

एन टी पी सी लिमिटेड (भारत सरकार का उद्यम)

NTPC Limited

(A Govt. of India Enterprise) कोयला खनन परियोजनाएँ, हजारीबाग Coal Mining Projects, Hazaribag

Ref:- 1040/PBCMP/Mining/2017/F-47/ 2/485/

Date: 17.01.2017

To

The Additional Principal Chief Conservator of Forest (Central), Ministry of Environment, Forests and Climate Change, Regional Office (ECZ), Bungalow No. A-2, Shyamli Colony, Ranchi – 834002, email ro.ranchi-mef@gov.in

Kind Attention Dr T.H.Mahato, Scientist C.

Sub: Submission of Half yearly Environment Monitoring Report (HYMR) of Environmental Clearance for Pakribarwadih Coal Mining Project (15 MTPA).

Ref1: EC Ltr No.J-11015/692/2007-IA.II(M) Dated 19th May 2009.

Ref 2: EC Amendment Ltr No J-11015/692/2007-IA-II(M) Date 29.06.2016

Dear Sir.

Please find enclosed the Half yearly Environment Monitoring Report (HYMR) of Environmental Clearance (EC) of Pakri Barwadih Coal Mine Block for the period from **June 2016 to November 2016** for your kind perusal.

This is for your kind information please.

Thanking you,

Encl: A/a.

Yours faithfully

P.M.Prasad, 17/1/20/7
Executive Director.

PB,CB, KD CMP,

NTPC Ltd, Hazaribagh.

CC:

Zonal Officer, Kolkata, Central Pollution Control Board, Southern Conclave, Block 502, 5th & 6th Floors, Rajdhanga Main road, Kolkata -700 107 (W.B.)., email rcsaxenaa@rediffmail.com

2. Regional Officer, Jharkhand State Pollution Control Board, PTC Chowk Hazaribagh. Jharkhand.

कोल खनन परियोजनाएँ, उज्जवल कॉम्पलेक्स, पगमिल रोड, हजारीबाग- 825301, फोन + फैक्स - 06546-270749 Coal Mining Projects, Ujjwal Complex, Pugmil Road, Hazaribag - 825301, Tele Fax: 06546-270749 Registered Office: NTPC Bhawan Scope Complex, 7 Institutional Area, Lodhi Road, New Delhi - 110 003



Half Yearly EC Compliance Report June -2016 to November 2016

(EC Clearance Ltr. No.J-11015/692/2007-IA.II (M) Dated 19th May 2009, Amendment Ltr No J-11015/692/2007-IA-II (M) Date 29.06.2016)

Pakri Barwadih Coal Mining Project, NTPC Limited, Hazaribagh Jharkhand.



Pakri Barwadih Coal Mining Project (15MTPA)

HALF YEARLY ENVIRONMENTAL MONITORING REPORT (For the Period June 2016 to November 2016)

COMPLIANCE STATUS OF ENVIRONMENTAL CLEARANCE CONDITIONS EC Clearance Ltr. No.J-11015/692/2007-IA.II (M) Dated 19th May 2009 & Amendment Ltr No J-11015/692/2007-IA-II (M) Dated 29.06.2016

SL No	Conditions	Compliance/ Status as on 30 th November, 2016						
SPECIFIC CONDITIONS I The environmental clearance is restricted to Phase-1 of 39 years of opencast operations involving 3319.42 ha of ML area only for which exploration has been completed. II No mining operations shall be undertaken in the forestland within the ML until clearance has been obtained under the provisions of FC Act, 1980. III No mining operations shall be undertaken in the forestland within the ML until clearance has been accorded under the provisions of FC Act, 1980. III Stage II Clearance obtained vide letter no. "F.No 8-56/2009, dated 11th May 2010", III. Stage II Clearance obtained vide letter no. "F.No 8-56/2009, dated 17th Sept 2010", III. Final land release letter received from the Stade Govt. vide letter no. 3/Vanbhoomi-75/2009-1240 dated 31.03.2011. Copy attached as Annexure -1. Final land release letter received from the Stade Govt. vide letter no. 3/Vanbhoomi-75/2009-1240 dated 31.03.2011. Copy attached as Annexure -1. Frotection of monolith found if any within core zone shall be done and its development by creating an approach road and maintaining park & green belf would be reated upto the monolith a park created around if so that the monolith could be visited. IV Mining shall be carried out as per statute from the streams/nallahs flowing within the lease. Embankment and lat least 2:1 towards the ML and shall be stabilized with plantation. The CWPRS would be engaged for the design and study of realignment of the drains / nallas flowing across the ML the drains / nallas flowing across the ML the drains / nallas flowing across the ML bept. Vide letter no. 2 / PMC/ND-10-10-10-10-10-10-10-10-10-10-10-10-10-								
	to Phase-1 of 39 years of opencast operations involving 3319.42 ha of ML area only for which exploration has been							
	in the forestland within the ML until clearance has been obtained under the	accorded under the provisions of FC Act 1980. i. Stage I Clearance obtained vide letter no. "F.No 8-56/2009, dated 11th May 2010", ii. Stage II Clearance obtained vide letter no. "F.No 8-56/2009, dated 17th Sept 2010", iii. Final land release letter received from the State Govt. vide letter no 3/Vanbhoomi-75/2009-1240 dated 31.03.2011. Copy attached as						
III	shall not be disturbed by the mining operations and a minimum 500m distance along with thick green belt would be maintained between the eastern quarry and the monolith. A road would be created upto the monolith a park created around it so that the monolith could be	core zone shall be done and its development by creating an approach road and maintaining park & green believes planned. The contract for preparation and development of Monolith was awarded to BIT Mishra. The later has submitted the proposal in detail. Following the course of action for execution of the work, land						
IV	from the streams/nallahs flowing within the lease. Embankment to be constructed shall be based on peak flow data and shall be at least 3m above the HFL. The slope of the embankment shall at least 2:1 towards the ML and shall be stabilized with plantation. The CWPRS would be engaged for the design and study of realignment of	Mining is being carried out as per DGMS permission with all precautions regarding the danger of streams / nallahs flowing within lease area. CWPRS has undertaken the study for design and realignment of drains/ nallahs flowing across Mine Lease and creation of embankment and submitted their report. NOC has been obtained from the State Water Resources						
٧	Topsoil should be stacked properly with proper slope at earmarked site(s) and	Top soil is being collected and stacked properly at earmarked site since opening						



Pakri Barwadih Coal Mining Project (15MTPA)

SL No	Conditions	Compliance/ Status as on 30th November, 2016
	should not be kept active and shall be used for reclamation and development of green belt.	of mine with proper protective measures say retaining wall at toe of the top soil dump. The same will be strictly used for reclamation and development of green belt.
VI	OB should be stacked at earmarked three external OB dumpsite within ML area of a maximum height of 90m.	As per approved Mine Plan OB is being stacked at earmarked area of Dump C at maximum height 90 meter.
	A minimum of 500m shall be maintained and thick green belt developed between the habitation and OB dumps particularly that of Barkagaon.	A Distance of 500 m will be maintained and thick green belt will be developed between the habitation and OB Dumps particularly that of village Barkagaon.
	The option of raising the level of grazing land created after backfilling the quarry by 10m or so shall be examined so to reduce the overall OD dump height.	Grazing land of 223 Ha will be developed on back filled quarry of western & eastern part
	Slope stability tests may be undertaken and the feasibility of backfilling depending on the type of cost effective technology available at that stage shall be reexamined.	Presently mining is under initial stage, Slope stability test will be undertaken during the full phased operation of mines and formation of the dumps.
	The ultimate slope of the dump shall not exceed 28°.	The ultimate slope of the dump will be kept restricted to 28 degree.
	Monitoring and management of reclaimed dumpsite should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests and its Regional office located at Bhubaneswar on yearly basis.	Monitoring & management of reclaimed dump site shall be carried out till the vegetation becomes self-sustaining. The half yearly compliance report is being submitted regularly to the MoEF & CC Regional office Ranchi. Recent repor (December 2015 to May 2016) submitted vide reference number 7010/PBMP, mining/2016/F-47/316 dated-08/09/2016.
VII	Catch drains and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected should be utilized for watering the mine area, roads, green belt development, etc. The drains should be regularly desilted and maintained properly. Garland drains (size, gradient and length) and sump capacity should be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provided adequate retention period to allow proper settling of silt material.	Presently Garland drains have been provided along the periphery of the initial mining area to arrest silts. Catch drain have been provided along the top so dump. Catch drains will be also provided at external dumps, workshop, offices etc. to direct the rain water to siltation pond a sump area to arrest silts and further to direct water to main sump of adequate capacity with 50% safety margin. Water collected will be utilized for water sprinklers for dust suppression for the minerare aroads, green belt development etc. The drains will be regularly desilted and maintained properly. The main sump is proposed in the de-coaled area at digmost side so as to provide adequate retention period to allow proper settling of silt material.
VIII	Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation should	The construction of the retaining wall of the toe of the top soil dump is under progress with the height of 2 meter above.

