

Ref.: 0100/DLCMP/F&E/ES/03/83

Date: 01.12.2017

To,

The Addl. PCCF (C)
Ministry of Environment, Forests & Climate Change,
Eastern Regional Office,
A/3, Chandrashekharpur,
Bhubaneswar, Odisha

Subject: Six monthly (April 2017 to September 2017) report on the status of compliance of Environmental Clearance for Dulanga Coal Mining Project of M/s NTPC Limited

Ref: Letter No.: J/11015/1140/2007-IA.II(M) dated 03.03.2014 issued by MoEF&CC, GoI.

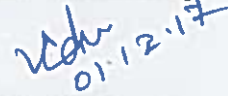
Sir,

Environmental clearance has been accorded to Dulanga Coal Mining project (7MTPA) of M/s NTPC Limited by MoEF GoI, vide letter cited under reference. Subsequent to this, as directed in general conditions point No 4B(xvii), the six monthly report for the period April 2017 to September 2017, on the status of compliance of stipulated environmental conditions for Dulanga Coal Mining Project is submitted herewith.

The softcopy of the same is being mailed to the email id: roez.bsr-mef@nic.in

Thanking You.

Yours Faithfully



(V. C. Dubey)
Addl. General Manager &
Agent, Dulanga Coal Mining Project

Encl.: Six monthly reports on compliance status of EC along with copy in a CD

Copy to: 1. Zonal Officer, CPCB, Kolkata
2. Regional Officer, SPCB, Jharsuguda, Odisha

DULANGA COAL MINING PROJECT (7.0MTPA)

SIX MONTHLY COMPLIANCE STATUS OF ENVIRONMENTAL CLEARANCE CONDITIONS

(PERIOD APRIL 2017 TO SEPTEMBER 2017)

Name of the Project: Dulanga Opencast Coal Mining Project (7MTPA in an area of 785.37 ha = (803.71 ha-18.34 ha=785.37 ha); Latitude 21⁰50'40"N to 22⁰01'30' N and Longitude 83⁰42'06"E to 83⁰53'43"E) of M/s NTPC Limited, Ib valley coalfields, Dist. Sundargarh , Orissa-Environment Clearance

Ref.: Letter No. J-11015/1140/2007-IA.II(M) dated 03rd March, 2014, issued by MoEF &CC, Govt. of India.

Introduction

The proposed project is an Opencast Coal Mining Project with rated production capacity of 7.0 Million Tonne per Annum located in Sundargarh District, Odisha. The proposed project of NTPC Limited has been planned to cater the coal requirement of Darlipali Thermal Power Plant of NTPC Limited. The project has also obtained Consent to Establish (NOC) from Odisha State Pollution Control Board vide consent order no. 23564/Ind-II-NOC dated 27-11-2012 and Stage-II Forest Clearance from MoEF &CC (FC Division), GoI vide letter: F. No.8-23/2013 -FC dated 23rd December, 2015. This project has been granted environmental clearance by the Ministry of Environment and Forests (MOEF), New Delhi, Letter No. J-11015/1140/2007-IA.II(M) dated 03rd March, 2014.

Present Status of the Project

The project is a new project and mining operations has not commenced yet. This Coal Block along with 204 number of other coal blocks were de-allocated vide Honorable Supreme Court Order dated 24.09.2014. Subsequently, pursuant to the Order no. 13016/35/2015/CA-III dated 24.03.2015 issued by the Government of India, Dulanga Coal Block has been reallocated to M/s NTPC Limited. Being the same user agency, the MoEF &CC vide letter dated 28.10.2015 revalidated / transferred the Environment Clearance in the name of Dulanga Coal Mining Project, NTPC Limited. Consent to Operate has been obtained from the SPCB, Odisha. Presently land acquisition for the project is under progress. Tree felling operation is under progress in the initial mining area. Mining operation is yet to commence.

