-Facilitator and the procedure for disposing of such appeals.

Power to make rules to exempt.

91. (*1*) The appropriate Government may make rules,—

(*a*) specifying the persons who hold positions of supervision or management or are employed in a confidential position in a factory or empowering the Chief Inspector-cum-Facilitator to declare any person, other than a person so specified, as a person holding position of supervision or management or employed in a confidential position in a factory if, in the opinion of the Chief Inspector-cum-Facilitator, such person holds such position or is so employed, and the provisions of this Code, shall not apply to any person so defined or declared;

(*b*) in respect of any worker or class of workers in any establishment or class of establishment, for providing the exemption, extent of exemption and conditions subject to which such exemption may be given.

(*2*) The appropriate Government or the Chief Inspector-cum-Facilitator may, by order in writing, exempt subject to such conditions as it may deem expedient, any or all of the adult workers in any establishment or class of establishments.

PART VIII

PLANTATION

Facilities for workers in plantation.

92. (*1*) Without prejudice to the generality of sections 23 and 24, the State Government may prescribe requiring every employer to make provisions in his plantation for—

(*a*) necessary housing accommodation including drinking water, kitchen and toilet to every worker employed in the plantation (including his family):

(*b*) crèches facilities where in the plantation fifty or more workers (including workers employed by any contractor) are employed or were employed on any day of the preceding twelve months:

Provided that.—

(*i*) an establishment may avail common crèche facility of the Central Government, State Government, municipality or private entity or provided by non-Governmental organisation or by any other organisation; or

(*ii*) a group of establishments may agree to pool their resources for setting up of common crèche:

(*c*) educational facilities for the children of the workers employed in the plantation where the children between the ages of six to twelve of the workers exceed twenty-five in number;

(*d*) health facilities to every worker employed in the plantation (including his family) or provide coverage under the Employees State Insurance Act, 1948; and

34 of 1948.

(*e*) recreational facilities for the workers employed in the plantation.

(*2*) An employer of a plantation shall be responsible to provide and maintain welfare facilities for which the workers in the plantation are entitled under this Code either from his own resources or through the schemes of the Central Government or State Government, Municipality or Panchayat for the locality in which the plantation is situated.

Explanation.—For the purposes of this sub-section—

(*i*) the expression "Municipality" has the same meaning as assigned to it in clause (*e*) of article 243 of the Constitution; and

(*ii*) the expression "Panchayat" has the same meaning as assigned to it in clause (*d*) of article 243 of the Constitution.

93. (*1*) In every plantation, arrangement shall be made by the employer to provide for the safety of a worker in connection with the use, handling, storage and transport of insecticides, pesticides and chemicals and toxic substances. Safety.

(*2*) The State Government may prescribe for special safeguards for employment of women or adolescents in using or handling hazardous chemicals.

(*3*) The employer of a plantation shall appoint persons possessing the prescribed qualifications to supervise the use, handling, storage and transportation of insecticides, chemicals and toxic substances in his plantation.

(*4*) Every employer of a plantation shall ensure that every worker in plantation employed for handling, mixing, blending and applying insecticides, chemicals and toxic substances, is trained about the hazards involved in different operations in which he is engaged, the various safety measures and safe work practices to be adopted in emergencies arising from spillage of such insecticides, chemicals and toxic substances and such other matters as may be prescribed by the State Government.

(*5*) Every worker in a plantation who is exposed to insecticides, pesticides, chemicals and toxic substances shall be medically examined periodically, in such manner as may be prescribed by the State Government.

(*6*) Every employer of a plantation shall maintain health record of every worker in plantation who is exposed to insecticides, pesticides, chemicals and toxic substances which are used, handled, stored or transported in a plantation, and every such worker shall have access to such record.

(*7*) Every employer of a plantation shall provide—

(*a*) washing, bathing and clock room facilities; and

(*b*) protective clothing and equipment,

to every worker engaged in the handling insecticides, pesticides, chemicals and toxic substances in such manner as may be prescribed by the State Government.

(*8*) Every employer of a plantation shall display in the plantation, a list of permissible concentrations of insecticides, pesticides, chemicals and toxic substances in the breathing zone of the workers engaged in the handling and application of insecticides, pesticides, chemicals and toxic substances in the plantation.

(*9*) Every employer of a plantation shall exhibit such precautionary notices in the plantation as may be prescribed by the State Government indicating the hazards of insecticides, pesticides, chemicals and toxic substances.

CHAPTER XII

OFFENCES AND PENALTIES

General penalty for offences.

94. Save as otherwise expressly provided in this Code, if in, or in respect of, any establishment, there is any contravention of the provisions of this Code or regulations or rules, or bye-laws or any of standards, made thereunder or of any order in writing given under this Code or such regulations or rules or bye-laws or standards, the employer or the principal employer of the establishment, as the case may be, shall be liable to penalty which shall not be less than two lakhs rupees but which may extend up to three lakh rupees, and if the contravention is continued after the conviction, then, with further penalty which may extend to two thousand rupees for each day till such contravention continues.

Punishment for causing obstruction to Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator, etc.

95. (*1*) Whoever wilfully—

(*i*) prevents or causes obstruction to a Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator or an officer of the appropriate Government or a person authorised to discharge any duty or to exercise any powers under this Code or the rules or the regulations or the bye-laws made thereunder, from discharging such duty or exercising such power; or

(*ii*) refuses entry to the Chief Inspector-cum-Facilitator or the Inspector-cum-Facilitator or person or public authority referred to in clause (*i*) of sub-section (*1*) of section 35 or expert referred to in section 37, to any place where such Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator or such person or authority or expert is entitled to enter; or

(*iii*) fails or refuses to produce any document which he is required to produce; or

(*iv*) fails to comply with any requisition or order issued to him,

under this Code or the rules, regulations or bye-laws made thereunder he shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to one lakh rupees, or with both.

(*2*) Where any person convicted of an offence punishable under sub-section (*1*) is again convicted of an offence under the same provision, then, he shall be punishable with imprisonment for a term which may extend to six months, or with fine which shall not be less than one lakh rupees but which may extend to two lakh rupees, or with both.

Penalty for non-maintenance of register, records and non-filing of returns, etc.

96. (*1*) Any person, who is required under this Code or the rules or regulations or bye-laws or order made thereunder, to—

(*i*) maintain any register or other document or to file returns, omits or fails to maintain such register or document or to file such returns; or

(*ii*) produce any register or plan or record or report or any other document, omits or fails to produce such register or plan or record or report or such other document,

he shall be liable to penalty which shall not be less than fifty thousand rupees but which may extend to one lakh rupees.

(*2*) Where any person convicted of an offence punishable under sub-section (*1*) is again convicted of an offence under the same provision, then, he shall be liable to penalty which shall not be less than fifty thousand rupees but which may extend to two lakh rupees.

Punishment for contravention of certain provisions.

97. (*1*) Any person, who, save as permitted by or under this Code, contravenes, any—

(*i*) provision of this Code or of any rule, regulation or bye-laws; or

(*ii*) order made under this Code prohibiting, restricting or regulating the employment of workers including women, audio-visual worker and contract labour and employee below eighteen years of age in case of mines,

he shall be liable to penalty which shall not be less than fifty thousand rupees but which may extend to one lakh rupees.

(*2*) Where any person convicted of an offence punishable under sub-section (*1*) is again convicted of an offence under the same provision, then, he shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to two lakh rupees, or with both.

Punishment for falsification of records, etc.

98. (*1*) Whoever—

(*a*) produces false records or counterfeits or knowingly makes or produces or uses a false statement, declaration or evidence regarding any document in connection with compliance of any of the provisions of this Code or any rules, regulations or bye-laws or any order made thereunder; or

(*b*) falsifies any plan or section, the maintenance of which is required by or under this Code or produces before any authority such plan or section, knowing the same to be false; or

(*c*) makes, gives or delivers knowingly a false plan, section, return, notice, record or report containing a statement, entry or detail,

he shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to one lakh rupees, or with both.

(*2*) Where any person convicted of an offence punishable under sub-section (*1*) is again convicted of an offence under the same provision, then, he shall be punishable with imprisonment for a term which may extend to six months, or with fine which shall not be less than one lakh rupees but which may extend to two lakh rupees, or with both.

Penalty for omission to furnish plans, etc.

99. Any person who, without reasonable excuse the burden of proving which shall lies upon him, omits to make or furnish in the prescribed form or manner or at, or within, the prescribed time any plan, section, return, notice, register, record or report required by or under any provision of this Code to be made or furnished, he shall be liable to penalty which shall not be less than one lakh rupees but which may extend to two lakh rupees.

Punishment for disclosure of information.

100. (*1*) Whoever being the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator or any other person referred to in section 39 or section 121 discloses, contrary to the provisions of that section, any such information as is referred to in that section without the consent of the appropriate Government, he shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to one lakh rupees, or with both.

(2) No court shall proceed with the trial of any offence under this section except with the previous sanction of the appropriate Government.

Punishment for wrongfully disclosing results of analysis.

101. Whoever, except in so far as it may be necessary for the purposes of a prosecution for any offence punishable under this Code, publishes or discloses to any person the results of an analysis of a sample of substance used or intended to be used in any process under this Code, shall be punishable with imprisonment for a term, which may extend to six months, or with fine, which may extend to fifty thousand rupees, or with both.

Punishment for contravention of provisions of duties relating to hazardous processes.

102. (1) Whoever fails to comply with or contravenes any of his duties specified under—

(i) clauses (a) to (h) of sub-section (1) or sub-section (2) of section 6 or clause (d) of section 13 in so far as such duty relates to hazardous processes; or

(ii) section 80,

shall, in respect of such failure or contravention, be punishable with an imprisonment for a term which may extend to two years and with fine which may extend to five lakh rupees, and in case the failure or contravention continues, with additional fine which may extend to twenty-five thousand rupees for every day during which such failure or contravention continues, after the conviction for the first such failure or contravention.

(2) If the failure or contravention referred to in sub-section (1) continues beyond a period of one year after the date of conviction, the offender shall be punishable with imprisonment for a term which may extend to three years or with a fine of twenty lakh rupees, or with both.

Punishment for contravention of provisions of duties relating to safety provisions resulting in an accident.

103. (1) If a person fails to comply with or contravenes any duties under this Code or the regulations, rules, bye-laws or orders made thereunder and such non-compliance or contravention has resulted in an accident or dangerous occurrences causing—

(a) death, he shall be punishable with imprisonment for a term which may extend to two years, or with a fine which shall not be less than five lakh rupees, or with both; or

(b) serious bodily injury to any person within the establishment, he shall be punishable with imprisonment for a term which may extend to one year, or with a fine which shall not be less than two lakh rupees but not exceeding four lakh rupees, or with both:

Provided that while imposing the fine under this section, the court may direct that a portion of the fine, which shall not be less than fifty per cent. thereof, shall be given as compensation to the victim or to the legal heirs of the victim, in the case of his death.

(2) Where a person having been convicted under sub-section (1) is again convicted thereunder, shall be punishable with double the punishment provided under that sub-section for first conviction.

Special provision for contravention of order under section 38.

104. Whoever continues to work in contravention of any general or special order issued under the provisions of section 38, shall be punishable with imprisonment for a term which may extend to two years and shall also be liable to fine which may extend to five lakh rupees:

Provided that the court shall not impose a fine under this section which shall be less than two lakh rupees without recording in the judgment the reasons for imposing such fine.

Failure to appoint manager in mine.

105. Whoever in compliance of the provisions of section 67, fails to appoint a manager shall be punishable with imprisonment for a term which may extend to three months, or with fine which may extend to one lakh rupees, or with both.

Offences by employees.

106. (*1*) Subject to the provisions of section 13, except clause (*d*) thereof, if any employee employed in a workplace contravenes any provision of this Code or any rules or orders made thereunder, imposing any duty or liability on employee, he shall be punishable with penalty which may extend to ten thousand rupees.

(*2*) Where an employee is convicted of an offence punishable under sub-section (*1*), the employer of the establishment shall not be deemed to be guilty of an offence in respect of that contravention, unless it is proved that he failed to take all reasonable measures for its prevention.

Prosecution of owner, agent or manager of mine.

107. No prosecution shall be instituted against any owner, agent or manager of a mine for any offence under this Code except at the instance of the Chief Inspector-cum-Facilitator or of the District Magistrate or of Inspector-cum-Facilitator authorised in this behalf by general or special order in writing by the Chief Inspector-cum-Facilitator:

Provided that the Chief Inspector-cum-Facilitator or the District Magistrate or the Inspector-cum-Facilitator as so authorised shall before instituting such prosecution satisfy himself that the owner, agent or manager of a mine had failed to exercise due diligence to prevent the commission of such offence:

Provided further that in respect of an offence committed in the course of the technical direction and management of a mine, the District Magistrate shall not institute any prosecution against an owner, agent or manager of a mine without the previous approval of the Chief Inspector-cum-Facilitator.

Exemption of owner, agent or manager of mine or occupier of factory from liability in certain cases.

108. Where the owner, agent or manager of the mine or employer or occupier of the factory is charged with an offence punishable under this Code he shall be entitled, upon complaint duly made by him and on giving to the prosecutor not less than three clear days' notice in writing of his intention so to do, to have any other person whom he charges as the actual offender brought before the Court at the time appointed for hearing the charge; and if, after the commission of the offence has been proved, the owner, agent or manager of the mine or occupier or manager of the factory, as the case may be, proves to the satisfaction of the Court—

(*a*) that he has exercised due diligence to enforce the execution of this Code, or

(*b*) that the said other person committed the offence in question without his knowledge, consent or connivance,

that other person shall be convicted of the offence and shall be liable to the like punishment as if he was the owner, agent or manager of the mine or occupier or manager of the factory, as the case may be, and the owner, agent or manager of a mine or the occupier or the manager of the factory shall be, discharged from any liability under this Code in respect of such offence:

Provided that in seeking to prove as aforesaid the owner, agent or manager of a mine or the occupier or manager of the factory, as the case may be, may be examined on oath, and his evidence and that of any witness whom he calls in his support, shall be subject to cross-examination on behalf of the person he charges as the actual offender and by the prosecutor:

Provided further that, if the person charged as the actual offender by the owner, agent or manager of the mine or occupier or manager of the factory, as the case may be, cannot be brought before the court at the time appointed for hearing the charge, the court shall adjourn the hearing from time to time for a period not exceeding three months and if by the end of the said period the person charged as the actual offender cannot still be brought before the court, the court shall proceed to hear the charge against the owner, agent or manager of the mine or occupier or manager of the factory, as the case may be, and shall, if the offence be proved, convict him.

Offences by companies, etc.

109. (*1*) Where an offence under this Code has been committed by a company, every person who, at the time the offence was committed, was in charge of, and was responsible to, the company for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly:

Provided that nothing contained in this sub-section shall render any such person liable to any punishment, if he proves that the offence was committed without his knowledge or that he had exercised all due diligence to prevent the commission of such offence.

(*2*) Notwithstanding anything contained in sub-section (*1*) where any offence under this Code has been committed by a company and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of any director, manager, company secretary or other officer of the company, such director, manager, company secretary or other officer shall be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

Explanation.—For the purposes of this section,—

(*a*) "company" means any body corporate and includes a firm or other association of individuals; and

(*b*) "director" means.—

(*i*) in relation to a firm a partner thereof; or

(*ii*) the owner of a mine being a firm or other association of individuals or a company; or

(*iii*) in case of association of individuals other than specified in sub-clause (*ii*), any of its members.

Limitation of prosecution and cognizance of offences.

110. (*1*) Notwithstanding anything contained in this Chapter, the Inspector-cum-Facilitator shall, not initiate prosecution proceeding against an employer for any offence under this Chapter, give an opportunity to comply with relevant provisions of this Act within a period of thirty days from the date of notice giving opportunity, and, if the employer complies with such provisions within such period, then, no such proceeding shall be initiated against such employer:

Provided that no such opportunity shall be accorded to an employer in case of an accident and if the violation of the same nature of the provisions under this Code is repeated within a period of three years from the date on which such first violation was committed and in such case the prosecution shall be initiated in accordance with provisions of sub-section (*2*).

(*2*) No court shall take cognizance of any offence punishable under this Code, unless a complaint in respect thereof is made within six months of the date on which the alleged commission of the offence came to the knowledge of the Inspector-cum-Facilitator and a complaint is filed in that regard by him.

(*3*) No court inferior to that of a Metropolitan Magistrate or a Judicial Magistrate of the First Class shall try any offence punishable under this Code.

Explanation.—For the purposes of this section,—

(*a*) in the case of a continuing offence, the period of limitation shall be computed with reference to every point of time during which the offence continues;

(*b*) where for the performance of any act, time is granted or extended on an application made by the employer of an establishment, the period of limitation shall be computed from the date on which the time so granted or extended expired.

Power of officers of appropriate Government to impose penalty in certain cases.

111. (*1*) Notwithstanding anything contained in section 110, for the purpose of imposing penalty under sub-section (*3*) of section 12 or sections 94, 96, 97, 99, 106 and sub-section (*3*) of section 114, the appropriate Government may appoint any officer not below the rank of Under Secretary to the Government of India or an officer of equivalent rank in the State Government, as the case may be, for holding enquiry in such manner, as may be prescribed by the Central Government.

(*2*) While holding the enquiry, the officer referred to in sub-section (*1*) shall have the power to summon and enforce attendance of any person acquainted with the facts and circumstances of the case to give evidence or to produce any document, which in the opinion of such officer, may be useful for or relevant to the subject-matter of the enquiry and if, on such enquiry, he is satisfied that the person has committed any offence under the provisions referred to in sub-section (*1*), he may impose such penalty as he thinks fit in accordance with the provisions of that sub-section.

(*3*) Any person aggrieved by an order made by the officer under sub-section (*2*) may prefer an appeal, in such form and manner and accompanied by such fee as may be prescribed, to the appellate authority to be appointed by the appropriate Government from amongst officers not below the rank of Deputy Secretary to the Government of India or an officer of equivalent rank in the State Government, as the case may be, within sixty days from the date on which the copy of the order made by the officer referred in sub-section (*1*) is received by the aggrieved person.

(*4*) The appellate authority may, after giving the parties to the appeal an opportunity of being heard, pass such order as he thinks fit, confirming, modifying or setting aside the order appealed against, within a period of sixty days from the date of receipt of appeal.

(*5*) Where a person fails to pay the penalty so imposed within a period of ninety days from the date of receipt of the copy of the order, he shall be punishable with fine which shall not be less than twenty-five thousand rupees but which may extend up to two lakh rupees.

(*6*) The amount of penalty imposed and received under this section shall be credited to the fund established under sub-section (*1*) of section 115.

Jurisdiction of court for entertaining proceedings, etc., for offence.

112. For the purposes of conferring jurisdiction on any court in relation to an offence under this Code or the rules, regulation or bye-laws made thereunder in connection with an establishment, the place where the establishment is for the time being situated, shall be deemed to be the place where such offence has been committed.

Power of court to make orders.

113. (*1*) Where the employer of a mine or a factory or a dock is convicted of an offence punishable under this Code, the court may, in addition to awarding him any punishment, by order in writing, require him within the period specified in the order (which may be extended by the court from time to time on application made in this behalf) to take such measures as may be specified in the order for remedying the matters in respect of which the offence was committed.

(*2*) Where an order is made under sub-section (*1*), the employer of the mine or the factory shall not be liable under this Code in respect of the continuance of the offence during the period or extended period, if any, but if on the expiry of such period or extended period the order of the court has not been fully complied with, employer shall be deemed to have committed a further offence and shall be punishable with imprisonment for a term which may extend to six months, or with fine which may extend to one hundred rupees for every day after such expiry on which the order has not been complied with, or with both.

Composition of certain offences.

114. (*1*) Notwithstanding anything contained in the Code of Criminal Procedure, 1973, any penalty under sub-section (*3*) of section 12 or section 94 or section 96 or sub-section (*1*) of section 97 or section 99 or section 106 or sub-section (*3*) or any offence

2 of 1974.

under sub-section (*2*) of section 97 or sub-section (*1*) of section 100 or section 101 or clause (*b*) of sub-section (*1*) of section 103 or section 105 or sub-section (*2*) of section 113 may either before or after the holding the enquiry or, as the case may be, of institution of prosecution may be compounded by such officer of the appropriate Government as may be notified by that Government in the manner as may be prescribed by it—

(*a*) in a case of penalty for a sum of fifty per cent. of the maximum penalty provided for such penalty; and

(*b*) in a case of offence for a sum of seventy-five per cent. of the maximum fine provided for such offence.

(*2*) Where a penalty or an offence has been compounded under sub-section (*1*), the person liable for penalty or the offender, as the case may be, shall be discharged of the penalty or offence and there shall be no further proceedings against him in respect of such penalty or offence.

(*3*) Any person who fails to comply with an order made by the officer referred to in sub-section (*1*), shall be liable to pay a penalty equivalent to twenty per cent. of the maximum penalty or fine provided for the penalty or the offence, as the case may be, in addition to the penalty or fine.

(*4*) The amount of composition received under sub-section (*1*) shall be credited to the fund established under sub-section (*1*) of section 115 for the unorganised workers.

