Office Of The Project Officer, Kulda OCP, Basundhara Area At/PO:-Balinga-770076 Dist:-Sundargarh (Orissa) FAX: 06621-286144



Ref. No.: MCL/BA/PO/KOCP/E&F/2023-24/81 Date: 22.02.2024

To

The Divisional Forest Officer, Sundargarh Division, Sundargarh

Subject: Submission of reply to the Essential Details Sought in respect of diversion proposal of 134.69 Ha of forest land for Kulda Expansion OCP of Basundhara Area, MCL.

- **Ref** 1.) Memo from PCCF vide no. 4060/9F(MG)-49/2023/Bhubaneswar, Date 17.02.2024.
  - 2.) Porposal No. FP/OR/MIN/50293/2020, State Serial No. OR-050/2021, date 08.07.2021
  - 3.) GoI, MoEF&CC, Eastern Regional Office, Bhubaneswar letter no.- 8-287/CE, date-08.03.2018

#### Respected Sir,

With reference to the letter cited above, the short coming found in the diversion proposal has been complied herewith. The details are furnished as below:

#### 1. Violation of LARR Act, 2013

Section 41(3) of LARR Act 2013 (<a href="http://indiacode.nic.in/acts-in-pdf/302013.pdf">http://indiacode.nic.in/acts-in-pdf/302013.pdf</a>) says that in case of acquisition or alienation of any land in the in the Scheduled Areas, the prior consent of the concerned Gram Sabha is a must. The proposed site for expansion being covered under the Scheduled Areas, the State Government and State Pollution Control Board should have gone for seeking prior consent of Gram Sabhas in the concerned villages before holding the Public Hearing on 10<sup>th</sup> Jan 2018.

The land acquisition in case of Kulda OCP has been done on the basis of Coal Bearing Areas (Acquisition and Development) Act, 1957 hence, the provision of LARR Act, 2013 is not applicable on the Project land acquisition. Secondly, the land acquisition of Kulda OCP has been made in the period 1984 to 1993, which was way before the promulgation of LARR Act 2013.

Further, the public hearing was successfully conducted on 10<sup>th</sup> Jan 2018 after the consent of Odisha State Pollution Control Board and District Administration, as per the EIA Notification, 2006, for expansion in production capacity from 10 to 14 MTPA, within the same mine lease area of 634.205 Ha. There was no requirement of taking consent from Gram Sabha, for conducting public hearing/consultation as per EIA Notification, 2006.

In view of the above facts the above point is found to be null and void.

#### 2. The Violation of Odisha Rules 2016 made under LARR Act 2013

Rule 13 of Odisha RTFCLARR Rules 2016 (https://www.igrodisha.gov.in/pdf/ORTFCTLARR Rules2016.pdf) says inter alia that SIMP including a Development Plan shall be discussed in the Gram Sabha or Panchayats in Scheduled Areas in accordance with provisions of PESA Act 1996 and even if it is subsequently modified by the District Collector, the final version of it has to receive the consent of concerned Gram Sabha. Rule 14 of Odisha RTFCLARR Rules 2016 which deals with 'Process for conducting Public Hearings lays down in its Clause (13) that in Scheduled Areas public hearing is to be held for consultation of each Gram Sabha. In the instant case, such procedures have not been followed and today's public hearing is therefore ultra vires the Rule 13 and Rule 14 of Odisha Rule 2016 made under LARR Act 2013.

The public hearing was successfully conducted on 10<sup>th</sup> Jan 2018 after the consent of Odisha State Pollution Control Board and District Administration, as per the EIA Notification, 2006, for expansion in production capacity from 10 to 14 MTPA, within the same mine lease area of 634.205 Ha. EIA Notification,

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2006 does not mandate to take consent from concerned Gram Sabha. It is to further inform that all the requisite procedures of EIA Notification, 2006 and the guidelines of OSPCB have been thoroughly followed for conducting the Public Hearing, based on which EAC has recommended and issued the Environment Clearance to Kulda OCP for expansion in production capacity from 10 to 14 MTPA, within same mine lease area of 634.205 Ha. Copy of Environment Clearance issued vide letter no. J-11015/10/95-IA.II(M), dated- 22.03.2018, has been attached in **Annexure-I.** 

Hence, in view of above fact the above point is found to be null and void.

#### 3. Violation in FRA, 2006

Section 4(5) of Forest Rights Act 2006(https://tribal.nic.in/FRA/data/FRAAct.pdf) stipulates that member of STs or OTFDs shall be evicted or removed from forest land under his occupation till the recognition and verification procedure is complete. In the instant case, though the proposed expansion project involves acquisition of forest land, none of the documents submitted in connection with the present public hearing has made any reference to the above referred provision of FRA 2006. Besides, as per Section 6 of FRA 2006 Gram Sabha is the ultimate authority in respect of determination of rights on forest land of any category. So the project proponent should have approached the concerned Gram Sabhas for availing the necessary acreage of additional forest land for expansion of their project. But none of the documents submitted by the project proponent indicates any effort they have made in this direction, Again, the Section 13 of FRA 2006 does also recognize the equal primacy of PESA Act 1996 (https://tribal.nic.in/actRules/PESA.pdf) so far it is applicable to Schedule Areas is concerned. Thus, the public hearing being held today is a naked violation of FRA 2006 and PESA Act 1996 too.

As briefed in the above two sections, the said proposal of Kulda OCP was for expansion in production capacity from 10 to 14 MTPA, within same mine lease area, for which the Public Hearing was conducted by OSPCB. As, the proposal did not involve any expansion in area, there was no such requirement of acquisition of forest land and did not attract the compliance of FRA, 2006 and PESA Act 1996.

Hence, in view of above fact the above point is found to be null and void.

4. We would like to submit a study conducted in the non-compliance of Kulda OCP to environment regulation on (Annexure-I) and its impacts. The study details the non-compliance of Kulda OCP with respect to conditions of the Environment Clearance letter No J-11015/10/95-IA.II(M), dated-24.12.2002. Violations are related to transportation, OB dumps and water discharge. Violation of the conditions is leading to dust pollution, no proper management of OB Dumps and water contamination, in the villages situated near Kulda OCP.

Violations of condition of Environmental Clearance leading to dust pollution are given below; Specific Condition (vii): Coal Handling Plan (CHP) should be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer point should also have efficient dust control arrangements. These should be properly maintained and operated. General Condition (IV): Fugitive dust emission from all the sources should be controlled regularly, monitored and data recorded properly. Water spraying arrangements on haul road, wagon loading and dump trucks (loading and unloading) should be provided and properly maintained.

It is to inform that Kulda OCP fully complies all the conditions related to transportation, OB dumps and water discharge. As on date, Kulda OCP is transporting its coal to Kanika and Sardega Railway Siding through dedicated coal corridor by-passing villages as per the EC Condition. The height of OB dumps are less than 90 m with proper benching i.e. 4 to 5 benches of 15-20m height. The compliance measures are frequently monitored by OSPCB as well as MoEF&CC. Kulda OCP strictly follows the concept of zero discharge as per the CTO condition issued by OSPCB, since 2017.

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#### Status related to dust pollution:

As on date, Kulda OCP has installed 177 fixed type sprinklers, 7 static fog canons (100m throwing capacity), and has deployed 11 nos. of mobile fog canons, 4 nos. of mechanical road sweepers, 4 nos. of 28Kl mobile water tankers, 2 nos. of 20 Kl mobile water tankers, 2 nos. of 12Kl mobile water tanker, 1 no. of 10Kl mobile water tanker, 1 no. of 4 Kl water tanker, 4 nos. of Surface miners fitted with water sprinkling system, 3 nos. of instant shower system with wheel washing system at the exit gates, ensuring Tarpulin covered trucks, provision of concrete roads for internal as well as external coal transportation roads, greenbelt development around the mines is being practiced by Kulda OCP as a control measure for abatement of fugitive dust inside and outside mine lease area and dust prone areas, as per the EIA-EMP of Kulda OCP & other statutory conditions, which is being reported to MoEF&CC six monthly and frequently monitored by MoEF&CC and OSPCB, respectively.

Besides this, the air quality is being frequently monitored by 4 nos. of manual monitoring stations and 3 nos. of Continuous Ambient Air Quality Monitoring Stations. It is being ensured that the air pollution level confirm to the standards prescribed by the MoEF&CC/CPCB by the existing dust suppression measures like mobile fog canons, water tankers, and static fog canon, & fixed sprinklers, etc. The total production of Kulda OCP is done by eco-friendly surface miners (4Nos.), hence, CHP is not in use since June'2017.

Transportation of the coal through the existing road passing through any village has been avoided. Special corridors have been constructed thus bypassing the neighboring villages. Coal transportation road towards Sardega Siding have been concreted for a length of 7.8 Km. 25 Km four lanes dedicated coal corridor from Bankibahal to Kanika has been provided for coal transportation. 22.1Km of road from Bankibahal to Tapuria towards Raigarh have been concreted. A separate coal corridor is presently under construction from Bankibahal to Bedabahal for a length of 32Km.

Photographs related to dust suppression measures adopted by Kulda OCP has been attached in Annexure-II.

#### Status related to improper management of OB Dumps:

OB dumps are maintained at less than the height of 90 m and with 4 to 5 benches of 15-20m height, which is being frequently monitored by OSPCB as well as MoEF&CC. 4.55Ha of External Dump and 18.3 Ha of internal dump/backfilled area has been reclaimed biologically with the help of DFO, Sundargarh to prevent the soil erosion and flow of silt. The retaining wall constructed at the toe of the external dump for a length of 500m has been designed on the basis of Rainfall data for the past 7 years.

Besides that gabion wall has been provided over a length of 1000m at the toe of internal dump. The provision of top soil blanketing is being done at fire prone areas of the OB dump to prevent spontaneous heating. Plantation of 25000 nos. has been done over an area of 10 ha at the toe of the external OB Dump.

Photographs of OB dumps under Kulda OCP have been attached in Annexure-III.