Six monthly compliance status of environmental clearance:

This report is being submitted as per the condition stipulated in the Environmental Clearance Order. The condition-wise six monthly compliance status of environmental clearance conditions of MoEF Letter No. J-11015/1140/2007-IA.II(M) dated 03rd March, 2014 in respect of Dulanga Coal mining Project for the period April 2017 to September 2017 is furnished hereunder:

Condition No.	Description	Compliance status
4	The proposal was reconsidered in the Expert Appraisal committee (EAC) (Thermal & Coal Mining) in its 9 th EAC meeting held on 20 th -	

ved

Condition No.	Description	Compliance status
	<p>21st January, 2014 and recommended Environmental Clearance. The Ministry of Environment & Forests hereby accords Environmental Clearance for the above-mentioned Dulanga Opencast Coal Mining Project (7 MTPA in asn aea of 785.37 ha= (803.71 ha-18.34 ha= 785.37 ha) of ; Latitude 21°50'40"N to 22°01'30' N and Longitude 83°42'06"E TO 83°53'43"E) of M/s National Thermal Power Corporation Ltd (NTPC), Ib valley coalfields, Dist. Sundargarh, Orissa under the provisions of the Environment Impact Assessment Notification, 2006 an subsequent amendments thereto subject to the compliance of the terms and conditions mentioned below:</p>	
A	Specific Conditions:-	
(i)	The maximum production from the mine at any given time shall not exceed the limit as prescribed in the EC.	The rated production capacity of the mine as per the approved mining plan is 7MTPA. Mining operations are yet to commence. The condition as stipulated, shall be adhered to.
(ii)	The Forest Clearance has been granted for 304.75 ha (273.68 ha within the Dulanga Coal Block and 31.07 ha of forest land outside the Coal Block including 4.94 ha of forest land coming within the safety zone in Dulanga Coal Mining Project) vide letter no. 8-23/2013-FC dated 10.01.2014. FC for balance 18.34 ha has not been granted. No mining activity shall be carried out in forest land for which FC has not been granted.	The Stage-I Forest Clearance (FC) has been accorded by MoEF for 304.75 ha (originally applied 323.09 ha.) of forest land (273.68 hectares within the Dulanga coal block and 31.07 hectares of forest land outside the coal block) including 4.94 hectares of forest land coming within safety zone in Dulanga coal mining project vide letter dated 10 th January 2014. Forest Clearance for the balance 18.34Ha was not granted by MoEF and hence no mining activity will be carried out in that 18.34 Ha of forest area. This area will rather be afforested by the State Forest Department from funds already deposited by NTPC in CAMPA fund.
(iii)	OB dump along the western side of an area of 244 ha would be brought to almost ground level for post-mining land use by rehandling of an estimated 112 Mm3 of OB during 5 years	This has been incorporated in the mine closure plan and shall be ensured at the time of mine closure.



Condition No.	Description	Compliance status
	after end of mine life (EOL). However, the dump along the east would be about 30m above ground level.	
(iv)	An estimated 112 Mm ³ of OB is proposed to be re-handled from the eastern and western OB dumps.	Noted.
(v)	It was stated that an area of 286.74 ha within the ML (which includes an area of 226.23 ha of quarry area) and an area of 179.72 ha outside the ML would be developed with plantation.	Will be complied during mining operations.
(vi)	No fly ash from the linked TPPs shall be used in backfilling of the void without undertaking an environmental feasibility study and without prior approval of this Ministry under EIA Notification, 2006.	Noted and will be complied accordingly during filling of void.
(vii)	Option-3 be adopted, as committed by the proponent, as the most feasible option for diversion of Garia Nala, Baidhara Nala and Nala B and its realignment, whereby the plan for their diversion to be taken up during the 8th and 10th year.	Will be complied.
(viii)	The fluoride in the groundwater both in dug wells and by installing peizometers in the study area at appropriate locations be monitored.	Will be complied thereof at the time of mining operations.
(ix)	Transport of coal to Darlipali TPS located at a distance of about 10km shall be by MGR.	Coal transportation to Darlipalli has been planned through MGR which is currently under construction.
(x)	An integrated calendar plan of production including the details re-handling separately in external and internal dumps should be furnished to MOEF for record.	An integrated calendar plan of production including the details of re-handling separately in external and internal dumps has been furnished to MOEF vide letter No.0100/DLCMP/FD/ES/02/08 14 dated 25.08.2014.
(xi)	Temporary OB dumps which require re-handling should be stabilized with grass and shrubs.	Noted and will be complied during mining operations.
(xii)	Data available with the Rajiv Gandhi National Drinking Water Mission, Department of Rural Development be studied and recommendations therein for removal / treatment of fluorides, TDS, etc, in drinking water be followed for providing safe drinking water to R&R colony and to the nearby villages.	Will be complied.