(*5*) Nothing contained in sub-section (*1*) shall apply to a penalty or an offence committed by a person for a second or subsequent time within a period of three years from the date of penalty or offence, as the case may be,—

(*a*) which was earlier compounded; or

(*b*) for which such person was earlier convicted.

CHAPTER XIII

SOCIAL SECURITY FUND

Social security fund.

115. (*1*) There shall be established by the appropriate Government a social security fund for the welfare of the unorganised workers to which there shall be credited the amount received from composition of the offence as specified in sub-section (*4*) of section 114 and the amount of the penalty as specified in sub-section (*6*) of section 111.

(*2*) The fund may also be funded by such other sources as may be prescribed by the appropriate Government.

(*3*) The fund shall be administered and expended for welfare of the unorganised workers in such manner as may be prescribed by the appropriate Government including the transfer of the amount in the fund to any fund established under any other law for the time being in force for the welfare of the unorganised workers.

Explanation.—For the purpose of this section the expression "unorganised worker" shall have the same meaning as is assigned to it under clause (*m*) of section 2 of the Unorganised Workers Social Security Act, 2008. 33 of 2008.

CHAPTER XIV

MISCELLANEOUS

Delegation of powers.

116. The Central Government may, by notification, direct that any power exercisable by it under this Code or rules made thereunder shall, in relation to such matters and subject to such conditions, if any, as may be specified in the notification, be exercisable also by the State Government or by such officer or authority subordinate to the State Government as may be specified in the said notification.

Onus as to age.

117. (*1*) When any offence is committed under this Code involving an issue of a certain age of a person and such person is in the opinion of the court *prima facie* under such age, the burden shall be on the accused to prove that such person is not under such age.

(*2*) The medical authority prescribed by the Central Government shall, while examining a worker for issuing the certificate of age for the purposes of this Code, take into account the Aadhaar card of the worker, and in the absence thereof, the date of birth certificate from school or the matriculation or equivalent certificate from the concerned examination Board of the worker, if available, and in the absence thereof, the birth certificate of the worker given by a corporation or a municipal authority or a Panchayat, and only in the absence of any of the methods specified in this sub-section, the age shall be determined by such medical authority through an ossification test or any other latest medical age determination test.

Onus of proving limits of what is practicable, etc.

118. In any proceeding for an offence for the contravention of any provision of this Code or regulations or bye-laws or rules made thereunder consisting of a failure to comply with a duty or requirement to do something, it shall be for the person who is alleged to have failed to comply with such duty or requirement, to prove that it was not reasonably practicable or all practicable measures were taken to satisfy the duty or requirement.

Common licence for contractor, factories and to industrial premises, etc.

119. (*1*) Notwithstanding anything contained in this Code, any person desirous of obtaining common licence in respect of a factory, industrial premises for *beedi* and cigar work and for engaging contract workers or any combination thereof or single licence for any one of them under this Code shall make an application electronically or otherwise to such authority as may be designated, by notification, by the appropriate Government.

(*2*) The application under sub-section (*1*),—

(*a*) shall be in such form and filed in such manner and accompanied by such fee and contain such information as may be prescribed by the appropriate Government:

(*b*) shall, in so far as it relates to the licence for engaging contract labours, contain the number of inter-State migrant workers employed.

(*3*) On receipt of an application under sub-section (*1*), the authority referred to in that sub-section shall take such actions in such manner and make such inquiry as may be prescribed by the appropriate Government.

(*4*) Where the authority referred to in sub-section (*1*) is satisfied that the common licence may be issued in respect of a factory, industrial premises for *beedi* and cigar work and for engaging contract workers or any combination thereof or single licence for any one of them under this Code, such authority shall issue a licence electronically within forty-five days of the receipt of application failing which the licence shall be deemed to be issued and shall be auto generated and the responsibility of such failure shall be on such authority:

Provided that where the licence is deemed to be issued, no further inquiry shall be made:

Provided further that the form of licence shall, as far as practicable, be similar throughout India:

Provided also that where such authority rejects the application he shall assign the reason for such rejection.

(*5*) Notwithstanding anything contained in this Code, any licence in respect of a factory, industrial premises for *beedi* and cigar work and for engaging contract labour has been obtained under any Central labour law before the commencement of this Code, in respect of any establishment shall be deemed to have been obtained under the provisions of this Code and shall be valid for the period for which it was issued and shall have to be obtained afresh after its expiration.

(6) Any person aggrieved by an order passed under this section by the authority referred to in sub-section (1) may file, within thirty days from the date of the order, an appeal in such form, accompanied with such fee to such appellate authority as may be prescribed by the appropriate Government and the appeal shall be disposed of electronically within thirty days of the filing of the appeal.

Effect of law and agreements inconsistent with Code.

120. (1) The provisions of this Code shall have effect notwithstanding anything inconsistent therewith contained in any other law for the time being in force or in the terms of any award, agreement or contract of service whether made before or after the commencement of this Code:

Provided that where under any such award, agreement, contract of service or otherwise an employee is entitled to benefits in respect of any matters which are more favourable to him than those to which he will be entitled to under this Code, the employee shall continue to get the former notwithstanding that he receives benefits in respect of other matters under this Code.

(2) Nothing contained in this Code shall be construed as precluding any employee from entering into an agreement with an employer for granting him rights or privileges in respect of any matter which are more favourable to him than those to which he would be entitled under this Code.

Power of appropriate Government to direct inquiry in certain cases.

121. (1) The appropriate Government may, in the event of the occurrence of an accident in an establishment which has caused or had the potentiality to cause serious danger to employees and other persons within, and in the vicinity of the workplace or whether immediate or delayed, or any occupational disease as specified in the Third Schedule, which has been or is suspected to have been contracted, in epidemic proportions, appoint one or more persons possessing legal or special knowledge to act as assessors or competent persons in such inquiry in order to inquire into the causes of the accident and disease, fix responsibilities and suggest a plan of action for the future to prevent such accidents or diseases and submit the report to the appropriate Government.

(2) The appropriate Government may direct a Chief Inspector-cum-Facilitator or any other officer under the control of the Government concerned or appoint a committee to undertake a survey in such manner as may be prescribed by the appropriate Government on the situation relating to safety or health at work at any workplace or class of workplaces or into the effect of work activity on the health of the employees and other persons within and in the vicinity of the workplace.

(3) The officer directed or committee appointed, under sub-section (1) or sub-section (2), to hold an inquiry, shall have the powers of a civil court under the Code of Civil Procedure, 1908, for the purposes of enforcing the attendance of witnesses and compelling the production of documents and material objects, and may also so far as may be necessary for the purposes of the inquiry, exercise such powers of an Inspector-cum-Facilitator under this Code as may be necessary. 5 of 1908.

(4) The Central Government may make rules for regulating the procedure of inquiry and survey and other related matters under this section.

Publication of reports.

122. The appropriate Government may, if it thinks fit, cause to be published any report submitted to it by the National Board or State Advisory Board or any extracts from any report submitted to it under this Code.

Powers of Central Government to give directions.

123. The Central Government may give directions to a State Government for the implementation of the provisions of this Code.

General restriction on disclosure of information.

124. (1) No person shall in respect of the establishment, disclose any information relating to any manufacturing or commercial business or any working process which may come to his knowledge in the course of his official duties.

(2) Nothing in sub-section (1) shall apply to any disclosure of information made with the previous consent in writing of the owner of the business or process or for the purposes of any legal proceeding (including adjudication or arbitration), pursuant to any of the relevant statutory provisions or of any criminal proceeding under this Code which may be taken, whether pursuant to any of the relevant statutory provisions or otherwise, or for the purposes of any report of any such proceedings.

Jurisdiction of civil courts barred.

125. No civil court shall have jurisdiction in respect of any matter to which any provision of this Code applies and no injunction shall be granted by any civil court in respect of anything which is done or intended to be done by or under this Code.

Protection of action taken in good faith.

126. (1) No suit, prosecution or other legal proceeding shall lie against any person for anything which is in good faith done or intended to be done in pursuance of this Code or any rule or regulation or bye-laws or order made thereunder.

(2) No prosecution or other legal proceeding shall lie against the Government, any Board or committees constituted under this Code or any member of such Board or any officer or employee of the Government or the Board or any other person authorised by the Government or any Board or committee, for any damage caused or likely to be caused by anything which is in good faith done or intended to be done in pursuance of this Code or any rule or regulation or bye-laws or order made or issued thereunder.

Power to exempt in special cases.

127. (1) The appropriate Government may, by notification and subject to such conditions and restrictions, if any, and for such period or periods as may be specified in the notification, direct that all or any of the provisions of this Code or the rules or the regulations made thereunder shall not apply to or in relation to any establishment or class of establishments.

(2) Without prejudice to the generality of sub-section (1), where the State Government is satisfied in the public interest that it is necessary to create more economic activities and employment opportunities, it may, by notification, exempt, subject to such conditions as it may think fit, any new factory or class or description of new factories from all or any of the provisions of this Code for such period from the date on which such commercial production starts, as may be specified in the notification:

Provided that any notification issued by a State Government under the Factories Act, 1948 for the time being in force in the State prior to the commencement of this Code to achieve the same purpose as is specified in this sub-section, shall remain in force after such commencement for its remaining period as if the provisions of this Code, to the extent they defeat any purpose to be achieved by such notification issued by the State Government, were not in force.

63 of 1948.

Explanation.—For the purpose of this sub-section, the expression "new factory or class or description of new Factories" means such factory or class or description of Factories which are established and whose commercial production start within such period as may be specified in the notification.

Power to exempt during public emergency.

128. In case of a public emergency or disaster or pandemic in whole of India or part thereof, the appropriate Government may, by notification, exempt any workplace or work activity or class thereof from all or any of the provisions of this Code for such period and subject to such conditions as it may think fit:

Provided that no such notification shall be made for a period exceeding one year at a time.

Explanation.—For the purposes of this section "public emergency" means a grave emergency whereby the security of India or any part of the territory thereof is threatened, whether by war or external aggression or internal disturbance.

Power to exempt public institution.

129. The appropriate Government may exempt, subject to such conditions as it may consider necessary, any workshop or workplace where a manufacturing process is carried on and which is attached to a public institution maintained for the purposes of education, training, research or information, from all or any of the provisions of this Code:

Provided that no such exemption shall be granted from the provisions relating to hours of work and holidays unless the persons having the control of the institution submit, for the approval of the appropriate Government, a scheme of the regulation of the hours of employment, intervals for meals, and holidays of the persons employed in or attending the institution or who are inmates for the institution, and the appropriate Government is satisfied that the provisions of the scheme are not less favourable than the corresponding provisions of this Code.

Persons required to give notice, etc., legally bound to do so.

130. Every person required to give any notice or to furnish any information to any authority in relation to the provisions of this Code shall be legally bound to do so within the meaning of section 176 of the Indian Penal Code. 45 of 1860.

Power of Central Government to amend Schedule.

131. The Central Government may, by notification, amend any Schedule by way of addition, alteration or omission therein and on any such notification being issued, the Schedule shall be deemed to be amended accordingly.

Power to remove difficulties.

132. (*1*) If any difficulty arises in giving effect to the provisions of this Code, the Central Government may, by order published in the Official Gazette, make such provisions not inconsistent with the provisions of this Code, as appears to it to be necessary or expedient for removing the difficulty:

Provided that no such order shall be made after the expiry of two years from the date on which this Code comes into force.

(*2*) Every order made under this section shall, as soon as may be after it is made, be laid before each House of Parliament.

Power of appropriate Government to make rules.

133. (*1*) The appropriate Government may, subject to the condition of previous publication and by notification, make rules for carrying out the purposes of this Code.

(*2*) In particular and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:—

(*a*) income from the sources under *Explanation* to clause (*x*) of sub-section (*1*) of section 2;

(*b*) substance or quantity of substance under clause (*zb*) of sub-section (*1*) of section 2;

(*c*) the late fee under the proviso to sub-section (*1*) of section 3;

(*d*) the manner of submitting application under sub-section (*2*) of section 3 and the form of such application and the particulars to be contained therein and the fees to be accompanied therewith;

(*e*) the form and manner of sending the notice and the authority to whom the notice shall be sent and the manner of intimating the authority under sub-section (*1*) of section 5;

(*f*) annual health examination or test free of costs, age of employees or class of employees or establishment or class of establishments under clause (*c*) of sub-section (*1*) of section 6;

(*g*) the information to be included in the letter of appointment and the form of such letter under clause (*f*) of sub-section (*1*) of section 6;

(*h*) the nature of bodily injury and the manner of notice and the time within which the notice shall be sent and the authority to which notice shall be sent under sub-section (*1*) of section 10:

(*i*) nature of dangerous occurrence and the form of notice, the time within which and the authority to which notice shall be sent under section 11;

(*j*) the form of notice related to certain diseases and the time within which the notice shall be sent and the authority to which the notice shall be sent under sub-section (*1*) of section 12;

(*k*) the form and manner of the report and the time within which such report shall be sent to the office of the Chief Inspector-cum-Facilitator under sub-section (*2*) of section 12;

(*l*) manner of making report by employee under clause (*d*) and other duties of employees under clause (*g*) of section 13;

(*m*) manner of sending report of action taken under sub-section (*3*) of section 14;

(*n*) the manner of constituting a safety committee and the manner and the purpose for choosing the representative of the workers in the Safety Committee under sub-section (*1*) of section 22;

(*o*) the qualifications, duties and number of safety officers under sub-section (*2*) of section 22;

(*p*) conditions for exemption of workers from weekly and compensatory holidays under sub-section (*2*) of section 26;

(*q*) the total number of overtime under second proviso to section 27;

(*r*) circumstances for exemption from restriction on double employment in factory and mine under section 30;

(*s*) the form of notice and manner of display of such notice and the manner in which such notice shall be sent to the Inspector-cum-Facilitator under sub-section (*2*) of section 31;

(*t*) the form of register and particulars of workers under clause (*a*) of section 33;

(*u*) the manner and form of displaying notices under clause (*b*) of section 33;

(*v*) return, manner of filing the return and periods of filing return to the Inspector-cum-Facilitator under clause (*d*) of section 33;

(*w*) the qualification and experience of Chief Inspector-cum-Facilitator under sub-section (*5*) of section 34;

(*x*) the manner of taking samples of any article or substance found in any premises and air of atmosphere under clause (*x*) of sub-section (*1*) of section 35;

(*y*) the other powers and duties under clause (*xiv*) of sub-section (*1*) of section 35;

(*z*) the specialised qualification and experience, duties and responsibilities of experts to be empanelled under section 37;

(*za*) the manner of providing alternative employment under sub-clause (*d*) of clause (*A*) of sub-section (*1*) of section 38;

(*zb*) the qualification for the appointment of medical practitioner and other establishment under sub-section (*1*) of section 42;

(*zc*) other establishment engaged in the dangerous occupation or processes under clause (*a*) of sub-section (*2*) of section 42:

(*zd*) medical supervision and other establishment under clause (*b*) of sub-section (*2*) of section 42;

(*ze*) other establishment under clause (*c*) of sub-section (*2*) of section 42:

(*zf*) conditions relating to safety, holidays and working hours or any other condition to be observed by the employer under section 43;

(*zg*) the manner of requiring the employer to provide the adequare safeguards under section 44;

(*zh*) conditions including, in particular, conditions as to hours of work, fixation of wages and other essential amenities in respect of contract labour under clause (*a*) of sub-section (*3*) of section 47;

(*zi*) the form and manner of application and the particulars which such application shall contain regarding the number of contract labour, nature of work for which contract labour is to be employed and other particulars including the information relating to the employment of inter-State migrant workers under sub-section (*1*) of section 48:

(*zj*) the procedure under sub-section (*2*) of section 48;

(*zk*) manner of applying for the renewal of licence and the manner of renewal of licence under sub-section (*3*) of section 48:

(*zl*) responsibility of the contractor under sub-section (*4*) of section 48;

(*zm*) the manner of intimation of work order and time-limit for such intimation under sub-section (*1*) of section 50;

(*zn*) the manner of suspending or cancelling the licence under sub-section (*2*) of section 50;

(*zo*) the period before which the wages shall be paid under sub-section (*1*) of section 55;

(*zp*) the mode of payment of wages under proviso to sub-section (*2*) of section 55:

(*zq*) the manner of payment of wages from security deposit under sub-section (*4*) of section 55;

(*zr*) the form of issuing experience certificate under section 56:

(*zs*) the form and manner of making application under clause (*b*) of sub-section (*2*) of section 57;

(*zt*) period of making report and the period of deciding the question under clause (*c*) of sub-section (*2*) of section 57;

(*zu*) minimum service for entitlement, class of travel and other matters under section 61:

(*zv*) manner of providing facility of toll free helpline under section 63;

(*zw*) manner of providing for study on inter-State migrant workers under section 64;

(*zx*) authority to whom a copy of the agreement shall be forwarded by the producer under sub-section (*3*) of section 66;

(*zy*) details under clause (*vii*) of sub-section (*4*) of section 66:

(*zz*) rules in respect of factory or class or description of factories under sub-section (*1*) of section 79;

(*zza*) mode of submission of application under sub-section (*2*) of section 79;

(*zzb*) common facilities and services for joint liability of owner of premises and occupiers of the factories under section 80;

(*zzc*) rules under section 82;

(*zzd*) purposes under sub-section (*1*) of section 83;

(*zze*) form of application under sub-section (*2*) of section 83;

(*zzf*) the appellate authority for appeal against the order of Inspector-cum-Facilitator of factory and the manner of appeal under section 90;

(*zzg*) rules under section 91;

(*zzh*) manner of holding enquiry under sub-section (*1*) of section 111;

(*zzi*) form and manner of preferring appeal and the fee to accompany such appeal under sub-section (*3*) of section 111;

(*zzj*) manner of compounding under sub-section (*1*) of section 114;

(*zzk*) other sources of fund under sub-section (*2*) of section 115;

(*zzl*) the manner of administering and expending the Fund under sub-section (*3*) of section 115;

(*zzm*) the form of application, manner of filing the application and the fee to be accompanied therewith including the information relating to the employment of inter-State migrant workers under sub-section (*2*) of section 119;

(*zzn*) actions, manner of taking actions and inquiry under sub-section (*3*) of section 119;

(*zzo*) the form of appeal, the fee to be accompanied therewith and the appellate authority under sub-section (*6*) of section 119;

(*zzp*) the manner of survey under sub-section (*2*) of section 121;

(*zzq*) any other matter which is required to be, or may be, prescribed under this Code.

Power of Central Government to make rules.

134. (*1*) The Central Government may, subject to the condition of previous publication and by notification, make rules for carrying out the purposes of this Code.

(*2*) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:—

(*a*) the other authority under sub-clause (*iii*) of clause (*zs*) of sub-section (*1*) of section 2;

(*b*) the matters which are directly related to the condition of ship under the proviso to sub-clause (*iii*) of clause (*zs*) of sub-section (*1*) of section 2;

(*c*) other period under clause (*a*) of sub-section (*1*) of section 3;

(*d*) the form of certificate of registration, the time within which and the conditions subject to which such certificate shall be issued under sub-section (*3*) of section 3;

(*e*) the form of intimation by the employer electronically and the manner of amendment in the certificate electronically under sub-section (*4*) of section 3;

(*f*) the manner of informing closing of establishment and certifying payment to the registering officer under sub-section (*5*) of section 3;

(*g*) procedure for nomination and discharge of functions of Members of National Board under sub-section (*3*) of section 16;

(*h*) the terms and conditions of service of officers and employees of the National Board under sub-section (*4*) of section 16;

(*i*) the number of members of technical committees or advisory committees and their qualifications under sub-section (*5*) of section 16;

(*j*) the form and manner of collecting, compiling and analyzing occupational safety and health statistics under sub-section (*1*) of section 21;

(*k*) the form and manner of maintaining database electronically or otherwise and the documents to be produced under sub-section (*2*) of section 21;

(*l*) health and working conditions under sub-section (*1*) of section 23;

(*m*) regarding matters specified in sub-section (*2*) of section 23;

(*n*) welfare facilities for the employees under sub-section (*1*) of section 24;

(*o*) regarding matters specified in sub-section (*2*) of section 24;

(*p*) facility of crèche under sub-section (*3*) of section 24;

(*q*) definition of "running time" in relation to a working day under clause (*a*) of the *Explanation* to sub-section (*1*) of section 25;

(*r*) the hours of work for working journalist under sub-section (*2*) of section 25;

(*s*) other kinds of leave under clause (*i*) of sub-section (*3*) of section 25;

(*t*) the maximum period of accumulating leave under clause (*ii*) of sub-section (*3*) of section 25;

(*u*) the limit up to which the earned leave may be availed of at a time and the reasons for which such leave may be exceeding under clause (*iii*) of sub-section (*3*) of section 25;

(*v*) conditions and restrictions for entitlement of cash compensation under clause (*iv*) of sub-section (*3*) of section 25;

(*w*) powers and duties of District Magistrate under section 36;

(*x*) requisite qualifications or criteria under sub-section (*1*) of section 47;

(*y*) period of renewal of licence under sub-section (*2*) of section 47;

(*z*) procedure under clause (*b*) of sub-section (*1*) of section 51;

(*za*) form of agreement under clause (*a*), and the name and other particulars under clause (*b*) of sub-section (*2*) of section 66;

(*zb*) the matter which may be saved and the qualifications of sole manager under sub-section (*1*) of section 67;

(*zc*) the conditions relating to number of employees, depth of excavation and other matters under clause (*a*) of sub-section (*1*) of section 68;

(*zd*) conditions relating to workings, opencast workings and explosives under clause (*b*) of sub-section (*1*) of section 68;

(*ze*) to declare the mines and part thereof for the purpose of applicability of the provisions of this Code under sub-section (*2*) of section 68;

(*zf*) the authority, the manner of informing such authority and the time limit for making such information under sub-section (*3*) of section 68;

(*zg*) to provide for medical examination of apprentice, other trainee or employee under sub-section (*3*) of section 70;

(*zh*) to exempt certain persons or category of persons holding positions of supervision or management and the persons employed in mine and the persons employed therein under section 71;

(*zi*) to provide for vocational training and rescue and recovery services to the persons employed in a mine under section 72;

(*zj*) medical authority under sub-section (*2*) of section 117;

(*zk*) rules under sub-section (*4*) of section 121;

(*zl*) the language of the bye-laws under sub-section (*7*) of section 139;

(*zm*) any other matter which is required to be, or may be prescribed.