#### Status related to water contamination, in the villages situated near Kulda OCP:

Kulda mine is following a zero discharge concept, i.e., no mine water is being discharged outside the mine under any circumstances, as per the Consent Order of Kulda OCP. Workshop effluent is treated in Effluent Treatment Plant with Oil & Grease Trap. Effluent monitoring is done fortnightly. The treated water confirms to the prescribed standard GSR 742 (E) dated 25th September, 2000.

Further, the waste water so generated is being collected in mine sump & used for industrial purposes like dust suppression, cooling, plantation and washing. The effluent quality report is also being sent to MoEF&CC periodically and is also displayed near the entry/exit of the mines and in the company's website for public view.

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Photographs of ETP as well as mine sump of Kulda OCP has been attached in **Annexure-IV**. Hence, in view of above fact the said comment is being denied by the Project Proponent.

5. Violation of EC condition related to the OB dump by Kulda OCP as follows:

Specific Condition (ii): OB dumps should be stacked at earmarked dump site only and should not be kept active for long period. The total height of the dumps should not exceed 90 m; each stage should preferably be of 15 m but should not exceed 20 m. Overall the slope of the dump should not exceed 28°; Concurrent backfilling should be started from the fourth year of operation. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forest on yearly basis. Due to the above non-compliance regular fire observed in the OB dump area and once accident was held in 2013. New clipping attached as Annexure IV.

Violation of EC condition related to water discharge

Given below are Specific Condition (III) and Specific Condition (IV) that are being violated by Kulda OCP

Specific Condition (iii): Catch drains and Siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected should be regularly desilted and maintained properly.

Garland drains and sump capacity be designed keeping 50 % safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material.

Specific Condition (iv): Dimensions of the retaining wall at the toe of the dumps and OB benches within the area to check run-off and siltation should be based on rainfall data.

OB dumps of Kulda mine has been stacked at the ear marked site as per the Mining plan of Kulda OCP and the external OB dump is inactive since 2018. OB dumps are maintained at less than the height of 90 m and with 4 to 5 benches of 15-20m height, which is being frequently monitored by OSPCB as well as MoEF&CC. 4.55Ha of External Dump and 18.3 Ha of internal dump/backfilled area has been reclaimed biologically with the help of DFO, Sundargarh to prevent the soil erosion and flow of silt. The retaining wall constructed at the toe of the external dump for a length of 500m has been designed on the basis of Rainfall data for the past 7 years.

Besides that gabion wall has been provided over a length of 1000m at the toe of internal dump. The provision of top soil blanketing is being done at fire prone areas of the OB dump to prevent spontaneous heating. Plantation of 25000 nos. has been done over an area of 10 ha at the toe of the external OB Dump. The monitoring is done for 4 years from the year of plantation until the vegetation becomes self-sustaining. The compliance report is being submitted to MoEF&CC on six monthly basis.

Garland drains (7632m x 1.5m x 1.5m) and Berm (4809m x 1.5m x 1.5m) has been provided all around the mine boundary and External dump. Catch drains (3349m x 1m x 1m) has been provided at coal stocks and internal dump. The water so collected in the catch drains is channelized into the mine sump (capacity 20 lakh cum) of Kulda OCP, which is further utilized for industrial purposes like dust suppression and fire-fighting, green belt development etc. The drains are cleaned and de-silted pre-monsoon and postmonsoon, annually twice.

Photographs of Plantation in dumps, Retaining wall, and concrete catch drain, garland drain and check dam has been enclosed in **Annexure - V** 

Hence, in view of above fact the said comment is being denied by the Project Proponent.

6. Through the study that we are submitting as per the study report. It is also seen that ten conditions mentioned in Consent to Operate (CTO) and 2 conditions in the Consent to Establish (CTE)

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are being violated. We would like to bring to your kind notice that these violations have been occurring consistently through the years. We are attaching a tabulation of these violations by Kulda OCP since 2010, which we have obtained through various inspections and direction reports issued by the Board.

It is pertinent to mention that Kulda OCP is dedicated to comply all the statutory conditions as per EC/FC/CTO/CTE, etc. and the same is frequently monitored by MoEF&CC, OSPCB and other statutory bodies. The mine operates with a valid EC/FC/CTE and CTO. All efforts are being taken to comply the conditions to their true spirit as per their timelines. As per the inspection report; the observations and recommendations are properly taken care of to eradicate any non-compliance. The copy of valid CTE and CTO of Kulda OCP has been attached in **Annexure-VI & VII** 

Hence, in view of above fact the said comment is being denied by the Project Proponent.

7. Violation While in the draft Environment Impact Assessment Report, assurances are given by the company for mitigating the social and environmental impacts arising out of its expansion, the same are not being complied with even in the existing operations. For example, in page 4 &5 of Chapter 4 (Anticipated Environmental Impacts and Mitigation Measures) it is given that there would be covering of coal transportation trucks with tarpaulin, that un-metalled roads shall be kept free of ruts and measures would be taken to control fire in the OB dumps. We have submitted evidence, which shows instances of this happening at several instances since the company's operation. As per the EIA Notification 2006 majority of the local people of mining area in tiklipada were not allowed to speak or to give in writing at the public hearing scheduled to be held on  $10^{th}$  January, 2018. Therefore, please cancel the public hearing given the history of non-complaince by the company Further, we request the Expert Appraisal Committee (EAC)- Thermal and Coal Mining Projects, to ensure that a public hearing be conducted only after certifying that the in the existing operations the conditions of environmental regulation are being complied with. Information certifying compliance of conditions is an essential part of the appraisal carried out by the EAC as is visible in the agenda for the EAC meetings. All project proponents need to provide information certifying compliance as part of the basis information to the EACs.

Due to above non-compliance by the Kulda OCP the public hearing should be cancelled and any further extension.

It is to inform that Kulda mine has installed CCTV at all the exit gates from where it is being monitored 24x7 and ensured that no truck leaves the premises of the mines without Tarpaulin cover. As on date, there are no such roads which have ruts and pot holes inside the mine area. The roads are either concreted or well maintained. Spontaneous fires in the OB dumps are being prevented using Top soil blanketing under Kulda OCP. The photographs of Tarpaulin covered trucks have been attached in **Annexure-VIII** 

The Public Hearing took place in the venue decided by the District Administration, which was properly communicated to all the statutory bodies and the Gram Panchayats and informed to the general public of nearby villages via announcement through pubic addressal system and through newspaper publications in order to gain widespread publicity of the event. The minutes of the public hearing, authenticated by OSPCB, is hereby attached for your kind reference in **Annexure-IX**, and it is to inform that nobody was restricted from sharing their thoughts during the public hearing which have been video-taped from the beginning to the end of event, as per EIA Notification, 2006.

It is to further inform that EAC only recommends and issues Environmental Clearance after the deliberation of compliances of the conditions mentioned in previous EC, which is being certified by MoEF&CC itself (Copy of latest CCR has been attached in **Annexure-X**). All the ECs issued with respect to Kulda OCP have been recommended by EAC only after thorough scrutiny of previous compliances. Besides, Kulda OCP is also assessed by third party like NEERI for compliance of EC conditions in every three years. Hence, in view of above fact the said comment is being denied by the Project Proponent.

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In light of the above facts, and as per the requirement of the O/o PCCF, we kindly request you to furnish your views/reports as desired in the memo no. 4060, dated – 17.02.2024 for onward submission and for grant of Forest Clearance of 134.69 Ha for the purpose of Coal Mining in Kulda Expansion OCP of Mahanadi Coalfields Limited.

Encl. As Above.

Thanking you.

Yours faithfully,

Project Officer, Kulda OCP, MCL, Basundhara Area

#### Copy to:

- **1.** General Manager (E&F), MCL HQ For kind information.
- **2.** GM, Basundhara Area For kind information.
- **3.** Staff Officer (E&F), Basundhara Area.
- **4.** Office Copy



# 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		Outside ML area		Total Area	
ļ		(ha)		(ha)		(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 (Core Zone)	Land-Use (ha)						
		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	187.155	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:

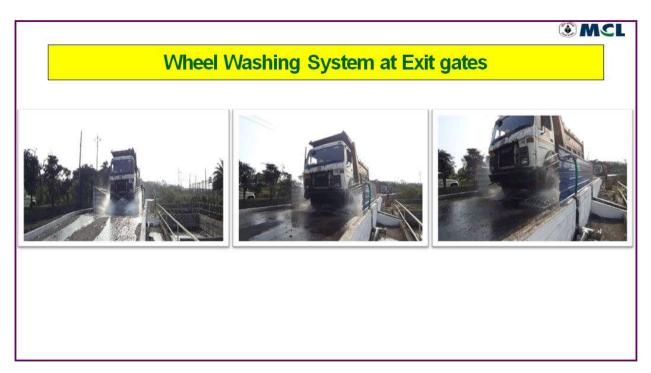
1. The Secretary, Ministry of Coal, Shastri Bhawan, New Delhi

- 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







## Fixed sprinklers at Coal Transportation Road





**®MCL** 

# Mist Shower system at Coal Transportation Road



#### **®M**CL

**MCL** 

## Mobile fog canons at Coal Transportation Road

9 Nos. of mobile fog canons of capacity 12Kl and 20 Kl have been deployed for dust suppression at coal transportation roads



## Mobile fog canons at Sardega Siding

Two nos. of mobile fog canons with 40m throwing capacity have been deployed at Kanika and Sardega Railway Siding



#### MCL

## Mobile tankers at Coal Transportation Road

•Contractual Mobile Water tankers have been deployed at every patch of external coal transportation roads near Kulda OCP.





## **Mobile tankers at Coal Transportation Road**



Departmental 28 KL Mobile Water tankers as well as 20 KL contractual water tankers have been deployed within the mines for control of dust emissions due to mining activities.