Pr-07/1/2018



Pakri Barwadih Coal Mining Project (15MTPA)

SL No	Conditions	Compliance/ Status as on 30th November, 2016
	be based on the rainfall data.	the ground with the width of 2 meter. The trench will be made in parallel to the retaining wall. Photographs enclosed as Exhibit-1 .
IX	(The main haul road of 6 km within the core zone shall be metaled. A 3-tier avenue plantation shall be developed along the main approach roads and haul roads. Mineral transportation from CHP to Railway siding shall be by closed belt conveyor of a length of 7km. The railway siding shall be provided with Silo Rapid Loading System.)	With the development of mine, the main haul road will be gradually converted into metalled road with 3 tier avenue plantation all along the approach road. MoEF & CC vide letter dated 29.06.2016 accorded permission for dispatch of coal by road to Banadag Railway siding for an interim period of two years. 50% of work for closed belt conveyor for coal transportation has been completed and work is under progress.
	Condition IX, Amendment vide letter number- J-11015/692/2007-IA-II(M) Date 29.06.2016 The coal shall be transported through closed belt conveyor system of a length of 13 km to Banadag railway station. The project proponent is permitted for (2) two year to use State Highways/public roads for transportation of coal (approx. 35 km) to Banadag railway siding by adopting all mitigative measure to control dust pollution. The project proponent shall put all efforts to expedite completion of service road for belt conveyer so that the same can be utilized for coal transportation by road.	Transportation of coal from CHP will be done in elevated closed conveyor to Railway siding near Banadag Railway station provided with Silo loading facility. However permission of MoEF & CC has been taken vide Amendment vide letter number- J-11015/692/2007-IA-II(M) Dated 29.06.2016 for dispatch of coal by road to Banadag Railway siding for a interim period of two years. All precautions will be taken to avoid air pollution.
X	Drills should be wet operated only.	 Presently mining is at initial stage, only top soil removal is under progress. Sufficient and regular water spraying is being in practice in the drilling area. Wet drill provision is deployed with wet cutting arrangements. Personnel engaged in drilling operation are provided with appropriate PPEs i.e. dust mask and ear plugs.
XI	Controlled blasting should be practiced with use of delay detonators. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders should be implemented.	Controlled blasting technique with most effective blasting design are formulated & implemented to minimize ground vibration and to avoid fly rocks & boulders.
XII	No additional groundwater (bore well) shall be used for mining operations. Additional water if any required for the project shall be used from recycled water or mine discharge water or rainwater collected in rainwater harvesting pits within the CML.	Only recycled water, mine discharge water and water collected from rain water harvesting pits within coal mine lease (CML) area is being used as additional water for mining operations.

पी. एम. प्रसाद / P.M. PRASAD कार्यकारी निदेशक / Executive Director एनटीपीसी लिमिटेड / NTPC Limited कोयला खनन परियोजनाएँ / CMPs हजारीबाग/Hazaribag



Pakri Barwadih Coal Mining Project (15MTPA)

SL No	Conditions	Compliance/ Status as on 30th November, 2016
XIII	Regular monitoring of groundwater level and quality should be carried out by establishing a network of existing wells and construction of new peizometers. The monitoring for quantity should be done four times a year in pre-monsoon (May), monsoon (August), post-monsoon (November) and winter (January) seasons and for quality in May. Data thus collected should be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring. Rainwater structures shall be erected in the core and buffer zone, in case monitoring indicates a decline in water table.	
XIV	The project authorities should meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.	Regular monitoring of the ground water table in the surrounding villages is being done and necessary action will be taken in case the village wells go dry due to dewatering from the mine.
XV	 Sewage treatment plant of adequate capacity shall be installed in the colony. ETP should also be provided for workshop and CHP wastewater. 	 Provision of sewage treatment plant of adequate capacity will be made for effective treatment of domestic effluent emanating from NTPC and MDO colony within the prescribed statutory standards. The treated sewage water shall be used for plantation and horticulture purpose. Dedicated ETP will be installed for the effective treatment of industrial effluents from Mine workshop and CHP area.
	 Treated wastewater meeting prescribed norms only shall be recycled for mining operations to the extent possible and permitted to be discharged in to the natural water courses only if it meets the prescribed standards. 	Only treated waste water confirming to prescribed statutory norms will be recycled/re-used for mining operation to the extent possible and the excess will be discharged into natural water course only if it meets the prescribed standards.
XVI	The total area that shall be brought under afforestation at the time of mine closure shall not be less than 1199 ha which includes reclaimed topsoil soil dump area (25 ha), external OB dump (632 ha), backfilled area (524 ha), along ML boundary, embankment and undisturbed area, along roads and infrastructure, green belt (18 ha), and in township outside the lease by planting native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha.	Efforts will be made to undertake adequate afforestation in the ML area at the time of mine closure in consultation with the local DFO/state forest department. Also the tree density of around 2500 plants/ha shall be maintained. पी. एम. प्रसाद/ P.M. PRAS/ कार्यकारी निदेशक / Executive Direct एमटीपीसी लिमिटेड / NTPC Limite

हजारीबाग/Hazaribag



Pakri Barwadih Coal Mining Project (15MTPA)

SL No	Conditions	Compliance/ Status as on 30 th November, 2016
XVII	A Progressive Mine Closure Plan shall be implemented by reclamation of 524 ha, of the total quarry area of 1785 ha, which shall be backfilled and afforested by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. Of the total reclaimed backfilled area, 223 ha shall be grazing land and 442 ha shall be agricultural land for utilisation of the villagers. Of the balance 1261 ha of quarry area, an area of 596 ha of decolaed area/void being converted into a water reservoir shall be gently sloped and the upper benches of the reservoir shall be terraced and stabilized with plantation and the remaining 665 ha is for public use for Phase-2 of the project.	A progressive mine Closure Plan will be implemented as per stipulation.
XVIII	Besides carrying out regular periodic health check up of their workers, 10% of the workers identified from workforce engaged in active mining operations shall be subjected to health check up for occupational diseases and hearing impairment, if any, through an agency such as NIOH, Ahmedabad within a period of one year and the results reported to this Ministry and to DGMS.	Regular periodic medical cheek-up of all mine workers as per DGMS guidelines is being carried out at project hospital. NIOH Ahmedabad or any other such agency will be engaged for Occupation health survey of mine worker for reporting any case or sign of occupational disease and hearing impairment and the result of same will be submitted to MOEF&CC and DGMS. However, as of on now no case of occupational disease and hearing
		impairment has been observed. Photographs showing Medical cheek-up of mine workers is enclosed as Exhibit-3 .
KIX	A detailed R&R Plan for the life of the project comprising land losers, homestead losers and land and homestead losers, including tribals to be displaced from the project area shall be prepared and implemented in a stipulated time frame. Phase-I of the R&R comprising of 2221 PAPs shall be implemented within one year. The compensation shall be not less than that specified in the National R&R Policy. Provision shall also be made in the R&R Plan to take care of the land less labourers and the tribals. The total	NTPC RAP has been approved vide letter No 116 dated 27.02.2013 from the Govt. of Jharkhand (GoJh) which is in line with the Jharkhand R&R policy. Compensation for landless project affected families will be paid as per the approved R&R policy. The details of the activities being taken up under Medical, Health, Welfare, skill development & infrastructure development under CD/ CSR is being enclosed as Annexure —2.
	Rs. 700 crores, which includes land acquisition (Rs. 30 crores) and R&R (350 crores). Alternate livelihood and skill development programmes and schemes	Photographs showing glimpse of CSR Activity undertaken at site is enclosed as Exhibit-4 .
		पी. एम. प्रसाद/ P.M. PRASA
C	ompliance of Condition stipulated in Environment Clear	कायकारा निद्शाक / Executive birgett एन हीपीसी लिगिटेड / NTPC Limited ance granted to Pakri Barwadih Coal Mining Regisalएँ / CMPs
	6 of 37	हजारीबाग/Hazaribag



