



No. J-11015/183/2008-IA-II(M)
Government of India
Ministry of Environment, Forest & Climate Change
Impact Assessment Division

Indira Paryavaran Bhavan,
Vayu Wing, 3rd Floor, Aliganj,
Jor Bagh Road, New Delhi-110 003

Dated: 26th December, 2019

To,

The Chief General Manager (CP&P)

M/s Mahanadi Coalfields Limited

PO - JagrutiVihar, Burla,

Sambalpur-768 020 (Odisha) E-mail: cgmenvt2014@gmail.com

Sub: Samleswari Opencast Coal Mining Expansion Project (Phase-IV) of 15 MTPA of M/s Mahanadi Coalfields Limited in an area of 1334.912 ha located in Village Lajkura Tehsil Brajarajnagar, District Jharsuguda (Odisha) - For Environmental Clearance – reg.

Sir,

This has reference to your online proposal No. IA/OR/CMIN/24722/2008 dated 28th January, 2019 on the above mentioned subject.

2. The Ministry of Environment, Forest and Climate Change has considered the proposal for grant of environmental clearance to Samleswari Opencast Coal Mining Expansion Project (Phase-IV) of 15 MTPA of M/s Mahanadi Coalfields Limited in an area of 1334.912 ha located in Village Lajkura Tehsil Brajarajnagar, District Jharsuguda (Odisha). 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 latitude and longitude of the project are 21 °46'48" to 21 °49'22" N and 83°52'23" to 83°56'00" E respectively.
- ii) Joint Venture: No
- iii) Coal Linkage: Thermal Power Plants & Basket Linkage
- iv) Employment generated/ to be generated: 1511 (Existing). There is no additional manpower requirement though indirect employments will be generated.
- v) Benefits of the project: (a) Improvement in physical and social infrastructure like roads, school building, provision of drinking water, community hall, plantation etc. (b) Increase in employment potential (c) Contribution to the Exchequer (both State and Central Govt.) (d) Improvement of Electrical Power Generation and availability of electricity in rural areas (e) Overall economic growth of the country by meeting the energy needs of the country.
- vi) The total project area is 1384.767 ha. The pre-mining land use are following:

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Pre-Mining

Sl. No.	Type of Land	Existing	Additional	Total
1	Agricultural/Tenancy	86.448	--	86.448
2	Waste land	483.578	161.274	644.852
3	Forest Land	334.918	245.374	580.292
4	Grazing	0.000	---	0.000
5	Surface water bodies	23.320	---	23.320
Total:		928.264	406.648	1334.912

Pre-Mining purpose wise

Sl. No	Item	For existing 15.0 MTPA			Addl. land for Expn. (15Mty)(Ph-IV)			Total		
		Forest	Non-forest	Total	Forest	Non-forest	Total	Forest	Non-forest	Total
Within mining lease area										
1.	Quarry excavation	310.792	236.980	547.772	150.784	158.203	308.987	461.576	395.183	856.759
2.	Safety zone for blasting	--	301.627	301.627	3.806	3.071	6.877	3.806	304.698	308.504
3.	External OB dump	--	24.86	24.86	--	--	--	0	24.86	24.86
4.	Infrastructure	24.126	29.879	54.005	--	--	--	24.126	29.879	54.005
5.	Forest land outside Quarry area notified under CBA(A&D) Act	--	--	--	90.784	--	90.784	90.784	--	90.784
	Sub-total :	334.918	593.346	928.264	245.374	161.274	406.648	580.292	754.620	1334.912
Outside mining lease area										
6.	Residential Colony	--	49.855	49.855	--	--	--	--	49.855	49.855
7.	Rehabilitation Colony*	--	--	--	--	--	--	--	--	--
	Total land requirement	334.918	643.201	978.119	245.374	161.274	406.648	580.292	804.475	1384.767

* Area for rehabilitation site is considered in adjacent Lajkura OCP Land details.