Kulda:

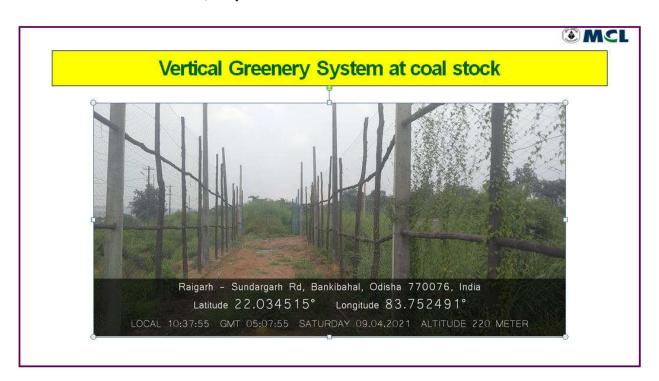
28Kl: 4 nos. 20Kl: 2 Nos.

20KI. Z INOS.

12Kl: 2 nos.

10Kl: 1 no.





## **Coal Production by Eco-Friendly Surface Miners**

**MSL** 

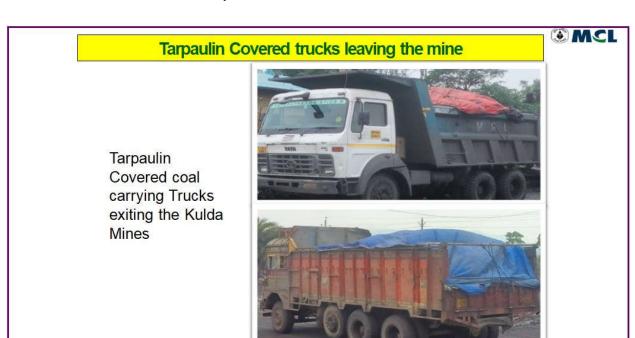
Coal Production under Kulda OCP using Surface Miner:

1. 2020-21: 100%

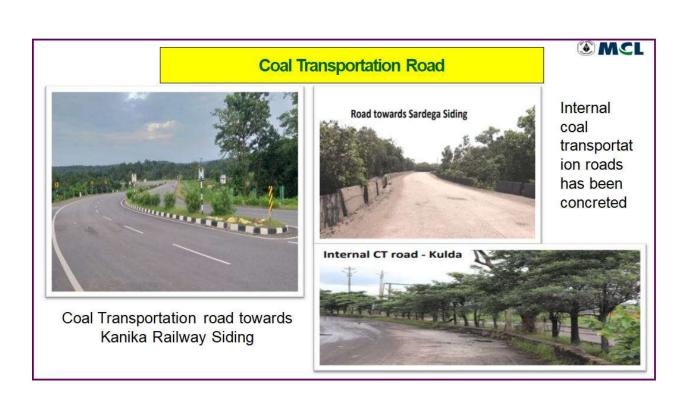
2. 2021-22: 100%

3. 2022-23: 100%





#### **Coal Transportation Road**



## Fog Canons installed at coal stocks of Kulda OCP



#### Annexure-III

#### External OB dump of Kulda OCP





## Internal OB dump/Backfilled Area of Kulda OCP



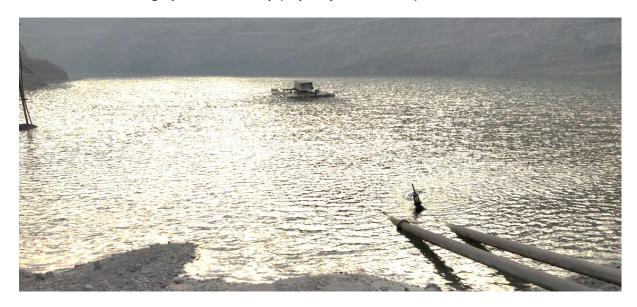


## Photograph of ETP (450KLD) operating under Kulda OCP





Photograph of Mine Sump (Capacity-20Lakh Cum) under Kulda OCP





#### **Annexure-V**

MCL

Output

Description





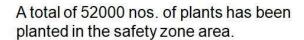




A total of 59,580 nos. of plants are planted in an area of  $23.94 \, \text{Ha}$  of internal as well as external OB Dump

## Safety Zone Plantation under Kulda OCP









## Plantation around MTK office of Kulda OCP

Plantation of 15,595 nos. of plants have been done in and around the infrastructure of Kulda OCP





MCL







Kulda Mine is surrounded by dense vegetation, which acts as a natural wind barrier.







Plantation along coal transportation road towards Kanika Railway Siding









Baul plantation in the coal transportation towards Raigarh



#### **NEW INITIATIVES TAKEN**

#### ❖ Departmental Nursery

- Seeds of various native species are collected by departmental members.
- Stored and used for germination before the onset of monsoon.
- The saplings are then planted at the vicinity of the mines.

#### ❖ Vertical Garden

An innovative approach to curb the airborne dust, has been initiated at Basundhara Area.









Vertical Greenery system of 100 m x 1.5m length has been installed in the Basundhara Area for the colony.

#### **®**M⊆L

#### **DEPARTMENTAL NURSERY TO RAISE SAL**





As per the advise of the EAC, Sal Plantation has been taken up in the Basundhara Coalfield. A **Sal Nursery** has been developed in **2019**. **8500 nos**. **of sapling** has been developed till date.

## Distribution of fruit bearing plants to nearby villagers and school

**®M**CL

Distribution (2023-24)

3000nos. Of Fruit Bearing Plants has been distributed to the nearby villages and schools.



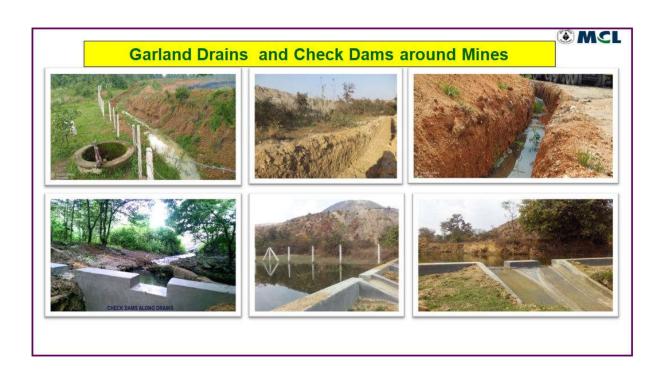
Photographs of retaining wall at the toe of OB dump





#### Photographs of concrete catch drain and Garland Drain







Tel : 2564033/2563924 EPABX : 2561909/2562847 E-mail: paribesh1@ospcboard.org

-mail: paribesh1@ospcboard.org
Web site: www.ospcboard.org

# OFFICE OF THE Web site: www.os STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST & ENVIRONMENT, GOVERNMENT OF ODISHA]
ParibeshBhawan, A/118, Nilakantha Nagar, Unit – VIII
Bhubaneswar – 751 012, INDIA

By Speed Post / Through online

	1970	
No.	19795	

IND-II-CTE-6742

Date 27.10.2022

#### **CONSENT TO ESTABLISH ORDER**

In consideration of the Online application No. 4296470 for obtaining Consent to Establish for Kulda OCP, Basundhara Area of M/s Mahanadi Coalfields Ltd., the State Pollution Control Board is pleased to convey its Consent to Establish under section 25 of Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 for enhancement in production capacity of Kulda Open Cast Mining Project from 19.6 MTPA to 21.0 MTPA (Increase of 10% w.r.t. 14 MTPA) over the mining lease area of 634.205 Ha.At villages-Siarmal, Tumulia, Kulda, Bankibahal, Balinga, under Hemgir Tahsil in the district of Sundargarh with the following conditions:

#### **GENERAL CONDITIONS:**

- 1. This Consent to Establish is valid for the product, method of mining and capacity mentioned in the application form. This order is valid for five years, which means the proponent shall commence mining activities for the proposal within a period of five years from the date of issue of this Consent to Establish order. If the proponent fails to commence mining activities for the proposal within five years, then a renewal of this consent to establish shall be sought by the proponent.
- The mine shall apply for grant of Consent to Operate under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 & Air (Prevention & Control of Pollution) Act, 1981 at least 3 (three) months before the commencement of production and obtain Consent to Operate from this Board.
- 3. This Consent to Establish is subject to statutory and other clearances from Govt. of Odisha and/or Govt. of India, as and when applicable.

#### **SPECIAL CONDITIONS:**

#### A. GENERAL CONDITIONS:

 The proponent shall carry out mining activity as per Environmental Clearance issued vide letter No. J-11015/10/1995-IA-II(M), dated 25.05.2022 by MoEF&CC, Govt. of India.

- 2. The mine shall not store for more than seven days of coal production to avoid coal fire in stock yard as well as coal seam. The mine shall take adequate preventive measures for spontaneous fire in the coal seam as well as stock yard and an action plan regarding this shall be submitted at the time of consent to operate application.
- The method of mining shall be open cast mining by shovel-dumper in overburden and surface mine with interlocking water sprinkling system, loader and tipper in coal. No change in mining technology and scope of working shall be made without prior approval of the Board.
- 4. A green belt of adequate width and density preferably with local species along the periphery of the mine. Inactive dumps, backfilled area, vacant area and any other vacant area shall be raised so as to provide protection against particulates and noise to ameliorate the environment. A detailed plantation programme in this regard shall be prepared and submitted at the time of making application for consent to operate for assessment.
- Adequate measures shall be taken for control of noise levels to meet the standards as per the Rule 2(1) of the Environmental (Protection)Amendment Rules, 2000 notified vide notification G.S.R. 742 (E), dated 25.09.2000
- Environmental laboratory shall be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.
- A separate environmental management cell with suitable qualified personnel should be set up under the control of a Senior Executive, who will report directly to the Head of the organization.
- 8. The Board may impose further condition or modify the conditions stipulated in this order during installation, and / or at the time of obtaining consent to operate and may revoke this clearance in case the stipulated conditions are not implemented and / or any information suppressed in the application form.
- 9. The project shall use fly ash bricks and other building materials made out of fly ash for construction of township.
- The proponent shall install solar powered lighting and heating system whenever possible in township
- 11. The proponent shall comply to the provisions of E-Waste (Management) Rules, 2016 and amendment thereafter and shall handover e-waste to authorized collection centers/ register dismantlers/ recyclers for proper disposal of e-waste.
- 12. The plastic waste if any generated from the industry as well as colony shall be sent to nearby cement kiln for co-processing.