Pakri Barwadih Coal Mining Project (15MTPA)

SL No	Conditions	Compliance/ Status as on 30th November, 2016						
	shall be implemented as part of R&R and CSR.							
XX	The project authorities shall carry out a pre-mining socio-economic survey based on the UNDP Human Development Report and monitor the socio-economic status once every three years and maintain records thereof and report in their Annual Report, the socio-economic impact of R&R and CSR activities.	been undertaken through IIT Kharagp and Abhiyan Samiti (local NGO).						
XXI	For monitoring land use pattern and, for post mining land use, a time series of land use maps, based on satellite imagery (on a scale of 1: 5000) of the core zone and buffer zone, from the start of the project until end of mine life shall be prepared once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to MOEF and its Regional office at Bhubaneshwar.	Post mining land use maps based on Satellite imagery (Scale of 1:5000) of core zone and buffer zone will be prepared in the gap of every 3 years until end of mine life and report will be submitted to MoEF & CC & its Regional Office Ranchi.						
XXII	A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.	A Final Mine Closure Plan along with details of Corpus Fund will be submitted to MoEF & CC for approval well in advance as per stipulation.						
GENER/	AL CONDITIONS							
I.	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.	Will be complied. Permission from MOEF & CC will be taken in case of any change in technology and scope of work is proposed.						
11	No change in the calendar plan including excavation, quantum of mineral coal and waste shall be made.	Will be complied. There will be no change in calendar plan, excavation, quantum of coal and wastage as specified in EIA/EMP report.						
III	Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring SPM, RPM, SO2, NO _x and heavy metals such as Hg, Pb, Cr, As, etc. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board.	Four Ambient Air Quality Monitoring Stations (AAQMS) have been established in consultation with the Jharkhand State Pollution Control Board (JSPCB) at different location in the core Zone as well as in the buffer Zone for monitoring of AAQ parameters, as stipulated.						
IV	Fugitive dust emissions (SPM and RSPM and heavy metals such as Hg, Pb, Cr., As, etc) from all the sources shall be controlled, regularly monitored and data recorded properly.	 Fugitive dust emissions (SPM and RSPM and heavy metals such as Hg, Pb, Cr., As, etc) from all the sources are controlled, regularly monitored and data is being recorded properly. 						
	Water spraying arrangement on haul roads, wagon loading, and dump trucks (loading and unloading) points shall be provided and properly maintained.	Wet drilling is being in practice during drilling operations.						
	provided and properly maintained.	Blasting parameters will be optimized to						

EMILIABELIA / Executive Directo



Pakri Barwadih Coal Mining Project (15MTPA)

SL No	Conditions	Compliance/ Status as on 30 th November, 2016
		 Different capacity water tankers is being used at the haul roads and other dust generating areas i.e. truck loading and unloading points towards dust suppression purposes.
V	Data on ambient air quality (SPM, RSPM, SO2, NOx and heavy metals such as Hg, Pb, Cr, As, etc.)) shall be regularly submitted to the Ministry including its Regional Office at Bhubaneswar and to the State Pollution Control Board and the Central Pollution Control Board once in six months.	Environmental monitoring data or ambient air quality is being monitored through M/s SGS India Pvt. limited (NAB Accredited lab), the data of Winter Season will be submitted to Regional MoE & CC / JSPCB/ CPCB).
VI	Adequate measures shall be taken for control of noise levels below 85 dB (A) in the work environment. Workers anguaged in blasting and drilling.	Effective measures are well taken to minimize the noise level below 85 dB (A in the work zone.
	 Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs. 	 Workers engaged in high noise wor zone are provided with suitable PPEs i.e ear plugs/muffs.
VII	 Industrial wastewater (workshop and wastewater from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop effluents. 	 The industrial waste water will be collected, analyzed and treated conforming to the stipulated standard before final discharge. Electro-mechanical ETP MBBR is being constructed at the Workshop area Photographs enclosed as Exhibit-5.
VIII	Vehicular emissions shall be kept under control and regularly monitored.	All vehicles plying for project are being well maintained & in good working condition.
		Regular monitoring of vehicular emission is being done. Vehicles used for transportation activity shall not be overloaded and will be covered with tarpaulin.
		Standard operating procedure will be prepared and implemented during the mining operation phase for proper movement of transportation vehicles for minimizing vehicular emission.
IX	Environmental laboratory shall be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.	A separate Lab shall be established at the site with adequate number and type of pollution monitoring and analysis equipment in consultation with the Jharkhand State Pollution Control Board (JSPCB) for analysis of variou environmental parameters. However, monitoring and analysis is being done through M/s SGS India Pvt. Ltd (NAB accredited lab) in consultation with the State Pollution Control Board.

पी. एम. प्रसाद/ P.M. PRASAD

7



Pakri Barwadih Coal Mining Project (15MTPA)

SL No	Conditions	Compliance/ Status as on 30th November, 2016
X	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of the workers shall be	Personal protective respiratory devices are made available to personnel working in dusty areas & adequate training on safety & health are also being imparted. A Schedule program is prepared for
	undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed.	organizing occupational health surveillance programme for the workers in order to identify the impact & to take appropriate corrective action, if required.
ΧI	A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.	At the corporate Office, a separate Environmental Management Cell is already functioning under supervision of senior executive who is reporting to Head of the company.
XII	 The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its Regional Office at Bhubaneshwar. 	 The requisite funds for environmental mitigation measures have been included in the project cost. Financial provision as stipulated towards environmental mitigative measures will not be diverted for other purposes. Also year-wise expenses detail for environmental protection measure will be submitted to the Regional Office of MoEF & CC at Ranchi after the completion of the financial year.
XIII	The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The Project authorities shall extend full cooperation to the office(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.	Full co-operation will be extended by the project authorities to the officers of MoEF/RO during their inspection / site visit.
XIV	A copy of the EC will be marked to concerned Panchayat/ local NGO, if any, from whom any suggestion/representation has been received while processing the proposal.	No suggestion / representation have been received while processing the proposal. Copy of the EC letter has been sent to the local administrative offices and the EC letter has been also uploaded on the company's website. www.ntpc.co.in
XV	State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industry Centre and Collector's Office/Tehsildar's Office for 30 days.	Copy of the EC letter was sent to office of District Industry centre, District Collector office for display. A copy of the EC has been also marked to JSPCB for display at their Regional office.
XVI	The Project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution control Board and may also be seen at the website of the ministry	 Advertisement regarding EC has been published in two daily local newspapers widely in circulation in Jharkhand. Advertised in English in "Times of India" dated 30/05/2009 In Hindi in "Prabhat Khabar" dated 30/05/2009. The half yearly Compliance status is being updated on Company's website. http://10.0.30.5/home/home10.asp and http://10.1.251.109/pbcmp



Pakri Barwadih Coal Mining Project (15MTPA)

SL No	Conditions	Compliance/ Status as on 30th November, 2016					
	of Environment & Forests at http://envfor.nic.in/ . The compliance status shall also be uploaded by the project authorities in their website and regularly updated at least once in six months so as to bring the same in the public domain. The data shall also be displayed at the entrance of the project premises and mines office and in corporate office.	entrance of the office.					
3	The Ministry or any other competent authority may stipulate any further condition for environmental protection.	If any additional condition related to environment protection stipulated by the statutory authorities, the same will be compiled.					
4	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract the provisions of the Environment (Protection) Act, 1986.	Noted and will be complied.					
5	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and Rules. The proponent shall ensure to provide for the costs incurred for taking up remedial measures in case of soil contamination, contamination of groundwater and surface water, and occupational and other diseases due to the mining operations.	Noted and will be complied under the provision of these acts and rules.					

पी. एम. प्रसाद / P.M. PRASAD कार्यकारी निदेशक / Executive Director एनटीपीसी लिमिटेड / NTPC Limited कोयला खनन परियोजनाएँ / CMPs हजारीबाग/Hazaribag

रगर्थालय - वन प्रमण्डल पदास्थिहारी, हमारीलाग पश्चिमी प्रमण्डल

21TUIS 1235 Paris 28.4.11

अतिलिप-महा अवन्धड, एन री० पी० वी० पकरी वरवाडीह काल (बनन परि घोमन), पामिल राँड, हमारीकाग वन क्रेम पदाविक्षति पदाधिकारी बुक्कागाव | हमारी ब्राग के ख्राचनार्क में जिया । उन्हें निदेशित जिया जाता है डि अधान मुल्य वन खंदरक डे आदिशासार हस्ता-गर्वा पंत्री त्रिया का समिति परे गढनमा हरूनानान्न्वा हो .