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Post- Mining

Sl - N o	Category	Land use (in Ha)					Total
		Plantati on	Water body	Dip side slope and haul road	Undis- turbed	Built- up area	
1	Excavation (backfill) \$	571.093	73.787	211.87 9	--	--	856.759
2	Danger zone for blasting	206.917	--	--	101.58 7	--	308.504
3	External OB dumps\$\$	24.860	--	--	--	--	24.860
4	Infrastructure	10.801	--	--	--	43.20 4	54.005
5	Residential colony	5.000	--	--	--	44.85 5	49.855
6	Forest land outside quarry area (modified under CBA (A&D) Act.	90.784	--	--	--	--	90.784
	Total	909.45 5	73.78 7	211.8 79	101.5 87	88.05 9	1384.76 7

\$ - 95.20 ha have already been technically and biologically reclaimed and afforested.

\$\$ - External OB dump area has already been reclaimed and afforested.

vii) Total geological reserve is 179.75 Mt. The mineable reserve/extractable reserve is 143.49 Mt (as on 01 -04-2018).

viii) The coal grade is G-14. The stripping ratio is 1.81 cum/tonne. The average gradient is 3°- 4°. There is one major seam with thickness ranging from 12.6 - 23.9 m and few local seams.

ix) Source water of water is from IWSS and Mine water. The total estimated water requirement is 5431 KLD. The level of ground water ranges from 0.95 m to 9.80 m below ground level.

x) The method of mining would be opencast mining using shovel-dumper/ripper-dozzer in OB/ parting; surface miner, pay loader & tipper in coal.

xi) There is no external OB dump proposed in the proposed expansion mine. However, there are 6 nos. of existing external dumps with Quantity of 4.060 Mm in an area of 24.86 ha with height of 21 meter above the surface level. There will be two internal dumps with quantity of 445.97 Mm³ in an area of 782.972 ha (Post-mining).

xii) The final mine void (post-mining) would be in 73.787 ha with Maximum depth up to 183m and the total quarry area is 856.759 ha. Backfilled quarry area of 571 .093 ha shall be reclaimed with plantation. A void of 73.787 ha with maximum depth up to 183 m is proposed to be converted into a water body.

xiii) Ambient Air quality Baseline data monitoring are been generated from Feb, 2018 to April, 2018 (Pre-monsoon season). For PM10 - Minimum is 55 µg/m³ and maximum is 110 µg/m³ in Residential zone and Minimum is 108 µg/m³ and Maximum value is 158.0 µg/m³ in core zone. For PM2.5 - Minimum is 33 µg/m³ and maximum is 63 µg/m³ in Residential zone and Minimum is 64 µg/m³ and Maximum value is 89.0 µg/m³ in core zone.

xiv) The life of mine is 10 years (including 2018-19)

xv) Existing & Proposed: Coal production is being done by surface miner. In-pit by tipper/ dumper. Surface to siding No 1, 2 & 3 by dumpers/tippers. Loading at siding by pay loader.

xvi) There is R & R involved of Jamakani village. There are additional 80 PAFs for this expansion project. Fund earmarked for compensation is about Rs. 200 Cr.

xvii) Capital Cost is Rs. 636.24 crore. CSR Cost: Fund for CSR will be allocated based on 2% of the average net profit of the company for the three immediately preceding financial years or Rs. 2.00 per tonne of coal production of the previous year whichever is higher. R&R Cost: Estimated around Rs. 630.66 lakhs (additional). Environmental Management Cost: Rs. 4984.09 Lakhs

xviii) Date of approval of mine plans, mine closure plan, status & date: Approved by Ministry of Coal vide Letter No. CPMA-34011/36/2017-CPMA dated 20-11-2017.

xix) Date of mine closure approval: Approved by Ministry of Coal vide Letter No. CPMA-34011/36/2017-CPMA dated 20-11-2017

xx) Date of Board's Approval: Project Report was approved by MCL Board on 08-09-2017.