- 13. The mine shall take up adequate measure for routine health checkup of its employees / workers and the people residing in the neighborhood of the plant free of cost.
- The mine shall maintain the haul road as per the circular of DGMS issued vide Cir.36/1972.
- 15. The conditions as stipulated in this consent to establish order shall be enforced, interalia, 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.

#### **B. WATER POLLUTION:**

- 16. The proponent shall ensure installation of ETP for treatment of Waste Water in contractual camps within the mine lease area.
- 17. The mine shall construct settling tanks in series to settle the suspended solids in the surface run-off water.
- 18. Garland drains (size, gradient and length) and sump capacity shall be designed keeping 50% safety margin over and above the hourly peak rain fall and maximum discharge in the area adjoining the mine site. Sump capacity shall have adequate retention period to allow proper settling of silt material.
- 19. Dimension of the retaining wall at the toe of dumps and OB benches within the mine to check run-off and siltation shall be based on the rainfall data. The detail specification shall be worked out and submitted to the Board.
- 20. Catch drains of appropriate size shall be constructed to divert the run-off from the OB dump to the siltation pond of appropriate size to arrest silt and sediment flows from soil, OB and mineral dumps. Similar arrangement shall be done around the coal stack pile area. The drains shall be regularly de-silted and maintained properly. Surface run-off from OB dump area, coal stock area, top soil storage area shall be routed through adequate settling pond (designed maximum hourly rain fall basis) to meet prescribed standard of SS-100 mg/l and Oil & Grease-10 mg/l before discharge into natural stream/water courses during monsoon.
- 21. Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells. The monitoring shall be done four times a year in pre-monsoon (April/May), monsoon (August), Post – monsoon (November) and winter (January) seasons. Data thus collected shall be submitted to the Board quarterly.
- 22. The domestic wastewater generated from the township will be treated in sewage treatment plant. The treated water shall be reused for gardening and plantation and

the surplus water if any shall be discharged to outside after meeting the following prescribed standards as notified by the MoEF&CC, Govt. of India vide G.S.R. 1265 (E), dated 13.10.2017.

SI. No.	Parameters	Standards
1.	рН	6.5-9.0
2.	BOD(mg/l)	30
3.	TSS(mg/l)	<100
4.	Fecal Coliform (MPN/100ml)	< 1000

- 23. Oil and grease trap shall be installed before discharge of effluent from workshop. Wastewater from the mine pit, check dams or any other discharge leaving lease boundary of the mine shall be properly collected, treated so as to conform the following standard i.e. pH = 5.5 9.0, SS = 100 mg/l, COD = 250 mg/l & Oil & Grease = 10 mg/l.
- 24. Rain water harvesting practice shall be followed by utilizing the rain water collected from the roof of the buildings for recharging of ground water within the premises and other large structures as per the concept and practices prescribed by CPCB, New Delhi and details of which is available in the web site. The management of mine drainage water shall be efficiently done as per the directive of the Central Ground Water Board, New Delhi.
- 25. The Mine shall provide mechanized wheel washing system along with effluent treatment and recycling facilities at the exit point of the mine. Wheel wash facilities shall be provided to minimize transfer of mud from unpaved approach roads to main paved and/or public roads.

### C. AIR POLLUTION:

- 26. Transportation road shall be black topped / concreted and sustainable coal transport measures shall be adopted to minimize air pollution.
- 27. Pipe conveyor shall be provided for transportation of coal to railway siding as proposed. The proponent shall provide adequate air pollution control measures at transfer points of pipe conveyors.
- 28. No village road shall be used for transportation of coal and no road transport route shall be adopted, which is passing through any sensitive location such as schools. hospitals etc.
- 29. The mine shall deploy higher capacity trucks/dumper to reduce fleet size till Rapid loading system and conveyor belt system is commenced as per Environment Clearance.

- 30. The mine shall develop wind barrier wall of 10 meters height all around the coal stack yard to control fugitive coal dust emission. The stack coal shall be below the height of the wind barrier.
- 31. The mine shall provide adequate number of trolley mounted and mobile Fog Cannons for dust suppression.
- 32. Water sprinkling shall be carried out on unplanted surface of OB dump to control fugitive emission.
- 33. Drilling shall be avoided to the maximum possible extent for coal excavation. However, drill shall be wet operated or with dust extractors.
- 34. The mine shall provide water or water mixed chemicals for dust suppression at all strategic points such as coal stack yards, loading and unloading points, all transfer points, conveyors etc. to suppress dust fine atomizer nozzles arrangement shall be provided on the coal heaps and on land around the crusher / pulverizes. As far as possible conveyors and transfer points etc. shall be provided with enclosures.
- 35. Adequate ambient air quality monitoring stations for 24 hours operation shall be established in the core zone as well as in the buffer zone for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>andNOx monitoring. Location of the stations shall be decided based on the metrological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Data on ambient air quality (PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NOx) shall be frequently submitted to the State Pollution Control Board once in six months.
- 36. Continuous ambient air quality monitoring stations (CAAQMS) with data transfer facility shall be established in the core zone as well as in the buffer zone for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NOx monitoring. Location of the stations shall be decided based on the metrological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board.
- 37. The mine shall comply the following standard at the loading or unloading, haul road, coal transportation road, coal handling plant (CHP), railway siding, blasting, drilling, overburden dumps or any other dust generating external sources as per the Rule 2(1) of the Environmental Amendment Rules, 2000 notified vide notification G.S.R. 742 (E), dated 25.09.2000.

Pollutant	Time weighted average	Concentration in Ambient Air	Method of Measurement		
1	2	3			
SPM	Annual Average* 24 hours**	360µg/m³ 500µg/m³	High volume sampling (Average flow rate not less than 1.1m3/min)		
RPM(size	Annual	180µg/m³	Respirable Particulate matter sampling		

Pollutant	Time weighted average	Concentration in Ambient Air	Method of Measurement		
1	2 3		4		
less than 10 µm)	Average* 24 hours**	250µg/m³	and analysis		
SO <sub>2</sub>	20044/11		Improved west and Gaeke method Ultraviolet fluorescence		
NO <sub>2</sub>	Annual Average* 24 hours**	80μg/m <sup>3</sup> 120μg/m <sup>3</sup>	Jacob & Hochheiser Modified (Na Arsenic) Method Gas phase Chemiluminescence		

(\*Annual Arithmetic mean for the measurements taken in a year, following the guidelines for frequency of sampling laid down in clause-2.

\*\*24 hourly/ 8 hourly values shall be met 92% of the time in a year. However, 8% of the time may exceed but not on two consecutive days.)

- 38. The haul roads and arterial roads shall be maintained properly with avenue plantation.
- 39. 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.
- 40. Adequate number of HD IP camera shall be installed at the coal face and other areas.
- 41. Dedicated Hazardous waste storage area for contractual workshop with all facilities shall be provided as per Hazardous & other waste (Management and Trans-boundary Movement) Rule-2016 & shall obtain Authorization.

## D. SOLID AND HAZARDOUS WASTE:

- 42. Back filling of abandoned pit and reclamation shall be carried out as per approved mining plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status in this regard shall be submitted to the Board on yearly basis.
- 43. Top soil of mining area shall be stacked separately with proper slope at earmarked site (s) with adequate measures and shall be used for reclamation and rehabilitation of mined out areas as per mining plan.
- 44. Municipal solid waste generated from the township shall be disposed-off as per Solid Waste Management Rules, 2016.
- 45. Intermediate storage area for Municipal Solid Waste (MSW) shall be developed inside the premises of proposed township, if any, before handing over the MSW to the concerned ULBs for final disposal.



- 46. The proponent shall segregate organic waste from the MSW of township and segregated organic waste shall be converted to manure through organic waste converter. The proponent shall store the organic waste in closed shed inside the proposed township, if any, before use of the same in organic waste converter.
- 47. All the top soil excavated during construction activities of township shall be stored for use in horticulture / landscape development within the project site.
- 48. The proponent shall comply the provisions of Construction & Demolition Waste Management Rules, 2016.
- 49. The Project proponent shall dispose-off hazardous waste materials such as tarry products, lead containing products, paints & pigments residues, broken fluorescent and mercury lamps during construction and operational phase as per Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 as amended from time to time.

50. Hazardous waste and ETP sludge shall be stored under cover shed on concrete platform.

To,

The Project Officer, Kulda OCP of M/s MCL BG Area, Hemgir, Dist-Sundargarh, Odisha-770076

Memo No. 19796 /Dt. 27.10.2022

Copy forwarded to:

- 1. The Director, Directorate of Steel & Mines, Govt. of Odisha, Bhubaneswar
- The Collector & District Magistrate, Sundargarh.
- The Director, Factories & Boiler, Bhubaneswar
- 4. The DFO, Sundargarh.
- Consent to Operate Cell, SPC Board, BBSR
- 6. Hazardous Waste Management Cell, SPC Board, BBSR
- 7. The Regional Officer, SPC Board, Jharsuguda.
- 8. Copy to Guard file

ADDL.CHIEF ENV. ENGINEER





## CONSENT ORDER

BY REGD. POST WITH AD

## STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST, ENVIRONMENT & CLIMATE CHANGE, GOVERNMENT OF ODISHA]

A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012

Phone-2561909, Fax: 2562822, 2560955 E-mail: paribesh1@ospcboard.org, Website: www.ospcboard.org

### CONSENT ORDER

No. 4963 /

IND-I-CON- 5125

Dt. 28.03. 2023 /

### CONSENT ORDER NO. 2288.

Sub: Consent for discharge of sewage and trade effluent under section 25/26 of Water (PCP) Act, 1974 and for existing / new operation of the plant under section 21 of Air (PCP) Act, 1981.

Ref: Your online application No.4297664, Dated 15-07-2022 and Online reply dated 31-12-2022.