कारवाई भी जाय।

ज्यारिका प्रकार मार्ग

PACMP, NTOCHO.

कार्यालय - क्षेत्रीय मुख्य वन संरक्षक, हजारीबाग वन भवन, हन्जारीबाग, कोन नं0.06546-223962, फैक्स नं0. 006546- 224758, Email-reef_hzb@yahoo.co.in दिनांक 07 .. 04-2011 रोवा में वन संरक्षक हजारीबाग अंचल. हजारीबाग । सर्वश्री एन०टी०पी०सी० के पकरीबन्रवाडीह कोयला खनन परियोजना हेतु 1026.438 विषय: हे0 वन भूमि अपयोजन का प्रस्ताव । प्रधान मुख्य वन संरक्षक, –सह— कार्यद्कारी निदेशक, बंद्जर भूमि विकास बार्ड, झारखंड, रांची का पत्राक 316 दिन्नांक 05..04.2011 महाशय. उपरोक्त विषयक प्रसंगाधीन पत्र वंत्री छाया। प्रतियां अनुलग्नक्त्रों के साथ प्रेषित करते हुभे निदश दिया जाता है कि उपरोक्त विषय के समबंध में अधिसूचित वन भूमि को एनoटीoपीoसीo कें पक्ष में हस्तानान्तरित करने की कार्रवाई करें ए वं की नगयी कार्रवाई से दअधोस्ताक्षरी को अवगत अन् –यथोक्त। क्षेत्रीय मुख्य वन संरक्षक. ार्थात्य : वन संरत्नक, हजारी द्वाग औपत, हजारी वाण अपिटिन १३ ई.१ । १३ १७६ :- १८५ । दिनांक :- २.२ ०५-१) प्रोतिविषि, अनुलग्नक की छाथा पृति विचित का प्रांडल परा-ोधारों, ह्यारोबाग पियमों प्रमंडत को तूबनार्थ एवं आवश्यक कार्रवाई हेत् प्रेचित । उनरी अनुरोध है कि हुमया विष्मवक प रियोजना संबंधी अधिसूचित दन भूगि को एन-दो-पो-तो-के पक्ष में उक्त निर्देशानुसार हस्तान्नान्तरित वर्ले की कार्रवाई को जाय एवं सूचना इस कार्नाच्या में भागा जाय । अवा-वधोवन ।

अवल, हजा से वाज ।



कार्यालय:- प्रधान मुच्च्य वन संरक्षाक»- सह-कार्यकारी। निदेशक, बंजर भूमि विकान्स बोर्ड, झारख्य एन्ड, रॉची।

पत्रांक:- / ई०डी०_ अ/त

दिनांक: - ८ -5/04/-00

ेरोवा में,

क्षेत्रिय मुख्य वन संरक्षक, हणारीबाग ।

विषय सर्वश्री एन०टी०पी०सी० के व्यन्करीबरवाडीह को स्य त्ना। खनन परियोजना हेतु 1026

प्रशंक वन विभागीय पत्रांक 1240 दि नांक 31.03.20 ■1_

17:11:2154

पारांगिक पत्र की छायाप्रति संल्नर न की जाती 🕮 । 'प्राप्त निर्देश के अप्रत्नों क में इस कार्यालय आपाक 519 विनांक 07.10.20 10 जिसके हारा स्टेज्म - 2 की शर्ती का अनुपालन प्रतिनेदन आपको प्रेषित है, में दिये गये ि दोश के आलोक में उन धिस्चित वन भूगि करे। 1011 के

ोर गजरूआ जंगल झाडी भूगि की विमुक्ति के राष्ट्रवंद्या की राजस्य एवं भूमि स्वाह्यार विभाग हारा अलग से आदेश निर्मत किया जायेगा। तदोपरान्त संस्थातना ।। Pand over जिला प्राशासन द्वारा विकार पासिमा ।

अन्छ सभोका ।

विश्वासभाजन

संस्कृत-संहै कार्यकारी निदेशक त्यंजा र भूगि विकास बोर्ड,

झारखण्ड, रॉवी।

kidap. 4.15.13

13 of 37

झारखण्ड सरकार वन एवं पर्यावरण विभाग

प्रेपवर

मुकेश कुमार वर्मा, सरकार के उप सचिव ।

सवा में

प्रधान मुख्य वन संरक्षक, झारखण्ड, रांची ।

राँची, दिनांक-

विषय - सर्वश्री एन्०टी०पी०सी० को पकरी बरवाडीह कोयद्ना खनन परियोजना हेतु

1026.438 है0 वन भूमि अष्पयोजन का प्रस्ताव ।

स्या:- प्रधान मुख्य वन संरक्षक-स ह-कार्यकारी निदेशक, बूंजर भूनि विकास बोर्ड,

झारखण्ड, रांची का पत्रांक 267 दिनांक 22.03.2011

सहाशय,

निदेशानुसार उपर्युक्त विषय्मक वरीय सहायक वन मन्हान्निरीक्षक, भारत सरकार, पर्यावरण एवं वन मंत्रालय, नई दिल्ली के प्रत्रांक 8–56/2009—एफ०सी विद्यांक 17.09.2010 द्वारा प्राप्त विषयगत परियोजना की शर्तों के साध्य प्रवत्त स्टेज—II की स्वीकृत्ति का प्रधान मुख्य वन संरक्षक—सह—कार्यकारी निदेशक, बंजर भूमि विकास बोर्ड, झारखण्ड, रांची के पत्रांक 267 दिनांक 22.03.2011 से प्राप्त अनुपालन प्रतिवेदन की समीक्षोपरान्त प्रस्ताव में स्पन्निहित 806.653 हैं। अधिसूचित वनभूमि विमुक्त करने का निर्णेष तिया गया है । प्रस्ताव में सन्निहित 219 78 हैं। मजरूआ जंगल—झाड़ भूमि के हस्तान्तरन हेन्द्रा राजस्व एवं भूमि सुधार व्यिभाग, झारखण्ड, सभी के एआक 1076/राठ दिनांक 16.04.2010 के अनुरूप कार्रवाई करने का निदेश अपने स्तर से प्रयोकता अभिकरण वर्ष देना चाहेंगे ।

कृपया निर्णय का अनुपालन सुनिश्चित किया जाय ।

विश्वासमाजन हर्ग —

(मुकेश कुम्बार वर्मा) सरकार को उप सचिव

ज्ञायाक- १/*७ १ ५/भग ५/२०*५ व ०५० राची, दिनांक-

प्रतिलिपि सचिवं पर्यावरण एट्सं वन मंत्रालय, भारत सरकार, पर्यावरण भवन, सीठजीठओठ कॉम्पलेक्स, लोदी रोड, नई दिल्ली —110003/वन संरक्षक (के न्द्रीय), पर्यावरण एवं वन मंत्रालय पूर्वी क्षेत्रीय कार्यालय, भुवनेश्वर— 751023 को अनुपालन प्रति वेदन्न के साथ सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित।

ह**ा** /− सरकार के उप सचिव

ज्ञापांक—3/95 ११९७ – 12 पण वर्ग पर राची, दिनांक— अ 2011 प्रतिलिपि—प्रधान मुख्य वन संरक्षक—सह—कार्यकारी निदेशक, बंजर भूमि विकास बोर्ड, झारखण्ड, रांची /महा प्रबंधक एनं०टी०पी० सी० लि०, पकरी बरवाडीह कोला माईनिंग प्रोजेक्ट, हजारीबाग को सूचनार्थ एवं आवश्यक कार्रवाई हेन्तु प्रेषित ।

सरकार के उप सचिव

JF.