xxi) The reserve forests falling in the buffer zone are Rampur RF, Khait RF, Bikramkhol RF, Rajpur RF, Malda RF, Arhaparha RF, Kusraloi RF, Remanda RF, Thugopahar RF, Ktangbari RF, Makarchatta RF & Chhengapahar RF. Ecologically sensitive areas such as national park, sanctuary, biosphere, etc. are not present within 10 km radius from the project

xxii) Water Bodies in 10 KM radius of the project

Sl. No	Name of the Water Bodies	Distance
1	Pandren Nalla	Within Mine Lease
2	Lilari Nalla	60 m
3	Bagachhopa jhor	100 m
4	IB river	700 m
5	Mandia Jhor	2.8 km
6	Bhedan River	3.0 km
7	Hinjakharu Jhor	4.8 km
8	Hirakud Reservoir (Backwater)	7.5 km

xxiii) Ground water clearance from CGWA under process.

xxiv) Mining plan was approved in 194th MCL Board meeting held on 8th September, 2017 and by MoC vide letter dated 20th November, 2017. Mine closure plan is an integral part of Mining Plan.

xxv) There are no national Parks, wildlife sanctuary, biosphere reserves found in the 10 km buffer zone. There are 12 nos. of reserve forest in 15 km of core zone.

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xxvi) Total forest land area involved is 580.292 ha. FC available for 350.092 ha and forest diversion proposal for remaining 230.20 ha has been submitted vide proposal No: FP/OR/MIN/26817/2017 dated 07-10-2017. Stage-I FC for 230.20 ha was granted by Ministry on 15th November, 2019

xxvii) Afforestation plan shall be implemented in an area of 571 .093 ha till the end of mining with green belt over an area of 297.701 ha and density of tree plantation as 2500 trees/ ha.

xxviii) Court cases pending: Case under Section 15 & 16 of EP Act 1986 vide case no. No. 2(c) cc No. 172/2013 dt: 11/02/13 is pending in SDJM, Jharsuguda court.

xxix) The public hearing was conducted on 14th December, 2018. Main issues raised during the public hearing included Rehabilitation & resettlement, employment, control of air pollution, water pollution, supply of drinking water, employment, etc.

xxx) The project was inspected by the officials of the Eastern Regional Office, MoEF&CC, Bhubaneswar on 18-09-18& the certified compliance report was issued vide letter no. 101-962/E.P.E/473 dated 14-12-2018. The ATR on the ERO's observation was submitted to ERO vide letter no. MCL/IBV/P.O.(SOCP)/Env/18-19/178 dated 20th December, 2018. The same is as under:-

xxxi) The Mining Plan of Samaleswari OC Expn. Ph-IV (15.0 MTPA) has been approved by MoC vide letter dated 20-11-2017.

xxxii) The additional forest land involved for the project is 230.20 ha, and the Stage-1 Forest Clearance is in process vide proposal no. FP/OR/MIN/26817/2017 dated 7th October, 2017.

xxxiii) The present proposal is for expansion in area with the production capacity remaining same at 15 MTPA.

xxxiv) The present working of Samaleswari OCP (15 MTPA) has almost reached to its boundary limit. The life of the mine is less than two months in the existing boundary, and extension to new lease hold area will be required very shortly to maintain the coal production and supply to power houses.


4. The sectoral Expert Appraisal Committee in its meeting held on 21st February, 2019 has recommended the project for grant of environmental clearance. Based on recommendations of the EAC, Ministry of Environment, Forest and Climate Change hereby accords approval for grant of environmental clearance to **Samleswari Opencast Coal Mining Expansion Project (Phase-IV) of 15 MTPA increase in mine lease area from 928.264 ha to 1334.912 ha (Total area 1384.767 ha) of M/s Mahanadi Coalfields Limited located in Village Lajkura Tehsil Brajarajnagar, District Jharsuguda (Odisha)**, 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 as under:-

- (i) The project proponent shall collect and analyze one season data for environmental parameters and submit for consideration of the EAC before 31st December, 2019.
- (ii) The project proponent shall obtain Consent to establish from the State Pollution Control Boards prior to commencement of production in increased area.
- (iii) Transportation of coal from face to Coal heap shall be carried out by truck.