vdh

Condition No.	Description	Compliance status
(xiii)	Mining shall be carried out as per statute at a safe distance from Garia Nala and its diversion canal and the diverted Baidhara nala and nala'B' Nala flowing within the lease boundary. The bund/embankment to be constructed along diverted canal of Garia nala shall be designed taking into account the highest flood level, based on past data, so as to guard against mine inundation.	Mining shall be carried out as per statute at a safe distance from Garia Nala and its diversion canal and the diverted Baidhara nala and nala'B' flowing within the lease boundary. The design of the embankment shall be made accordingly and approval of the competent technical authority i.e Water Resource Department shall also be obtained before diversion.
(xiv)	Topsoil shall be stacked properly within the ML with proper slope at earmarked site of 3.84 ha and shall be concurrently used for reclamation and development of green belt within a year of its generation.	Noted and will be complied during mining operations.
(xv)	A temporary external OB dump in an area of 106.62 ha and of 60m height for the initial period of 2.5 years shall be created for dumping 38.5 Mm ³ of OB, which would be reclaimed with plantation and after 2.5 to 3 year. There would be no external OB dumping from 5th year onwards. The temporary OB dumps which require re-handling shall be stabilised with grass and shrubs.	As per Forest clearance accorded by MoEF&CC, leaving out 18.34 Ha of forest land involved in dump area, the revised dump area has been reduced to 86Ha for accommodating 28.5 Million Cubic meter of OB for initial 4 years. The temporary OB dumps will be stabilized with grass and shrubs.
(xvi)	Area brought under afforestation shall be not less than 466.46 ha which includes 286.74 ha within the ML and 179.72 ha outside the ML would be reclaimed with plantation, which includes 351.23 ha of reclaimed quarry, 106.50 ha of reclaimed external OB dump, 3.84 ha of topsoil dump, 2.75 ha of coal stockyard, 2.14 ha of surface water reservoir and an area of 83.74 ha undisturbed shall be developed into green belt within the first 3 years.	Will be complied during mining operations.
(xvii)	Catch drains and siltation ponds of appropriate size shall be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected shall be utilized for watering the mine area, roads, green belt development, etc. The drains shall be regularly desilted and maintained properly.	Noted and will be complied during mining operations.
(xviii)	The entire transportation of 21,210 TPD of coal from the mine to the linked Darlipali Super Thermal Power plant shall be by MGR	Transportation of coal from mine to plant has been planned and shall be done