	BSTRACT OF	
LAND UNDER PAKRI-BARWADIH COAL MINING PROJECT, NTPC Ltd	STRACT OF LAND SCHEDULE OF DEMARCATED FOREST/ UN-DEMARCATED FOREST/ EX-RESERVE FOREST /JUNGLEJHARI	DIVERSION OF 1026,438 Ha OF FOREST LAND FOR PAKRIBARWADIH COAL MINING PROJECT OF NIPC LID

	18	17	 on	15	14	EJ.	12	===	10	9	80	7	6	S	.£a	ω	2			No.	
Total	Banadag/88	Kusumbha/102	Odarna/104	Sirka/103	Pakri-Barwadih/56	Keri/62	Lakura/128	Langatu/58	Arahara/55	Jugra/54	Churchw61	Sonabarsa/59	Sinduari/60	Chepakalan/52	Nagri/49	Chirudih/48	161/47	Urub/41		Village/ Thana No	
1286.14	0.10	1.36	0.00	0.00	116.79	0.00	0.00	0.00	23.14	46.45	18.05	34.32	9.25	54.32	126.04	472.06	10,00	374.26	in acre	Demarcated Forest	Proj
520.47	0.04	0.55	0.00	0.00	47.26	0.00	0.00	0.00	9.36	18.80	7.30	13.89	3.75	21.98	51.00	191.03	4.05	151.46	in ha	ed Forest	posed Area
693.76	0.76	3.26	0.00	0.00	225.90	0.00	125.55	0.00	50.05	13.95	22.95	37.52	6.58	19.52	64.46	51.07	4.00	68.19	in acre	Un-Demar	a of notified
280.75	0.31	1.32	0.00	0.00	91.42	0.00	50.81	0.00	20.25	5.65	9.29	15.18	2.66	7.90	26.09	20.67	1.62	27.59	in ha	Un-Demarcated Forest	Proposed Area of notified forest to be acquired by NTPC
1979.90	0.86	4.62	0.00	0.00	342,69	0.00	125.55	0.00	73.19	60.40	41.00	71.84	15.83	73.84	190.50	523.13	14.00	442.45	in acre	Total (Demarcated + Un-demarcated)	scquired by N
801.22	0.35	1.87	0.00	0.00	138.68	0.00	50.81	0.00	29.61	24.44	16.59	29.07	6.41	29.88	77.09	211.70	5.67	179.05	in ha	narcated + ircated)	VTPC
41.10		19.08	0.00	1.63	3.21				11.08	6.10									in acre	EX-Reser	
5.54		7.72	0.00	0.86	1.30				4.49	2.47									in ha	EX-Reserved Forest	
540.11	0.00	0.00	0.00	0.00	123.12	27.00	0.00	218.77	6.61	0.00	0.00	34.54	10.36	1.40	85.54	3.83	3.47	28,45	in acre	Jungle-Jhari land to be acquired by NTPC Ltd.	Proposed area of G.M.
219.78	0.00	0.00	0.00	0.00	49.82	10.93	0.00	88.53	2.66	0.00	0.00	13.98	4.20	0.57	34.62	1.55	1.40	11.51	in ha	NTPC Ltd.	rea of G.M.
2564.11	0.86	23.70	0.00	1.63	469.02	27.00	125.55	218.77	90.88	66.50	41.00	106.38	26.21	75.24	276.04	526.96	17.47	470.90	in acre	G.M. Jungle Jhari) Forest land to be acquired by NTPC Ltd	Proposed area of (notified forest+EX-Reserve Forest+
1037.65	0.35	9.59	0.00	0.66	189.81	10.93	50.81	88.53	36.76	26.92	16.59	43.05	10.61	30.45	111.71	213.25	7.07	190.56	in ha	G.M. Jungle Jhari) Forest and to be acquired by NTPC Ltd	erve Forest +



		2											,	4										9. 70.	2
10191		Itij/47		Total									Tto /on in	Henry Can										Thana No.	Village/
	110	f	4		632	619	540	517	347	348	284	238	230	210	216	100	94	200	13	12	10	9		PIOE NO	
10.00	0.00	10.00	1000	37 175	47.10	0.00	0.00	0.00	29.24	7.84	0.00	0.00	45.42	0.00	4.00	100	10.00	25.66	39.06	85.46	62.00	17.80	in acre	Demarca	Propos
4.05	0.00	4.05	151.46	474	19.06	0.00	0.00	0.00	11.83	3.00	0,00	0.00	18.38	0.00	1.9/	1.00	4 05	85.01	15.81	34.58	25.09	7.20	in ha	Demarcated Forest	acquiredby NTPC
4.00	0.00	4.00	08.19		13.40	0.00	0.00	0.00	12.51	*146	0.00	0.00	14.58	0.00	10.12	0,40	10.1	787	2.04	0.54	0.00	4.70	in acre	Un-Der Fo	acquiredby NTPC
1.62	0.00	1.62	27.59	4. 14	5 47	000	0.00	0.00	5.06	0.58	0.00	0.00	5.90	0.00	4.10	67.7	1.13	4 4 7	107	0.22	0.00	1.90	in ha	Un-Demarcated Forest	st to be
										1													in acre	Forest	Ex-Re
																							in ha	est	Ex-Reserved
2 44	3.47	0.00	28.45	0.00	3.16	3.90	10.00	10.00	0.00	0.13	0 10	0.17	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	000	0.00	in acre	be acquired by NIPC	Proposed area of Jungle-Jhari land to
4 4 4 4	1.40	0.00	11.51	0.00	1.28	4.0	0.03	0 0	0.00	50.0		0.07	0.00	0.04	0.00	0.00	0.00	0.00	RAIX	0.00	0.00	000	in ha	by NTPC	area of
3.77	1 1 1 1	14 00	470,90	60,50	3.16	9.90	15.00	41./3	9.10	0.13		0 17	60.00	0.09	15.00	15,40	28.50	41.70	08	00.00	63 00	23.55	in acre	forest + Jungle-Jhari land to	Proposed ar
1.40	0.0/	C7 2	190 56	24.48	1.28	4.01	6.07	16.90	3.68	0.85	18:0	0.07	20.00	0.04	6.07	6.23	11.53	16.88	34.80	60.02	2.11		in ha	be acquired by NTPC Ltd	Proposed area of notified forest + Ex- Reserved



DIVERSION OF 1026.438 Ha OF FOREST LAND FOR PAKRIBARWADIH COAL MINING PROJECT OF NTPC Ltd



	1							0	-	-				te.				I	-			V)			1	-				ļ	, N	
Iotal			Jugra/54			Total		Churchu/ 61	Total		ougo concess	000000000000000000000000000000000000000	59	Sonabarsa/				Total			19	Sinduari/ 60				Total		(an/52	Chepaka -			Thana No.	
	077	7 1	172	30	38		13	5			1017	1015	1013	1106	739	239	223		861	424	82	777	65	48	2		614	535	411	213		Plot No	
46,45	12.50	37.70	22.05	0000	0.00	18,05	16.55	1.50	34.32		6.20	14.80	13.00	0.00	0.32	0.00	0.00	9.25	0.88	0.85	0.00	0.00	0.00	7.52	0.00	54.32	23.72	20.00	0.00	10.60	in acre	Demarcat	- Andrew
18.80	5.06	13./4	. 0.00	0.00	0.00	7.30	6.70	0.61	13.89		2.51	5,99	5.26	0.00	0.13	0.00	0.00	3.75	0.36	0.34	0.00	0.00	0.00	3.04	0.00	21.98	9.60	8.09	0.00	4.29	in ha	Demarcated Forest	acquired
13.95	6.00	CK./	0.00	0.00	0 00	22.95	9.95	13.00	37.52		24.10	4.77	4,25	0.00	4.40	0.00	00 0	6.58	0.00	3.35	0.00	0.00	0.00	3.23	0.00	19.52	2.28	2.32	0.00	14.92	in acre	Un-Den Foi	acquiredby NTPC
5,65	2.43	3.22	0.00	0.00	000	9.29	4.03	5.26	15.18		9.75	1.93	1.72	0.00	1.78	0.00	0,00	2.66	0.00	1.36	0.00	0.00	0.00	1.31	0.00	7.90	0.92	0.94	0.00	6.04	in ha	Un-Demarcated Forest	St to be
6.10			2.4/	0.00	22 5					4																					in acre	For	TT X = X = X = X = X = X = X = X = X = X
2.47			1.00	1.4/	, A. W.					1/44																			AMP		in ha	Forest	Ex-Reserved
0.00	0.00	0.00	0.00	0.00	0 0	0.00	0.00	0.00	34.54		0.00	0.00	0.00	32.00	0.00	1.40	1.14	10.38	0.00	0.00	6.63	0.06	- 2.05	0.00	1.64	1.40	0.00	0.00	1.40	0.00	in acre	be acquired by MTPC	Proposed a ea of
0.00	0.00	0.00	0.00	0.00	4.00	0 00	0.00	0.00	13.98		0,00	0.00	0.00	12.95	0.00	0.57	0.46	4.20	0.00	0.00	2.68	0.02	0.83	0.00	0.66	0.57	000	0.00	0.57	0.00	in ha	d by NTPC	d area of
66.50	18.50	41.90	2.47	3.63	AD.LF	41 00	26.50	14.50	106.38		30.30	19.57	17.25	32.00	4.72	1.40	1.14	26.21	0.88	4.20	6.63	0.06	2.05	10.75	1,64	75.24	26.00	22.32	1.40	25.52	in acre	forest+ Jungle-Jhari land to be acquired by NTPC Ltd	Proposed are
76 27	7,49	16.96	1.00	1.47	6c.ar	4 6 70	10.72	5.87	43.05	1	12.76	7 92	6.98	12.95	1.91	0.57	0.46	10.61	0.36	1.70	2.68	0.02	0.83	4.35	0.56	30.45	10.00	9 03	0.57	10 33	in ha	est+ Jungle-Jhari land to e acquired by NTPC Ltd	Proposed area of notified