Power of State Government to make rules.

135. (*1*) The State Government may, subject to the condition of previous publication and by notification, make rules for the carrying out the provisions of this Code.

(*2*) In particular and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:—

(*a*) the constitution, procedure and other matters relating to State Advisory Board under sub-section (*2*) of section 17;

(*b*) the number of members and their qualifications under sub-section (*3*) of section 17;

(*c*) the form of application and the payment of fees under sub-section (*2*) of section 74;

(*d*) the manner of preparing the plan of the place or premises under sub-section (*3*) of section 74;

(*e*) other matters under clause (*e*) of sub-section (*4*) of section 74;

(*f*) fees under sub-section (*6*) of section 74;

(*g*) period under the second proviso to sub-section (*6*) of section 74;

(*h*) the time of filing appeal and fees under section 75;

(*i*) the form of application by the employee and conditions under sub-section (*1*) of section 76;

(*j*) form of maintaining the record of the work under sub-section (*2*) of section 76;

(*k*) the manner of disclosing information by occupier of a factory under sub-section (*1*) of section 84;

(*l*) the interval of informing Chief Inspector-cum-Facilitator and the local authority about the policy with respect to the health and safety of the workers under sub-section (*2*) of section 84;

(*m*) the form and manner of informing Chief Inspector-cum-Facilitator under sub-section (*5*) of section 84;

(*n*) the manner of publicising among the workers and the general public living in the vicinity of the factory the measures and disposal laid down under sub-section (*7*) of section 84;

(*o*) the conditions for accessibility to the record by the workers under clause (*a*) of section 85;

(*p*) the qualification and experience of persons handling hazardous substance and manner of providing necessary facilities for protecting the workers under clause (*b*) of section 85;

(*q*) the manner of providing for medical examination of a worker under sub-clause (*ii*) of clause (*c*) of section 85:

(*r*) the measures or standards under sub-section (*1*) of section 86;

(*s*) the value of the maximum permissible limit of exposure of chemical and toxic substances in manufacturing process in any factory under section 88:

(*t*) requiring every employer to make in his plantation provisions in respect of as specified in clauses (*a*) to (*d*) of sub-section (*1*) of section 92:

(*u*) for prohibiting or, restricting employment of women or adolescents under sub-section (*2*) of section 93;

(*v*) qualifications under sub-section (*3*) of section 93;

(*w*) other matters under sub-section (*4*) of section 93;

(*x*) manner of periodical medical examination of worker under sub-section (*5*) of section 93:

(*y*) the manner of providing facilities, clothing and equipment under sub-section (*7*) of section 93:

(*z*) precautionary notices under sub-section (*9*) of section 93:

(*za*) any other matter which is required to be, or may be, prescribed.

(*3*) The Central Government may, by notification and in consultation with the State Government, make rules for the purposes of bringing uniformity, throughout the country, in occupational safety, health or such other matters as it considers necessary in respect of factories.

Power of Central Government to make regulations in relation to mines and dock work.

136. The Central Government may, by notification, make regulations consistent with this Code for all or any of the following purposes, namely:—

(*a*) for specifying the qualifications required for appointment as Inspector-cum-Facilitator;

(*b*) for specifying and regulating the duties and powers of the Chief Inspector-cum-Facilitator and of Inspector-cum-Facilitators in regard to the inspection of mines under this Code;

(*c*) for specifying the duties of owners, agents and managers of mines and of persons acting under them, and for specifying the qualifications (including age) of agents and managers of mines and of persons acting under them;

(*d*) for requiring facilities to be provided for enabling managers of mines and other persons acting under them to efficiently discharge their duties:

(*e*) for regulating the manner of ascertaining, by examination or otherwise, the qualifications of managers of mines and persons acting under them, and the granting and renewal of certificates of competency:

(*f*) for fixing the fees, if any, to be paid in respect of such examinations and of the grant and renewal of such certificates;

(*g*) for determining the circumstances in which and the conditions subject to which it shall be lawful for more mines than one to be under a single manager, or for any mines to be under a manager not having the specified qualifications;

(*h*) for providing for inquiries to be made under this Code, including any inquiry relating to misconduct or incompetence on the part of any person holding a certificate under this Code and for the suspension or cancellation of any such certificate and for providing, wherever necessary, that the person appointed to hold an inquiry shall have all the powers of a civil court under the Code of Civil Procedure, 1908, for the purpose of enforcing the attendance of witnesses and compelling the production of documents and material objects;

5 of 1908.

(*i*) for regulating, subject to the provisions of the Indian Explosives Act, 1884, and of any rules made thereunder, the storage, conveyance and use of explosives;

4 of 1884.

(*j*) for prohibiting, restricting or regulating the employment of women in mines or in any class of mines or on particular kinds of labour which are attended by danger to the life, safety or health of such persons and for limiting the weight of any single load that may be carried by any such person;

(*k*) for providing for the safety of the persons employed in a mine, their means of entrance there into and exit therefrom, the number of shafts or outlets to be furnished, and the fencing of shafts, pits, outlets, pathways and subsidences;

(*l*) for prohibiting the employment in a mine either as manager or in any other specified capacity of any person except persons paid by the owner of the mine and directly answerable to the owner or manager of the mine;

(*m*) for providing for the safety of the roads and working places in mines, including the siting, maintenance and extraction or reduction of pillars or blocks of minerals and the maintenance of sufficient barriers between mine and mine;

(*n*) for the inspection of workings and sealed off fire-areas in a mine, and for the restriction of workings in the vicinity of the sea or any lake or river or any other body of surface water, whether natural or artificial, or of any public road or building, and for requiring due precaution to be taken against the irruption or inrush of water or other liquid matter into, outbreak of fire in or premature collapse of, any workings;

(*o*) for providing for the ventilation of mines and the action to be taken in respect of dust, fire, and inflammable and noxious gases, including precautions against spontaneous combustion, underground fire and coal dust;

36 of 2003.

(*p*) for regulating, subject to the provisions of the Electricity Act, 2003, and of any rules made thereunder, the generation, storage, transformation, transmission and use of electricity in mines and for providing for the care and the regulation of the use of all electrical apparatus and electrical cables in mines and of all other machinery and plant therein;

(*q*) "for regulating the use of machinery in mines, for providing for the safety of persons employed on or near such machinery and on haulage roads and for restricting the use of certain classes of locomotives underground;

(*r*) for providing for proper lighting of mines and regulating the use of safety lamps therein and for the search of persons entering a mine in which safety lamps are in use;

(*s*) for providing against explosions or ignitions of inflammable gas or dust or irruptions of or accumulations of water in mines and against danger arising therefrom and for prohibiting, restricting or regulating the extraction of minerals in circumstances likely to result in the premature collapse of workings or to result in or to aggravate the collapse of workings or irruptions of water or ignitions in mines;

(*t*) for specifying type of accidents for the purposes of notice under section 10 and for specifying the notices of accidents and dangerous occurrences, and the notices, reports and returns of mineral output, persons employed and other matters

provided for by regulations, to be furnished by owners, agents and managers of mines, and for specifying the forms of such notices, returns and reports, the persons and authorities to whom they are to be furnished, the particulars to be contained in them, and the time within which they are to be submitted;

(*u*) for requiring owners, agents and managers of mines to have fixed boundaries for the mines, for specifying the plans and sections and field notes connected therewith to be kept by them and the manner and places in which such plans, sections and field notes are to be kept for purposes of record and for the submission of copies thereof to the Chief Inspector-cum-Facilitator, and for requiring the making of fresh surveys and plans by them, and in the event of non-compliance, for having the survey made and plans prepared through any other agency and for the recovery of expenses thereof in the same manner as an arrear of land revenue;

(*v*) for regulating the procedure on the occurrence of accidents or accidental explosions or ignitions in or about, mines; for dealing effectively with the situation;

(*w*) for specifying the form of, and the particulars to be contained in, the notice to be given by the owner, agent or manager of a mine under section 5;

(*x*) for specifying the notice to be given by the owner, agent or manager of a mine before mining operations are commenced at or extended to any point within forty-five meters of any railway subject to the provisions of the Indian Railways Act, 1989 or of any public roads or other works as the case may be, which are maintained by the Government or any local authority; 24 of 1989.

(*y*) for the protection from injury, in respect of any mine when the workings are discontinued, of property vested in the Government or any local authority or railway company as defined in the Indian Railways Act, 1989; 24 of 1989.

(*z*) for requiring protective works to be constructed by the owner, agent or manager of a mine before the mine is closed, and in the event of non-compliance, for getting such works executed by any other agency and for recovering the expenses thereof from such owner in the same manner as an arrear of land revenue;

(*za*) for requiring the fencing of any mine or part of a mine or any quarry, incline, shaft, pit or outlet, whether the same is being worked or not, or any dangerous or prohibited area, subsidence, haulage, tramline or pathway, where such fencing is necessary for the protection of the public;

(*zb*) for specifying the number of officials to be appointed;

(*zc*) for specifying the qualifications of the officials to be appointed;

(*zd*) for specifying the qualifications and experience of the agents;

(*ze*) for specifying the period during which the agent shall be resident in India;

(*zf*) for specifying duties and responsibilities of suppliers, designers, importer and contractors for safety in mines;

(*zg*) for requiring the owners, agents and managers of mines to formulate, maintain and enforce safety management plan in their mines;

(*zh*) for requiring the managers of mines to formulate and implement codes of practice or standard operating procedure in respect of any machinery or operation used in the mines;

(*zi*) for providing for the safety in opencast mines and associated operations and machineries used therein;

(*zj*) for regulating the extraction of methane from working or abandoned coal mines or from virgin coal seam;

(*zk*) for specifying the forms of returns which shall be filed by the establishments or the class of establishments under this Code:

(*zl*) for the general requirement relating to the construction, equipping and maintenance for the safety of working places on shore, ship, dock, structure and other places at which any dock work is carried on:

(*zm*) for the safety of any regular approaches over a dock, wharf, quay or other places which dock workers have to use for going for work and for fencing of such places and projects;

(*zn*) for the efficient lighting of all areas of dock, ship, any other vessel, dock structure or working places where any dock work is carried on and of all approaches to such places to which dock workers are required to go in the course of their employment;

(*zo*) providing and maintaining adequate ventilation and suitable temperature in every building or an enclosure on ship where dock workers are employed;

(*zp*) providing for the fire and explosion prevention and protection:

(*zq*) providing for safe means of access to ships, holds, stagings, equipment, lifting appliances and other working places;

(*zr*) providing for the safety of workers engaged in the opening and closing of hatches, protection of ways and other openings in the docks which may be dangerous to them;

(*zs*) providing for the safety of workers on docks from the risk of falling overboard being struck by cargo during loading or unloading operations;

(*zt*) providing for the construction, maintenance and use of lifting and other cargo handling appliances and services, such as, pallets containing or supporting loads and provision of safety appliances on them, if necessary;

(*zu*) providing for the safety of workers employed in freight container terminals or other terminals for handling unitised cargo;

(*zv*) providing for the fencing of machinery, live electrical conductors, steam pipes and hazardous openings;

(*zw*) providing for the construction, maintenance and use of staging:

(*zx*) providing for the rigging and use of ship's derricks;

(*zy*) providing for the testing, examination, inspection and certification as appropriate of loose gears including chains and ropes and of slings and other lifting devices used in the dock work;

(*zz*) providing for the precautions to be taken to facilitate escape of workers when employed in a hold, bin, hopper or the like or between decks of a hold while handling coal or other bulk cargo;

(*zza*) providing for the measures to be taken in order to prevent dangerous methods of working in the stacking, unstacking, stowing and unstowing of cargo or handling in connection therewith;

(*zzb*) providing for the handling of dangerous substances and working in dangerous or harmful environments and the precautions to be taken in connection with such handling;

(*zzc*) providing for the work in connection with cleaning, chipping, painting, operations and precautions to be taken in connection with such work;

(*zzd*) providing for the employment of persons for handling cargo, handling appliances, power operated hatch covers or other power operated ship's equipment, such as, door in the hull of a ship, ramp, retraceable car deck or similar equipment or to give signals to the drivers of such machinery;

(*zze*) providing for the transport of dock workers;

(*zzf*) providing for the precautions to be taken to protect dock workers against harmful effects of excessive noise, vibrations and air pollution at the workplace;

(*zzg*) providing for protective equipment or protective clothing;

(*zzh*) providing for the sanitary, washing and welfare facilities;

(*zzi*) providing for—

(*i*) the medical supervision;

(*ii*) the ambulance rooms, first aid and rescue facilities and arrangements for the removal of dock workers to the nearest place of treatment;

(*iii*) the safety and health organisation; and

(*iv*) the training of dock workers and for the obligations and rights of the dock workers for their safety and health at the workplace;

(*zzj*) providing for the investigation of occupational accidents, dangerous occurrences and diseases, specifying such diseases and the forms of notices, the persons and authorities to whom, they are to be furnished, the particulars to be contained in them and the time within which they are to be submitted;

(*zzk*) providing for the submission of statement of accidents, man-days lost, volume of cargo handled and particulars of dock workers; and

(*zzl*) any other matter which is required to be or may be specified by regulation.

Prior publication of rules, etc.

137. The power to make rules, regulations, and bye-laws under this Code shall be subject to the condition of the previous publication of the same being made, in the following manner, namely:—

(*a*) the date to be specified after a draft of rule, regulation, and bye-laws proposed to be made will be taken under consideration, shall not be less than forty-five days from the date on which the draft of the proposed rule, regulation and bye-laws is published for general information;

(*b*) rule, regulation and bye-laws shall be published in the Official Gazette and on such publication, shall have effect as if enacted in this Code.

Power to make regulation without previous publication.

138. Notwithstanding anything contained in section 137, regulations under section 136 may be made without previous publication and without reference to the National Occupational Safety Health Advisory Board constituted under sub-section (*1*) of section 16, if the Central Government is satisfied that for the prevention of apprehended danger or the speedy remedy of conditions likely to cause danger and to avoid delay it is necessary to dispense with from such publication and reference.

Bye-laws.

139. (*1*) The employer of a mine may, and shall, if called upon to do so by the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator, frame and submit to the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator a draft of such bye-laws, not being inconsistent with this Code or any rules or regulations or standards for the time being in force, governing the use of any particular machinery or the adoption of a particular method of working in the mine, as the employer may deem necessary to prevent accidents and provide for the safety, convenience and discipline of the persons employed in the mine.

(2) If any such employer—

(a) fails to submit within two months a draft of bye-laws after being called upon to do so by the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator; or

(b) submits a draft of bye-laws which is not in the opinion of the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator sufficient, the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator may —

(i) propose a draft of such bye-laws as appear to him to be sufficient; or

(ii) propose such amendments in any draft submitted to him by the employer as will, in his opinion, render it sufficient, and shall send such draft bye-laws or draft amendments to the employer for consideration.

(3) If within a period of two months from the date on which any draft bye-laws or draft amendments are sent by the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator to the employer under the provisions of sub-section (2), the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator and the employer are unable to agree as to the terms of the bye-laws to be made under sub-section (1), the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator shall refer the draft bye-laws for settlement to the technical committee constituted under sub-section (5) of section 16 in respect of mines.

(4) When such draft bye-laws have been agreed to by the employer and the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator, or, when they are unable to agree, have been settled by the technical Committee constituted under sub-section (5) of section 16 in respect of mines, a copy of the draft bye-laws shall be sent by the Chief Inspector-cum-Facilitator or Inspector-cum-Facilitator to the Central Government for approval:

Provided that the Central Government may make such modification of the draft bye-laws as it thinks fit:

Provided further that before the Central Government approves the draft bye-laws, whether with or without modifications, there shall be published, in such manner as the Central Government may think best adapted for informing the persons affected, a notice of the proposal to make the bye-laws and of the place where copies of the draft bye-laws may be obtained, and of the time (which shall not be less than thirty days) within which any objections with reference to the draft bye-laws, made by or on behalf of persons affected should be sent to the Central Government.

(5) Every objection under second proviso to sub-section (4) shall be in writing and shall state—

(i) the specific grounds of objections, and

(ii) the omissions, additions or modifications asked for.

(6) The Central Government shall consider any objection made within the required time by or on behalf of persons appearing to it to be affected, and may approve the bye-laws either in the form in which they were published or after making such amendments thereto as it thinks fit.

(7) The employer shall cause a copy of the bye-laws, in English and in such other language or languages as may be prescribed by the Central Government, to be pasted up in some conspicuous place at or near the mine, where the bye-laws may be conveniently read or seen by the persons employed; and, as and when the same become defaced, obliterated or destroyed, shall cause them to be pasted again.

(8) The Central Government may, by order in writing rescind, in whole or in part, any bye-law so made, and thereupon such bye-law shall cease to have effect accordingly.

Powers to regulate general safety and health.

140. Notwithstanding any law for the time being in force, the Central Government may make rules to regulate general safety and health of the persons residing in whole or part of India, in the event of declaration of an epidemic, pandemic or disaster, for such period as may be notified by the Central Government.

Laying of regulations, rules, bye-laws, etc., before Parliament.

141. Every rule, regulation, standard and bye-laws notified or made by the Central Government under this Code shall be laid, as soon as may be after it is notified or made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the rule, regulation, standard or bye-law or both Houses agree that the rule, regulation, standard or bye-law should not be made, the rule, regulation, standard or bye-law shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule, regulation, standard or bye-law, as the case may be.

Laying of rules made by State Government.

142. Every rule made by the State Government under this Code shall be laid, as soon as may be, after it is made, before the State Legislature.

Repeal and Savings.

143. (*1*) The following enactments shall stand repealed on and from the dates the notification referred to in sub-section (*2*) of section 1 is issued, namely:—

(*a*) The Factories Act, 1948; 63 of 1948.

(*b*) The Plantations Labour Act, 1951; 69 of 1951.

(*c*) The Mines Act, 1952; 35 of 1952.

(*d*) The Working Journalists and other Newspaper Employees (Conditions of Service) and Miscellaneous Provisions Act, 1955; 45 of 1955.

(*e*) The Working Journalists (Fixation of Rates of Wages) Act, 1958; 29 of 1958.

(*f*) The Motor Transport Workers Act, 1961; 27 of 1961.

(*g*) The Beedi and Cigar Workers (Conditions of Employment) Act, 1966; 32 of 1966.

(*h*) The Contract Labour (Regulation and Abolition) Act, 1970; 37 of 1970.

(*i*) The Sales Promotion Employees (Conditions of Service) Act, 1976; 11 of 1976.

(*j*) The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979; 30 of 1979.

(*k*) The Cine-Workers and Cinema Theatre Workers (Regulation of Employment) Act, 1981; 50 of 1981.

(*l*) The Dock Workers (Safety, Health and Welfare) Act, 1986; 54 of 1986.

(*m*) The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996. 27 of 1996.

(*2*) Every Chief Inspector, Additional Chief Inspector, Joint Chief Inspector, Deputy Chief Inspector, Inspector and every other officer appointed for the purposes under any of the provisions of the enactments repealed by this Code, shall be deemed to have been appointed under this Code for such purposes under this Code.

(*3*) Notwithstanding repeal under sub-section (*1*), anything done or any action taken under the enactments so repealed (including any rule, regulation, bye-laws, notification, nomination, appointment, order or direction made thereunder) shall be deemed to have been done or taken under the corresponding provisions of this Code and shall remain in force to the extent they are not contrary to the provisions of this Code till they are repealed by the Central Government.

(*4*) Without prejudice to the provisions of sub-section (*2*), provisions of section 6 of the General Clauses Act, 1897 shall apply to the repeal of such enactments. 10 of 1897.

THE FIRST SCHEDULE
[*See* section 2(*za*)]

List of Industries involving hazardous processes:

1. Ferrous Metallurgical Industries

— Integrated Iron and Steel

— Ferro-alloys

— Special Steels.

2. Non-ferrous metallurgical Industries

— Primary Metallurgical Industries, namely, zinc, lead, copper, manganese and aluminium.

3. Foundries (ferrous and non-ferrous)

— Castings and forgings including cleaning or smoothening/roughening by sand and shot blasting.