Consent to operate is hereby granted under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act, 1981 and rules framed thereunder to

Name of the Industry: KULDA OCP OF M/S. MCL

Name of the Occupier & Designation: SRI MANORANJAN DAS, PROJECT OFFICER

Address: AT: BALINGA, PO: BASUNDHARA, DIST: SUNDERGARH.

This consent order is valid for the period up to 31.03.2024,

This consent order supersedes the earlier consent order issued vide letter No.788 dated 20.01.2023.

### **Details of Products Manufactured**

SI. No.	Product	Quantity
1.	Coal	21.0 MTPA

This consent order is valid for the specified outlets, discharge quantity and quality, specified chimney/stack, emission quantity and quality of emissions as specified below. This consent is granted subject to the general and special conditions stipulated therein.



## A. Discharge permitted through the following outlet subject to the standard

Outlet	Description	Point of	Quantity of discharge KL/hr	Pre-scribed Standard					
No.	of outlet	discharge		рН	TSS (mg/l)	Oil & Grease (mg/l)	BOD (mg/l)	COD (mg/l	
01	Septic tank (Domestic effluent)	Soak pit	**	5.5 to 9.0	200	( <b>**</b>	100		

## B. Emission permitted through the following stack subject to the prescribed standard

Chimney Stack No.	Description of Stack	Stack height (m)	Quantity of emission			dard
				PM (mg/Nm³)	SO <sub>2</sub>	NO.
	N					
				20		-

## C. Disposal of solid waste permitted in the following manner

SI. No.	Type of Solid waste	Quantity generated (TPD)	Quantity to be reused on site(TPD)	Quantity to be reused off site(TPD)	Quantity disposed off (TPD)	Description of disposal site.
1.	Top soil/over burden	As per approved mining plan	52.50 S	-	-	As per approved mining plan



### D. GENERAL CONDITIONS FOR ALL UNITS

- The consent is given by the Board in consideration of the particulars given in the application. Any change or alternation or deviation made in actual practice from the particulars furnished in the application will also be the ground liable for review/variation/revocation of the consent order under section 27 of the Act of Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 and to make such variations as deemed fit for the purpose of the Acts.
- The industry would immediately submit revised application for consent to operate to this Board in the event of any change in the quantity and quality of raw material / and products / manufacturing process or quantity /quality of the effluent rate of emission / air pollution control equipment / system etc.
- The applicant shall not change or after either the quality or quantity or the rate of discharge or temperature or the route of discharge without the previous written permission of the Board.
- 4. The application shall comply with and carry out the directives/orders issued by the Board in this consent order and at all subsequent times without any negligence on his part. In case of non-compliance of any order/directives issued at any time and/or violation of the terms and conditions of this consent order, the applicant shall be liable for legal action as per the provisions of the LawlAct.
- 5. The applicant shall make an application for grant of fresh consent at least 90 days before the date of expry of this consent order
- The issuance of this consent does not convey any property right in either real or personal property or any exclusive privileges nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State laws or regulation.
- This consent does not authorize or approve the construction of any physical structure or facilities or the undertaking of any work in any natural water course.
- 8. The applicant shall display this consent granted to him in a prominent place for perusal of the public and inspecting officers of this Board.
- An inspection book shall be opened and made available to Board's Officers during the visit to the factory.
- 10. The applicant shall furnish to the visiting officer of the Board any information regarding the construction, installation or operation of the plant or of effluent treatment system / air pollution control system / stack monitoring system any other particulars as may be pertinent to preventing and controlling pollution of Water / Air.
- 11. Meters must be affixed at the entrance of the water supply connection so that such meters are easily accessible for inspection and maintenance and for other purposes of the Act provided that the place where it is affixed shall in no case be at a point before which water has been taped by the consumer for utilization for any purposes whatsoever.
- 12 Separate meters with necessary pipe-line for assessing the quantity of water used for each of the purposes mentioned below
  - a) Industrial cooling, spraying in mine pits or boiler feed.
  - b) Domestic purpose
  - c) Process
- 13. The applicant shall display suitable caution board at the lace where the effluent is entering into any water-body or any other place to be indicated by the Board, indicating therein that the area into which the effluents are being discharged is not fit for the domestic userbathing.
- 14 Storm water shall not be allowed to mix with the trade and/or domestic effluent on the upstream of the terminal mannoles where the flow measuring devices will be installed.
- 15. The applicant shall maintain good house keeping both within the factory and the premises. All pipes, valves, sewers and drains shall be leak-proof. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas.
- 16. The applicant shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems install or used by him to achieve with the term(s) and conditions of the consent.
- 17. Care should be taken to keep the anaerobic lagoons, if any, biologically active and not utilized as mere stagnation ponds. The anaerobic lagoons should be fed with the required nutrients for effective digestion. Lagoons should be constructed with sides and bottom made impervious.
- 18. The utilization of treated effluent on factory's own land, if any, should be completed and there should be no possibility of the effluent gaining access into any drainage channel or other water courses either directly or by overflow.
- 19. The effuent disposal on land, if any, should be done without creating any nuisance to the surroundings or inundation of the lands at any time
- 20. If at any time the disposal of treated efficient on land becomes incomplete or unsatisfactory or create any problem or becomes a matter of dispute. The industry must adopt alternate satisfactory treatment and disposal measures.
- 21 The sludge from treatment units shall be dried in sludge drying beds and the drained liquid shall be taken to equalization tank
- 22. The efficient treatment units and disposal measures shall become operative at the time of commencement of production.

# 

## CONSENT ORDER

- 23. The applicant shall provide port holes for sampling the emissions and access platform for carrying out stack sampling and provide electrical outlet points and other arrangements for chimneys/stacks and other sources of emissions so as to collect samples of emission by the Board or the applicant at any time in accordance with the provision of the Act or Rules made therein.
- 24. The applicant shall provide all facilities and render required assistance to the Board staff for collection of samples / stack monitoring / inspection.
- 25. The applicant shall not change or after either the quality or quantity or rate of emission or install, replace or after the air pollution control equipment or change the raw material or manufacturing process resulting in any change in quality and/or quantity of emissions, without the previous written permission of the Board.
- 26. No control equipments or chimney shall be altered or replaced or as the case may be erected or re-erected except with the previous approval of the Board.
- The liquid effluent arising out of the operation of the air pollution control equipment shall to treated in the manner and to ion of standards prescribed by the Board in accordance with the provisions of Water (Prevention and Control of Pollution) Act, 1974 (as amended)
- 29. The stack monitoring system employed by the applicant shall be opened for inspection to this Board at any time
- 29. There shall not be any fugitive or episodal discharge from the premises.
- 30. In case of such episodal discharge/emissions the industry shall take immediate action to bring down the emission within the limits prescribed by the Board in conditions/stop the operation of the plant. Report of such accidental discharge /emission shall be brought to the notice of the Board within 24 hours of occurrence.
- 31. The applicant shall keep the premises of the industrial plant and air pollution control equipments clean and make all hoods, pipes, valves, stacks/chimneys leak proof. The air pollution control equipments, location, inspection chambers, sampling port holes shall be made easily accessible at all times.
- 32. Any upset condition in any of the plant/plants of the factory which is likely to result in increased effluent discharge/emission of air pollutants and / or result in violation of the standards mentioned above shall be reported to the Headquarters and Regional Office of the Board by fax / speed post within 24 hours of its occurrence.
- 33 The industry has to ensure that minimum three varieties of trees are planted at the density of not less than 1000 trees per acre. The trees may be planted along boundaries of the industries or industrial premises. This plantation is stipulated over and above the bulk plantation of trees in that area.
- 34. The solid waste such as sweeping, wastage packages, empty containers residues, sludge including that from air pollution control equipments collected within the premises of the industrial plants shall be disposed off scientifically to the satisfaction of the Board, so as no to cause fugitive emission, dust problems through leaching etc., of any kind.
- 35. All solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by :
  - () Land fill in case of ment material, care being taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.
  - ii) Controlled incineration, wherever possible in case of combustible organic material
  - iii) Composting, in case of bio-degradable material.
- 36. Any toxic material shall be detoxicated if possible, otherwise be sealed in steel drums and buried in protected areas after obtaining approval of this Board in writing. The detoxication or sealing and burying shall be carried out in the presence of Board's authorized persons only. Letter of authorization shall be obtained for handling and disposal of hazardous westes.
- 37 If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard, vary all or any of such condition and thereupon the applicant shall be bound to comply with the conditions so varied.
- The applicant, his/heirs/legal representatives or assignees shall have no claim whatsoever to the condition or renewal of this consent after the
  expiry period of this consent.
- 39. The Board reserves the right to review, impose additional conditions or condition, revoke change or after the terms and conditions of this consent.
- 43 Notwithstanding anything contained in this conditional letter of consent, the Board was reserves to it the right and power under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 to review any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Act by the Board.
- The conditions imposed as above shall continue to be in force until revoked under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 and section 21 A of Air (Prevention & Control of Pollution) Act, 1981.
- 42. In case the consent fee is revised upward during this period, the industry shall pay the differential fees to the Board (for the remaining years) to keep the consent order in force. If they fall to pay the amount within the period stipulated by the Board the consent order will be revoked without prior notice.
- 43. The Board reserves the right to revoks/refuse consent to operate at any time during period for which consent is granted in case any violation is observed and to modify! stipulate additional conditions as deemed appropriate.

## CONSENT ORDER

## GENERAL CONDITIONS FOR UNITS WITH INVESTMENT OF MORE THAN Rs 50 CRORES, AND 17 CATEGORIES OF HIGHLY POLLUTING INDUSTRIES (RED A).