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Further, the coal transportation from Coal heap to Coal Handling Plant shall be carried out through covered trucks.

- (iv) To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.
- (v) Mitigating measures shall be undertaken to control dust and other fugitive emissions all along the roads by providing sufficient water sprinklers. Adequate corrective measures shall be undertaken to control dust emissions, 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.
- (vi) The company shall obtain approval of CGWA for use of groundwater for mining operations.
- (vii) Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.
- (viii) Persons of nearby villages shall be given training on livelihood and skill development to make them employable.
- (ix) To ensure health and welfare of nearby villages, regular medical camps shall be organized at least once in six months.
- (x) Thick green belt of adequate width at the final boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.
- (xi) Efforts shall be made for utilizing alternate sources of surface water, abandoned mines or else whatsoever and thus minimizing the dependability on a single source.
- (xii) A third party assessment of EC compliance shall be undertaken once in three years through agency like ICFRI /NEERI/IIT or any other expert agency identified by the Ministry.
- (xiii) Hazardous ETP sludge should be only disposed off as per Hazardous and Other Waste (Management and Transboundary Movement) Rules (2016)
- (xiv) CTE/CTO for the project shall be obtained from the SPCB as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974, and the SPCB shall follow the mechanism/protocol issued by the Ministry vide letter no. Q-16017/38/2018-CPA dated 24th October, 2019 while issuing the CTE/CTO for the project, for improvement of environmental quality in the area.
- (xv) The green belt of at least 5-10 m width shall be developed in more than 40% of the total project area, mainly along the periphery of mine boundary, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (xvi) In addition, the project proponent shall develop greenbelt outside the plant premises such as avenue plantation, plantation in vacant areas, social forestry etc.
- (xvii) Monitoring of compliance of EC conditions may be submitted with third



party audit every year.

- (xviii) The percentage the CER may be atleast 1.5 times the amount given in the OM dated 1st May, 2018 recommended by the EAC and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (xix) Permission for concerned statutory authority for diversion of Pandran nallah shall be taken by PP"
- (xx) PP shall comply the decision of Case under Section 15 & 16 of EP Act 1986 vide case no. No. 2(c) cc No. 172/2013 dt: 11/02/13.

4.1 The grant of environmental clearance is further subject to compliance of the Standard EC conditions as under:

(a) Statutory compliance

- (i) The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- (ii) The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- (iii) The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study area).
- (iv) The project proponent shall obtain Consent to Establish/Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- (v) The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- (vi) Solid/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016/Hazardous & Other Waste Management Rules, 2016.

(b) Air quality monitoring and preservation

- (i) Continuous ambient air quality monitoring stations as prescribed in the statue be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM₁₀, PM_{2.5}, SO₂ and NO_x. 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 25th September, 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) 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 PM₁₀/PM_{2.5}) 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.
 - (iv) The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring 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.
 - (v) 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.
 - (vi) 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.
 - (vii) Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.

(c) Water quality monitoring and preservation

- (i) The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.
- (ii) 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 27th May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
- (iii) 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

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- quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
- (iv) 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.
 - (v) 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.
 - (vi) Catch and/or garland drains and siltation ponds in adequate numbers and 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 de-silted 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 and green belt development and other industrial use. 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.
 - (vii) Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).
 - (viii) 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 standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.
 - (ix) The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
 - (x) 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/GoI 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 or any other authority as prescribed by the law.
 - (xi) The project proponent shall take all precautionary measures to ensure riverine/riparian ecosystem in and around the coal mine up to a distance of

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5 km. A rivarine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

(d) Noise and Vibration monitoring and prevention

- (i) Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 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.
- (ii) Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.
- (iii) 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) Mining Plan

- (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) 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).
- (iii) No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980.
- (iv) Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

(f) Land reclamation

- (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 or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
- (ii) 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 diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.
- (iii) The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the "during

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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 MOEFCC/RO.

- (iv) Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.
- (v) Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. 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.
- (vi) 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.

(g) Green Belt

- (i) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic 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.
- (ii) Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.

