# No.J-11015/10/1995-IA.II(M) Government of India Ministry of Environment, Forest & Climate Change IA-II (Coal Mining) Division

Indira Paryavaran Bhawan, Jorbagh Road, N Delhi - 3 Dated: 22<sup>nd</sup> March, 2018

To.

The Chief General Manager (CP&P) M/s Mahanadi Coalfields Limited PO - Jagruti Vihar, Burla, Sambalpur - 768 020 (Odisha)

E-mail: cgmenvt2014@gmail.com; gmenvt mcl@yahoo.co.in

Sub: Expansion of Kulda OCP from 10 MTPA to 14 MTPA of M/s Mahanadi Coalfields Limited in ML area of 634.205 ha located in Tehsil Himgir, District Sundergarh (Odisha) - Environmental Clearance reg.

Sir,

This has reference to your letter No.MCL/HQ/(ENVT)/Kulda OCP/17-18/2832 dated 2<sup>nd</sup> February, 2018 along with online proposal No.IA/OR/CMIN/61822/2017 dated 15<sup>th</sup> February, 2018 and subsequent letters dated 05.02.2018, 13.02.2018, 15.02.2018, 19.02.2018 and 27.02.2018 on the above mentioned subject.

- 2. The Ministry of Environment, Forest and Climate Change has considered the proposal for grant of environmental clearance to the project for expansion of Kulda OCP from 10 MTPA to 15 MTPA of M/s Mahanadi Coalfields Limited in a total area of 694.605 ha (mine lease area of 634.205 ha) located in Tehsil Hemgir, District Sundargarh (Odisha).
- 3. The proposal was considered by the Expert Appraisal Committee (EAC) in the Ministry for Thermal & Coal Mining Sector in its 27<sup>th</sup> meeting held on 27<sup>th</sup> February, 2018. The details of the project, as per the documents submitted by the project proponent, and also as informed during the meeting, are reported to be as under:-
- (i) The project was accorded EC vide letter no. J-11015/10/95-IA.II(M) dated 24-12-2002 for 10.0 MTPA in an ML area of 878.29 ha [(929.60 51.31 = 878.29 ha) i.e. EC is only granted for 878.29 as out of 279.20 ha total Forest Land, FC is available only for 227.89 ha (FC is not available for 279.20 227.89 = 51.31 ha)].
- (ii) ToR for the project was granted vide letter dated 18<sup>th</sup> May,2017.
- (iii) The latitudes and longitudes of the project are 21°42'00" to 21° 44'30" N and 83°43'00" to 83°46'30" E respectively.
- (iv) Coal Linkage: Thermal Power Plant & Basket Linkage
- (v) Employment generated / to be generated: 385 numbers (direct employment)
- (vi) Benefits of the project: (a) Improvement in physical infrastructure, (b) Improvement in social infrastructure, (c) Increase in employment potential, (d) Contribution to the exchequer (both State and Central Govt.), (e) Post-mining enhancement of green cover, (f) Improvement of electrical power generation and availability of electricity for 24x7 in rural areas, (j) overall economic growth of the country.
- (vii) There is no additional land involved in the Project. The total land area is 694.605 ha. Mining lease area as per the approved Mining Plan is 634.205 ha.



# (viii) The land usage of the project will be as follows:

Pre-Mining:

SI.	Type of Land	Within ML area (ha)		Outside ML area		Total Area	
ļ				(h	a)	(ha)	
		Existing	Proposed	Existing	Proposed	Existing	Proposed
1.	Agricultural/Tenanc y	455.790	259.794	37.500	37.500	493.290	297.294
2.	Waste land	194.610	146.521	22.900	22.900	217.510	169.421
3.	Forest Land	279.200*	227.890	0.000	0.000	279.200	227.890
4.	Grazing	0.000	0.000	0.000	0.000	0.000	0.000
5.	Surface water bodies	0.000	0.000	0.000	0.000	0.000	0.000
	Total:	929.600	634.205	60.400	60.400	990.000	694.605

Note: Instead of 929.60 ha, EC is only granted for 878.29 ha; as out of  $^*279.20$  ha Forest Land, FC is available only for 227.89 ha (FC not available for 279.20 - 227.89 = 51.31 ha).