LDK

Condition No.	Description	Compliance status
	only with wagon loading by Silo. Transportation of coal by road is not permitted.	through the planned MGR route only. Construction of the said MGR is already under progress.
(xix)	An STP shall be provided for the township/ colony to treat the domestic effluents to prescribed standards and for their reuse in project activities.	An STP shall be provided for the township/ colony to treat the domestic effluents.
(xx)	Area brought under afforestation shall be not less than 466.46 ha which includes 286.74 ha within the ML and 179.72 ha outside the ML would be reclaimed with plantation, which includes 351.23 ha of reclaimed quarry, 106.50 ha of reclaimed external OB dump, 3.84 ha of topsoil dump, 2.75 ha of coal stockyard, 2.14 ha of surface water reservoir and an area of 83.74 ha undisturbed shall be developed into green belt within the first 3 years.	Noted and will be complied during mining operations as per approved mining plan and subsequent additional information furnished thereof.
(xxi)	A Project specific Wildlife Conservation Plan prepared for Rs 73 lakhs as capital costs and Rs 61 lakhs (annual) for the project for conservation of wild fauna including Elephant, Sloth Bear and a number of Schedule-II fauna found in the study area and for conservation of their habitat shall be implemented in consultation with the Forest and Wildlife Departments of the State Government. The Plan shall include creation of a passageway (undisturbed area through the block as a passage for the free movement of the elephants and for wild animals which may venture into the coal mine areas) at all stages of the mine operation in conjunction with the neighbouring mines which come up in the area to allow movement of these fauna through the project area. The passageway shall be forested with species from the natural habitat to provide connectivity to enable them to reach the neighbouring forests unhindered. Solar fencing would be done along the quarry which would be shifted as the mine develops. Grasslands shall be developed as part of Habitat Restoration in the study area and tree and plant species such as bamboo which constitute the natural diet of the elephants and plant species suitable for bears shall be developed as part of mine reclamation and eco-regeneration of the study area regularly visited by the elephants. At the post mining stage, the mine shall be restored as a habitat for the wildlife found in the pre-mining stage.	<p>The Site specific Wildlife Conservation Plan as approved by the Chief Wildlife Warden, Odisha vide 9597/1WL(C)SSP-270/2012 dated 03.12.2013 shall be implemented.</p> <p>Funds for implementation of the same in the buffer zone by the State Forest Department has already been deposited in Ad-hoc CAMPA account.</p> <p>Compliance of all the conditions shall be ensured during mining operations.</p>

Ver

Condition No.	Description	Compliance status
	The WL Plan shall include the use of sirens to alert the animals during MGR movement, sensitising the rail drivers and minimising speed during such crossings shall also be implemented.	
(xxii)	The project authorities shall also participate in a Regional Conservation Plan as and when prepared in the future by the State Govt. for the conservation of flora-fauna found in the region as a whole.	Funds for the Regional Wildlife Conservation Plan have already been deposited in Ad-hoc CAMPA as per the revised rate fixed by the State Govt. @ Rs. 43000/- per Ha for the total leasehold area.
(xxiii)	The progress made on the implementation of the Wildlife Conservation Plan shall be monitored by creation of a Committee which includes experts in ecology and wildlife. The status of budgetary provision of capital and revenue expenditure on the various activities under the Project specific and Regional WL Conservation Plan and the status of the Plans shall be regularly reported to the MOEF RO, Bhubaneswar and also uploaded on the company website.	Will be complied during mine operations. The formation of an expert wildlife committee as stipulated shall also be ensured.
(xxiv)	Third Party monitoring of implementation of WL Conservation Plan shall be carried out and for monitoring the utilisation of funds earmarked for implementation of the WL Plan.	Will be complied.
(xxv)	A detailed R&R Plan shall be formulated for the 417 PAPs and 309 homestead losers as per R&R Policy of the State Govt. and shall be completed within December 2014, R&R shall include specific income generation schemes, skill development and capacity building, etc. The details of status of implementation and expenditure on the various activities under the R&R Action Plan for the total budget of R&R shall be uploaded on the company website.	A detailed R&R Plan for the project affected families of Dulanga Coal Mining Project has been approved by the District Magistrate & Collector, Sundargarh with a total financial outlay of Rs. 237.70Crores . The plan shall be implemented accordingly for all the PAPs village-wise in phases.
(xxvi)	CSR Plan with a total budgetary provision of Rs 15.92 crores (capital) and 7.34 crore/annum recurring cost) shall be implemented for the life of the project. The details of village-wise activities undertaken for the amount of Rs 67.69 lakhs already spent on CSR shall be uploaded on the company website and further, details of village-wise activities for provision of Rs 30-40 crores for CSR for the first 5 years and Rs5/T of coal as recurring expenditure shall also be provided in the annual report and the compliance report furnished to MOEF RO, Bhubaneswar.	The budgetary provision of Rs. 15.92 crores (Capital) and 7.34 crore/ annum (recurring cost) pertains to the Environment Management Plan for the project and not for the CSR. Shall be implemented during mining operations for the life of the project. The details of village-wise activities undertaken for the