4. Coal (including coke) industries

— Coal, Lignite, Coke and like other substances

— Fuel Gases (including Coal Gas, Producer Gas, Water Gas).

5. Power Generating Industries.

6. Pulp and paper (including paper products) industries.

7. Fertiliser Industries

— Nitrogenous

— Phosphatic

— Mixed.

8. Cement Industries

— Portland Cement (including slag cement, puzzolona cement and their products).

9. Petroleum Industries

— Oil Refining

— Lubricating Oils and Greases.

10. Petro-chemical Industries.

11. Drugs and Pharmaceutical Industries

— Narcotics, Drugs and Pharmaceuticals.

12. Fermentation Industries (Distilleries and Breweries).

13. Rubber (Synthetic) Industries.

14. Paints and Pigment Industries.

15. Leather Tanning Industries.

16. Electro-plating Industries.

17. Chemical Industries.

(*a*) Coke Oven by-products and Coaltar Distillation products:

(*b*) Industrial Gases (nitrogen, oxygen, acetylene, argon, carbon dioxide, hydrogen, sulphur dioxide, nitrous oxide, halogenated hydrocarbon, ozone, or any like gases);

(*c*) Industrial Carbon;

(*d*) Alkalies and Acids;

(*e*) Chromates and dichromates;

(*f*) Lead and its compounds;

(*g*) Electrochemicals (metallic sodium, potassium and magnesium, chlorates, perchlorates and peroxides);

(*h*) Electrothermal produces (artificial abrasive, calcium carbide);

(*i*) Nitrogenous compounds (cyanides, cyanamides and other nitrogenous compounds);

(*j*) Phosphorous and its compounds;

(*k*) Halogens and Halogenated compounds (Chlorine, Fluorine, Bromine and Iodine);

(*l*) Explosives (including industrial explosives and detonators and fuses).

18. Insecticides, Fungicides, Herbicides and other Pesticides Industries.

19. Synthetic Resin and plastics.

20. Man made Fibre (Cellulosic and non-cellulosic) industry.

21. Manufacture and repair of electrical accumulators.

22. Glass and Ceramics.

23. Grinding or glazing of metals.

24. Manufacture, handling and processing of asbestos and its products.

25. Extraction of oils and fats from vegetable and animal sources.

26. Manufacture, handling and use of benzene and substances containing benzene.

27. Manufacturing processes and operations involving carbon disulphide.

28. Dyes and Dyestuff including their intermediates.

29. Highly flammable liquids and gases.

30. Printing and dyeing on fabrics in textiles and plywood and laminate manufacturing process.

31. Process involving usage of radium or Radioactive Substances.

32. Stone Crushing industry.

33. Extraction of Oil and Raw material from the scrap tyres.

34. Cigarette manufacturing industry.

35. Ship breaking industry.

36. Hazardous waste and e-waste processing plants.

37. Semiconductor manufacturing industry.

38. Styrene manufacturing, handling and processing industry.

39. Nano-particles utilising industry.

40. Manufacturing, processing, preparation and utilisation of Mercury or Compounds of Mercury, Lead Tetra-ethyl, Manganese, Arsenic, Chrome, Aliphatic series, Beryllium, Phosgene and Isocyanates.

THE SECOND SCHEDULE

[*See* section 18(*2*)(*f*)]

List of matters:

(*1*) fencing of machinery;

(*2*) work on or near machinery in motion;

(*3*) employment of adolescents on dangerous machines;

(*4*) striking gear and devices for cutting off power;

(*5*) self acting machines;

(*6*) casing of new machinery;

(*7*) prohibition of employment of women, children and adolescent near cotton openers;

(*8*) hoists and lifts;

(*9*) lifting machines, chains, ropes and lifting tackles;

(*10*) revolving machinery;

(*11*) pressure plant;

(*12*) floors, stairs and means of access;

(*13*) pits, sumps, openings in floors and other similar indentation of area;

(*14*) safety officers;

(*15*) protection of eyes;

(*16*) precautions against dangerous fumes, gases, etc.;

(*17*) precautions regarding the use of portable electric light;

(*18*) explosive or inflammable dust, gas, and other like dusts or gases;

(*19*) safety committee;

(*20*) power to require specifications of defective parts or tests of stability;

(*21*) safety of buildings and machinery;

(*22*) maintenance of buildings;

(*23*) prohibition in certain cases of danger;

(*24*) notice in respect of accidents;

(*25*) court of inquiry in case of accidents;

(*26*) safety management in plantation;

(*27*) the general requirement relating to the construction, equipments and maintenance for the safety of working places on shore, ship, dock, structure and other places at which any dock work is carried on;

(*28*) the safety of any regular approaches over a dock, wharf, quay or other places which dock worker have to use for going for work and for fencing of such places and projects;

(*29*) the efficient lighting of all areas of dock, ship, any other vessel, dock structure or working places where any dock work is carried on and of all approaches to such places to which dock workers are required to go in the course of their employment;

(*30*) adequate ventilation and suitable temperature in every building or an enclosure on ship where dock workers are employed;

(*31*) the fire and explosion preventions and protection;

(*32*) safe means of access to ships, holds, stagings, equipment, appliances and other working places;

(*33*) the construction, maintenance and use of lifting and other cargo handling appliances and services, such as, pallets containing or supporting loads and provision of safety appliances on them, if necessary;

(*34*) the safety of workers employed in freight container terminals of other terminals for handing unitized cargo;

(*35*) the fencing of machinery, live electrical conductors, steam pipes and hazardous openings;

(*36*) the construction, maintenance and use of staging;

(*37*) the rigging and use of ship's derricks;

(*38*) the testing, examination, inspection and certification as appropriate of loose gears including chains and ropes and of slings and other lifting devices used in the dock work;

(*39*) the precautions to be taken to facilitate escape of workers when employed in a hold, bin, hopper or the like or between decks of a hold while handing coal of other bulk cargo;

(*40*) the measures to be taken in order to prevent dangerous methods of working in the stacking, unstacking, stowing and unstowing of cargo or handling in connection therewith;

(*41*) the handling of dangerous substances and working, in dangerous or harmful environments and the precautions to be taken in connection with such handling;

(*42*) the work in connection with cleaning, chipping, painting, operations and precautions to be taken in connection with such work;

(*43*) the employment of persons for handling cargo, handling appliances, power operated hatch covers or other power operated ship's equipment such as, door in the hull of a ship, ramp, retraceable car deck or similar equipment or to give signals to the drivers of such machinery;

(*44*) the transport of dock workers;

(*45*) the precautions to be taken to protect dock workers against harmful effects of excessive noise, vibration and air pollution at the work place;

(*46*) protective equipment and protective clothing;

(*47*) the sanitary, washing and welfare facilities;

(*48*) the medical supervision;

(*49*) the ambulance rooms, first aid and rescue facilities and arrangements for the removal of dock workers to the nearest place of treatment;

(*50*) the investigation of occupational accidents, dangerous occurrences and diseases, specifying such diseases and the forms of notices, the persons and authorities to whom, they are to be furnished, the particulars to be contained in them and the time within which they are to be submitted;

(*51*) the submission of statement of accidents, man-days lost, volume of cargo handled and particulars of dock workers.

(*52*) the safe means of access to, and the safety of, any working place, including the provision of suitable and sufficient scaffolding at various stages when work cannot be safely done from the ground or from any part of a building or from a ladder or such other means of support;

(*53*) the precautions to be taken in connection with the demolition of the whole or any substantial part of a building or other structure under the supervision of a competent person for the avoidance of danger from collapse of any building or other structure while removing any part of the framed building or other structure by shoring or otherwise;

(*54*) the handling or use of explosive under the control of competent persons so that there is no exposure to the risk of injury from explosion or from flying material;

(*55*) the erection installation, use and maintenance of transporting equipment, such as locomotives, trucks, wagons and other vehicles and trailers and appointment of competent persons to drive or operate such equipment;

(*56*) the erection, installation, use and maintenance of hoists, lifting appliances and lifting gear including periodical testing and examination and heat treatment where necessary, precautions to be taken while raising or lowering loads, restrictions on carriage of persons and appointment of competent persons on hoists or other lifting appliances;

(*57*) the adequate and suitable lighting of every workplace and approach thereto, of every place where raising or lowering operations with the use of hoists, lifting appliances or lifting gears are in progress and of all openings dangerous to building workers employed;

(*58*) the precautions to be taken to prevent inhalation of dust, fumes, gases or vapours during any grinding, cleaning, spraying or manipulation of any material and steps to be taken to secure and maintain adequate ventilation of every working place or confined space;

(*59*) the measures to be taken during stacking or unstacking, stowing or unstowing of materials or goods or handling in connection therewith;

(*60*) the safeguarding of machinery including the fencing of every fly-wheel and every moving part of prime mover and every part of transmission or other machinery, unless it is in such a position or of such construction as to be safe to every worker working only of the operations and as if it were securely fenced;

(*61*) the safe handling and use of plant, including tools and equipment operated by compressed air;

(*62*) the precaution to be taken in case of fire;

(*63*) the limits of weight to be lifted or moved by workers;

(*64*) the safe transport of workers to or from any workplace by water and provision of means for rescue from drowning;

(*65*) the steps to be taken to prevent danger to workers from live electric wires or apparatus including electrical machinery and tools and from overhead wires;

(*66*) the keeping of safety nets, safety sheets and safety belts where the special nature or the circumstances of work render them necessary for the safety of the workers;

(*67*) the standards to be complied with regard to scaffolding, ladders and stairs, lifting appliances, ropes, chains and accessories, earth moving equipment and floating operational equipments;

(*68*) the precautions to be taken with regard to pile driving, concrete work, work with hot asphalt, tar or other similar things, insulation work, demolition operations, excavation, underground construction and handling materials;

(*69*) the safety policy, that is to say, a policy relating to steps to be taken to ensure the safety and health of the building workers, the administrative arrangements therefore and the

matters connected therewith, to be framed by the employers and contractors for tile operations to be carried on in a building or other construction work;

(*70*) emergency standards for enforcement of suitable standards in respect of hazardous processes in a factory;

(*71*) the maximum permissible threshold limits of exposure of chemical and toxic substances in manufacturing processes (whether hazardous or otherwise) in any factory;

(*72*) lightning; and

(*73*) any other matter which the Central Government considers under the circumstance for better working condition for safety at the workplace.

THE THIRD SCHEDULE

[*See* section 12(*1*)]

List of Notifiable Diseases:

1. Lead poisoning, including poisoning by any preparation or compound of lead or their sequelae.

2. Lead-tetra-ethyle poisoning.

3. Phosphorus poisoning or its sequelae.

4. Mercury poisoning or its sequelae.

5. Manganese poisoning or its sequelae.

6. Arsenic poisoning or its sequelae.

7. Poisoning by nitrous fumes.

8. Carbon bisulphide poisoning.

9. Benzene poisoning, including poisoning by any of its homologues, their nitro or amido derivatives or its sequelae.

10. Chrome ulceration or its sequelae.

11. Anthrax.

12. Silicosis.

13. Poisoning by halogens or halogen derivatives of the hydrocarbons of the aliphatic series.

14. Pathological manifestations due to—

(*a*) radium or other radio-active substances;

(*b*) X-rays.

15. Primary epitheliomatous cancer of the skin.

16. Toxic anaemia.

17. Toxic jaundice due to poisonous substances.

18. Oil acne or dermatitis due to mineral oils and compounds containing mineral oil base.

19. Byssionosis.

20. Asbestosis.

21. Occupational or contact dermatitis caused by direct contact with chemicals and paints. These are of two types, that is, primary irritants and allergic sensitizers.

22. Noise induced hearing loss (exposure to high noise levels).

23. Beriyllium poisoning.

24. Carbon monoxide poisoning.

25. Coal miners' pneumoconiosis.

26. Phosgene poisoning.

27. Occupational cancer.

28. Isocyanates poisoning.

29. Toxic nephritis.

DR. G NARAYANA RAJU,
Secretary to the Govt. of India.

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ANNEXURE - D

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Certificate No.	:	IN-BR54297063824408V
Certificate Issued Date	:	25-Mar-2023 11:45 AM
Account Reference	:	NONACC (CB)/ brpccbk09/ BARH/ BR-PAT/ BRH
Unique Doc. Reference	:	SUBIN-BRBRPCCBK09912719649851 75V
Purchased by	:	ASIT DUTTA
Description of Document	:	Not Applicable
Property Description	:	Not Applicable
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	Not Applicable
Second Party	:	ASIT DUTTA
Stamp Duty Paid By	:	ASIT DUTTA
Stamp Duty Paid (Rs.)	:	1,000(One Thousand only)
Reg. fee (Rs.)	:	0 (Zero)
LLR & P Fee (Rs.)	:	0 (Zero)
Miscellaneous Fee (Rs.)	:	0 (Zero)
Discore SC (Rs.)	:	0 (Zero)
Total Amount (Rs.)	:	1,000 (One Thousand only)

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3. In case of any discrepancy please inform the Competent Authority.

MEMORANDUM OF UNDERSTANDING (MoU) BETWEEN NTPC BARH AND BUIDCo FOR SUPPLY OF TREATED SEWAGE WATER FOR NTPC's BARH PLANT

This MoU is made into this 27th Day of March 2023,

BETWEEN

Bihar Urban Infrastructure Development Corporation Ltd, the governing body of the city of Patna in the state of Bihar, having its registered office at Rajapur Pul, West Boring Canal Road Patna 800001, Bihar (hereinafter referred to as the **"BUIDCo"**), which expression shall, unless the context otherwise requires, include its legal successors, successors in business, successors in governance and permitted assigns and substitutes of the **FIRST PART**;

AND

NTPC- Barh Super Thermal Power Project, (Address) P.O. NTPC-Barh, Distt-Patna, Bihar. PIN 803215, a Unit of NTPC Ltd., a company incorporated under provisions of the Companies Act, 1956, having its registered office at NTPC Bhawan, SCOPE Complex Institutional Area, Lodhi Road, New Delhi - 110003 (hereinafter referred to as the **"NTPC Barh"**), and which expression shall, unless the context otherwise requires, include its successors / successors in business and permitted assigns and substitutes of the **SECOND PART**;

"BUIDCo" and **"NTPC Barh"** are collectively referred to as **"Parties"** and individually as **"Party"**.

Whereas Government of India, through Tariff Policy dated 28.01.2016 has mandated that Thermal Power Plant(s) (TPPs) including the existing plants located within 50 Kms radius of sewage treatment plant (STP) of Municipality/local bodies/similar organisation shall in the order of their closeness to the STP, mandatorily use treated sewage water produced by these bodies and the associated cost on this account be allowed as a pass through in the tariff. Such thermal plants may also ensure back-up source of water to meet their requirement in the event of shortage of supply by the STP. The associated cost on this account shall be factored into the fixed cost so as not to disturb the merit order of such thermal plant.

Whereas Government of India, through Gazette notification dated 07.12.2015 and revised notification dated 28.06.2018, has mandated that the thermal power plants installed after 01.01.2017 shall have to meet specific water consumption up to maximum 3.0 m^3/MWh and achieve zero wastewater discharged.

Whereas Government of India has established National Mission for Clean Ganga, as an Authority, under Environment Protection Act 1986, through River Ganga (Rejuvenation, Protection and Management) Authorities Order, 2016 for implementation of Namami Gange programme- Integrated Ganga river rejuvenation Mission

Whereas this MoU is signed for use of treated sewage water in NTPC Barh from STP at Barh

RECITALS

A. BUIDCo desires to deliver treated sewage water from sewage treatment plant (STP) at Barh to NTPC Barh for its Barh Super Thermal Power Plant for Non-potable application after treatment of raw municipal sewage through its STP. The secondary treated sewage water at STP outlet shall meet the NGT norms. Any upgradation required in the STP to meet the NGT norms shall be carried out by BUIDCo at their own cost.

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कार्यकारी निदेशक / Executive Director
एनटीपीसी लि., बाढ़ / NTPC Ltd., Barh
/ Patna-803215

B. NTPC Barh desires to accept treated sewage water for its Barh Thermal Power Plant for Non-potable application by construction of pumping system, Tertiary Treatment Plant (as applicable to Thermal power plant requirement) and pipe conveying system up to power plant, to be executed by BUIDCo on deposit work basis

DEFINITIONS

1.1 "**Emergency**" means an unanticipated event, which causes a malfunction of either Party's facilities, preventing either the delivery or the acceptance of water.

1.2 "**Joint Oversight Committee**" (JOC) means that committee comprised of four members, two (02) representatives each from – BUIDCO/NTPC Barh (as given in Annexure-III) established to share information and coordinate to fulfil each Party's interest as per agreement

1.3 "**Point-of-Delivery**" means the point at which BUIDCo delivers water at the doorstep (forebay of Stage-II circulating water system) of NTPC Barh

1.4 "**Project completion**" means that point in time when the Project (STP, Pumping System, Pipeline conveying system and Tertiary Treatment System (as applicable)) has been constructed, tested and commissioned successfully in accordance with Project specifications, the facilities are put under full operation, and the Project has been accepted in writing by the JOC

1.5 "**Third Party**" means any person or entity (governmental, semi government or private) other than BUIDCo or NTPC Barh.

1.6 "**Raw Sewage**" means sewage water received at inlet of STP for treatment.

1.7 "**Secondary Treated Sewage**" means output from STP, which are input to pumping system or TTP (as applicable) meeting quality requirement as per Annexure-I & II.

1.8 "**Sewage Treatment Plant**" (STP) means Sewage Treatment constructed by BUIDCo at Barh

1.9 "**Tertiary Treatment Plant**" (TTP) means Tertiary Treatment facility, to treat the secondary treated sewage water, constructed by BUIDCo.

1.10 "**BUIDCo**" means Bihar Urban Infrastructure Development Corporation Ltd

1.11 "**Power Plant**" means Barh Super Thermal Power Plant, St-II (2x660MW) of NTPC Ltd.

1.12 "**MLD**" means Million Litre per day.

1.13 "**Capex charges (NTPC Barh's scope)**" shall mean the capital cost of facilities defined under NTPC Barh scope (price bid of the successful Bidder in Open Tender, mutually agreed upon and subject to approval of respective Managements)

1.14 "**Opex charges (NTPC Barh's Scope)**" shall mean the O&M charges of the facilities defined under NTPC Barh's scope (price bid of the successful Bidder in Open Tender, mutually agreed upon and subject to approval of respective Managements) payable on per cubic meter basis.

2. QUANTITY

2.1 "Demand by NTPC Barh and Supply by BUIDCo"

BUIDCo has constructed STP of 11 MLD capacity at Barh. The incepted amount at the time of completion of TTP project 9 MLD and the rated capacity of 11 MLD likely to be achieved by the year 2033. NTPC Barh agrees to accept treated sewage water from the STP at Barh. The transmission piping system shall be designed to deliver Treated Sewage Water to the Power Plant. BUIDCo agrees to supply treated sewage water at a steady uniform rate (allowable variation of (+/-) 15%) which is vital for NTPC Barh 's process requirements, and accordingly BUIDCo shall provide adequate storage facility at STP premises to take care and dampen the peak and off-peak flows of

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incoming raw sewage TTP (as applicable), Pumping & Piping shall be designed & erected by the BUIDCo on deposit work basis on behalf of NTPC Barh. The tertiary treatment (as applicable), water supply system for delivery of treated water at doorstep of NTPC Barh shall be operated & maintained by BUIDCo and the charges for this shall be payable by NTPC Barh as O&M charges on per cubic meter basis, at a mutually agreed rate.

3. "QUALITY"

NTPC Barh shall use treated sewage water for non-potable purposes in its power plant. Physical, biological, chemical characteristics and other characteristics of Secondary Treated Sewage Water shall be of NGT order quality as per **Annexure-I**. Additional parameters (TDS, Chloride and Total Hardness) are also annexed at **Annexure-II**, which are required for use of treated STP water in TPPs. BUIDCo is required and bound to meet NGT Norms (**Annexure-I**) for secondary treated sewage water. Further, BUIDCo shall also ensure that parameters like TDS, Chloride & Total Hardness of the raw sewage shall be kept within (+) 5% variation for the design of the TTP, to meet the Additional quality parameters (**Annexure-II**) at the outlet of TTP. If the parameters are exceeded, it will attract penal action towards BUIDCo (on mutually agreed charges).

In case of disagreement on treated water quality, the same shall be tested in an accredited third-party laboratory mutually agreed and through the joint sampling. The water quality results obtained out of such process shall only be considered for the operation of any quality related clauses in this MoU.

4. "DIVISION OF SCOPE"

BUIDCo scope shall include construction of intercepting weirs, Raw Sewage pumping stations in the city, pipelines carrying Raw Sewage from pumping stations to STP, Sewage treatment plant (STP) at Barh, Any upgradation required to meet the NGT norms, treated water sump etc. shall be in the scope of BUIDCo.

BUIDCo will be responsible to supply treated sewage water at NTPC Barh Doorstep (the point of delivery).

NTPC Barh scope shall include TTP (as applicable) and pumping system, to be located in the premises of STP, supply and laying of conveying cross-country pipeline to TPP, to be executed by BUIDCo on deposit work basis (Open tender basis). The price discovered through transparent open tender basis by BUIDCo shall be mutually agreed upon, subject to approval of respective Managements.