T														10												alpino concentration of the second		SI. No.	
TOTAL												P		Arahara/ 55	-				-									Village/ Thana No.	
The state of the s	2179	2166	2093	2058	2048	2030	1707	2020		7014	1993	• 268	252	243	68	42	141	30	24	23	22	21	20	11	w	2		Plot No	
V. E.C	0.00	0.00	0.22	0.06	0.00	0.00	11.42	3.32) (E) (E) (E) (E) (E) (E) (E) (E	8.12	11.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	in acre	Demarcat	Proposi
35.0	0.00	0.00	0 09	0.02	0.00	0.00	74.8	1.34	1 7	3.29	4,48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	in ha	Demarcated Forest	Proposed area of notified forest to be acquiredby NTPC
50.05	0.00	0.00	0.42	0.66	0.28	0.00	7.00	07.4.1	1010	10.11	6.50	0.00	0.00	0.00	0.00	7.30	8.60	0.00	0,00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	in acre	Un-Den For	by NTPC .
20.25	0.00	0.00	0.17	0,27	0.11	0.00	70.0	081	574	4,09	2.63	0.00	0.00	0.00	0.00	2.95	3.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	in ha	Un-Demarcated Forest	St to be
11.08																		0.32	0.89	2.15	0.25	3.21	0.22	0.88	1.11	2.05	E C C C C C C C C C C C C C C C C C C C	Forest	Ex-Reserved
4.49																		0.13	0.36	0.87	0.10	1.30	0.09	0.36	0.45	0.83	11111	st	erved
6.61	0.30	0,70	0.00	0.00	0.00	0.85	200	0.00	0.00	U.W.	0.00	3,00	0.45	0.12	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	in acre	be acquired by NTPC	Jungle-Jhari
2.60	0.14	0.40	0.00	0.00	0.00	0.00	78 73	0.00	0.00	8810	7 8 8	200	07.0	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0,00	0.00	0.00	0.00	0.00	in ha	d by NTPC	ri land to
90.00	0.50	02.0	0.04	0.72	0.20	0.03	0.85	2.42	11:38	N. I. I. I.	18)7	17.50	2 20 5	0.14	0.00	7,50	0.00	0.32	0.03	21.2	0.25	3.21	0.88	0.88	1.13	2.05	in acre	be acquired by NTPC Ltd	forest + Ex- Reserved
50.70	36.75	0.12	0000	30.0	0.79	0.11	0.34	0.98	7.00	708	7.30	7.08	1.57	0 18	0.05	0 10	2000	3 48	0.13	70.07	0.10	1100	1 20	0.00	0.70	0.83	in ha	be acquired by NTPC Ltd	forest + Ex- Reserved

Total		13 6	To	L	17 13	100								***************************************	11								SI. No
<u> </u>	VC11/07		Total	ranura/ 128	142	Total		T	T	T	T	7.		-85 /niphita								Thana No.	Village/
	459		DE	16	000>	-	2839	3825	6/17	2172	1977	1000	1010	1917	1018	077	646	883	281	40		Plot No	
0.00	0.00	0.00	U.UU	0.00	0 80	0.00	U.V.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	in acre	Demarca	
0.00	0.00	0.00	0.08	0.00	0.00	O'UI	000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	iii na	Demarcated Forest	acquiredby NTPC
0.00	0.00	125.55	121.40	4.15	0,00	0,00	A AA	0.00	3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	in acre	Un-Do	acquiredby NTPC
0.00	Toroc	5 5 5	49 13	1.68	0.00	0.00	0.00	0.00	M 41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	in ha	Un-Demarcated Forest	
																					in acre	Forest	1
				-	-	1	1		1											Bu iii		Forest	
27.00	0.00	0.00	0.00	218.77	0.28	RAIX;	200.00	17 50	119	1.20	0.17	0.17	19.77	23.38	49.00	52.50	3.72	2.37	1.02	in acre	rtd	be acquired by NTPC	Propose
10.93	0.00	0.00	000	88.53	0.11	78'97	1.08	0.40	0 48	0.49	0.07	0.07	8.00	9.46	19.83	21.25	1.51	0.96	0.41	in ha		ari land to	
27.00	-	67.45	1	1	8.28	46.50	17.50	1.19	T.20	17.0	0.17	0 17	10 77	22.20	49.00	57.50	3 77	237	100	in acre	0000	Proposed area of notified forest + Ex- Reserved forest + Jungle-Thank Inc.	
10.93	49.13	1.68	00.35	C. LI	0 11	0	7.08	0.48	0.49	0.07	0.07	8.00	9.46	19.83	21.25	1.51	0.96	0.41	Bu un		NTPC	eserv	



10/01	Total	- HOUSE COLUMN		-					*****		**********				56	14 Ranwadii															Si. No. Tha	Vil
	-		_	7	-	_				1				- (-	6	STIP I	i.	-	_					27.000		27 -110					Thana No.	300
	77.67	0002	2000	2060	1951	1900	1744	1447	1440	913	885	499	1 66F	394	765	165	288	384	380	3/9	349	34/	313	243	116	35	34	100	w		Plot No	
116.79	0.42	0.00	0.00	0.00	000	0.00	0.00	0.00	0.00	0.00	10.20	5.96	0.00	25.00	3.77	8.42	5.80	0.00	0.00	0.00	0.00	0.00	0.60	13.42	33.04	2.35	1.53	6.08	0.20	in acre	Demarca	department of the same of the same of
47,26	0.17	0.00	0.00	0.00	0 0	0.00	0.00	0.00	0.00	0.00	4.13	2.41	0.00	10.12	1.53	3.41	2.35	0.00	0.00	0.00	0.00	0.00	0.24	5.43	13.37	0.95	0.62	2.46	0.08	in ha	Demarcated Forest	
225.90	0.00	. 0.00	0.00	0.00	0.00	000	0.00	0.00	0.00	0.00	18.50	1.10	30.08	10.76	31,48	27.83	29.95	0.00	0.00	0.00	0.00	0.00	21.15	39.58	14.70	0.00	0.77	0.00	0.00	in acre	Un-Dei	3
91.42	0.00	0.00	0.00	0.00	0,00	0.00	0.00	0.00	0.00	0.00	7.49	0.45	12.17	4.35	12.74	11.26	12.12	0.00	0.00	0.00	0.00	0.00	8.56	16.02	5.95	0.00	0.31	0.00	0.00	in ha	Un-Demarcated Forest	A CORPORATION OF STREET, STREE
3.21		3.21													The second						14									in acre	Forest	Ex-Reserved
1.30		1.30					- Contraction																							in ha	155	e Tred
173 17	0.00	0.00	7.84	33.25	37.00	3.36	3 3 3 5	22.22	2 22	26.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.50	1.17	1.10	6.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	in acre	be acquired	Jungle-Jhari land to
C8 DV	0.00	0.00	3.17	13.46	14.97	1.36	1,00	4 30	000	10.52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.20	0.47	0.45	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	in ha	d by NTPC	Tand to
460 00	0.42	3.21	7.84	33.25	37.00	3.36	0.00	22.2	272	26.00	28.70	7.06	30.08	35.76	35.25	36.25	35.75	0.47	0.50	1.17	1.10	6.88	21.75	53.00	47.74	7 27	230	80.9	0,00	in acre	forest + ox reserved forest + Jungle-Jhari land to be acquired by NTPC Ltd	
	0.17	1.30	3.17	13.46	14.97	1.36	1.35	0.90	000	10.50	11 63	2.86	12.17	14.47	14.27	14.67	14.47	0.19	0.20	0.47	0.45	2.78	8.80	21.45	19 32	0 05	0 93	2.46	200	in ha	be acquired by NTPC Ltd	Co. Docomon