- The applicant shall analyse the emissions every month for the parameters indicated in TABLE. B & C as mentioned in this order and shall furnish the report thereof to the Board by the 10<sup>th</sup> of the succeeding month.
- The applicant shall provide and maintain at his own cost three ambient air quality monitoring stations for monitoring Suspended Particulate
  Matter, Sulphor Dioxide, Oxides of Nitrogen, Hydro-Carbon, Carbon-Monixide and monitor the same once in a day/week/fortright/month. The
  data collected shall be maintained in a register and a monthly extract be furnished to the Board.
- The applicant shall provide and maintain at his own cost a meteorological station to collect the data on wind velocity, direction, temperature, humidity, rainfall, etc. and the daily reading shall be recorded and the extract sent to the Board once in a month.
- The applicant shall forward the following information to the Member Secretary, State Pollution Control Board, Odisha, Bhubaneswar regularly
  a. Report of analysis of stack monitoring, ambient air quality monitoring meteorological data as required every month.
  - b. Progress on planting of trees quarterly
- The applicant shall install mechanical composite sampling equipment and continuous flow measuring / recording devices on the effluent drains of trade as well as domestic effluent. A record of daily discharge shall be maintained.
- The following information shall be forwarded to the Member Secretary on or before 10<sup>th</sup> of every month.
  - a. Performance / progress of the treatment plant.
  - b. Monthly statement of daily discharge of domestic and/or trade effluent.
- Non-compliance with effluent limitations
  - a) If for any reason the applicant does not comply with or is unable to comply with any effluent limitations specified in this consent, the applicant shall immediately notify the consent issuing authority by telephone and provide the consent issuing authority with the following information in writing within 5 days of such notification.
    - i) Causes of non-compliance
    - ii) A description of the non-compliance discharge including its impact on the receiving waters.
    - iii) Anticipated time of continuance of non-compliance if expected to continue or if such condition has been corrected the duration or period of non-compliance.
    - (v) Steps taken by the applicant to reduce and eliminate the non-complying discharge and
    - Steps to be taken by the applicant too prevent the condition of non-compliance
  - b) The applicant shall take all reasonable steps to minimize any adverse impact to natural waters resulting from non-compliance with any effluent limitation specified in this consent including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.
  - c) Nothing in this consent shall be construed to relieve the applicant from civil or criminal penalties for non-compliance whether or not such non-compliance is due to factors beyond his control, such as break-down, electric failure, accident or natural disaster.
- The applicant shall at his own cost get the efficient samples collected both before and after treatment and get them analysed at an approval laboratory every month for the parameters indicated in Part-D and shall submit in duplicate the report thereof to the Board.
- 9 The addition of various treatment chemicals should be done only with mechanical dozers and proper equipment for regulation of correct dosages determined daily and for proper uniform feeding. Crude practices such as dumping of chemicals in drains or sumps or trickling of acids or alkalies arbitrarily and utilizing poles for stirring etc. should not be resorted to.
- 10. In the disposal of treated effluent on land for irrigation, the industry shall keep in view of the need for
  - a) Rotation of crops
  - b) Change of point of application of effluent on land
  - c) A portion of land kept fallow
- 11. The adoption of these would avoid soil becoming sick or slate, the industry may ensure this in consultation with the Agriculture Department.
- 12 It is the sole responsibility of the industry to ensure that there are no complaints at any time from the royals in the surrounding areas as a result of discharge of sewage or trade efficient if any.
- 13. Proper housekeeping shall be maintained by a dedicated team
- 14. The industry must constitute a team of responsible and technically qualified personnel who will ensure continuous operation of all pollution control devices round the clock (including night hours) and should be in a position to explain the status of operation of the pollution control measures to the inspecting officers of the Board at any point of time. The name of these persons with their contact telephone numbers shall be intimated to the concerned. Regional Officer and Head Office of the Board and in case of any change in the team if shall be intimated to the Board immediately.



### E. SPECIAL CONDITIONS:

- Mining operation is subject to availability of all other statutory clearances required under relevant Acts/Rules.
- 2) The quantity of production shall be determined on monthly pro-rata basis from the date of issue of this order. If the date of issue is before 15<sup>th</sup> of the month, then the entire month will be considered for calculation, otherwise the quantity shall be determined from the next month on pro-rata basis.
- The pollution control measures for air and water shall be augmented to control the possible pollution potential during the expansion project.
- Excavation of coal shall be done using surface miners. The surface miner shall be operated along with dust control measures.
- 5) Drills shall either be operated with dust extractors or equipped with water injection system to minimize dust generation in the work environment. Controlled blasting shall also be done and blasting shall be carried out during day time.
- 6) Coal handling plant/ Crusher unit shall be operated with adequate dust extraction system or dry fog system for dust suppression. Loading, unloading areas and conveyor systems including all transfer points and coal stack yard shall have adequate dust suppression measures. The pollution control systems shall be properly maintained and operated.
- Proper water spray system with rain guns shall be provided all along the coal stockyards of the mine to deal with fugitive dust and coal fire.
- 8) All internal coal transportation roads shall be black topped/concreted. Necessary dust suppression measures shall also be taken in these roads to prevent generation of dust during movement of vehicles. Plantation of thick leaf trees on both sides of the road shall be done.
- 9) The transportation of coal shall be carried out as per the provisions and route envisaged in EC order No.J-11015/10/1995-IA.II(M) dated 24.05.2022. A declaration to this effect shall be submitted to the Board within 07 days.
- The Project Proponent shall implement in-pit conveyor system with silo loading facility till railway siding and no road transportation shall be allowed after 31<sup>st</sup>



- October, 2023. The Project Proponent shall submit the Action Plant for In-pit Belt Conveyor System to the Board.
- 11) Mobile water sprinkling shall be provided for dust suppression on the temporary quarry haul roads and sprinkling of water shall be done at desired intervals so as to prevent generation of fugitive dust.
- 12) All internal coal transportation roads, temporary mine haul roads and other material transportation roads of the mine shall be maintained properly to avoid creation of ruts and pot holes.
- 13) The Project Proponent shall deploy only 40-50 tonnes covered trucks / dumper to reduce fleet size till Rapid loading system and conveyor belt system is commenced (i.e. till October, 2023).
- 14) Instant water shower system at the exit point of the quarry shall be provided and all heavy vehicles loaded with coal shall move through the instant shower system. The wheel washing facility shall be integrated with complete recirculation system.
- 15) The railway sidings shall have adequate fixed water sprinkling system to prevent generation of dust during unloading and loading activities. In addition to this, firefighting system shall be in place to control fire in the coal stack yard of railway sidings.
- 16) Adequate nos. of fog canons shall be deployed at the coal stockyard & railway sidings for control of fugitive dust emission.
- Wind barriers or vertical greenery system shall be provided at coal stockyards and railway sidings.
- Appropriate action shall be taken to enhance rake loading facility for coal transportation through rail.
- 19) All necessary precaution shall be taken to prevent fire in coal stack yards and coal seams. Necessary precautionary measures, inter alia, maintaining a minimum stock shall be taken to avoid fire hazards in the coal stack yard.
- 20) Ambient air quality measured at a distance of 500m from the dust generating sources (Loading or un-loading, haul road, coal transportation road, coal handling plant (CHP), Railway siding, Blasting, Drilling, overburden dumps or any other dust generating source like nearby roads etc.) in the down wind direction shall meet the following standards.



Pollutant	Co	ncentration in (micrograme/m³) (24 hourly)
SPM		500
RPM		250
SO <sub>2</sub>		120
NO.		120

In case any residential or commercial or industrial place falls within 500 metres of any generating sources, the National Ambient Air Quality Standards for industrial area notified shall be applicable.

- 21) Adequate Ambient Air Quality Monitoring Stations (at least 04 nos.) shall be established in core as well as in buffer zone at the locations as decided in consultation with the Regional Officer, State Pollution Control Board. Monitoring of parameters shall as SPM, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> shall be done.
- 22) Monitoring of Ambient Air Quality of the mine shall be done once in a fortnight (24 hourly) and data shall be submitted to the State Pollution Control Board once in a year.
- 23) Action shall be taken for installation of Continuous Ambient Air Quality Monitoring Stations (at least 03 nos. keeping in view the cumulative impact of all mines) with data transfer facility to SPCB Server in Basundhara-Garjanbahal Area for monitoring of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>2</sub>. The location of CAAQMS shall be finalized in consultation with the Regional Officer, State Pollution Control Board keeping in view the criteria specified for coal mines in Environment (P) Rules, 1986/Standards specified in the consent order.
- 24) The CAAQMS shall be properly maintained and calibrated from time to time to ensure that spurious data are not transformed to the SPCB server.
- 25) The top soil and overburden shall be removed separately and stored it in separate heaps, duly covered with grass and vegetation or utilized for backfilling of mined out area.
- 26) Concurrent backfilling of mined out area shall be done. The backfilled area shall be technically and biologically reclaimed.
- 27) Action shall be taken for removal of residual coal going along with over burden so that spontaneous fire in the dump site can be eliminated. Water sprinkling arrangements shall also be provided at the coal seam faces and active dump sites to control fire.



- 28) The surface runoff generated from the mining area as well as railway siding during monsoon shall be diverted to adequate size of sedimentation pond or mine sump for storage and use. Systems shall be in place for collection and channelizing the surface runoff to the sedimentation pond/mine sump.
- 29) Strata water generated during mining operation shall be diverted to the available sump for storage and use.
- No direct disposal of strata water & runoff to outside shall be allowed under any circumstances.
- 31) Water from sedimentation pond or mine sump shall be used for sprinkling purposes on haulage roads and other dust generating areas, vehicle washing and plantation activities. For discharge of mine sump water to outside, prior permission shall be obtained from Board by submitting the details regarding treatment system, discharged water quality, discharge rate, flow of recipient water body and its quality.
- 32) Workshop effluent shall be treated in the Effluent Treatment Plant (ETP) and the ETP shall be operated at all the time. The quality of the treated wastewater shall comply with the following standards and shall be re-used for washing of vehicles:

pH - 6.5 -8.5 TSS - 50 mg/l Oil & grease - 10 mg/l COD - 150 mg/l

No wastewater from workshop shall be allowed to be discharged to outside under any circumstances.

33) Domestic effluents shall be treated in a sewage treatment plant (STP) and or shall be discharged to soak pit via septic tank constructed as BIS specification. The treated wastewater quality of STP shall comply with the following standards and shall be used for plantation:

> pH - 6.5 -9.0 TSS - <100 mg/l BOD - 30 mg/l

Fecal Coliform - <1000 MPN/100 ml.