5. "COST & PAYMENT"

The secondary treated sewage water shall be supplied by BUIDCo free of cost. The charges for facilities in NTPC Barh's scope shall be defined as the Capex Charges and the O&M charges. The Capex Charges shall be payable to BUIDCo for the entire facility installed, defined under the scope of NTPC Barh. The Opex charges for O&M of TTP (as applicable), pumping & piping system defined under the scope of NTPC Barh shall be payable by NTPC Barh on per cubic meter basis, at a mutually agreed rate.

Detailed payment terms shall be finalized between NTPC Barh and BUIDCo, with the price discovered through transparent Open Tendering process and before the Award of the contract. An Agreement in this regard, subject to approval of respective managements, shall form an integral part of this MoU

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NTPC Barh shall pay the Opex charges on calendar month basis based on actual drawl subject to Treated Sewage Water meeting the effluent quality as indicated in **Annexure-I & II**. The bill shall be raised by 7th of the month for the quantity supplied in the previous calendar month. The same shall be paid within 25 days from the receipt of the bill by hard copy or by e-mail.

If BUIDCo is unable to deliver Treated Sewage Water, then NTPC Barh shall not be liable to make any payment in such case.

6. "PERIOD OF AGREEMENT"

The minimum period of agreement for supply of Treated Sewage Water shall be for 15 years, from the date of start of operation & commencement of supply of treated sewage water to NTPC Barh from BUIDCo. or remaining power plant life whichever is earlier. Renewal of agreement shall be upon mutually agreed terms

7. "END USE OF TREATED SEWAGE WATER"

NTPC Barh will have all the rights for end use of Treated Sewage Water of agreed quantity at specified quality for any non-potable application. BUIDCo shall discharge/utilise surplus treated sewage water, if any, meeting quality level as per prevalent norms of concerned statutory authority (ies). BUIDCo shall keep the provision of discharging/utilising treated sewage water due to less/no drawl of Treated Sewage Water by Power Plant, based on the operational requirement of the Power Plant.

NTPC Barh will have the right to refuse drawl of treated sewage water in case BUIDCo fails to deliver water of agreed quality and/or quantity as per JOC's findings

8. "RIGHTS, PERMISSIONS, STATUTORY OBLIGATIONS"

BUIDCo shall be responsible for all the rights permissions and statutory obligations, the norms of state or central pollution control board or water right issues with water resources department or any other government department related to the treatment and disposal of effluent of the sewage treatment plant.

9. DELIVERY AND ACCEPTANCE OF WATER

9.1 Upon commencement of operations, BUIDCo shall deliver to NTPC Barh at the point of delivery as agreed in this document except for supply interruption as set forth in clause-14 or excused as provided in Clause-13.

9.2 For the purpose of measuring the Parties' compliance with this section, the day shall be the twenty-four hours period commencing on 12.00 noon on the first day of the month following Commencement of Operations. Quality parameter and quantity delivered shall be measured at the point of delivery and shall be considered for acceptance. JOC will maintain all records related to quality and quantity of treated sewage water supplied to NTPC Barh. The instruments for measurements of quantity and quality shall be regularly checked for correct calibration once in every month by JOC or as desired.

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10. QUALITY OF WATER

10.1 NTPC Barh along with Joint Oversight Committee (JOC) shall have access to BUIDCo facilities and records for the purpose of either testing or verifying the quality of the Treated Sewage Water.

10.2 If the Treated Sewage Water quality do not meet the quality performance set at the point of delivery for whatsoever reason then NTPC Barh shall not accept the water to be supplied to the Power Plant & will not have any obligation of payment in such case

10.3 The quality parameters declared at the time of signing the MoU, as attached at Annexure-I & II, shall be considered final and binding throughout the period of agreement. If the parameters are exceeded, it will attract penal action towards BUIDCo (on mutually agreed charges).

11. JOINT OVERSIGHT COMMITTEE (JOC)

11.1 The Parties shall establish the JOC The goal of the JOC shall be to achieve maximum efficiency of the overall work. The representative of BUIDCo and NTPC Barh shall occupy the position of Chairman of JOC by rotation after each period of one calendar year.

11.2 Each Party shall designate its two (2) representatives within 10 days following execution of this Agreement and each Party shall provide notice to the others pursuant to clause 31.

11.3 The JOC shall keep written minutes of its meetings.

11.4 Each party may, by written or oral notice to the other Party, designate an alternate or substitute to act as its representative in the absence of any of its regular members or to act on specified occasions with respect to specific matters.

12. DUTIES OF JOINT OVESIGHT COMMITTEE (JOC)

12.1 Each Party shall have two members in JOC. At least one authorized representative each from BUIDCo & NTPC Barh shall be present at all meetings.

12.2 The JOC shall share information between the Parties and coordinate the operations of the Parties in order to achieve the objectives of this agreement and resolve disputes between the Parties However, JOC will not have any right to verify the design and supervise the quality of construction works.

12.3 The JOC shall be responsible for the periodic review of the water quality parameters as given in Annexure-I & II. Sampling protocol shall be established by the JOC.

12.4 The JOC shall meet whenever requested by a member of the JOC.

12.5 If the JOC is unable to act on any issue raised by a member of the JOC, the issue shall be dealt as per provisions of Clause 17.

13. FORCE MAJEURE

13.1 No Party shall be considered to be in default in the performance of any of its obligations when a failure to perform is due to or materially contributed to by an act of God, war, fire, earthquake, windstorm, flood, and other natural catastrophe, civil disturbance or disobedience, labour disputes, vandalism, sabotage, terrorism, restraint by order of a court or administrative agency with jurisdiction, which such Party could not reasonably have been expected to avoid and which by exercise of due diligence has been unable to overcome.

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13.2 The Party whose performance is affected by force majeure shall, as soon as practicable, but in any event no later than 14 days thereafter, give written notice of the event of force majeure to the other Party

13.3 The Parties shall use their best efforts and cooperate with each other to mitigate the effects of force majeure

14. SUPPLY INTERRUPTIONS

14.1 To allow maintenance or in an Emergency, the JOC may authorize an interruption of delivery and acceptance of water. The Party who is in emergency situation shall inform the other immediately over mail/phone/SMS and tackle the emergency situation expeditiously and shall not wait till formal meeting of JOC. The Parties' respective duty to deliver and accept water under this Agreement is temporarily suspended during a supply/acceptance (use) interruption authorized by the JOC.

14.2 The Parties shall use their best efforts to minimize the length of supply/acceptance (use) interruption.

15. OBLIGATIONS AND RELATIONSHIP OF THE PARTIES

A) Obligations of BUIDCo

i. BUIDCo shall be responsible for timely execution of the complete scope of work for supplying the treated sewage water at the doorstep of NTPC Barh

ii. BUIDCo shall be responsible for arranging all permissions, right of use, right of way, land acquisition etc as required, for executing and laying of treated sewage water supply pipeline up to point of delivery at NTPC Barh power plant.

iii. BUIDCo shall be responsible for maintaining the quality and quantity of the Treated Sewage water at the inlet & outlet of TTP and at the point of delivery

iv. Pumping system TTP (as applicable) shall be in the premises of STP and the reject (from TTP) handling shall be the responsibility of BUIDCo.

v. BUIDCo shall be responsible for O&M of the facilities (under NTPC Barh's scope) on chargeable basis

B. Obligations of NTPC Barh

i. NTPC Barh shall make payments regularly to BUIDCo on the date and manner agreed in this Agreement

ii. NTPC Barh shall be the lawful owner of the assets (under NTPC Barh's scope).

iii. NTPC Barh shall use the Treated Sewage Water for its power plant for non-potable purpose.

C. General Obligations

i. Each Party shall use its best efforts and work diligently, in good faith, and in a timely manner to carry out the duties and obligations imposed by this Agreement

ii. Each Party shall provide to the other Party services to permit efficient and reliable operations under this Agreement as follows:

iii. The obligations, rights and liabilities of the Parties under this Agreement are intended to be several and not joint or collective, and nothing herein is intended to create an association, joint venture, trust, or partnership, or to impose a trust or partnership obligation or liability on or with regard to BUIDCo or NTPC Barh

मुख्य महाप्रबंधक
बिहार शहरी आधारभूत संरचना
विकास निगम लिमिटेड

अमित दत्ता / ASIT DUTTA
कार्यकारी निदेशक / Executive Director
एनटीपीसी लि., बाढ़/ NTPC Ltd., Barh
पटना-803215 / Patna-803215

iv. Except as expressly provided for in this Agreement or any other agreements, no Party shall be deemed the agent of or have the right or power to bind any other Party.

v. This MoU will hold subject to approval from CERC, for which necessary assistance and justification for the queries raised by CERC shall be provided by BUIDCo.

16. DEFAULT

If either Party to this Agreement defaults in respect to any of its obligations or under any of the clauses of this Agreement, the non-defaulting Party may notify the defaulting Party in writing, setting out in what respects the non-defaulting Party deems the defaulting Party to be in default. If within thirty (30) days or such other period as agreed to by the Parties in writing after receipt of notice, the defaulting Party has corrected the default alleged by the non-defaulting Party, the defaulting Party shall no longer be in default. In the event of failure by the Party to mitigate the default(s), the other Party may resort to the dispute resolution procedure under Cl.17 for resolution of the said dispute(s).

17. DISPUTE RESOLUTION

17.1. At the first instance the disputes should be resolved through mutual consultations between the Parties.

17.2 If the Parties fail to resolve such a dispute or difference by mutual consultation within a period of forty-five (45) days from the date of reference of such dispute or within such extended period as the Parties shall agree in writing, such dispute or difference shall be taken up by either Party for resolution through Administrative Mechanism for Resolution of CPSEs Disputes (AMRCD) as mentioned in DPE OM No-05/0003/2019-FTS-10937 dated 14th December, 2022 issued by Department of Public Enterprises, Ministry of Finance, Government of India and any clarifications/modifications/amendments thereof and the decision of AMRCD on the said dispute will be binding on both the Parties.

18. NO COMPENSATION

The representatives of each Party to this Agreement shall serve without compensation except for reimbursements made in accordance with this Agreement or as expressly agreed to, in writing, by both Parties.

19. ASSIGNMENTS

No Party shall assign, either in whole or in part, any of the rights, duties or obligations created or imposed under this Agreement without the prior written consent of the other Party, except to another Party to this Agreement or to a subsidiary, affiliate or any other entity succeeding to all or substantially all of the affected interests and assets of the Party provided that such subsidiary, affiliate or succeeding Party shall assume the assigning Party's obligations hereunder in writing.

No delegation of any obligation owed, or of the performance of any obligation, by any Party, may be made without the prior written permission of the other Party. Any attempted assignment or delegation shall be wholly void and totally ineffective for all purposes unless made in conformity with this clause-19. Consent may be withheld, refused, or conditioned if the economic viability of the other Party is a concern; provided, however, that consent may not be unreasonably withheld, conditioned or delayed.

महाप्रबंधक
बिहार शहरी आधारभूत संरचना
विकास निगम लिमिटेड

असित दत्ता / ASIT DUTTA
कार्यकारी निदेशक / Executive Director
एनटीपीसी लि., बाढ़ / NTPC Ltd., Barh
पटना-803213 / Patna-803213

20. INDEMNITY

20.1 **BUIDCo Responsibilities**: BUIDCo shall, to the fullest extent permitted by law, defend, indemnify and hold harmless NTPC Barh, its present and future members, officers, directors, employees and agents from and against

(a) any and all liabilites and losses resulting from claims or causes of action by any third party to the extent that claims or causes of action arise out of, or are in any way related to, BUIDCo's active negligence or wilful misconduct in the performance of BUIDCo's responsibilities under this Agreement and

(b) the consequences of BUIDCo's violation or alleged violation of permits, statutes, ordinances, orders, rules or regulations of any government entity to the extent that a violation or alleged violation arises out of, or is in any way related to, BUIDCo's responsibilities

20.2 **NTPC Barh's Responsibilities**. NTPC Barh shall, to the fullest extent permitted by law, defend, indemnify and hold harmless BUIDCO, their present and future members, officers, directors, employees and agents from and against

(a) any and all liabilities and losses resulting from claims or causes of action by any third party, to the extent that claims or causes of action arise out of, or are in any way related to, NTPC Barh's active negligence or wilful misconduct in the performance of NTPC Barh's responsibilities under this Agreement, and

(b) the consequences of NTPC Barh's violation or alleged violation of permits, statutes, ordinances, orders, rules or regulations of any governmental entity to the extent that a violation or alleged violation arises out of or is in any way related to NTPC Barh's responsibilities.

20.3 Notwithstanding anything contained herein, neither Party shall be responsible to the other for consequential or indirect damages.

21. NO DEDICATION OF FACILITY

Any undertaking by a Party under any provision of this Agreement is rendered strictly as an accommodation and shall not constitute the dedication of any facility by the undertaking Party to the public, to the other Party or to any Third Party. BUIDCo shall have no interest in any facility owned or operated by NTPC Barh and shall not be responsible for any shutdown, abandonment or clean-up of any facility. NTPC Barh shall have no interest in BUIDCo's facilities and shall not be responsible for any repairs, shutdown, abandonment or clean-up of any BUIDCO facilities.

22. NO THIRD-PARTY BENEFICIARIES

None of the promises, rights or obligations contained in this Agreement shall inure to the benefit of any person or entity not a Party to this Agreement.

23. GOVERNING LAW

This Agreement shall be governed by the laws of the Bihar state & Union of India without reference to its conflict of laws rules.

24. ENTIRE AGREEMENT

This Agreement represents and contains the entire agreement and understanding between the Parties with respect to the subject matter hereof and supersedes any and all prior oral and written agreements and understandings. No promises, agreements, or warranties additional to this

उप महाप्रबंधक
बिहार शहरी आधारभूत संरचना विकास निगम लिमिटेड

असित दत्ता / ASIT DUTTA
कार्यकारी निदेशक / Executive Director
एनटीपीसी लि., बरह / NTPC Ltd., Barh
पटना-803215 / Patna-803215

Agreement shall be deemed to be a part hereof, nor will any alteration, amendment or modification hereto be effective unless confirmed in writing by both Parties.

25. TERMINATION OF AGREEMENT AND TERMINATION PAYMENT

25.1 **NTPC Barh may terminate this Agreement if:**

25.1.1 BUIDCo fails to deliver treated sewage water of specified quality and quantity as reduced pursuant to Section 9.1 in any continuous 36-month period; and in such case, the depreciated value of the cost borne by NTPC Barh, towards use of treated sewage water, will be recovered from BUIDCo;

25.2 **BUIDCo may terminate this agreement if:**

25.2.1 NTPC Barh defaults in accepting the treated sewage water meeting the specified quality parameters for a period more than 3 months continuously.

25.3 Procedure for termination – The Parties may mutually agree to terminate thrs Agreement in the above events (25.1.1 & 25.2.1) on the terms and conditions acceptable to them as on the date of termination.

26. COMPLIANCE WITH LAWS

Both Parties shall comply with all applicable laws and the rules and regulations of GoI, state, local or other government agency having jurisdiction over the activities and operations conducted pursuant to this Agreement.

27. SEVERABILITY

This agreement shall be irreversible in general, however, in case of any change of law/notification/MoP guidelines, the agreement shall be mutually discussed and updated/amended. In the event that any term, covenant or condition of this Agreement or the application of any such term, covenant or condition shall be held invalid as to any person, entity or circumstance by any court or agency having jurisdiction, such term, covenant or condition shall remain in force and effect to the extent not held invalid, and all other terms, covenants and conditions of this Agreement and their application shall not be affected thereby but shall remain in full force and effect unless a court holds that such provisions are not severable from the other provisions of this Agreement.

28. WAIVER

Any waiver at any time by a Party of its rights with respect to any matter arising in connection with this Agreement shall not be deemed a waiver with respect to any subsequent matter. Any waiver must be in writing.

29. AMENDMENT AND MODIFICATION

This Agreement may be amended or modified in any way at any time by an instrument in writing signed by the Parties hereto.

बिहार शहरी आधारभूत संरचना विकास विगम लिमिटेड

असित दत्ता / ASIT DUTTA
कार्यकारी निदेशक / Executive Director
एनटीपीसी लि., बाढ़ / NTPC Ltd., Barh
पटना 803215 / Patna-803215

30. NOTICES

30.1 Any and all notices or other communications required or permitted by this Agreement or by law to be delivered to, served on by mail or fax, or given to either Party to this Agreement shall be dated and in writing and shall be deemed properly delivered, served, or given when personally delivered or faxed to the Party to whom it is directed or, five business days after postal mail, first-class postage prepaid, addressed to the Parties as follows:

Party	Address
BUIDCO, Barh	Attn.: MD
NTPC, Barh	Attn. Business Unit Head

30.2 Any Party hereto may change its address for the purpose of Section 30.1 by giving written notice of such change in the manner prescribed herein to the other Party to this Agreement.

IN WITNESS WHEREOF, both Parties hereto through their duly authorized representatives have executed this Agreement the day and year first above written.

27/3/2023
मुख्य महाप्रबंधक
बिहार शहरी आधारभूत संरचना
विकास निगम लिमिटेड

BUIDCo

27/3/2023
असित दत्ता / ASIT DUTTA
Executive Director
एनटीपीसी लि०, बाढ़ / NTPC Ltd., Barh
पटना-803215 / Patna-803215

NTPC Barh Super Thermal Power Project

Witnesses

1 Amitar Ranjan 27.3.23 GM (HR), BUIDCO

2 Nilash 27.3.23 Manager Legal, BUIDCo.

1. = SUBRATA DE GM(TS), NTPC-Barh

2. 27/03/2023 L. K. NAYAK AGM(PE-MECH).

ANNEXURE - E

Annexure - 8

15/वि०-04-401/2008-Part-II- 189

Government of Bihar
Water Resources Department

Resolution

Dated:- 03.10.16

Subject – Increment in Water charges rate for Industrial, Commercial and Municipal use.

Under Para-62 of Bihar Irrigation Act, 1997 (Bihar Act - 11, 1998) there is provision for fixation of water charges rate for Industrial, Commercial and Municipal use.

Water charges rate ₹ 4.50 (Rupees four and paise fifty) only per thousand gallon for Industrial, Commercial and Municipal use effective from 1st April 1998 is hereby increased to ₹ 18.00 (Rupees eighteen) only per thousand gallon.

New Water charges rate will be effective from 3rd October 2016.

This has the approval of the State Cabinet.

By the order of Governor of Bihar

03.10.16
(Yogeshwar Dhari Singh)
Joint Secretary (Engineering)
Water Resources Department

Memo No- 15/वि०-04-401/2008-Part-II- 189 Patna, Dated- 03.10.16

Copy to :- Accountant General (Account & Entitlement), Bihar/ Accountant General (Audit), Bihar, Birchand Patel Marg, Patna for information and necessary action.

03.10.16
(Yogeshwar Dhari Singh)
Joint Secretary (Engineering)
Water Resources Department

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Memo No- 15/ सि०-04-401/2008-Part-II- 189 Patna, Dated- 03.10.16

Copy to :- PA to Honorable Minister, Water Resources Department, Bihar, Patna /Chief Secretary, Bihar, Patna /Principal Secretary, Cabinet Secretariat Department, Patna /Principal Secretary Finance Department, Patna /Principal Secretary, Industry Department, Patna /Principal Secretary, Town Development and Housing Department Patna /Personal Assistant to the Principal Secretary, Water Resources Department, Patna /All Engineer in Chief /All Chief Engineer /All Superintending Engineer /All Joint Secretary /All Executive Engineer, Water Resources Department for information and necessary action.

03.10.16
(Yogeshwar Dhari Singh)
Joint Secretary (Engineering)
Water Resources Department

Memo No- 15/ सि०-04-401/2008-Part-II- 189 Patna, Dated- 03.10.16

Copy to :- Superintendent, Secretarial Printing Press, Gulzarbagh, Patna in two hard copies along with CD for information and necessary action. Please publish it in the next extra ordinary publication and provide 200 (Two hundred) copies to Water Resources Department.