SOUND BONNEY



	GRAND TOTAL	10(0)		18 Ba	1 Ordi	7			*****		17 Ku					To	16 00	To		155	-	SI. No.	
	TOTAL	(0)		Banadag/88	tal					707	Kusumbha/	3070	2 115			Total	Odarna/104	Total		Sirka/103		Thana No.	Village/
				4301		0.00	3676	3434	3433	3432	3431	2855	5007	200	000		1		000	220		Plot No	
A400.49	1006 14	0.10	1	0.10	2.50	c		0	0	0	0	0.00	0.89	0.47	0 44	0	0	0	U	0	21 0010	Demarca	
74,076	1	0.04	0.04	0 20	0.55	0.00	0.00	0.00	0.00	0,00	0.00	0.00	0.36	0.19	0.00	000	0.00	0.00	0.00	0.00	in ha	Demarcated Forest	acquiredby NTPC
693.76		0.76	0.70	22/	3.26	0.00	0.00	0.00	000	0.00	0.00	0.00	1.95	1.31	0.00	000	000	0.00	0.00	0.00	in acre	Un-Dei	acquiredby NTPC
280.75		0.31	0.31		1.32	0.00	0.00	0.00	0.00	000	0.00	0.00	0.79	0.53	0.00	0.00	000	0.00	0.00	0.00	in ha	Un-Demarcated Forest	1000
41.10	0.00	000	0.00	20.00	1000	1.14	1.11	3.88	4.07	10.07	6.97	2 41			0.00	0.00	2000	4 65	1.31	0.32	in acre	Fo	TI X
16.64	0.00	200	0.00	1.12	7 77	0.46	0.45	1.57	1.89	2,70	7,0,0/	770			0.00	0.00	0.00	0.00	22 O	0.13	er or	Forest	Ex-Received
543.11	0.00		0.00	0.00	0.00	9	0.00	0.00	0.00	0.00	0.00	0.00	0 0	0 00	0.00	0.00	0.00	0.00	000	0.00	in acre	be acquire	Propose
219.78	0.00		0.00	0.00	0.00	0 00	000	0,00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00		in ha	be acquired by NTPC	Proposed area of
2564.11	0.86		0.86	23.70	1.14	1.11	1 11	3 88	4.67	6.87	1.41	2.84	1./8		0.00	0.00	1.63	1.31	20.0	0 33	in acre	forest + Ex- Reserved forest+ Jungle-Jhari land to be acquired by NTPC Ltd	Proposed ar
1037.65	0.35	(:,,,	200	9.59	0.46	0.45	10.1	1 57	1.89	2.78	0.57	1.15	0.72	0.00	000	0.00	0.66	0.53	0.13	-	in ha	forest + Ex- Reserved brest+ Jungle-Jhari land t be acquired by NTPC Ltd	Proposed area of notified



NTP C Limited Pakri Barwadih Coal Mining Project (15MTPA)

Exhibit -1 (Ref Specific condition SI No. VIII)

Photographs showing construction of Retaining wall at the toe of the dumps





Pakri Barwadih Coal Mining Project (15MTPA)

Exhibit -2 (Ref Specific condition SI No. XIII)

Photographs showing Pieozometers installation



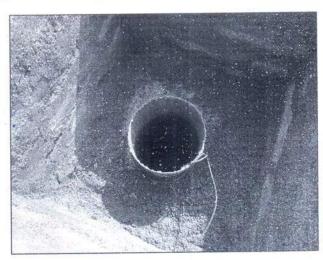
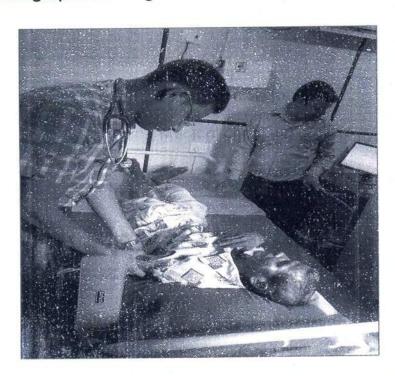


Exhibit -3 (Ref Specific condition SI No. XVII)

Photographs showing Medical cheek-up of mine workers





NTP C Limited Pakri Barwadih Coal Mining Project (15MTPA)

Exhibit - 4 (Ref Specific condition SI No. XIX) Photographs Showing CSR Activity





NTPC Limited Pakri Barwadih Coal Mining Project (15MTPA)

Exhibit - 5 (Ref General condition SI No. VII) Photographs Showing ETP is under construction Phase.







Annexure-2

					NTPC Ltd.	d.				
				Month	th: December-2016	r-2016		SITE: Pa	SITE: Pakri Barwadih	
Annoviiro	Cost	DAPTICIII ADC	NOTEVOOL	DATE OF	LIKELY DATE	PERCENTAGE OF WORK	AMOUNT	ACCUMULA	ASESSED IMPACT ON POPULATION	-
	code			STARTING	COMPLETION	(On going/ Completed)	FOR THIS MONTH	COST(IN RUPEES)	NO OF HOUSEHOLD BENEFITTED	кетагк
	LIVELIHOOD	000								
	Training								Manager	
	10.1(A)	Garments Training 2nd Batch	Dumka	18-0ct-16	18-jan-16	ongoing			32 Ladies	
	80	For Regular expenses of 32 Trainees at LIMS	Dumka	22-Nov-16			10000		March 1	
								572508		Not including course fees of 2nd batch
	10.6	First aid		None and		Completed	Nil	33180	30 person	



3	1	L					Ť
All Training expenses till date		All water tanker expenses till date				-	
698113		7 Villages			20 villages		1920 patients
		2732645	38660			4007052	3020363
ii ii		110000				Nii	142500
		Completed	Completed			Completed	Ongoing
	1	Nov-16	-			5.	1
		0ct-16	0ct-16				
		Chirudih Mines & Dalhandi Darikalan	Chirudih mines			Darikalan	Darikalan
	DRINKING WATER	Drinking water facility for villagers (Total 2 water tankers)	Submersible & Pumset fitting at workshop in Mining area	CARE	Dispensary Darikalan	Medical container and all machines setup	Dispensary(Darikalan & Nagri) expenses of medicine
	DRINKIN	11.1	11.2	HEALTH CARE		12.1	12.2
	11			12			



	17	16	15	14		
17.1	EDUCATION	ELECTR	15.1	14.1	13.2	13.1
Teaching staff for schools.Total 32 Teachers in 6 schools and Coaching centres	NOI	ELECTRIFICATION	Health awareness campaign	Dispensary Darikalan Electrification work	Civil work expenses of Nagri dispensary	Pcc Road work for dispensary gate
Manjhali Dari,Sindw ari, Sonbarsa, Nagri, Kerigada, Upatola Darikalan					Nagri	Darikalan
01-Sep-16			L.		0ct-16	0ct-16
30-Sep-16					Nov-16	Nov-16
Completed			Completed		ongoing	Completed
Nil	- 草 種		Nil	Nil	300000	200000
248000			9365	65655	3612000	
6 Villages students					-	
Accu. Expenses are till date	5				All civil work of Darikalan and Nagri dispensary till date	



			_						-		
	Till date				Ne Hisc					3	
12 schools	The state of the	1 school		40-50 villages	1 village	1 police camp	1 villge	1 villge	1 villge	7 villages	10 mm
267930	VINETICS!	19000		297391	145000	23745	24665	11085	2000	206000	50621
Nil		Nil		Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Completed		Completed		Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed
		0ct-16		Count	0ct-16	0ct-16	Jul-16		ı,	STREET CONTRACTOR	Aug-16
		0ct-16		Aug-16	May-16	0ct-16	Jul-16	Jul-16	Jul-16	Jul-16	Jul-16
		Chirudih		Kandaber	Nagri	Thana Barkagaon	Sonbarsa	Sindwari	Sindwari	Urub	Site office Langatu
Umbrella, Sweets distribution & Drawing competetion in schools		Borewell repair of school	INFRASTRUCTURE	Kandaber Temple Construction	Constructions of well	Pipe fitiing and plumbing work	Drain& Culvert	Drain repair	Pond Deepening	Urub Dam Repair	Civil work at flag hoisting area
17.2		17.3	INFRAST	18.1	18.2	18.4	18.5	18.6	18.7	18.8	18.9
Barton v.			18								