(h) Public hearing and Human health issues

- (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 & it's RO on six-monthly basis.
- (ii) The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel 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

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the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.

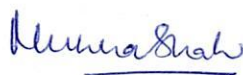
- (iii) Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- (iv) Implementation of the action plan on the issues raised during the public hearing shall 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.
- (v) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29th 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'.

(i) Corporate Environment Responsibility

- (i) The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No.22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- (ii) The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental 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/forest/wildlife norms/conditions. The company shall have defined system of reporting infringements/deviation/violation of the environmental/forest/wildlife norms/conditions and/or shareholders/stake holders.
- (iii) A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- (iv) Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company 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.

(j) Miscellaneous

- (i) The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular



- language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- (ii) The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
 - (iii) The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
 - (iv) The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
 - (v) The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
 - (vi) The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.I1 (M) dated 29th 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'.
 - (vii) The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
 - (viii) The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
 - (ix) The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
 - (x) The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
 - (xi) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change.
 - (xii) Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
 - (xiii) The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
 - (xiv) The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
 - (xv) 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.

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- (xvi) The above conditions shall 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, Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 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.
 8. 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 2nd August, 2017 of Hon'ble Supreme Court in WP (Civil) No.114/2014 in the matter of 'Common Cause Vs Union of India & others.
 9. The concerned State Government shall ensure no mining operations to commence till the entire compensation for illegal mining, if any, is paid by the project proponent through their respective Department of Mining & Geology, in strict compliance of the judgment of Hon'ble Supreme Court.
 10. This environmental clearance shall not be operational till such time the project proponent complies with the above said judgment of Hon'ble Supreme Court, as applicable, and other statutory requirements.


(Munna Kumar Shah)
Scientist D

Copy to:

1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi.
2. The Additional Principal Chief Conservator of Forests, Regional office (EZ), Ministry of Environment & Forests, A-31, Chandershekharpur, Bhubaneswar-751023 (Odisha).

3. The Secretary, Department of Environment & Forests, Government of Orissa, Secretariat, Bhubaneswar (Odisha).
4. The Member Secretary, CPCB, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32.
5. The Member Secretary, Central Ground Water Authority, Ministry of Water Resources, River Development & Ganga Rejuvenation, Curzon Road Barracks, A-2, W-3 Kasturba Gandhi Marg, New Delhi.
6. The Member Secretary, Orissa State Pollution Control Board, Parivesh Bhawan, A/118, Nilkanthanagar, Unit VIII, Bhubaneshwar - 751012 (Odisha).
7. The Advisor, Coal India Limited, SCOPE Minar, Core-I, 4th Floor, VikasMarg, Laxminagar, New Delhi.
8. The District Collector, Jharsuguda, Government of Odisha.
9. Monitoring File
10. Guard File
11. Record File
12. Parivesh Portal


(Munna Kumar Shah)
Scientist D

Munna Shah

**MCL****MAHANADI COALFIELDS LIMITED**

(A Subsidiary of Coal India Limited)

JAGRUTI VIHAR, BURLA-768020, DIST-SAMBALPUR, ODISHA

Tel Phone (EPABX) - 0663-2542461 to 469 Website : www.mahanadicoal.in**NOTICE**

This is to inform to all concerned that Samleswari Opencast Coal Mining Expansion Project (Phase IV) MCL of 15 MPTA has been accorded Environment Clearance by the Govt. of India, Ministry of Environment, Forest & Climate Change for an increase in Mining Area from 928.264 Ha to 1334.912 Ha (Total Area 1384.767 Ha). This project is situated in Village Lajkura, Tehsil Brajrajnagar, Jharsuguda District. A copy of the clearance letter No. J-11015/183/2008-IA-II(M) DATED 26/12/2019 is available with state Pollution control Board and may also be seen at the website of the Ministry of Environment & Forest & Climate Change at www.environment.clearance.nic.in

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Sd/-
General Manager
IB Valley Area, MCL