03.10.16
(Yogeshwar Dhari Singh)
Joint Secretary (Engineering)
Water Resources Department

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15/रा०-04-401/2008-पार्ट-II- 189

बिहार सरकार
जल संसाधन विभाग

संकल्प

दिनांक- 03.10.16

विषय :- औद्योगिक, व्यावसायिक एवं म्युनिसिपल उपयोग हेतु जल प्रभार दर में वृद्धि।

बिहार सिंचाई अधिनियम, 1997 (बिहार अधिनियम-11, 1998) की कंडिका 62 के अधीन औद्योगिक, व्यावसायिक एवं म्युनिसिपल उपयोग हेतु जल प्रभार दर निर्धारित करने का प्रावधान है।

औद्योगिक, व्यावसायिक एवं म्युनिसिपल उपयोग हेतु 01 अप्रैल 1998 से प्रभावी जल प्रभार दर ₹ 4.50 (चार रुपये पचास पैसे) प्रति हजार गैलन में वृद्धि करके ₹ 16.00 (अठारह) प्रति हजार गैलन निर्धारित किया जाता है ।

नया जल प्रभार दर दिनांक 03.10.2016 से प्रभावी होगा।

इस पर मंत्रिपरिषद की स्वीकृति प्राप्त है।

बिहार राज्यपाल के आदेश से,

03.10.16
(योगेश्वर धारी सिंह)
संयुक्त सचिव (अभियंत्रण)
जल संसाधन विभाग

ज्ञापांक-15/रा०-04-401/2008-पार्ट-II- 189 /पटना दिनांक- 03.10.16

प्रतिलिपि :- महालेखाकार (लेखा एवं हकदारी), बिहार /महालेखाकार (लेखा परीक्षा), बिहार, वीरचन्द पटेल मार्ग, पटना को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित।

03.10.16
(योगेश्वर धारी सिंह)
संयुक्त सचिव (अभियंत्रण)
जल संसाधन विभाग

CH

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ज्ञापांक–15/सा०–04–401/2008–पार्ट–II- 189 /पटना, दिनांक:- 03.10.16

प्रतिलिपि :– माननीय मंत्री, जल संसाधन विभाग, बिहार, पटना के आप्त सचिव /मुख्य सचिव, बिहार, पटना /प्रधान सचिव, मंत्रिमंडल सचिवालय विभाग, पटना /प्रधान सचिव, वित्त विभाग, पटना /प्रधान सचिव, उद्योग विभाग, पटना /प्रधान सचिव, नगर विकास एवं आवास विभाग, पटना /प्रधान सचिव के निजी सहायक, जल संसाधन विभाग, पटना /सभी अभियंता प्रमुख /सभी मुख्य अभियंता /सभी संयुक्त सचिव /सभी अधीक्षण अभियंता /सभी कार्यपालक अभियंता, जल संसाधन विभाग को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित।

03.10.16
(योगेश्वर धारी सिंह)
संयुक्त सचिव (अभियंत्रण)
जल संसाधन विभाग

ज्ञापांक:– 15/सा०–04–401/2008–पार्ट–II- 189 /पटना, दिनांक:–03.10.16

प्रतिलिपि :– अधीक्षक, सचिवालय मुद्रणालय, गुलजारबाग, पटना को दो हार्ड कॉपी एवं सी०डी० के साथ सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित । कृपया राजपत्र के अगामी असाधारण अंक में इसे प्रकाशित कराकर दो सौ प्रतियाँ जल संसाधन विभाग को उपलब्ध करायी जाय।

03.10.16
(योगेश्वर धारी सिंह)
संयुक्त सचिव (अभियंत्रण)
जल संसाधन विभाग

307

FORM- 15 : Details of Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station: Barh Stage-I

S. No.	Month	Unit	Apr-23		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
A)	**OPENING QUANTITY**				
1	Opening Quantity of Coal	(MT)	41247.68	394968.94	9625.08
2	Value of Stock	(Rs.)	127324795.15	1909217280.92	162652436.64
B)	**QUANTITY**				
3	Quantity of Coal supplied by Coal Company	(MT)	75082.24	511081.28	15969.50
4	Adjustment (+/-) in quantity supplied made by Coal Company	(MT)	1248.49	0.00	0.00
5	Coal supplied by Coal Company (3+4)	(MT)	73833.75	511081.28	15969.50
6	Normative Transit & Handling Losses (For Coal based Projects)	(MT)	590.67	4088.65	31.94
7	Net Coal Supplied (5-6)	(MT)	73243.08	506992.63	15937.56
C)	**PRICE**				
8	Amount charged by the Coal Company	(Rs.)	175677239.00	1843591486.36	268678483.81
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	-3015918.06	162437956.15	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	1880082.39	12797632.51	0.00
11	Total amount Charged (8+9+10)	(Rs.)	174541403.33	2018827075.02	268678483.81
D)	**TRANSPORATION**				
12	Transportation charges by rail/ship/road transport	(Rs.)			
	By Rail		78211174.00	458550874.86	0.00
	By Road		0.00	6570523.29	0.00
	By Ship				
	.....				
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)			
14	Demurrage Charges, if any	(Rs.)			
15	Cost of diesel in transporting Coal through MGR system, if applicable	(Rs.)	305641.07	2080484.37	0.00
16	Total Transportation Charges (12+13+14+15)	(Rs.)	78516815.07	467201882.52	0.00
17	Other Charges	(Rs.)			
18	Total amount Charged for Coal supplied including Transportation (11+16)	(Rs.)	253058218.40	2486028957.54	268678483.81
E)	**TOTAL COST**				
18	Landed cost of Coal (2+18)/(1+7)	Rs./MT	**3322.39**	**4872.99**	**16873.49**
19	Blending Ratio (Domestic/Imported)		15.00%	85.00%	0.00%
20	Weighted average cost of Coal	Rs./MT		**4640.40**	
F)	**QUALITY**				
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)	**4966**	**4645**	
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)	**4584**	**4843**	
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)			**5650**
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)			**5650**
25	Weighted average GCV of coal as Billed	(kCal/Kg)		**4710**	
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	**3391**	**3956**	
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	**3360**	**3826**	
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)			**4966**
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)			**5049**
30	Weighted average GCV of coal as Received	(kCal/Kg)		**3806**	

Sanjay Sinha — Digitally signed by Sanjay Sinha Date: 2024.08.21 12:22:30 +05'30'

Ankit Tiwari — Digitally signed by Ankit Tiwari Date: 2024.05.24 10:09:21 +05'30'

AMIT BISWAS — Digitally signed by AMIT BISWAS Date: 2024.09.14 16:48:27 +05'30'

For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station Barh Stage-I

S. No.	Month	Unit	Apr-23	
			HFO	LDO
A)	OPENING QUANTITY			
1	Opening Stock of Oil	(KL)	3493.20	3092.88
2	Value of Opening Stock	(Rs.)	183947678	377911365
B)	QUANTITY			
3	Quantity of LDO supplied by Oil company	(KL)	0.00	219.82
4	Adjustment(+/-) in qnty.supplied made by Oil Comopany	(KL)	0.00	0.00
5	LDO supplied by Oil company (3+4)	(KL)	0.00	219.82
6	Normative transit & Handling losses	(KL)	0.00	0.00
7	Net Oil supplied (5-6)	(KL)	0.00	219.82
C)	PRICE			
8	Amount charged by Oil Company	(Rs.)	0.00	14068363
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00	0.00
11	Total amount Charged (8+9+10)	(Rs.)	0.00	14068363
D)	TRANSPORATION			
12	Transportation charges by rail/ship/road transport	(Rs.)		
	By Rail		Inclusive	Inclusive
	By Road			
	By Ship			
	.....			
13	Adjustment(+/-) in amount made byRailways/ Transport Company	(Rs.)		
14	Demurrage Charges, if any	(Rs.)		
15	Total Transportation Charges (12+13+14+15)	(Rs.)		
16	Other Charges	(Rs.)	0	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	0	14068363
E)	TOTAL COST			
18	**Landed cost of Oil**	**(Rs./KL)**	52658.76	118326.29
F)	QUALITY			
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9600	9560
20	**Weighted average GCV of Oil as Received**	**Kcal/KL**	9504	9371
G)	**Details of information to be submitted in respect of Fuel for consumption of energy charges**			
1	Landed Cost of Oil at Sl No 18	(Rs.)	52658.76	118326.29
2	Usage Quantity for the month	(KL)	133.58	113.52
3	**Wighted average rate**	**(Rs./KL)**	**82827.02**	
4	**Weighted average GCV of Oil**	**Kcal/KL**	**9443**	

Sanjay Sinha Digitally signed by Sanjay Sinha Date: 2024.08.21 12:28:29 +05'30'

Ankit Tiwari Digitally signed by Ankit Tiwari Date: 2024.05.24 10:10:05 +05'30'

AMIT BISWAS Digitally signed by AMIT BISWAS Date: 2024.09.14 16:47:27 +05'30'

For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station: Barh Stage-I

S. No.	Month	Unit	May-23		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
A)	**OPENING QUANTITY**				
1	Opening Quantity of Coal	(MT)	49318.03	201767.83	400.52
2	Value of Stock	(Rs.)	163853750.83	983211820.03	6758158.32
B)	**QUANTITY**				
3	Quantity of Coal supplied by Coal Company	(MT)	193529.34	618739.22	24073.20
4	Adjustment (+/-) in quantity supplied made by Coal Company	(MT)	3371.28	0.00	0.00
5	Coal supplied by Coal Company (3+4)	(MT)	190158.06	618739.22	24073.20
6	Normative Transit & Handling Losses (For Coal based Projects)	(MT)	1521.26	4949.91	48.15
7	Net Coal Supplied (5-6)	(MT)	188636.80	613789.31	24025.05
C)	**PRICE**				
8	Amount charged by the Coal Company	(Rs.)	459620787.00	2167790789.53	393223159.80
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	-8140339.35	214723858.70	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	4846034.22	15493420.45	0.00
11	Total amount Charged (8+9+10)	(Rs.)	456326481.87	2398008068.68	393223159.80
D)	**TRANSPORATION**				
12	Transportation charges by rail/ship/road transport	(Rs.)			
	By Rail		178915849.00	563543349.64	0.00
	By Road		4271303.20	7954586.90	0.00
	By Ship				
	.....				
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)			
14	Demurrage Charges, if any	(Rs.)			
15	Cost of diesel in transporting Coal through MGR system, if applicable	(Rs.)	787809.66	2518732.98	0.00
16	Total Transportation Charges (12+13+14+15)	(Rs.)	183974961.86	574016669.52	0.00
17	Other Charges	(Rs.)			
18	Total amount Charged for Coal supplied including Transportation (11+16)	(Rs.)	640301443.73	2972024738.21	393223159.80
E)	**TOTAL COST**				
18	Landed cost of Coal (2+18)/(1+7)	Rs./MT	**3379.44**	**4849.74**	**16375.51**
19	Blending Ratio (Domestic/Imported)		29.00%	71.00%	0.00%
20	Weighted average cost of Coal	Rs./MT		**4423.35**	
F)	**QUALITY**				
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)	**5018**	**4757**	
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)	**0**	**4550**	
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)			**5650**
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)			**5650**
25	Weighted average GCV of coal as Billed	(kCal/Kg)		**3534**	
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	**3371**	**3883**	
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	**3522**	**3723**	
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)			**5018**
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)			**4901**
30	Weighted average GCV of coal as Received	(kCal/Kg)		**3684**	

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For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station Barh Stage-I

S. No.	Month	Unit	May-23	
			HFO	LDO
A)	**OPENING QUANTITY**			
1	Opening Stock of Oil	(KL)	3359.62	3199.18
2	Value of Opening Stock	(Rs.)	176913521	378547328
B)	**QUANTITY**			
3	Quantity of LDO supplied by Oil company	(KL)	4937.76	3742.92
4	Adjustment(+/-) in qnty.supplied made by Oil Comopany	(KL)	0.00	0.00
5	LDO supplied by Oil company (3+4)	(KL)	4937.76	3742.92
6	Normative transit & Handling losses	(KL)	0.00	0.00
7	Net Oil supplied (5-6)	(KL)	4937.76	3742.92
C)	**PRICE**			
8	Amount charged by Oil Company	(Rs.)	273402692.25	239545913
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00	0.00
11	Total amount Charged (8+9+10)	(Rs.)	273402692.25	239545913
D)	**TRANSPORATION**			
12	Transportation charges by rail/ship/road transport	(Rs.)		
	By Rail		Inclusive	Inclusive
	By Road			
	By Ship			
	.....			
13	Adjustment(+/-) in amount made byRailways/ Transport Company	(Rs.)		
14	Demurrage Charges, if any	(Rs.)		
15	Total Transportation Charges (12+13+14+15)	(Rs.)		
16	Other Charges	(Rs.)	0	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	273402692	239545913
E)	**TOTAL COST**			
18	**Landed cost of Oil**	**(Rs./KL)**	54272.08	89035.47
F)	**QUALITY**			
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9504	9371
20	**Weighted average GCV of Oil as Received**	**Kcal/KL**	9554	9326
G)	**Details of information to be submitted in respect of Fuel for consumption of energy charges**			
1	Landed Cost of Oil at Sl No 18	(Rs.)	54272.08	89035.47
2	Usage Quantity for the month	(KL)	384.01	246.39
3	**Wighted average rate**	**(Rs./KL)**	**67859.25**	
4	**Weighted average GCV of Oil**	**Kcal/KL**	**9465**	

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For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station: Barh Stage-I

S. No.	Month	Unit	Jun-23		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
A)	**OPENING QUANTITY**				
1	Opening Quantity of Coal	(MT)	61445.91	339168.55	3003.57
2	Value of Stock	(Rs.)	207653059.09	1644877820.05	49185051.81
B)	**QUANTITY**				
3	Quantity of Coal supplied by Coal Company	(MT)	190164.92	465655.75	3617.20
4	Adjustment (+/-) in quantity supplied made by Coal Company	(MT)	999.32	0.00	0.00
5	Coal supplied by Coal Company (3+4)	(MT)	189165.60	465655.75	3617.20
6	Normative Transit & Handling Losses (For Coal based Projects)	(MT)	1513.32	3725.25	7.23
7	Net Coal Supplied (5-6)	(MT)	187652.28	461930.50	3609.97
C)	**PRICE**				
8	Amount charged by the Coal Company	(Rs.)	468378139.92	1494007879.66	59488954.20
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	-2515048.16	248818106.15	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	4761788.11	11660163.26	0.00
11	Total amount Charged (8+9+10)	(Rs.)	470624879.87	1754486149.07	59488954.20
D)	**TRANSPORATION**				
12	Transportation charges by rail/ship/road transport	(Rs.)			
	By Rail		166491185.50	486183370.68	0.00
	By Road		6648586.80	5986527.13	0.00
	By Ship				
	.....				
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)			
14	Demurrage Charges, if any	(Rs.)			
15	Cost of diesel in transporting Coal through MGR system, if applicable	(Rs.)	774113.94	1895568.37	0.00
16	Total Transportation Charges (12+13+14+15)	(Rs.)	173913886.24	494065466.19	0.00
17	Other Charges	(Rs.)			
18	Total amount Charged for Coal supplied including Transportation (11+16)	(Rs.)	644538766.11	2248551615.26	59488954.20
E)	**TOTAL COST**				
18	Landed cost of Coal (2+18)/(1+7)	Rs./MT	**3421.11**	**4860.11**	**16432.05**
19	Blending Ratio (Domestic/Imported)		55.00%	45.00%	0.00%
20	Weighted average cost of Coal	Rs./MT		**4068.66**	
F)	**QUALITY**				
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)	**4903**	**4601**	
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)	**4518**	**4059**	
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)			**5650**
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)			**5650**
25	Weighted average GCV of coal as Billed	(kCal/Kg)		**3923**	
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	**3490**	**3762**	
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	**3350**	**3538**	
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)			**4903**
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)			**4834**
30	Weighted average GCV of coal as Received	(kCal/Kg)		**3495**	

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For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station Barh Stage-I

S. No.	Month	Unit	Jun-23	
			HFO	LDO
A)	OPENING QUANTITY			
1	Opening Stock of Oil	(KL)	5638.37	4813.71
2	Value of Opening Stock	(Rs.)	306006199	428591032
B)	QUANTITY			
3	Quantity of LDO supplied by Oil company	(KL)	6701.53	3928.11
4	Adjustment(+/-) in qnty.supplied made by Oil Comopany	(KL)	0.00	0.00
5	LDO supplied by Oil company (3+4)	(KL)	6701.53	3928.11
6	Normative transit & Handling losses	(KL)	0.00	0.00
7	Net Oil supplied (5-6)	(KL)	6701.53	3928.11
C)	PRICE			
8	Amount charged by Oil Company	(Rs.)	371062251.74	251398092
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00	0.00
11	Total amount Charged (8+9+10)	(Rs.)	371062251.74	251398092
D)	TRANSPORATION			
12	Transportation charges by rail/ship/road transport	(Rs.)		
	By Rail		Inclusive	Inclusive
	By Road			
	By Ship			
	.....			
13	Adjustment(+/-) in amount made byRailways/ Transport Company	(Rs.)		
14	Demurrage Charges, if any	(Rs.)		
15	Total Transportation Charges (12+13+14+15)	(Rs.)		
16	Other Charges	(Rs.)	0	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	371062252	251398092
E)	TOTAL COST			
18	**Landed cost of Oil**	**(Rs./KL)**	54868.22	77785.75
F)	QUALITY			
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9554	9326
20	**Weighted average GCV of Oil as Received**	**Kcal/KL**	9748	9486
G)	**Details of information to be submitted in respect of Fuel for consumption of energy charges**			
1	Landed Cost of Oil at Sl No 18	(Rs.)	54868.22	77785.75
2	Usage Quantity for the month	(KL)	429.68	255.14
3	**Wighted average rate**	**(Rs./KL)**	**63406.49**	
4	**Weighted average GCV of Oil**	**Kcal/KL**	**9650**	

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For M.C. Bhandari & Co.
Chartered Accountants

FORM- 15 : Details of Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station Barh Stage-I

S. No.	Month	Unit	Jul-23		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
A)	**OPENING QUANTITY**				
1	Opening Quantity of Coal	(MT)	43645.60	190100.74	1243.54
2	Value of Stock	(Rs.)	149316301.99	923910491.52	20433889.62
B)	**QUANTITY**				
3	Quantity of Coal supplied by Coal Company	(MT)	327576.61	487870.91	34621.40
4	Adjustment (+/-) in quantity supplied made by Coal Company	(MT)	0.00	0.00	0.00
5	Coal supplied by Coal Company (3+4)	(MT)	327576.61	487870.91	34621.40
6	Normative Transit & Handling Losses (For Coal based Projects)	(MT)	2620.61	3902.97	69.24
7	Net Coal Supplied (5-6)	(MT)	324956.00	483967.94	34552.16
C)	**PRICE**				
8	Amount charged by the Coal Company	(Rs.)	861044595.00	1687812128.72	441810549.61
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	-990706.44	162423106.91	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	6980051.85	10395627.00	0.00
11	Total amount Charged (8+9+10)	(Rs.)	867033940.41	1860630862.63	441810549.61
D)	**TRANSPORATION**				
12	Transportation charges by rail/ship/road transport	(Rs.)			
	By Rail		285764078.00	476898602.30	0.00
	By Road		6172538.16	7274074.43	0.00
	By Ship				
	.....				
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)			
14	Demurrage Charges, if any	(Rs.)			
15	Cost of diesel in transporting Coal through MGR system, if applicable	(Rs.)	1193501.33	1777521.84	0.00
16	Total Transportation Charges (12+13+14+15)	(Rs.)	293130117.49	485950198.57	0.00
17	Other Charges	(Rs.)			
18	Total amount Charged for Coal supplied including Transportation (11+16)	(Rs.)	1160164057.90	2346581061.20	441810549.61
E)	**TOTAL COST**				
18	Landed cost of Coal (2+18)/(1+7)	Rs./MT	**3552.56**	**4851.87**	**12913.41**
19	Blending Ratio (Domestic/Imported)		49.00%	51.00%	0.00%
20	Weighted average cost of Coal	Rs./MT		**4215.21**	
F)	**QUALITY**				
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)	**4866**	**4279**	
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)	**4474**	**4279**	
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)			**5650**
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)			**5650**
25	Weighted average GCV of coal as Billed	(kCal/Kg)		**4326**	
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	**3385**	**3630**	
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	**3226**	**3609**	
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)			**4866**
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)			**4865**
30	Weighted average GCV of coal as Received	(kCal/Kg)		**3433**	

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For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station Barh Stage-I

S. No.	Month	Unit	Jul-23	
			HFO	LDO
A)	OPENING QUANTITY			
1	Opening Stock of Oil	(KL)	2287.66	4833.82
2	Value of Opening Stock	(Rs.)	125519941	376002404
B)	QUANTITY			
3	Quantity of LDO supplied by Oil company	(KL)	2935.88	361.88
4	Adjustment(+/-) in qnty.supplied made by Oil Comopany	(KL)	0.00	0.00
5	LDO supplied by Oil company (3+4)	(KL)	2935.88	361.88
6	Normative transit & Handling losses	(KL)	0.00	0.00
7	Net Oil supplied (5-6)	(KL)	2935.88	361.88
C)	PRICE			
8	Amount charged by Oil Company	(Rs.)	151161661.27	27923752
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00	0.00
11	Total amount Charged (8+9+10)	(Rs.)	151161661.27	27923752
D)	TRANSPORATION			
12	Transportation charges by rail/ship/road transport	(Rs.)		
	By Rail		Inclusive	Inclusive
	By Road			
	By Ship			
	.....			
13	Adjustment(+/-) in amount made byRailways/ Transport Company	(Rs.)		
14	Demurrage Charges, if any	(Rs.)		
15	Total Transportation Charges (12+13+14+15)	(Rs.)		
16	Other Charges	(Rs.)	0	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	151161661	27923752
E)	TOTAL COST			
18	**Landed cost of Oil**	**(Rs./KL)**	52968.20	77742.41
F)	QUALITY			
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9748	9486
20	**Weighted average GCV of Oil as Received**	**Kcal/KL**	9784	9362
G)	**Details of information to be submitted in respect of Fuel for consumption of energy charges**			
1	Landed Cost of Oil at Sl No 18	(Rs.)	52968.20	77742.41
2	Usage Quantity for the month	(KL)	250.92	242.33
3	**Wighted average rate**	**(Rs./KL)**	**65139.58**	
4	**Weighted average GCV of Oil**	**Kcal/KL**	**9577**	