**Post-Mining:** 

	r mining.							
SI.	Land Use during Mining	Land-Use (ha)						
	(Core Zone)	Plantation/ grass carpeting	Water Body	Dip side slope & haul road	Un- disturbed	Built-up area	Total	
1.	Excavation Area	211.470	17.64	92.80			321.910	
2.	OB dump Area	160.502					160.502	
3.	Infrastructure	25.230				100.927	126.157	
4.	Embankment	3.510				14.049	17.559	
5.	Other Area including Safety Zone & Road/ Nullah Diversion	8.077					8.077	
	Total	408.789	17.64	92.80		114.976	634.205	

## Core Area:

	Existing (ha)			Proposed (ha)		
Particulars	Forest	Non- Forest	Total	Forest	Non-Forest	Total
Excavation Area	241.700	294.300	536.000	<u>1</u> 87.155	134.755	321.910
Infrastructure/Embankment and Other Area including Safety Zone	32.900	189.930	222.830	36.615	115.178	151.793
External OB Dumps	4.600	166.170	170.770	4.120	156.382	160.502
Mine Lease Area	279.200*	650.400	929.600	227.890	406.315	634.205
Residential Colony	0.000	37.500	37.500	0.000	37.500	37.500
Rehabilitation Site	0.000	22.900	22.900	0.000	22.900	22.900
Outside Lease Area	0.000	60.400	60.400	0.000	60.400	60.400
Total	279.200	710.800	990.000	227.890	466.715	694.605

Note: Instead of 929.60 ha, EC is only granted for 878.29 ha; as out of \*279.20 ha Forest Land, FC is available only for 227.89 ha (FC not available for 279.20 - 227.89 = 51.31 ha).

- (ix) The total geological reserve is 438.90 MT. The mineable reserve 245.71 MT, extractable reserve is 122.29 MT. The percent of extraction would be 70.20%.
- (x) The coal grade is G-11 (average). The stripping ratio is 0.90 Cum/tonne. The gradient varies from 5° to 8°. There are three major seams with thickness ranging upto 34.07 m.
- (xi) The total estimated water requirement is 4083 m3/day. The level of ground water ranges from 0.30 m to 8.42 m below ground level.
- (xii) The method of mining would be Opencast.
- (xiii) There are two external OB dumps with quantity of 30.26 Mm3 in an area of 160.502 ha with the height of 90 meter above the surface level and two internal dump with quantity of 112.32 Mm3 in an area of 211.47 ha.
- (xiv) The final mine void would be in 34.05 ha with depth varying from 30 m to 40 m and the total quarry area is 469.80 ha. Backfilled quarry area of 435.75 ha shall be reclaimed with plantation. A void of 17.64 ha with depth upto 200 m (max.) which is proposed to be converted into a water body.
- (xv) The seasonal data for ambient air quality has been documented and all results at all stations are within the prescribed limits.
- (xvi) The life of mine is 9 Years.
- (xvii) Transportation: In pit: by trucks. Surface to Siding: Present:- Kanika siding (31 km) by truck, JSPL Raigarh by truck & Road Sale by tarpaulin-covered truck. Proposed:- Sardega Siding (6.0 Km) by truck, JSPL Raigarh by Pipe Conveyor & Road Sale by tarpaulin-covered truck. Siding to Loading: by pay loader into wagons.
- (xviii) There is no additional R&R involved.
- (xix) Cost: Total capital cost of the project is Rs.622.21 Crores. CSR Cost is 2% of the average net profit of the company for the three immediate preceding financial years. Environmental Management Cost Rs.87.28 Crores.
- (xx) Water body: Chattajor nallah passing through the mine lease area, Basundhara river flows at a distance of 70 m, Bhaina Jor is at a distance of 0.5 km.
- (xxi) Approvals: Board's approval obtained in the 182nd Board Meeting held on 22-10-2016. Mining plan has been approved by MoC vide letter no. 34012/(04)/2011-CPAM dated 26-12-2016. Mine closure plan is an integral part of mining plan.
- (xxii) Wildlife issues: There are no National Parks, Wildlife Sanctuary, Biosphere Reserves found in the 10 km buffer zone.
- (xxiii) Forestry issues: Total forest land is 227.89 ha in ML area of 634.205 ha, Forest clearance hass been obtained vide letter no. F.No.8-176/1997-FC dated 8<sup>th</sup> August, 2007.
- (xxiv) Total afforestation plan shall be implemented covering an area of 211.47 ha at the end of mining and green belt over an area of 8.077 ha has also been proposed having density of tree plantation 2500 trees/ha..
- (xxv) There are no court cases/violation pending with the project proponent for the proposed expansion.
- (xxvi) The public hearing was held on 10<sup>th</sup> January, 2018 for expanded capacity of 15 MTPA. The issues raised during the public hearing included control of air pollution, water pollution, supply of drinking water, employment, etc.
- (xxvii) Base line data was generated during the pre-monsoon season, March to June, 2017.
- (xxviii) The Cumulative Impact Assessment Study has been done considering nearby running and upcoming mines namely, Kulda Expansion OCP, Garjanbahal OCP, Basundhara OCP and Basundhara (W) Extn. OCP for incremental capacity of 23.25 MTPA, and it has been observed that after replacement of road transportation by rail and conveyors, the absolute predicted values of PM<sub>10</sub> will be within the permissible limit at all the locations.
- (xxix) The monitoring report on compliance status of EC conditions has been forwarded by the Eastern Regional Office of the Ministry at Bhubaneswar vide letter dated 25<sup>th</sup> September, 2017.