Wdh

Condition No.	Description	Compliance status
		<p>amount of 67.69 lakhs already spent on CSR have already been uploaded on the company website.</p> <p>NTPC Dulanga Coal Mining Project has spent a total of approx. Rs. 27.22Crores since then under different heads like health, education, infrastructure, drinking water, capacity building/ skill development including an expenditure of Rs 0.98 Crore incurred during April 2017 to September 2017.</p>
(xxvii)	<p>A detailed R&R Plan shall be formulated in consultation with the various stakeholders as per prevalent R&R Policies and would cover R&R for individuals and for the displaced community as a whole.</p>	<p>R&R plan for the individuals and for the displaced community as a whole has been prepared in-line with the National R&R Policy & the OPRR Policy and the same has been duly approved of by the District Magistrate & Collector, Sundargarh. The plan shall be implemented accordingly.</p>
(xxviii)	<p>Various activities under R&R Plan should be completed within time-schedule. The detailed R&R and CSR Action Plans be prepared and implemented.</p>	<p>Detailed R&R plan has already been prepared, approved of and shall be implemented village-wise in phases.</p>
(xxix)	<p>An amount of 67.69 lakhs has been already spent on CSR and further, a provision of Rs 30-40 crores shall be earmarked for CSR for the first 5 years and 5/T of coal as recurring expenditure adjusted to the annual inflation rate.</p>	<p>An amount of 67.69 lakhs has already been spent on CSR/ICD.</p> <p>Further, as prescribed regarding provision of earmarking of 30-40 crores for CSR/ICD, Dulanga Coal Mining Project has spent a total of approx. Rs 27.22 Crores since then under different heads like health, education, infrastructure, drinking water, capacity building/ skill development out of which Rs 0.98 Crore of expenditure has been incurred during last six months i.e. from April 2017 to September 2017.</p>

led

Condition No.	Description	Compliance status
(xxx)	An amount of Rs 1592 lakhs (capital costs) and Rs 734 lakhs (recurring) costs earmarked for EMP shall be implemented and detail thereof furnished as part of the compliance report and also uploaded on the company website.	Will be complied. Compliance Reports therein shall be furnished.
(xxxi)	Coal transportation in pit: Rear Dumper, Surface to Siding through Conveyor belts and loading at siding by rail.	Will be complied during mining operations.
(xxxii)	The production shall be within the same Mining Lease area.	Will be complied.
(xxxiii)	The OB shall be completely re-handled at the end of the mining.	Noted and will be complied as per approved Mining Plan.
(xxxiv)	Final mine void depth will not be more than 40m. The void area will be converted into waterbody. The rest of the area will be back filled upto the ground level and covered with about a meter thick top soil and put to use.	This has already been incorporated in the approved Mining Plan for the project and will be complied accordingly.
(xxxv)	Garland drains be provided.	Garland drains will be provided
(xxxvi)	The land after mining shall be brought back for agriculture purpose.	Will be complied at the time of mine closure.
(xxxvii)	Mine water should be treated for discharge into the lagoon. The quality of lagoon water shall be regularly monitored and mitigation measures taken.	Noted and will be complied.
(xxxviii)	Everybody in the core area should be provided with mask for protection against fugitive dust emissions.	Will be provided as a part of PPE during mining operations.
(xxxix)	Dust mask to be provided to everyone working in the mining area.	Will be provided during mining operations.
(xl)	The supervisory staff should be held personally responsible for ensuring compulsory regarding wearing of dust mask in the core area.	Will be complied during mining operations.
(xli)	People working in the core area should be periodically tested for the lung diseases and the burden of cost on account of working in the coal mine area.	Will be complied during mining operations.
(xlii)	The mining area should be grounded by green belt having thick closed thick canopy of the tree cover.	Will be complied. Plantation shall be taken up accordingly.
(xliii)	The embankment constructed along the river boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side and stabilised with plantation so as to withstand the peak water flow and prevent mine inundation.	Will be complied. Design of the embankment shall be made accordingly. Extensive plantation activities will be carried out on either sides of the embankment.