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For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station: Barh Stage-I

S. No.	Month	Unit	Aug-23		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
A)	**OPENING QUANTITY**				
1	Opening Quantity of Coal	(MT)	44532.34	130125.27	14678.70
2	Value of Stock	(Rs.)	158203947.79	631350513.38	189551993.51
B)	**QUANTITY**				
3	Quantity of Coal supplied by Coal Company	(MT)	417075.02	617701.16	64382.80
4	Adjustment (+/-) in quantity supplied made by Coal Company	(MT)	3921.51	0.00	0.00
5	Coal supplied by Coal Company (3+4)	(MT)	413153.51	617701.16	64382.80
6	Normative Transit & Handling Losses (For Coal based Projects)	(MT)	3305.23	4941.61	128.77
7	Net Coal Supplied (5-6)	(MT)	409848.28	612759.55	64254.03
C)	**PRICE**				
8	Amount charged by the Coal Company	(Rs.)	1102358048.26	2171334787.15	792472650.85
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	-9819636.60	187301712.78	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	9621496.23	14249737.10	0.00
11	Total amount Charged (8+9+10)	(Rs.)	1102159907.89	2372886237.02	792472650.85
D)	**TRANSPORATION**				
12	Transportation charges by rail/ship/road transport	(Rs.)			
	By Rail		328341786.71	577944614.61	0.00
	By Road		7858960.00	12461081.19	0.00
	By Ship				
	.....				
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)			
14	Demurrage Charges, if any	(Rs.)			
15	Cost of diesel in transporting Coal through MGR system, if applicable	(Rs.)	1286275.02	1905013.56	0.00
16	Total Transportation Charges (12+13+14+15)	(Rs.)	337487021.73	592310709.36	0.00
17	Other Charges	(Rs.)			
18	Total amount Charged for Coal supplied including Transportation (11+16)	(Rs.)	1439646929.62	2965196946.38	792472650.85
E)	**TOTAL COST**				
18	Landed cost of Coal (2+18)/(1+7)	Rs./MT	**3516.55**	**4841.33**	**12441.29**
19	Blending Ratio (Domestic/Imported)		59.50%	38.22%	2.28%
20	Weighted average cost of Coal	Rs./MT		**4226.00**	
F)	**QUALITY**				
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)	**4865**	**4279**	
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)	**4526**	**4214**	
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)			**5650**
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)			**5650**
25	Weighted average GCV of coal as Billed	(kCal/Kg)		**4428**	
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	**3245**	**3615**	
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	**3198**	**3420**	
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)			**4865**
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)			**4853**
30	Weighted average GCV of coal as Received	(kCal/Kg)		**3336**	

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For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station Barh Stage-I

S. No.	Month	Unit	Aug-23	
			HFO	LDO
A)	**OPENING QUANTITY**			
1	Opening Stock of Oil	(KL)	1043.27	2903.58
2	Value of Opening Stock	(Rs.)	55260343	225731303
B)	**QUANTITY**			
3	Quantity of LDO supplied by Oil company	(KL)	2935.13	2843.90
4	Adjustment(+/-) in qnty.supplied made by Oil Comopany	(KL)	0.00	0.00
5	LDO supplied by Oil company (3+4)	(KL)	2935.13	2843.90
6	Normative transit & Handling losses	(KL)	0.00	0.00
7	Net Oil supplied (5-6)	(KL)	2935.13	2843.90
C)	**PRICE**			
8	Amount charged by Oil Company	(Rs.)	151123045.50	219445114
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00	0.00
11	Total amount Charged (8+9+10)	(Rs.)	151123045.50	219445114
D)	**TRANSPORATION**			
12	Transportation charges by rail/ship/road transport	(Rs.)		
	By Rail		Inclusive	Inclusive
	By Road			
	By Ship			
	.....			
13	Adjustment(+/-) in amount made byRailways/ Transport Company	(Rs.)		
14	Demurrage Charges, if any	(Rs.)		
15	Total Transportation Charges (12+13+14+15)	(Rs.)		
16	Other Charges	(Rs.)	0	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	151123046	219445114
E)	**TOTAL COST**			
18	**Landed cost of Oil**	**(Rs./KL)**	51875.93	77455.93
F)	**QUALITY**			
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9784	9362
20	**Weighted average GCV of Oil as Received**	**Kcal/KL**	9457	9724
G)	**Details of information to be submitted in respect of Fuel for consumption of energy charges**			
1	Landed Cost of Oil at Sl No 18	(Rs.)	51875.93	77455.93
2	Usage Quantity for the month	(KL)	2300.59	1754.06
3	**Wighted average rate**	**(Rs./KL)**	**62941.95**	
4	**Weighted average GCV of Oil**	**Kcal/KL**	**9608**	

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For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station Barh Stage-I

S. No.	Month	Unit	Sep-23		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
A)	**OPENING QUANTITY**				
1	Opening Quantity of Coal	(MT)	49948.69	104888.91	1748.73
2	Value of Stock	(Rs.)	175646924.58	507801383.20	21756451.47
B)	**QUANTITY**				
3	Quantity of Coal supplied by Coal Company	(MT)	371190.03	443222.72	42316.40
4	Adjustment (+/-) in quantity supplied made by Coal Company	(MT)	6802.98	0.00	0.00
5	Coal supplied by Coal Company (3+4)	(MT)	364387.05	443222.72	42316.40
6	Normative Transit & Handling Losses (For Coal based Projects)	(MT)	2915.10	3545.78	84.63
7	Net Coal Supplied (5-6)	(MT)	361471.95	439676.94	42231.77
C)	**PRICE**				
8	Amount charged by the Coal Company	(Rs.)	921539647.00	1503073674.00	491249733.93
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	-17053038.57	110296907.83	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	7902141.03	9435621.00	0.00
11	Total amount Charged (8+9+10)	(Rs.)	912388749.46	1622806202.83	491249733.93
D)	**TRANSPORATION**				
12	Transportation charges by rail/ship/road transport	(Rs.)			
	By Rail		318867444.00	450929216.00	0.00
	By Road		6994347.44	7893468.88	0.00
	By Ship				
	.....				
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)			
14	Demurrage Charges, if any	(Rs.)			
15	Cost of diesel in transporting Coal through MGR system, if applicable	(Rs.)	1398375.89	1669743.03	0.00
16	Total Transportation Charges (12+13+14+15)	(Rs.)	327260167.33	460492427.91	0.00
17	Other Charges	(Rs.)			
18	Total amount Charged for Coal supplied including Transportation (11+16)	(Rs.)	1239648916.79	2083298630.75	491249733.93
E)	**TOTAL COST**				
18	Landed cost of Coal (2+18)/(1+7)	Rs./MT	**3440.02**	**4758.10**	**11664.40**
19	Blending Ratio (Domestic/Imported)		58.00%	40.26%	1.74%
20	Weighted average cost of Coal	Rs./MT		**4113.45**	
F)	**QUALITY**				
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)	**4856**	**4226**	
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)	**4462**	**4199**	
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)			**5650**
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)			**5650**
25	Weighted average GCV of coal as Billed	(kCal/Kg)		**4382**	
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	**3203**	**3454**	
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	**3299**	**3586**	
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)			**4856**
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)			**4854**
30	Weighted average GCV of coal as Received	(kCal/Kg)		**3424**	

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For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station Barh Stage-I

S. No.	Month	Unit	Sep-23	
			HFO	LDO
A)	OPENING QUANTITY			
1	Opening Stock of Oil	(KL)	1677.81	3503.42
2	Value of Opening Stock	(Rs.)	87038154	271360660
B)	QUANTITY			
3	Quantity of LDO supplied by Oil company	(KL)	2939.35	941.72
4	Adjustment(+/-) in qnty.supplied made by Oil Comopany	(KL)	0.00	0.00
5	LDO supplied by Oil company (3+4)	(KL)	2939.35	941.72
6	Normative transit & Handling losses	(KL)	0.00	0.00
7	Net Oil supplied (5-6)	(KL)	2939.35	941.72
C)	PRICE			
8	Amount charged by Oil Company	(Rs.)	151340323.53	72666434
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00	0.00
11	Total amount Charged (8+9+10)	(Rs.)	151340323.53	72666434
D)	TRANSPORATION			
12	Transportation charges by rail/ship/road transport	(Rs.)		
	By Rail		Inclusive	Inclusive
	By Road			
	By Ship			
	.....			
13	Adjustment(+/-) in amount made byRailways/ Transport Company	(Rs.)		
14	Demurrage Charges, if any	(Rs.)		
15	Total Transportation Charges (12+13+14+15)	(Rs.)		
16	Other Charges	(Rs.)	0	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	151340324	72666434
E)	TOTAL COST			
18	**Landed cost of Oil**	**(Rs./KL)**	51628.77	77393.97
F)	QUALITY			
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9457	9724
20	**Weighted average GCV of Oil as Received**	**Kcal/KL**	9695	9471
G)	**Details of information to be submitted in respect of Fuel for consumption of energy charges**			
1	Landed Cost of Oil at Sl No 18	(Rs.)	51628.77	77393.97
2	Usage Quantity for the month	(KL)	1966.674	1389.17
3	**Wighted average rate**	**(Rs./KL)**	**62294.41**	
4	**Weighted average GCV of Oil**	**Kcal/KL**	**9602**	

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For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station: Barh Stage-I

S. No.	Month	Unit	Oct-23		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
A)	**OPENING QUANTITY**				
1	Opening Quantity of Coal	(MT)	91573.56	61488.66	5396.50
2	Value of Stock	(Rs.)	315014995.71	292569326.44	62946912.64
B)	**QUANTITY**				
3	Quantity of Coal supplied by Coal Company	(MT)	349039.46	362286.73	52326.40
4	Adjustment (+/-) in quantity supplied made by Coal Company	(MT)	5978.15	0.00	0.00
5	Coal supplied by Coal Company (3+4)	(MT)	343061.31	362286.73	52326.40
6	Normative Transit & Handling Losses (For Coal based Projects)	(MT)	2744.49	2898.29	104.65
7	Net Coal Supplied (5-6)	(MT)	340316.82	359388.44	52221.75
C)	**PRICE**				
8	Amount charged by the Coal Company	(Rs.)	854734159.51	1258721608.00	646921979.02
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	-14977588.74	59417155.22	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	5975382.06	6202168.74	0.00
11	Total amount Charged (8+9+10)	(Rs.)	845731952.83	1324340931.96	646921979.02
D)	**TRANSPORATION**				
12	Transportation charges by rail/ship/road transport	(Rs.)			
	By Rail		320764546.65	348144933.00	0.00
	By Road		0.00	3830636.47	0.00
	By Ship				
	.....				
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)			
14	Demurrage Charges, if any	(Rs.)			
15	Cost of diesel in transporting Coal through MGR system, if applicable	(Rs.)	1282102.34	1330762.62	0.00
16	Total Transportation Charges (12+13+14+15)	(Rs.)	322046648.99	353306332.09	0.00
17	Other Charges	(Rs.)			
18	Total amount Charged for Coal supplied including Transportation (11+16)	(Rs.)	1167778601.82	1677647264.05	646921979.02
E)	**TOTAL COST**				
18	Landed cost of Coal (2+18)/(1+7)	Rs./MT	**3433.26**	**4681.22**	**12320.21**
19	Blending Ratio (Domestic/Imported)		40.00%	54.74%	5.26%
20	Weighted average cost of Coal	Rs./MT		**4583.64**	
F)	**QUALITY**				
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)	**4854**	**4204**	
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)	**4458**	**4447**	
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)			**5650**
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)			**5650**
25	Weighted average GCV of coal as Billed	(kCal/Kg)		**4497**	
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	**3287**	**3561**	
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	**3413**	**3571**	
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)			**4854**
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)			**4871**
30	Weighted average GCV of coal as Received	(kCal/Kg)		**3565**	

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For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station Barh Stage-I

S. No.	Month	Unit	Oct-23	
			HFO	LDO
A)	**OPENING QUANTITY**			
1	Opening Stock of Oil	(KL)	2650.49	2508.97
2	Value of Opening Stock	(Rs.)	136841526	194179218
B)	**QUANTITY**			
3	Quantity of LDO supplied by Oil company	(KL)	0.00	2966.71
4	Adjustment(+/-) in qnty.supplied made by Oil Comopany	(KL)	0.00	0.00
5	LDO supplied by Oil company (3+4)	(KL)	0.00	2966.71
6	Normative transit & Handling losses	(KL)	0.00	0.00
7	Net Oil supplied (5-6)	(KL)	0.00	2966.71
C)	**PRICE**			
8	Amount charged by Oil Company	(Rs.)	0.00	222043045
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00	0.00
11	Total amount Charged (8+9+10)	(Rs.)	0.00	222043045
D)	**TRANSPORATION**			
12	Transportation charges by rail/ship/road transport	(Rs.)		
	By Rail		Inclusive	Inclusive
	By Road			
	By Ship			
	.....			
13	Adjustment(+/-) in amount made byRailways/ Transport Company	(Rs.)		
14	Demurrage Charges, if any	(Rs.)		
15	Total Transportation Charges (12+13+14+15)	(Rs.)		
16	Other Charges	(Rs.)	0	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	0	222043045
E)	**TOTAL COST**			
18	**Landed cost of Oil**	**(Rs./KL)**	51628.77	76012.88
F)	**QUALITY**			
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9695	9471
20	**Weighted average GCV of Oil as Received**	**Kcal/KL**	9693	9481
G)	**Details of information to be submitted in respect of Fuel for consumption of energy charges**			
1	Landed Cost of Oil at Sl No 18	(Rs.)	51628.77	76012.88
2	Usage Quantity for the month	(KL)	1289.996	906.57
3	**Wighted average rate**	**(Rs./KL)**	**61692.61**	
4	**Weighted average GCV of Oil**	**Kcal/KL**	**9606**	

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For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station Barh Stage-I

S. No.	Month	Unit	Nov-23		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
A)	**OPENING QUANTITY**				
1	Opening Quantity of Coal	(MT)	55927.83	75137.94	5011.24
2	Value of Stock	(Rs.)	192014981.87	351736938.69	61739586.98
B)	**QUANTITY**				
3	Quantity of Coal supplied by Coal Company	(MT)	332784.72	412672.84	14983.40
4	Adjustment (+/-) in quantity supplied made by Coal Company	(MT)	3441.91	0.00	0.00
5	Coal supplied by Coal Company (3+4)	(MT)	329342.81	412672.84	14983.40
6	Normative Transit & Handling Losses (For Coal based Projects)	(MT)	2634.74	3301.38	29.97
7	Net Coal Supplied (5-6)	(MT)	326708.07	409371.46	14953.43
C)	**PRICE**				
8	Amount charged by the Coal Company	(Rs.)	800822548.77	1398963382.38	170534551.89
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	-8629754.75	70596706.29	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	5696198.25	7063624.52	0.00
11	Total amount Charged (8+9+10)	(Rs.)	797888992.27	1476623713.19	170534551.89
D)	**TRANSPORATION**				
12	Transportation charges by rail/ship/road transport	(Rs.)			
	By Rail		320826761.77	382774625.00	0.00
	By Road		0.00	3274354.50	0.00
	By Ship				
	.....				
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)			
14	Demurrage Charges, if any	(Rs.)			
15	Cost of diesel in transporting Coal through MGR system, if applicable	(Rs.)	1222394.94	1515842.41	0.00
16	Total Transportation Charges (12+13+14+15)	(Rs.)	322049156.71	387564821.90	0.00
17	Other Charges	(Rs.)			
18	Total amount Charged for Coal supplied including Transportation (11+16)	(Rs.)	1119938148.98	1864188535.09	170534551.89
E)	**TOTAL COST**				
18	Landed cost of Coal (2+18)/(1+7)	Rs./MT	**3428.72**	**4573.54**	**11634.25**
19	Blending Ratio (Domestic/Imported)		55.00%	42.28%	2.72%
20	Weighted average cost of Coal	Rs./MT		**4135.95**	
F)	**QUALITY**				
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)	**4870**	**4413**	
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)	**4283**	**4468**	
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)			**5650**
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)			**5650**
25	Weighted average GCV of coal as Billed	(kCal/Kg)		**4409**	
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	**3387**	**3570**	
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	**3354**	**3320**	
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)			**4870**
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)			**4872**
30	Weighted average GCV of coal as Received	(kCal/Kg)		**3399**	

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For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station Barh Stage-I

S. No.	Month	Unit	Nov-23	
			HFO	LDO
A)	OPENING QUANTITY			
1	Opening Stock of Oil	(KL)	1360.49	4252.60
2	Value of Opening Stock	(Rs.)	70240626	323252434
B)	QUANTITY			
3	Quantity of LDO supplied by Oil company	(KL)	2938.99	0.00
4	Adjustment(+/-) in qnty.supplied made by Oil Comopany	(KL)	0.00	0.00
5	LDO supplied by Oil company (3+4)	(KL)	2938.99	0.00
6	Normative transit & Handling losses	(KL)	0.00	0.00
7	Net Oil supplied (5-6)	(KL)	2938.99	0.00
C)	PRICE			
8	Amount charged by Oil Company	(Rs.)	239812388.50	0
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00	0.00
11	Total amount Charged (8+9+10)	(Rs.)	239812388.50	0
D)	TRANSPORATION			
12	Transportation charges by rail/ship/road transport	(Rs.)		
	By Rail		Inclusive	Inclusive
	By Road			
	By Ship			
	.....			
13	Adjustment(+/-) in amount made byRailways/ Transport Company	(Rs.)		
14	Demurrage Charges, if any	(Rs.)		
15	Total Transportation Charges (12+13+14+15)	(Rs.)		
16	Other Charges	(Rs.)	0	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	239812389	0
E)	TOTAL COST			
18	**Landed cost of Oil**	**(Rs./KL)**	72114.01	76012.88
F)	QUALITY			
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9693	9481
20	**Weighted average GCV of Oil as Received**	**Kcal/KL**	9691	9500
G)	**Details of information to be submitted in respect of Fuel for consumption of energy charges**			
1	Landed Cost of Oil at Sl No 18	(Rs.)	72114.01	76012.88
2	Usage Quantity for the month	(KL)	1784.59	1537.54
3	**Wighted average rate**	**(Rs./KL)**	**73918.47**	
4	**Weighted average GCV of Oil**	**Kcal/KL**	**9601**	

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For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station: Barh Stage-I

S. No.	Month	Unit	Dec-23		
			Domestic (NTPC Mines)	Domestic (Other Sources)	Imported
A)	**OPENING QUANTITY**				
1	Opening Quantity of Coal	(MT)	90621.97	113580.68	2992.68
2	Value of Stock	(Rs.)	310717783.70	519466351.99	34817574.22
B)	**QUANTITY**				
3	Quantity of Coal supplied by Coal Company	(MT)	455748.42	408971.09	30069.90
4	Adjustment (+/-) in quantity supplied made by Coal Company	(MT)	5799.55	0.00	0.00
5	Coal supplied by Coal Company (3+4)	(MT)	449948.87	408971.09	30069.90
6	Normative Transit & Handling Losses (For Coal based Projects)	(MT)	3599.59	3271.77	60.14
7	Net Coal Supplied (5-6)	(MT)	446349.28	405699.32	30009.76
C)	**PRICE**				
8	Amount charged by the Coal Company	(Rs.)	1159358168.08	1354711693.60	374741112.63
9	Adjustment (+/-) in amount charged made by Coal Company	(Rs.)	-14563191.66	66819441.94	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	7717957.32	6925797.83	0.00
11	Total amount Charged (8+9+10)	(Rs.)	1152512933.74	1428456933.37	374741112.63
D)	**TRANSPORATION**				
12	Transportation charges by rail/ship/road transport	(Rs.)			
	By Rail		373609882.09	331718154.78	0.00
	By Road		0.00	3245294.24	0.00
	By Ship				
	.....				
13	Adjustment (+/-) in amount charged made by Railways/Transport Company	(Rs.)			
14	Demurrage Charges, if any	(Rs.)			
15	Cost of diesel in transporting Coal through MGR system, if applicable	(Rs.)	1674068.94	1502245.03	0.00
16	Total Transportation Charges (12+13+14+15)	(Rs.)	375283951.03	336465694.05	0.00
17	Other Charges	(Rs.)			
18	Total amount Charged for Coal supplied including Transportation (11+16)	(Rs.)	1527796884.77	1764922627.42	374741112.63
E)	**TOTAL COST**				
18	Landed cost of Coal (2+18)/(1+7)	Rs./MT	**3423.86**	**4399.15**	**12409.95**
19	Blending Ratio (Domestic/Imported)		82.00%	12.21%	5.79%
20	Weighted average cost of Coal	Rs./MT		**4063.38**	
F)	**QUALITY**				
21	GCV of Domestic Coal of the opening coal stock as per bill of Coal Company	(kCal/Kg)	**4871**	**4459**	
22	GCV of Domestic Coal supplied as per bill of Coal Company	(kCal/Kg)	**4412**	**4169**	
23	GCV of Imported Coal of the opening stock as per bill Coal Company	(kCal/Kg)			**5650**
24	GCV of Imported Coal supplied as per bill Coal Company	(kCal/Kg)			**5650**
25	Weighted average GCV of coal as Billed	(kCal/Kg)		**4447**	
26	GCV of Domestic Coal of the opening stock as received at Station	(kCal/Kg)	**3359**	**3357**	
27	GCV of Domestic Coal supplied as received at Station	(kCal/Kg)	**3214**	**3225**	
28	GCV of Imported Coal of opening stock as received at Station	(kCal/Kg)			**4871**
29	GCV of Imported Coal supplied as received at Station	(kCal/Kg)			**4876**
30	Weighted average GCV of coal as Received	(kCal/Kg)		**3335**	