The action taken report on observations of the Regional Office was submitted vide letter dated 24<sup>th</sup> October, 2017 & 1<sup>st</sup> February, 2018.

- (xxx) Kulda OC is catering to most of the critical and super critical thermal power plants and at the present level of production it has already achieved its production capacity of 10 MTPA and is under non-producing state for the want of EC for higher production capacity.
- 4. The Expert Appraisal Committee in its 27<sup>th</sup> meeting held on 27<sup>th</sup> February, 2018 has recommended the project for grant of environmental clearance for a period of one year. Based on recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for expansion of Kulda Opencast Coal Mine from 10 MTPA to 14 MTPA of M/s Mahanadi Coalfields Ltd in a total area of 694.605 ha (mine lease area 634.205 ha) located in Tehsil Hemgir, District Sundargarh (Odisha), for a period of one year only i.e. up to 31<sup>st</sup> March, 2019, under the provisions of the Environment Impact Assessment Notification, 2006 and subsequent amendments/circulars thereto subject to the compliance of the terms & conditions and environmental safeguards mentioned below:
- (i) The project proponent shall collect and analyze one season base line data for environmental parameters, preferably during April-June, 2018, and submit for consideration of the EAC before 31<sup>st</sup> December, 2018.
- (ii) The project proponent shall submit the details regarding action taken on different observations of the Regional Office before 31<sup>st</sup> December, 2018, for the Committee to examine adequacy and efficacy of the pollution control measures and its impact on ambient air quality and to make recommendations for continuance of the project thereafter.
- (iii) To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.
- (iv) Mitigative measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient numbers of water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions as presented before the Committee, which would include mechanized sweeping, water sprinkling/mist spraying on haul roads and loading sites, long range misting/fogging arrangement, wind barrier wall and vertical greenery system, green belt, dust suppression arrangement at railway siding, etc.
- (v) Persons of nearby villages shall be given training on livelihood and skill development to make them employable.
- (vi) To ensure health and welfare of nearby villages, regular medical camps shall be organized at least once in six months.
- (vii) Thick green belt of 75 m width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.
- (viii) A third party assessment of EC compliance shall be undertaken once in 03 year through agency like ICFRI /NEERI/IIT or any other expert agency identified by the Ministry.
- **4.1** The grant of EC is further subject to compliance of the generic conditions as under:

## (a) Mining

- (i) Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
- (ii) No change in mining method i.e OC to UG, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forest and Climate Change (MoEFCC).

Kulda OCP 10-14 MTPA of MCL10\_1995\_EC

- (iii) Mining shall be carried out as per the approved mining plan(including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
- (iv) No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.

#### (b) Land reclamation and water conservation

- (i) Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale shall be submitted to Ministry of Environment, Forest and Climate Change/Regional Office (RO).
- (ii) The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/Gol Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS.
- (iii) The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be handed over to the respective state government as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27<sup>th</sup> August, 2009 and subsequent amendments.
- (iv) The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the "during mining"/"post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the Ministry of Environment, Forest and Climate Change/Regional Office on six monthly basis.
- (v) The top soil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized for long. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office on six monthly basis.

# (c) Emissions, effluents, and waste disposal

- (i) Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM<sub>10</sub>/PM<sub>2.5</sub>) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
- (ii) Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area in a phased manner. The green belt comprising a mix of native species shall be developed all along the major approach/ coal transportation roads.
- (iii) The transportation of coal shall be carried out as per the provisions and route proposed in the approved Mining Plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.
- (iv) Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
- (v) Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
- (vi) Coal handling plant shall be operated with effective control measures viz. bag filters/water or mist sprinkling system etc to check fugitive emissions from crushing operations, conveyor system, transfer points, etc.
- (vii) Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
- (viii) Catch/garland drains and siltation ponds of appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly desilted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression measures and green belt development. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.
- (ix) Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Oil and grease trap shall be installed and maintained fully functional with effluents

discharge adhering to the norms. Sewage treatment plant of adequate capacity shall be installed for treatment of domestic waste.

(x) Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.

## (d) Illumination, noise & vibration

- (i) Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & its RO on six-monthly basis.
- (ii) Adequate measures shall be taken for control of noise levels below 85 dB(A) in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.
- (iii) Controlled blasting techniques shall be practiced in order to mitigate ground vibrations and fly rocks as per the guidelines prescribed by the DGMS.
- (iv) The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

# (e) Occupational health & safety

- (i) The project proponent shall undertake occupational health survey for initial and periodical medical examination of the workers engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% 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.
- (ii) Personnel (including outsourcing employees) working in dusty areas shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- (iii) Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.

# (f) Ecosystem and biodiversity conservation

(i) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.