Wd

Condition No.	Description	Compliance status
(xliv)	There shall be no overflow of OB into the river and into the agricultural fields and massive plantation of native species shall be taken up in the area between the river and the project.	Will be complied.
(xlv)	OB shall be stacked at one earmarked external OB dumpsite(s) only. The ultimate slope of the dump shall not exceed 28°. Monitoring and management of existing reclaimed dumpsites shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forest and its concerned Regional office on yearly basis.	Will be complied at the time of mining operations.
(xlvi)	Garland drains (size, gradient and length) and sump capacity shall be designed keeping 50% adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper setting of silt material.	Noted and will be complied at the time of mining operations.
(xlvii)	Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data.	Noted and will be complied at the time of mining operations.
(xlviii)	Crushers at the CHP of adequate capacity for the expansion project shall be operated with high efficiency bag filters, water sprinkling system shall be provided to check fugitive emissions from crushing operations, conveyor system, haulage roads, transfer points, etc.	Noted and will be complied at the time of mining operations.
(xlix)	Drills shall be wet operated.	Noted and will be complied during mining operations.
(l)	The project authorities shall undertake regular repairing and tarring of roads used for mineral transportation. A 3-tier green belt comprising of a mix of native species shall be developed all along the major approach roads.	Noted and will be complied.
(li)	Controlled blasting shall be practiced with use of delay detonators and only during daytime. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders shall be implemented.	Noted and will be complied during mining operations.
(lii)	A Progressive Mine Closure Plan shall be implemented by reclamation and afforestation of 351.23 ha of the total quarry area of 567.19 ha by planting native plant species in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha. The balance 159.55 ha decoaled area being converted into a water reservoir of 45-50m depth at the post mining stage shall be gently sloped along the	Will be complied at the time of implementation of the approved mine closure plan and the activities contained therein.

Red

Condition No.	Description	Compliance status
	upper benches an stabilised and reclaimed with plantation	
(liii)	A temporary external OB dump in an area of 106.62 ha and of 60m height for the initial period of 2.5 years shall be created for dumping 38.5 Mm3 of OB, which would be reclaimed with plantation and after 2.5 to 3 years. There would be no external OB dumping from 5th year onwards. The temporary OB dumps which require re-handling shall be stabilised with grass and shrubs.	As per Forest clearance accorded by MoEF&CC, leaving out 18.34 Ha of forest land involved in dump area, the revised dump area has been reduced to 86Ha for accommodating 28.5 Million Cubic meter of OB for initial 4 years. The temporary OB dumps will be stabilized with grass and shrubs.
(liv)	The proponent should prepare restoration and reclamation plan for the degraded area. The land be used in a productive and sustainable manner.	Noted and will be complied.
(lv)	Compensatory Ecological & Restoration of waste land, other degraded land and OB dumps in lieu of breaking open the land be carried out	Noted and will be complied.
(lvi)	The mining should be phased out in sustainable manner. No extra over burden dumps are permitted.	Noted and will be complied.
(lvii)	No groundwater shall be used for mining operations.	<p>NOC for ground water withdrawal in respect of Dulanga coal mining project has been accorded by the Central Ground Water Authority, New Delhi vide letter No. 21-4 (513) SER/CGWA/ 2013-1522 dated 30.09.2015.</p> <p>Ground water shall be used as per permission obtained from the Ground Water Authority.</p>
(lviii)	Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quantity shall 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 shall be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring.	Will be complied on start of mining operations.