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For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station Barh Stage-I

S. No.	Month	Unit	Dec-23	
			HFO	LDO
A)	OPENING QUANTITY			
1	Opening Stock of Oil	(KL)	2514.89	1412.02
2	Value of Opening Stock	(Rs.)	181359080	107331322
B)	QUANTITY			
3	Quantity of LDO supplied by Oil company	(KL)	0.00	3987.50
4	Adjustment(+/-) in qnty.supplied made by Oil Comopany	(KL)	0.00	0.00
5	LDO supplied by Oil company (3+4)	(KL)	0.00	3987.50
6	Normative transit & Handling losses	(KL)	0.00	0.00
7	Net Oil supplied (5-6)	(KL)	0.00	3987.50
C)	PRICE			
8	Amount charged by Oil Company	(Rs.)	0.00	298443647
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00	0.00
11	Total amount Charged (8+9+10)	(Rs.)	0.00	298443647
D)	TRANSPORATION			
12	Transportation charges by rail/ship/road transport	(Rs.)		
	By Rail		Inclusive	Inclusive
	By Road			
	By Ship			
	.....			
13	Adjustment(+/-) in amount made byRailways/ Transport Company	(Rs.)		
14	Demurrage Charges, if any	(Rs.)		
15	Total Transportation Charges (12+13+14+15)	(Rs.)		
16	Other Charges	(Rs.)	0	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	0	298443647
E)	TOTAL COST			
18	**Landed cost of Oil**	**(Rs./KL)**	72114.01	75150.32
F)	QUALITY			
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9691	9500
20	**Weighted average GCV of Oil as Received**	**Kcal/KL**	9691	9500
G)	**Details of information to be submitted in respect of Fuel for consumption of energy charges**			
1	Landed Cost of Oil at Sl No 18	(Rs.)	72114.01	75150.32
2	Usage Quantity for the month	(KL)	561.977	550.35
3	**Wighted average rate**	**(Rs./KL)**	**73616.30**	
4	**Weighted average GCV of Oil**	**Kcal/KL**	**9596**	

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For M.C. Bhandari & Co
Chartered Accountants

Part 1
Form - 15 version: 1

Details of Sourcewise fuel for computation of Energy Charges

Company	NTPC Limited
Name of the generating Station	Barh Super Thermal Power Plant-STAGE 01
Month	January-2024

SL	Particulars	Unit	COAL DOMESTIC (NTPC MINES)	COAL-DOMESTIC	COAL - IMPORTED
A)	**OPENING QUANTITY**				
1	Opening Stock of coal	MT	85603.03	346483.66	80.42
2	Value of Stock	Rs.	293092898.32	1524245268.62	997970.65
B)	**QUANTITY**				
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	MT	390004.12	524213.78	87686.40
3.01	- Qty Received (Pit Head)	MT	0.00	0.00	87686.40
3.02	- Qty Received (Non Pit Head)	MT	390004.12	524213.78	0.00
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	MT	3628.90-	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	MT	386375.22	524213.78	87686.40
6	Normative transit & Handling losses (for Coal /Lignite based projects)	MT	3091.00	4193.71	175.37
6.01	- Normative Loss (Pit Head)	MT	0.00	0.00	175.37
6.02	- Normative Loss (Non Pit Head)	MT	3091.00	4193.71	0.00
7	Net Coal / Lignite supplied (5 - 6)	MT	383284.22	520020.07	87511.03
C)	**PRICE**				
8	Amount charged by the Coal / Lignite Company	Rs.	1009769785.35	1749923908.00	1087644834.34
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs.	5058619.34-	16023082.09-	0.00
10	Handling,Sampling and such other Similar charges	Rs.	11647499.90	15655680.63	0.00
11	Total Amount charged (8 +9+10)	Rs.	1016358665.91	1749556506.54	1087644834.34
D)	**TRANSPORTATION**				
12	Transportation charges by Rail / Ship / Road Transport	Rs.	325575470.66	509766361.37	0.00
13	Adjustment (+/-) in amount charged by railways / transport company	Rs.	0.00	0.00	0.00
14	Demurrage charges, if any	Rs.	0.00	0.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs.	1509211.26	2028566.63	0.00
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs.	327084681.92	511794928.00	0.00
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs.	1343443347.83	2261351434.54	1087644834.34
E)	**TOTAL COST**				
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	Rs./MT	3490.26	4368.82	12428.64
19	Blending Ratio (Domestic/Imported)	%	85.00	4.65	10.35
20	Weighted average cost of Coal /Lignite (Including biomass)	Rs./MT	4456.18		
20.10	Weighted average cost of Coal /Lignite (Excluding biomass)	Rs./MT	4456.18	4456.18	4456.18
F)	**QUALITY**				
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	kCal/Kg	4419	4254	0
22	GCV of Domestic coal supplied as per bill of coal company	kCal/Kg	4367	4990	0
23	GCV of Imported coal of the opening coal stock as per bill of coal company	kCal/Kg	0	0	5650
24	GCV of Imported coal supplied as per bill of coal company	kCal/Kg	0	0	5650
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	kCal/Kg	4523		
25.10	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	kCal/Kg	4523	4523	4523
26	GCV of Domestic coal of the Opening stock as received at station	kCal/Kg	3239	3253	0
27	GCV of Domestic coal/biomass supplied as received at station	kCal/Kg	3360	3445	0
28	GCV of Imported coal of the Opening stock as received at station	kCal/Kg	0	0	4875
29	GCV of Imported coal supplied as received at station	kCal/Kg	0	0	4908
30	Weighted average GCV of coal/ Lignite as Received (Including biomass)	kCal/Kg	3502		
30.10	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	kCal/Kg	3502	3502	3502

Submitted On :16.04.2024

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Date: 2024.09.14

For M.C. Bhandari & Co.
Chartered Accountants

FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station Barh Stage-I

S. No.	Month	Unit	Jan-24	
			HFO	LDO
A)	OPENING QUANTITY			
1	Opening Stock of Oil	(KL)	1952.92	4458.92
2	Value of Opening Stock	(Rs.)	140832668	335089181
B)	QUANTITY			
3	Quantity of LDO supplied by Oil company	(KL)	2763.04	0.00
4	Adjustment(+/-) in qnty.supplied made by Oil Comopany	(KL)	0.00	0.00
5	LDO supplied by Oil company (3+4)	(KL)	2763.04	0.00
6	Normative transit & Handling losses	(KL)	0.00	0.00
7	Net Oil supplied (5-6)	(KL)	2763.04	0.00
C)	PRICE			
8	Amount charged by Oil Company	(Rs.)	138835662.14	0
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00	0.00
11	Total amount Charged (8+9+10)	(Rs.)	138835662.14	0
D)	TRANSPORATION			
12	Transportation charges by rail/ship/road transport	(Rs.)		
	By Rail		Inclusive	Inclusive
	By Road			
	By Ship			
	.....			
13	Adjustment(+/-) in amount made byRailways/ Transport Company	(Rs.)		
14	Demurrage Charges, if any	(Rs.)		
15	Total Transportation Charges (12+13+14+15)	(Rs.)		
16	Other Charges	(Rs.)	0	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	138835662	0
E)	TOTAL COST			
18	**Landed cost of Oil**	**(Rs./KL)**	59302.56	75150.32
F)	QUALITY			
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9691	9500
20	**Weighted average GCV of Oil as Received**	**Kcal/KL**	9676	9504
G)	**Details of information to be submitted in respect of Fuel for consumption of energy charges**			
1	Landed Cost of Oil at Sl No 18	(Rs.)	59302.56	75150.32
2	Usage Quantity for the month	(KL)	712.258	515.73
3	**Wighted average rate**	**(Rs./KL)**	**65958.30**	
4	**Weighted average GCV of Oil**	**Kcal/KL**	**9604**	

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For M.C. Bhandari & Co
Chartered Accountants

Part 1
Form - 15 version: 1

Details of Sourcewise fuel for computation of Energy Charges

Company	NTPC Limited
Name of the generating Station	Barh Super Thermal Power Plant-STAGE 01
Month	February-2024

SL	Particulars	Unit	COAL DOMESTIC (NTPC MINES)	COAL-DOMESTIC	COAL - IMPORTED
A)	**OPENING QUANTITY**				
1	Opening Stock of coal	MT	62278.04	554579.91	38082.45
2	Value of Stock	Rs.	217366407.43	2422858316.82	473313118.71
B)	**QUANTITY**				
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	MT	310121.49	450495.76	162682.20
3.01	- Qty Received (Pit Head)	MT	0.00	0.00	162682.20
3.02	- Qty Received (Non Pit Head)	MT	310121.49	450495.76	0.00
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	MT	1838.46-	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	MT	308283.03	450495.76	162682.20
6	Normative transit & Handling losses (for Coal /Lignite based projects)	MT	2466.26	3603.97	325.36
6.01	- Normative Loss (Pit Head)	MT	0.00	0.00	325.36
6.02	- Normative Loss (Non Pit Head)	MT	2466.26	3603.97	0.00
7	Net Coal / Lignite supplied (5 - 6)	MT	305816.77	446891.79	162356.84
C)	**PRICE**				
8	Amount charged by the Coal / Lignite Company	Rs.	813765838.21	1477504941.62	2052174232.50
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs.	1310986.20-	12656920.81	0.00
10	Handling,Sampling and such other Similar charges	Rs.	9262961.64	13455774.84	0.00
11	Total Amount charged (8 +9+10)	Rs.	821717813.65	1503617637.27	2052174232.50
D)	**TRANSPORTATION**				
12	Transportation charges by Rail / Ship / Road Transport	Rs.	251682565.76	450055971.21	0.00
13	Adjustment (+/-) in amount charged by railways / transport company	Rs.	0.00	0.00	0.00
14	Demurrage charges, if any	Rs.	0.00	0.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs.	1887841.36	2742359.23	0.00
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs.	253570407.12	452798330.44	0.00
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs.	1075288220.77	1956415967.71	2052174232.50
E)	**TOTAL COST**				
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	Rs./MT	3511.74	4372.84	12599.76
19	Blending Ratio (Domestic/Imported)	%	40.00	49.97	10.03
20	Weighted average cost of Coal /Lignite (Including biomass)	Rs./MT		4853.28	
20.10	Weighted average cost of Coal /Lignite (Excluding biomass)	Rs./MT	4853.28	4853.28	4853.28
F)	**QUALITY**				
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	kCal/Kg	4944	4688	0
22	GCV of Domestic coal supplied as per bill of coal company	kCal/Kg	4310	4894	0
23	GCV of Imported coal of the opening coal stock as per bill of coal company	kCal/Kg	0	0	5650
24	GCV of Imported coal supplied as per bill of coal company	kCal/Kg	0	0	5650
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	kCal/Kg		4722	
25.10	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	kCal/Kg	4722	4722	4722
26	GCV of Domestic coal of the Opening stock as received at station	kCal/Kg	3350	3388	0
27	GCV of Domestic coal/biomass supplied as received at station	kCal/Kg	3215	3287	0
28	GCV of Imported coal of the Opening stock as received at station	kCal/Kg	0	0	4944
29	GCV of Imported coal supplied as received at station	kCal/Kg	0	0	4920
30	Weighted average GCV of coal/ Lignite as Received (Including biomass)	kCal/Kg		3459	
30.10	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	kCal/Kg	3459	3459	3459

Submitted On :16.04.2024

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For M.C. Bhandari & Co
Chartered Accountants

FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station Barh Stage-I

S. No.	Month	Unit	Feb-24	
			HFO	LDO
A)	**OPENING QUANTITY**			
1	Opening Stock of Oil	(KL)	4003.70	3378.19
2	Value of Opening Stock	(Rs.)	237429606	253871978
B)	**QUANTITY**			
3	Quantity of LDO supplied by Oil company	(KL)	0.00	0.00
4	Adjustment(+/-) in qnty.supplied made by Oil Comopany	(KL)	0.00	0.00
5	LDO supplied by Oil company (3+4)	(KL)	0.00	0.00
6	Normative transit & Handling losses	(KL)	0.00	0.00
7	Net Oil supplied (5-6)	(KL)	0.00	0.00
C)	**PRICE**			
8	Amount charged by Oil Company	(Rs.)	0.00	0
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00	0.00
11	Total amount Charged (8+9+10)	(Rs.)	0.00	0
D)	**TRANSPORATION**			
12	Transportation charges by rail/ship/road transport	(Rs.)		
	By Rail		Inclusive	Inclusive
	By Road			
	By Ship			
	.....			
13	Adjustment(+/-) in amount made byRailways/ Transport Company	(Rs.)		
14	Demurrage Charges, if any	(Rs.)		
15	Total Transportation Charges (12+13+14+15)	(Rs.)		
16	Other Charges	(Rs.)	0	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	0	0
E)	**TOTAL COST**			
18	**Landed cost of Oil**	**(Rs./KL)**	59302.56	75150.32
F)	**QUALITY**			
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9676	9504
20	**Weighted average GCV of Oil as Received**	**Kcal/KL**	9666	9468
G)	**Details of information to be submitted in respect of Fuel for consumption of energy charges**			
1	Landed Cost of Oil at Sl No 18	(Rs.)	59302.56	75150.32
2	Usage Quantity for the month	(KL)	1267.124	723.60
3	**Wighted average rate**	**(Rs./KL)**	**65063.00**	
4	**Weighted average GCV of Oil**	**Kcal/KL**	**9594**	

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For M.C. Bhandari & Co
Chartered Accountants

Part 1
Form - 15 version: 1

Details of Sourcewise fuel for computation of Energy Charges

Company	NTPC Limited
Name of the generating Station	Barh Super Thermal Power Plant-STAGE 01
Month	March-2024

SL	Particulars	Unit	COAL DOMESTIC (NTPC MINES)	COAL-DOMESTIC	COAL - IMPORTED
A)	**OPENING QUANTITY**				
1	Opening Stock of coal	MT	98043.41	457740.51	106939.28
2	Value of Stock	Rs.	344303265.63	2001625305.15	1347409604.20
B)	**QUANTITY**				
3	Quantity of Coal /Lignite supplied by Coal / Lignite Company	MT	385492.70	543243.55	38157.30
3.01	- Qty Received (Pit Head)	MT	0.00	0.00	38157.30
3.02	- Qty Received (Non Pit Head)	MT	385492.70	543243.55	0.00
4	Adjustment (+/-) in quantity supplied made by Coal / Lignite Company	MT	5141.71-	0.00	0.00
5	Coal supplied by Coal/Lignite Company (3+4)	MT	380350.99	543243.55	38157.30
6	Normative transit & Handling losses (for Coal /Lignite based projects)	MT	3042.81	4345.95	76.32
6.01	- Normative Loss (Pit Head)	MT	0.00	0.00	76.32
6.02	- Normative Loss (Non Pit Head)	MT	3042.81	4345.95	0.00
7	Net Coal / Lignite supplied (5 - 6)	MT	377308.18	538897.60	38080.98
C)	**PRICE**				
8	Amount charged by the Coal / Lignite Company	Rs.	971476837.00	1858895229.25	446454939.30
9	Adjustment (+ / -) in amount charged by coal / Lignite Company	Rs.	8946317.01-	7189645.61-	0.00
10	Handling,Sampling and such other Similar charges	Rs.	11515427.75	16227756.97	0.00
11	Total Amount charged (8 +9+10)	Rs.	974045947.74	1867933340.61	446454939.30
D)	**TRANSPORTATION**				
12	Transportation charges by Rail / Ship / Road Transport	Rs.	330569007.00	543834748.59	0.00
13	Adjustment (+/-) in amount charged by railways / transport company	Rs.	0.00	0.00	0.00
14	Demurrage charges, if any	Rs.	0.00	0.00	0.00
15	Cost of diesel in transporting Coal through MGR system, if applicable	Rs.	1412670.60	1990761.94	0.00
16	Total transportation charges (12+/- 13 - 14 + 15)	Rs.	331981677.60	545825510.53	0.00
17	Total amount charged for Coal / Lignite supplied including transportation (11 + 16)	Rs.	1306027625.34	2413758851.14	446454939.30
E)	**TOTAL COST**				
18	Landed Cost of Coal/Lignite (2+17) / (1+7)	Rs./MT	3471.81	4430.28	12369.75
19	Blending Ratio (Domestic/Imported)	%	66.50	22.69	10.81
20	Weighted average cost of Coal /Lignite (Including biomass)	Rs./MT		4650.97	
20.10	Weighted average cost of Coal /Lignite (Excluding biomass)	Rs./MT	4650.97	4650.97	4650.97
F)	**QUALITY**				
21	GCV of Domestic coal of the opening coal stock as per bill of coal company	kCal/Kg	4326	4717	0
22	GCV of Domestic coal supplied as per bill of coal company	kCal/Kg	4360	4967	0
23	GCV of Imported coal of the opening coal stock as per bill of coal company	kCal/Kg	0	0	5650
24	GCV of Imported coal supplied as per bill of coal company	kCal/Kg	0	0	5650
25	Weighted average GCV of Coal /Lignite as billed (Including biomass)	kCal/Kg		4606	
25.10	Weighted average GCV of Coal /Lignite as billed (Excluding biomass)	kCal/Kg	4606	4606	4606
26	GCV of Domestic coal of the Opening stock as received at station	kCal/Kg	3286	3370	0
27	GCV of Domestic coal/biomass supplied as received at station	kCal/Kg	3355	3625	0
28	GCV of Imported coal of the Opening stock as received at station	kCal/Kg	0	0	4941
29	GCV of Imported coal supplied as received at station	kCal/Kg	0	0	4918
30	Weighted average GCV of coal/ Lignite as Received (Including biomass)	kCal/Kg		3551	
30.10	Weighted average GCV of coal/ Lignite as Received (Excluding biomass)	kCal/Kg	3551	3551	3551

Submitted On :16.04.2024

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For M.C. Bhandari & Co.
Chartered Accountants

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FORM- 15 : Details of Secondary Fuel for Computation of Energy Charges

Name of the Petitioner: NTPC Limited
Name of the Generating Station Barh Stage-I

S. No.	Month	Unit	Mar-24	
			HFO	LDO
A)	OPENING QUANTITY			
1	Opening Stock of Oil	(KL)	2736.58	2654.59
2	Value of Opening Stock	(Rs.)	162285907	199493208
B)	QUANTITY			
3	Quantity of LDO supplied by Oil company	(KL)	0.00	2967.80
4	Adjustment(+/-) in qnty.supplied made by Oil Comopany	(KL)	0.00	0.00
5	LDO supplied by Oil company (3+4)	(KL)	0.00	2967.80
6	Normative transit & Handling losses	(KL)	0.00	0.00
7	Net Oil supplied (5-6)	(KL)	0.00	2967.80
C)	PRICE			
8	Amount charged by Oil Company	(Rs.)	0.00	245046840
9	Adjustment (+/-) in amount charged by Oil Company	(Rs.)	0.00	0.00
10	Handling, Sampling and such other similar charges	(Rs.)	0.00	0.00
11	Total amount Charged (8+9+10)	(Rs.)	0.00	245046840
D)	TRANSPORATION			
12	Transportation charges by rail/ship/road transport	(Rs.)		
	By Rail		Inclusive	Inclusive
	By Road			
	By Ship			
	.....			
13	Adjustment(+/-) in amount made byRailways/ Transport Company	(Rs.)		
14	Demurrage Charges, if any	(Rs.)		
15	Total Transportation Charges (12+13+14+15)	(Rs.)		
16	Other Charges	(Rs.)	0	0
17	Total Amount charged for Oil supplied including transportation (11+15+16)	(Rs.)	0	245046840
E)	TOTAL COST			
18	**Landed cost of Oil**	**(Rs./KL)**	59302.56	79066.04
F)	QUALITY			
19	GCV of Oil of the opening stock as per Oil Company	Kcal/KL	9666	9468
20	**Weighted average GCV of Oil as Received**	**Kcal/KL**	9660	9499
G)	**Details of information to be submitted in respect of Fuel for consumption of energy charges**			
1	Landed Cost of Oil at Sl No 18	(Rs.)	59302.56	79066.04
2	Usage Quantity for the month	(KL)	643.771	702.99
3	**Wighted average rate**	**(Rs./KL)**	**69618.82**	
4	**Weighted average GCV of Oil**	**Kcal/KL**	**9576**	

Sanjay Sinha Digitally signed by Sanjay Sinha Date: 2024.08.21 15:03:53 +05'30'

Ankit Tiwari Digitally signed by Ankit Tiwari Date: 2024.05.24 11:18:21 +05'30'

AMIT BISWAS Digitally signed by AMIT BISWAS Date: 2024.09.14 16:55:40 +05'30'

For M.C. Bhandari & Co
Chartered Accountants