# (g) Public hearing, R&R and CSR

- (i) Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
- (ii) The project proponent shall ensure the expenditure towards socio-economic development in and around the mine, in every financial year in pursuance of the Corporate Social Responsibility Policy as per the provisions under Section 135 of the Companies Act, 2013
- (iii) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.I1 (M) dated 29<sup>th</sup> October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.
- (iv) The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

## (h) Corporate environment responsibility

- (i) The Company shall have a well laid down environment policy duly approved by Board of Directors. The environment policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions. Also, the company shall have a defined system of reporting of non-compliances/violations of environmental norms to the Board of Directors and/or shareholders/stakeholders.
- (ii) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions should be displayed on website of the Company.
- (iii) A separate environmental management cell both at the project and company headquarter level, with suitable qualified personnel shall be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- (iv) Action plan for implementing EMP and environmental conditions shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- (v) Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

## (i) Statutory Obligations

- (i) The environmental clearance shall be subject to orders of Hon'ble Supreme Court of India, Hon'ble High Court, NGT and any other Court of Law from time to time, and as applicable to the project.
- (ii) This environmental clearance shall be subject to obtaining wildlife clearance, if applicable, from the Standing Committee of National Board for Wildlife.
- (iii) The project proponent shall obtain Consent to Establish/Operate under the Air Act, 1981 and the Water Act, 1974 from the concerned State Pollution Control Board.
- (iv) The project proponent shall obtain the necessary permission from the Central Ground Water Authority (CGWA).

# (j) Monitoring of project

- (i) Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub>. 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. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.
- (ii) The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
- (iii) The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.
- (iv) The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-IA.11 (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
- (v) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to Ministry of Environment, Forest and Climate Change/Regional Office.
- (vi) Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.

- (vii) The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental conditions to the Ministry of Environment, Forest and Climate Change/Regional Office. For half yearly monitoring reports, the data should be monitored for the period of April to September and October to March of the financial years.
- (viii) The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

## (k) Miscellaneous

- (i) Efforts should be made to reduce energy consumption by conservation, efficiency improvements and use of renewable energy.
- (ii) The project authorities shall inform to the Regional Office regarding commencement of mining operations.
- (iii) A copy of the environmental clearance shall be marked to concerned Panchayat. A copy of the same shall also be sent to the concerned State Pollution Control Board, Regional Office, District Industry Sector and Collector's Office/Tehsildar Office for information in public domain within 30 days.
- (iv) The EC shall be uploaded on the company's website. The compliance status of the stipulated EC conditions shall also be uploaded by the project authorities on their website and updated at least once every six months so as to bring the same in public domain.
- (v) The project authorities shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of this clearance, informing that the project has been accorded environmental clearance and a copy of the same is available with the State Pollution Control Board and also at website of the Ministry.
- (vi) 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 Offices of the MoEF&CC by e-mail. Concerns raised during public hearing.
- (vii) 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 and any other orders passed by the Hon'ble Supreme Court of India/High Courts and any other Court of Law relating to the subject matter.
- 5. The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and also that during presentation to the EAC. All the commitments made on the issues raised during public hearing shall also be implemented in letter and spirit.



- **6.** The proponent shall 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. The Ministry or any other competent authority may stipulate any further condition for environmental protection.
- 7. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- The coal company/project proponent shall be liable to pay the compensation against the illegal mining, if any, and as raised by the respective State Governments at any point of time, in terms of the orders dated 2<sup>nd</sup> August, 2017 of Hon'ble Supreme Court in WP (Civil) No.114/2014 in the matter of 'Common Cause Vs Union of India & othrs'.
- **9.** The project proponent, without prejudice to this environmental clearance, shall be bound to comply with any other interpretation of the orders of Hon'ble Supreme Court also, in due course of time.

**10.** This environmental clearance supersedes the earlier one granted vide letter No.J-11015/10/1995-IA.II(M) dated 24<sup>th</sup> December, 2002 for a capacity 10 MTPA.

(S. K. Srivastava)
Scientist E

## Copy to:

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi

- 2. The APPCF, Regional office (EZ), Ministry of Environment Forests and Climate Change, A-31, Chandrashekarpur, Bhubaneswar 751023
- 3. The Secretary, Department of Environment & Forest, Government of Odisha, Secretariat, Bhubaneswar
- 4. The Member Secretary, Central Ground Water Authority, Ministry of Water Resources, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi
- 5. The Member Secretary, CPCB, CBD-cum-Office Complex, East Arjun Nagar, Delhi -110032
- 6. The Member Secretary, Odisha State Pollution Control Board, Neelakanth Nagar, Unit-VIII,

7. The District Collector, Sundargarh, Government of Odisha

8. Monitoring File 9. Guard File 10. Record File 11. Notice Board

(S. K. Srivastava)
Scientist E