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MCL

ମହାନଦୀ କୋଲଫିଲ୍ଡସ ଲିମିଟେଡ୍

(କୋଲ ଇଣ୍ଡିଆ ଲିମିଟେଡ୍‌ର ଏକ ସହାୟକ କମ୍ପାନୀ)

ଜାଗୃତି ବିହାର, ବୁର୍ଲା-୭୬୮୦୨୦, ଜିଲ୍ଲା-ସମ୍ବଲପୁର, ଓଡ଼ିଶା

ଟେଲିଫୋନ୍ (ଇଣ୍ଡିଏନ୍-୯୧)-୦୬୬୩-୨୫୪୨୪୭୧ ରୁ ୪୭୯, ୱେବସାଇଟ୍ : www.mahanadicoal.in

ବିଜ୍ଞପ୍ତି

ଏତଦ୍ ଦ୍ୱାରା ସର୍ବସାଧାରଣଙ୍କ ଅବଗତ ନିମନ୍ତେ ଜଣାଇ ଦିଆଯାଉଅଛି ଯେ, ମହାନଦୀ କୋଲଫିଲ୍ଡସ ଲିମିଟେଡ୍ ସମଲେଶ୍ୱରୀ ଖୋଲା ମୁହଁ କୋଇଲା ଖଣି ସମ୍ପ୍ରସାରିତ ପ୍ରକଳ୍ପ (ଫେଜ-IV)କୁ ପରିବେଶ ଓ ଜଙ୍ଗଲ ମନ୍ତ୍ରାଳୟ, ନୂଆ ଦିଲ୍ଲୀ ଦ୍ୱାରା ଖଣି ଅଂଚଳରେ 928.264 ହେକ୍ଟର ରୁ 1334.912 ହେକ୍ଟର (ସମୁଦାୟ 1384.767 ହେକ୍ଟର) ପର୍ଯ୍ୟନ୍ତ ଏହାର ସଂପ୍ରସାରଣ ନିମନ୍ତେ ପତ୍ର ସଂଖ୍ୟା J-11015/183/2008-IA-II(M), ତାରିଖ 26/12/2019 ରିଖ ମାଧ୍ୟମରେ 15 ନିୟୁତ ଚନ୍ଦ୍ର ଷମତା ପ୍ରତିବର୍ଷ କୋଇଲା ଉତ୍ପାଦନ ପାଇଁ ପରିବେଶ ସମ୍ପର୍କିତ ସ୍ୱୀକୃତି ପ୍ରଦାନ କରାଯାଇଅଛି । ଏହି ପ୍ରକଳ୍ପ ଧାରସୁଗୁଡା ଜିଲ୍ଲାର ବ୍ରଜରାଜନଗର ତହସିଲ, ଲାଜକୁରା ଗ୍ରାମରେ ଅବସ୍ଥିତ । ଏହି ମଞ୍ଜୁରୀ ପତ୍ରର ଏକ କିତା ନକଲ ଓଡ଼ିଶା ପ୍ରଦୂଷଣ ନିୟନ୍ତ୍ରଣ ବୋର୍ଡରେ ଉପଲବ୍ଧ ହେବା ସହିତ ଏହାକୁ ପରିବେଶ ମନ୍ତ୍ରାଳୟ, ଜଙ୍ଗଲ ଏବଂ ଜଳବାୟୁ ପରିବର୍ତ୍ତନ କାର୍ଯ୍ୟାଳୟ ୱେବସାଇଟ୍ www.environment.clearance.nic.in ରେ ମଧ୍ୟ ଦେଖିବାକୁ ମିଳିପାରିବ ।

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ସ୍ୱା/- ମହାପ୍ରବନ୍ଧକ
ଇବ୍ ବ୍ୟାଲି କ୍ଷେତ୍ର, ଏମ.ସି.ଏଲ

ଆମର ଆସ ପ୍ରାପ୍ତ କରିବା ପାଇଁ ଟୋଲ ଫ୍ରୀ ନମ୍ବର ୧୮୦୦ ୨୦୦ ୩୦୦୪ ରେ ଏକ ମିସ୍ତକ କଲ୍ କରନ୍ତୁ ।