21	9				20	**		
SPORTS	20.4	20.3	20.2	20.1	Nursery	19.3	19.2	19.1
8	Seeds, Medicines, Spray machine and Water sprinkler	Wages of Nursery and ofice garden Langatu for month of November	Cutting charge for dead tree in nursery	infrastructure works	7	Sun temple painting work	Civil work at Chirudih school	Adarsh chowk drain repairing
	li li	Sonbarsa & Langatu	Sonbasa	Sonbarsa	Sonbarsa	Barkagaon	Chirudih	Sindwari
	1	01-Nov-16	20-Nov-16	XI		Sep-16	Sep-16	Sep-16
13 4 11		30-Nov-16				Oct-16		
	Completed	ongoing	Completed	Completed		Completed	Completed	Completed
	Nil	58014	1200	Nil		88600	Nil	Nil
	6315	146274	1200	503511		88600	13350	8400
41		9 labours on daily wages					1 school	1 village
				April to Till date				



*					
					(8 Lakhs each families)
State Level	18 villages			onthe Language	4 Family
200000	62806				3200000
200000	Ni			THE STATE OF	3200000
Completed					Completed
18-Nov-16					26-Nov-16
Ranchi					Sonbarsa, Chepakhur d, Sindwari
Donation for Jharkhand state level Badminton championship	Football Tournament in Independece day- 16	MISCELLANEOUS / SOCIAL WELFARE/CUTU RAL ACTIVITIES	l Help	sation	Distribution Compensation for Death of four families(block office barkagaon)
21.1	21.2		Financial Help	Compensation	22.1
		22			



28	27	26	25									
				23.7	23.6	23.5	23.4	23.3	23.2	23.1	Puja	22.2
Education	Cremation programme	Poor Families	House repair	Yagya	Eid	Chhat	Vishwakarma puja	Ganesh Puja	Donation for Kaali puja	Donation for Durga Puja		Lunch for villagers duringcompensa tion programme Block office
Different villages	Itij					Chepakala n and Keri Chamgada			Barkagaon	Urub		Barkagaon
Mar-16	25-0ct-16					,			30-0ct-16	25-Sep-16		26-Nov-16
0ct-16												
Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed		Completed
Nil	Nil		Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil		6990
112700	50000	10000	34800	20000	15000	31000	22900	10000	10000	95301		
30-40 Students approx	3 family	1 family	4 families	1 village	1 village	2 villaes	1 village	1 village	1 village	1 village		
						1801						1 2



5										
15-20 family approx	7885356	2000 persons	1000 persons	1500 persons	Contratal Section	4-5 villages	20 girls			
708870	September 1	440000	615000	187500	150290	11500	20000	31500	22319130	accumulative
Nil	TRANSFE OF STREET	Nil	Nil	Nil	Nil	Nil	Nil	Nil	4317304	monthly
Completed	The second second	Completed	Completed	Completed	Completed	Completed	Completed	Completed		
0ct-16	Town	01-Jun-16	15-Jul-16	01-Apr-16	Coord	Comp.	TO THE STATE OF TH			
Mar-16		01-May-16 01-Jun-16	10-Jun-16	01-Mar-16		and and and			Total	
Different villages		Langatu site office	Langatu site office	Langatu site office						
Treatment		T-shirt for villagers	Raincoat for villagers	Umbrella for villagers	Plantation	Well & Borewell repair	Village Survey	Signboard for our activity		
		30.6	30.7	30.8	30.9	31.1	31.2	31.3		
29						31				



Community Development Activities: Synopsis

SI	HEAD	Expenditure Till Date (Amount in Lacs)	Activity	No. of Beneficiaries				
1.	EDUCATION	244	Development of 14 no. govt schools in PB project area as Model schools in line with directives of CSR Council, GoJh – benefitting more than 7500 students.					
	Ech B	Bett grincipiera y	Demonstration by Mobile science lab	6200 no.				
	mx to	A should be liege	Organising Science fair in schools	2000 no.				
	seed!	feeted villages	Provision of Bi- cycle to girls students Provision of study materials in govt.	40 nos.				
	The same of	when the collect	school	6400 sets				
	240	la attack/ not 30	Provision of bench cum desk to school	3200 nos				
		a badmada 1	Scholarship to Meritorious students of jharkhand Academic Council 2010	61 nos				
	0	Course in Plasmic	Provision of school bags to school students	8500 nos.				
	BCI	T. Heappur	Distribution of school uniforms to school students	8500 nos.				
2.	HEALTH	193	Medical Camps for project affected person of PBCMP villages	324 camps Patients Examined ~24500 Nos				
	W.	sprawner source	Medical Camps through hired lady doctor in Girls schools	600 no.				
	1048	or equal by the terminal and the termina	01 no. Mobile Clinic and 02 no. ambulances operational					
		411-54	Veterinary Health Check up Camp in PAV, Chirudih	More than 200 animal examined				
		ni a ne si giliviti	Organised Eye Check up and Cataract Operation Camps for Project affected person of PBCMP villages	More than 1100 patients examined				
		di vikege.	Eye Check up Camps for School Students	Organised in Govt. School				
		line south stre	Spectacle provided to vision impaired	25				
			Distribution of bleaching powder.	17 villages				
		PROBLEMBY PRODUCTION CONTRACTOR	Medical Equipment provided to public Health Centre, Barkagaon	2 PHCs				
	200	aga blo of G	Equipment provided to Phycially Handicapped	70 nos				
	3521	of alon of	promise regulation and a second	37.128				



3.	INFRASTRU CTURE	876	Construction of NTPC –Barkagaon Private ITI at Dhenga	600 per year
	DEVELOPME		Development of Kusumbha as Model village- DPR prepared and various	Tarah T
	NT		infra devt. Works under award.	NEW TOTAL
			Installation of Hand Pump	285 nos
	FACILITIES		Installation of Solar Street Light	500 nos
	or Denois and		Installation of Solar High Mast	10 nos
	W. S. A. S. A.		Construction of Boundary Walls in village govt.School	22 nos
	ar area		Construction of new Community Hall	8 nos
	in 2005 in		Construction and repair of roads & nallahs in Project affected villages	33 Km
	455		Repair of existing wells in PAV's for improving hygienic conditions	75nos
	THE GRAD		Deepening and renovation of Ponds	08 No.s Ponds
4.	SKILL DEVELOPME NT MEASURES	292	Full Time ITI Training for Wards of PAPs (2 years course in ITI Hazaribagh, Ranchi , Dhanbad & Dumka)	240
	rahi (1535)		Placement linked course in Plastic Processing at CIPET, Hazipur	20
	miles de la companya		MoU signed with JHARCRAFT for operation & management of ITI for 10 years Regular classes u/p in Welder, Electrician & Fitter trade.	126
	DOMEGNAT.		MES Training in computer course, electrician and welder trade for wards of PAPs.	110
	in sand		Tailoring Training for Women PAPs in all villages and distribution of sewing machines.	365
	AND SOURCE		Computer Training for Girls PAPs	120
			Motor driving training for wards of PAPs & issuance of driving license to successful candidates.	120
	Schrönes !		Jharcraft training (Zardozi trade)for women PAPs in Nagadi village.	30
			Jharcraft training (jute Macrane) for women PAPs in Dhenga village and Chirudih	76
	•	or derived	Apparel training and Embroidery training income generation courses at MAITI, Barkagaon	80
5.	MISCELLANE OUS/	228	Distribution of blankets to old age persons	7000
	WELFARE		Distribution of mosquito nets to school student	1250



		Hazaribagh.	
		Fund. Installation of solar lights and other support at Vinobha bhave University,	
		Cricket and Football leagues and other Programmes at District level Deposition of Rs 7 lacs in DC- CSR	
1	and a URIO	Installation of 4 no. High Mast Lights. Sponsorship to Konar Mahotsava,	
	and a	Development activities at Sadar Hospital(Hzb).	
三般27		Sahai Memorial Park,	
A A LTA	100	Activities at Hazaribagh- Renovation of Chatth Talaab, K.B	
		equipments to Panchayat bhavan, block offices etc.	10887
The same of		youths Distribution of Furniture and other	covered
	2122	Project Affected villages Distribution of Sports item to village	covered 12 village
		Organising and Cricket Tournament in	17 village
		Drinking water through Piyau Ghar during summer seasons	4 Centres
		Supply of drinking water through water tankers for project villages every summer seasons	7 Villages
		Distribution of solar Lantern to School students & PAPs	1180