Woh

Condition No.	Description	Compliance status
(lix)	The Company shall put up artificial groundwater recharge measures for augmentation of groundwater resource in case monitoring indicates a decline in water table. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.	Noted and will be complied.
(lx)	Sewage treatment plant shall be installed in the existing colony. ETP shall also be provided for workshop and CHP wastewater.	Will be complied.
(lxi)	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 specialized agency/ institution within the District/State and the results reported to this Ministry and to DGMS.	Noted and will be complied.
(lxii)	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 concerned Regional office.	Noted and will be complied during mining operations.
(lxiii)	A detailed Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & forests within 6 months of grant of Environmental Clearance.	Detailed Final Mine Closure Plan already submitted to the MoEF&CC vide our letter ref no: 0100/ DLCMP/FD/ES/ 02/ 0814 dated 25.08.2014.
(lxiv)	The project authorities shall in consultation with the Panchayats of the local villages and administration identify socio-economic and welfare measures under CSR to be carried out over the balance life of the mine.	Various socio-economic and welfare measures are being undertaken as initial community development in close consultation with the administration and village Panchayats.
(lxv)	The commitment made by the Proponent to the issue raised during Public Hearing shall be implemented by the Proponent.	Will be complied.
(lxvi)	Corporate Environment Responsibility : a. The Company shall have a well laid down Environment Policy approved by the Board of Directors. b. The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/	The Corporate Environment Responsibility policy of NTPC already exists and the same is also revised time to time. Recently Corporate Environment policy has been revised in 2017.

cdm

Condition No.	Description	Compliance status
	<p>deviation/violation of the environmental or forest norms/conditions.</p> <p>c. The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.</p> <p>d. To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.</p>	
B	General Conditions :	
(i)	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forests.	Any change in mining technology and scope of working will be submitted to MoEF & CC well in advance for approval.
(ii)	No change in the calendar plan of production for quantum of mineral coal shall be made.	There will be no change in the calendar plan of production for quantum of coal.
(iii)	Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for PM ₁₀ , PM _{2.5} , SO ₂ , and NO _x monitoring. 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. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc. carried out at least once in six months.	Four nos. of ambient air quality monitoring stations shall be established in consultation with the Odisha State Pollution Control Board at different locations in the core zone as well as in the buffer zone for monitoring of air quality parameters, as stipulated during operational phase of mining.
(iv)	Data on ambient air quality (PM ₁₀ , PM _{2.5} , SO ₂ , and NO _x) and heavy metals such as Hg, As, Ni, Cd, Cr, and other monitoring data shall be regularly submitted to the Ministry including its concerned Regional Office and to the State Pollution Control Board and the Central Pollution Control Board once in six months. Random verification of samples through analysis from independent laboratories recognized under the EPA rules, 1986 shall be furnished as part of compliance report.	Monitored data on ambient air quality and heavy metals will be submitted half yearly to the concerned statutory authority of MoEF/ SPCB/ CPCB during the operation phase of mining block.

Kdr

Condition No.	Description	Compliance status
(v)	Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc. shall be provided with ear plugs/muffs.	Adequate measures will be taken for control of noise levels below 85 dBA in the work environment during the operation phase of mining block. Workers in high noise environment will be also provided with ear plugs/muffs.
(vi)	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.	Shall be complied.
(vii)	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.	Shall be complied.
(viii)	Monitoring of environmental quality parameters shall be carried out through establishment of adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board and data got analyzed through a laboratory recognized under EPA Rules, 1986.	Shall be complied.
(ix)	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.	Protective respiratory devices will be made available to personnel working in dusty areas & they will be provided with adequate training and information on safety & health aspects.
(x)	Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures , if needed and records maintained thereof. The quality of environment due to outsourcing and the health and safety issues of the outsourced manpower should be addressed by the company while outsourcing.	A schedule will be prepared for implementation of Occupational health surveillance programme of workers during operation of the Mine Block to determine the impact due to exposure to dust and to take corrective measures for the same. Compliances regarding environment quality, health issues of outsourced manpower shall be taken care of during outsourcing.