- 34) Acid mine drainage water if any, shall be treated adequately and used only for sprinkling activity.
- 35) Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells. The monitoring should be done four times



a year in pre-monsoon (April/May), monsoon (August), post-monsoon (November) and winter (January) seasons. Data thus collected should be submitted to the Board quarterly.

36) Adequate measures shall be taken for control of noise levels below the following limits.

(06.00 AM - 10.00 PM) - Leq 75 dB(A) (10.00 PM - 06.00 AM) - Leq 70 dB(A)

- The following actions shall be taken for better environmental management as suggested by Regional Officer.
  - The inbuilt water sprinkling facility of the surface miner shall be made operational with interlocking system with operation of surface miner.
  - The construction of four lane road from Bankibhal to Bedabahal is shall be completed expeditiously.
  - iii) All the wheel washing facility shall be made functional .
  - iv) Five nos. of contractual workshops are only having two settling tanks for settlement of wastewater generated from vehicle washing. Proper treatment system shall be provided in these workshops for adequate treatment of wastewater generated from vehicle washing activity.
  - v) The damaged floor of departmental workshop shall be repaired.
  - More number of water tankers and fog cannons shall be deployed for dust suppression in various areas.
  - vii) Desilting of Basundhara nallah shall be done near Bankibahal Chowk.

An action plan in this regard shall be submitted by 15.04.2023 at the Regional Office as well at Head Office of SPCB, Odisha.

- 38) Ambient air quality monitoring data, noise monitoring data and wastewater quality monitoring data shall be electronically displayed at the entry point of the mine or at a suitable location of the mine.
- 39) IP cameras shall be installed at major dust prone areas of the mine such as coal face, coal stockyards, coal haul roads, transportation roads, railway sidings, etc. and they shall be connected SPCB server.
- 40) The mine shall take action to increase the supply of drinking water in the peripheral villages.
- 41) Plantation of trees shall be undertaken in the colony/ township, over top soil dumps, OB dumps, along the side of haul road and in other areas of the mines not



being utilized for mining activities. The mine shall take up avenue plantation and plantation in nearby village areas in consultation with DFO/Horticulture Department. The plantation details shall be submitted to the Board by end of April every year.

- 42) The annual coal production status shall be submitted to the Board latest by 30<sup>th</sup> April every year.
- 43) The environmental statement report for the financial year ending 31<sup>st</sup> March shall be submitted to the Board in Form-V on or before 30<sup>th</sup> September every year.

MEMBER SECRETARY
STATE POLLUTION CONTROL BOARD, ODISHA

TO,

SRI MANORANJAN DAS, PROJECT OFFICER, KULDA OPENCAST PROJECT OF M/S. MCL, AT: BALINGA, PO: BASUNDHARA, DIST: SUNDERGARH-770076.

Memo No						_/Dt	1		1
Copy	forw	arde	ed to:						
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- Regional Officer, State Pollution Control Board, <u>Jharsuguda</u>.
- ii) District Collector, Sundargarh
- iii) Director of Mines, Govt. of Odisha, Bhubaneswar
- Director, Environment-cum-Special Secretary, F & E. Dept. Govt. of Odisha, Bhubaneswar.
- v) D.F.O., Sundargarh
- vi) Deputy Director of Mines, Rourkela
- vii) Chief Env. Scientist, Central Lab, SPCB, Bhubaneswar
- viii) Addl. Chief Env. Engineer (Hazardous Waste Management Cell)
- ix) Consent Register

CHIEF ENV. ENGINEER (M)
STATE POLLUTION CONTROL BOARD, ODISHA



## GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENTAL POLLUTANTS



# GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENTAL POLLUTANTS PART –A: EFFLUENTS

SI.	Parameters	Standards						
No.		Inland surface	ce Public Land sewers irriga		Marine Costal Areas			
		(a)	(b)	(c)	(d)			
1.	Colour & odour	Colourless/ Odourless as far as practible		See 6 of Annex-1	See 6 of Annex-1			
2.	Suspended Solids (mg/l)	100	600	200	For process wastewater – 100 b. For cooling water effluent 10% above total suspended matter of influent.			
3.	Particular size of SS	Shall pass 850						
5.	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0			
6.	Temperature	Shall not exceed 5°C above the receiving water temperature			Shall not exceed 5°C above the receiving water temperature			
7.	Oil & Grease mg/l max.	10	20	10	20			
8.	Total residual chlorine	1.0	*****		1.0			
9.	Ammonical nitrogen (as N) mg/l max.	50	50	12.411.03.2	50			
10.	Total Kajeldahl nitrogen (as NH <sub>3</sub> ) mg/1 max.	100			100			
11.	Free ammonia (as NH <sub>3</sub> ) mg/1 max.	5.0	12 <del>10001</del> 13	-	5.0			
12	Biochemical Oxygen Demand (5 days at (20°C) mg/1 max.	30	350	100	100			
13.	Chemical Oxygen Demand, mg/1 max.	250			250			
14.	Arsenic (as As) mg/1 max.	0.2	0.2	0.2	0.2			
15.	Mercury (as Hg) mg/1 max.	0.01	0.01		0.001			
16.	Lead (as pb) mg/1 max.	01.	1.0		2.0			
17.	Cardmium (as Cd) mg/1 max.	2.0	1.0		2.0			



SI.	Parameters	Standards						
No.	00000000000000000000000000000000000000	Inland surface	Public sewers	Land for irrigation	Marine Costal Areas			
		(a)	(b)	(c)	(d)			
18,	Hexavalent Chromium (as Cr + 6) mg/l max.	0.1	20		1.0			
19.	Total Chromium (as Cr) mg/l max.	2.0	2.0		2.0			
20.	Copper (as Cu) mg/l max.	3.0	3.0		3.0			
21.	Zinc (as Zn) mg/l max.	5.0	15	1,00000	15			
22.	Selenium (as Sc) mg/l max.	0.05	0.05	*****	0.05			
23.	Nickel (as Nil) mg/l max.	3.0	3.0	*****	5.0			
24.	Cyanide (as CN) mg/l max.	0.2	2.0	0.2	0.02			
25.	Fluoride ( as F) mg/l max.				15			
26.	Dissolved Phosphates (as P) mg/l max.	ates 5.0		******	*****			
27.	Sulphide (as S) mg/l max.	2.0	£ <del>101111</del> .		50			
28.	Phennolic compounds as (C <sub>t</sub> H <sub>5</sub> OH) mg/l max.	1.0	5.0	27.0000 P	5.0			
29.	Radioactive materials  a. Alpha emitter micro curle/ml. b. Beta emitter	10 <sup>7</sup>	10 <sup>7</sup>	10 <sup>8</sup>	10 <sup>7</sup>			
30.	micro curle/ml. Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent			
31	Manganese (as Mn)	2 mg/l	2 mg/l		2 mg/l			
32.	Iron (Fe)	3 mg/l	3 mg/l		3 mg/l			
33.	Vanadium (as V)	0.2 mg/l	0.2 mg/l		0.2 mg/l			
34.	Nitrate Nitrogen	10 mg/l			20 mg/l			





## NATIONAL AMBIENT AIR QUALITY STANDARDS

SL No.	Pollutants	Time		Concentrate of Ambient Air				
		Weighed Average	Industrial Residential, Rural and other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement			
(1)	(2)	(3)	(4)	(5)	(6)			
1.	Sulphur Dioxide (SO <sub>2</sub> ), µg/m³	Annual *	50	80	-Improved west and Gacke - Ultraviolet fluorescence			
2	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	Annual *	40	30	- Modified Jacob & Hochheiser (Na-Arsenite) - Chemiluminescence			
3.	Particulate Matter (size less than 10µm) or PM <sub>10</sub> µg/m <sup>3</sup>	Annual * 24 Hours **	100	100	-Gravimetric - TOEM - Beta Attenuation			
4.	Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub> µg/m <sup>3</sup>	Annual * 24 Hours **	40	40 60	Gravimetric - TOEM - Beta Attenuation			
5.	Ozone (O <sub>3</sub> ) µg/m³	8 Hours **	100	100	- UV Photometric - Chemiluminescence - Chemical Method			
6.	Lead (Pb) µg/m³	Annual * 24 Hours **	0.50	0.50	-AAS/ICP method after sampling on EMP 2000 or equivalent filter paper. - ED-XRF using Teflon filter			
7.	Carbon Monoxide (CO) mg/m <sup>3</sup>	8 Hours **	02	02	- Non Dispersive Infra Rec (NDIR) Spectroscopy			
8.	Ammonia (NH <sub>1</sub> ) μg/m <sup>3</sup>	Annual*	100	100	- Chemiluminescence - Indophenol Blue Method			
9,	Benzene (C <sub>6</sub> H <sub>6</sub> ) μg/m <sup>3</sup>	Annul *	05	05	-Gas Chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis			
10.	Benzo (a) Pyrene (BaP)- Particulate phase only, ng/m <sup>3</sup>	Annual*	01	01	-Solvent extraction followed by HPLC/GC analysis			
11.	Arsenic (As), ng/m³	Annual*	06	06	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper			
12.	Nickel (Ni),ng/m³	Annual*	20	20	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper			

Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24
hourly at uniform intervals.

<sup>24</sup> hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year, 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

### Photographs of Tarpaulin covered trucks exiting Kulda OCP



Photograph showing CCTV cameras installed at the exit gates of Kulda OCP







## STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST & ENVIRONMENT, GOVERNMENT OF ODISHA]
Paribesh Bhawan, A/118, Nilakantha Nagar, Unit – VIII
Bhubaneswar – 751 012, INDIA

o. 1033 / IND-II-PH-741

Date: 27-01-2018 /

By Regd. Post

To

ODISHA

The Secretary,
Ministry of Environment, Forest and Climate Change,
Govt. of India, Indira Paryavaran Bhawan,
Jorbagh Road, New Delhi

Sub: Proceedings of Public hearing in respect of Environmental Assessment of M/s. Mahanadi Coalfields Ltd. for Kulda OCP for expansion of coal production capacity from 10.0 MTPA to 15.0 MTPA over an area of 634.205 Ha. in Basundhara area, tahsil-Himgiri of Sundargarh district.— regarding.