ledh

Condition No.	Description	Compliance status
(xi)	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.	A separate environmental management cell (EMC) under the control of senior executive already exists for the project. This Cell directly reports to the head of the company.
(xii)	The funds earmarked for environment 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 concerned Regional Office.	The requisite funds for environment protection measures have been included in the project cost. Financial provision stipulated towards environment protection measures will not be diverted for other purpose. Year-wise expenditure will be reported to this Ministry and its Regional Office.
(xiii)	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 of Environment & Forests at http://envfor.nic.in .	Already completed and compliance thereof has been mentioned in the first six-monthly EC compliance (April 2014 to Sept. 2014) vide letter dated 19.11.2014.
(xiv)	A copy of the environmental clearance letter shall be marked to concern Panchayat/Zila Parishad, Municipal Corporation or Urban local body and local NGO, if any, from whom any suggestion/representation has been received while processing the proposal. A copy of the clearance letter shall also be displayed on company's website.	Already completed and compliance thereof has been mentioned in the first six-monthly EC compliance (April 2014 to Sept.2014) vide letter dated 19.11.2014.
(xv)	A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office. District Industry Sector and Collector's Office/Tehsildar's Office for 30 days.	A copy has been marked to SPCB regional office for display at the Regional Office for a period of 30 days. Copy of EC letter has also been sent to District Industry Sector and Collector's Office / Tehsildar's office for display for a period of 30 days.
(xvi)	The clearance letter shall be uploaded on the company's website. The compliance status of the stipulated environmental clearance condition shall also be uploaded by the project authorities on their website and updated at	The clearance letter has been uploaded on the company's website. The compliance and the

Loch

Condition No.	Description	Compliance status
	least once every six months so as to bring the same in public domain. The monitoring data of environmental quality parameter (air, water, noise and soil) and critical pollutant such as PM ₁₀ , PM _{2.5} , SO ₂ , and NO _x (ambient) and critical sectorial parameters shall also be displayed at the entrance of the project premises and mine office and in corporate office and on company's website.	monitoring data of the stipulated environmental quality parameters will be displayed at the entrance of the mine office and uploaded on the web site during operation phase.
(xvii)	The project proponent shall submit six monthly compliance reports on status of compliance of the stipulated environmental clearance conditions (both in hard copy and in e-mail) to the respective Regional Office of the Ministry, respective Zonal Offices of CPCB and the SPCB.	Six monthly progress report for the period April 2017 to September 2017 is submitted herewith.
(xviii)	The Regional Office of this Ministry located in the Region 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.	Will be complied as per the requirements of MoEF & CC.
(xix)	The Environmental statement for each financial year ending 31 March in Form-V is mandated to be submitted by the project proponent for the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be uploaded on the company's website along with the status of compliance of EC conditions and shall be sent to the respective Regional Office of the MoEF by e-mail.	The Environmental statement for each financial year ending 31 March will be submitted to the Odisha State Pollution Control Board and Regional office of MoEF in prescribed Form-V during operation of the Mine Block and the same will be also uploaded on NTPC website.
5.	The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report so also during their presentation to the EAC.	Noted and will be complied.
6.	The proponent is required to obtain all necessary clearances/approvals that may be required before the start of the project. The Ministry or any other competent authority may stipulate any further condition for environmental protection.	Noted and will be complied.
7.	The Proponent shall setup an Environment Audit cell with responsibility and accountability to ensure implementation of all the EC Conditions.	Noted and will be complied.
8.	The Ministry or any other competent authority may stipulate any further condition for environmental protection.	Noted and will be complied.

vedh

Condition No.	Description	Compliance status
9.	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract the provisions of the Environmental (Protection) Act, 1986.	Noted.
10.	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 undertake and 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.

V. C. Dubey
01/12-17

(V. C. Dubey)
Addl. General Manager &
Agent, Dulanga Coal Mining Project