Sir,

Inviting reference to above, this is to inform that public hearing of the above mentioned project proposed by M/s. Mahanadi Coalfields Ltd. for Kulda OCP for expansion of coal production capacity from 10.0 MTPA to 15.0 MTPA over an area of 634.205 Ha. in Basundhara area, tahsil-Himgiri in the district of Sundargarh was conducted on on 10-01-2018 at 11-00 AM at Stadium Field near Jagannath Mandir, Basundhara Area, Tikilipada under Himgiri Block of Sundargarh district in accordance with the Ministry of Environment, Forest & Climate Change, Govt. of India, EIA Notification No. SO-1533(E) dt.14.09.2006.

As per the above notification, notice inviting comments, views, objection, and suggestions from the public in respect of the above project was published in newspapers namely the **New Indian Express and the Dharitri on 07-12-2017.** 

However, it was not possible to conduct the public hearing at the venue in prescribed manner due to protest of some people. The facts that occurred on the day of public hearing are recorded in the enclosed proceedings.

A copy of the proceedings of the public hearing along with the following documents are enclosed for kind information and necessary action at your end.

- 1. Proceedings of the public hearing.
- 2. Video CD of public hearing.
- 3. Copies of the newspaper advertisement.
- 4. 285 nos. of representations were received during public hearing. (Enclosed as Annexure A).

Yours faithfully,

Encl: As above

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	Memo No 1034 /dt. 27.01. 2018
	Copy along with copy of the proceedings of public hearing forwarded to the Additional
	Chief Secretary, Forest & Env. Department, Govt. of Odisha for information and necessary action.
	Encl: As above  MEMBER SECRETARY
	MEMBER SECRETARY
	Memo No 1035 /dt. 27-01-2018
	Copy forwarded to the Additional Director, Eastern Regional Office, MoEF&CC Govt. of India, A-3, Chandrasekharpur, Bhubaneswar for information and necessary action.
	MEMBER SECRETARY
	Momo No Jana Idt 27 al 24.5
	Memo No 1036 /dt. 27.01.2018  Copy along with copy of proceedings of public hearing forwarded The General
	Manager, M/s. MCL, Kulda OCP, Jagruti Vihar, Burla, Sambalpur – 768020 for information and necessary action.
***	
	Encl: As above  MEMBER SECRETARY
	MEMBER SECRETARY

PROCEEDINGS OF THE PUBLIC HEARING HELD ON 10.01.2018 AT 11.00AM AT STADIUM FIELD NEAR JAGANNATH MANDIR, BASUNDHARA AREA, TIKILIPADA OF HEMGIR TAHASIL OF SUNDARGARH DISTRICT, ODISHA FOR EXPANSION OF COAL PRODUCTION CAPACITY FROM 10.0MTPA TO 15.0MTPA OVER AN AREA OF 634.205Ha OF KULDA OCP OF M/S. MAHANADI COALFIELDS LIMITED IN BASUNDHARA AREA, HEMGIR TAHASIL OF SUNDARGARH DISTRICT.

As scheduled the public hearing for expansion of coal production capacity from 10.0MTPA to 15.0MTPA over an area of 634.205ha of Kulda OCP of M/s. Mahanadi Coalfields Limited in Basundhara Area, Hemgir, Sundargarh was conducted at Stadium Field Near Jagannath Mandir, Basundhara Area, Tikilipada, Hemgir, Sundargarh on 10.01.2018 from 11.00am. The Additional District Magistrate, Sundargarh presided over the meeting. The Regional Officer, State Pollution Control Board, Jharsuguda and other officers of Pollution Control Board were present. The Sub-Collector, Sundargarh, Tahasildar, Hemgir and Block Development Officer, Hemgir were also present. The Officers of MCL and people representatives i.e Sarpanch, Balinga G.P, Sarpanch, Gopalpur G.P, Chairperson, Hemgir Panchayat Samiti, Zilla Parisad Members, Panchayat Samiti Members, Ward Members and around 300 (public) people of Balinga Gram Panchayats and nearby areas were present.

On arrival of the ADM, Sundagarh, Presiding Officer of the Public Hearing meeting and the Regional Officer, State Pollution Control Board, Jharsuguda at the venue, at the fixed time the public present at the venue started shouting to stop the public hearing. However, following persons came forward and expressed their views before the mike (without registering their names in the attendance sheet) as follows. The views of the public as expressed before the mike is presented hereunder:

Sri Rajendra Nayak, Ratansara Village: MCL is polluting the area about which we have also given in the complaint. The Pollution Control Board has issued many show cause notices in last 25 years. I myself gave a complaint to the State Pollution Control Board. MCL has not done any work on pollution and not complying the conditions of Environmental Clearance, Consent to Establish and Consent to Operate order of the Pollution Control Board that's why cancel the public hearing.

After the deliberation of Sri Rajendra Nayak, the Additional District Magistrate,

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Sundargarh in his opening address informed the gathering that the Public Hearing is being conducted as per the instruction of MoEF & Climate Change, New Delhi. He said that, public opinions are very much important in such matter and requested the General public to put forth their opinions one by one on the issue of Environment & Pollution in the event of coming up of the said expansion project and to maintain law and order and peace during the meeting.

Interrupting the welcome address of ADM, the following persons also came forward and expressed their views before the mike (without registering their name in the attendance sheet) as follows:

Smt. Sudharani Raudia, Hemgir Panchayat Samiti, speech 1: "Addressing to the shouting public she asked to bear patience and to maintain silence we will definitely say what we intend to. Since this is the matter of local area and it is getting polluted and meeting is called for pollution related, we will speak of our problems".

Sri Kashinath Rout, Zilla Parisad: "Please maintain silence, please come here to the mikeindividually and whatever you have to say, speak out. Those who are affected by Kulda Mines and different peoples who are working in the mines are having their rights. That's why please maintain silence, many people want this meeting, let them speak".

Some people were shouting as, "mines khulega". Let the mine be open. But they were opposed.

Speaker from Gopalpur Village - "For the last 25 years MCL has opened the mines and since then it's being operating here, but no infrastructure development has been done in the area. During the meeting on 14.11.2017 we said pollution is happening, dust blowing in our areas due to which our people are getting sick. We lost our father, mother, brothers and our friends. We don't want such mine due to which our area will suffer, we will suffer, our area will not develop, will not provide water for drinking and bathing, road, electricity, health facility. We protest the expansion of the mine and request to stop this public hearing".

Smt. Sudharani Raudia, Hemgir Panchayat Samiti, speech 2: "I am also too sad, those people who are here, who are local, who are affected, they are very sad. Since last 3 years MCL is doing politics here. MCL has not taken any major steps on pollution in this area due to which the people are getting sick. There has been hindrance while travelling through the roads, there has been frequent accidents; MCL has not taken any major

steps. Even after giving complaints in writing MCL has not accepted those complaints, so why we should not complain today. MCL has opened the mines, but MCL has not planted the number of trees that were meant to be planted. They have also not provided adequate drinking water. MCL has been in an agreement and according to the agreement they are not planting as many trees they are bound to plant, they are not providing adequate employment. They also agreed they will look after them (people) but MCL has not done his duty. Everything is at zero level. Look at the pollution on the road from Bankibahal to Taparia and Bankibahal to Sundargarh. Till date, there is no 4-lane road, there is only one road which is PWD road-cum-public road which is being used by MCL. And in this area, pollution is generated. We will eat coal dust here and officers will roam in air-conditioners cars. I hereby request to the administration to end this meetings because I am the Block Chairman of the affected area. It is my duty to think about the wellbeing of this block. Today I am standing here with the public and I will be talking about the public and I will be with them. You come and check what the guidelines are and correct the deficient works. It is not that public will not support you, one day they will support, you are here today because of public support only otherwise you wouldn't have entered in this area. People have lost their land but don't you think they are eligible for providing drinking water. In summer season we come to MCL for drinking water but MCL provides only two tanker of water to the area. How thousands of people will survive with these two tankers? Due to mining, groundwater in the area is depleting. It is your first priority to provide drinking water. People who came from Pollution Control Board, I request them to see how much coal dust deposited on leaves of the trees, see the road condition, they are not sprinkling water on the road. How we can support you. would we die ourself, what favor you have done on us".

Sri Rajendra Nayak, Ratansara Village, Speech-2: "I had requested them (Pollution Control Board) that, I personally gave complaint to PCB, they came on 25<sup>th</sup> and carried inspection. I requested them that when the inspection will be carried on, I should be called. They came. Some conditions area given by SPCB to MCL for the functioning of the mine. In it, the CTO for the operating of the mines, the CTE for the Opening of the mines and Environmental Clearance conditions are laid. If there is violation of any one of the conditions, the mines should not run and this is known to the SPCB. This is in the conditions that during extraction of coal, there should be provision of sprinkling of water. Such machines should be deployed which generates less dust during mining, also the

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internal road within the mines should be blacktopped. If not blacktopped, sufficient water sprinkling should be done to avoid generation of dust, but MCL has not implemented this. There should be provision for water sprinkling over CHP that has not been done. When the trucks leave the mines, its wheels should be washed with water, which is not being done. When trucks leaves the mine area, tarpaulin covers should be there from top to bottom, and this violations is continuing till date, also the dust that is getting suspended in the air in the villages should be cleaned but it is not being done. You people can see in front of the Balinga Outpost, 1ft of coal dust is deposited; the bikers are dying due to accidents. After so many violations in the last 25 years, 13 people have died in the overburden dump slide, still MCL is not getting aware. Retaining walls should be constructed along the OB dumps, SPCB is also aware of that. After all this, why consent has given to the mine by SPCB. See what has happened in the Delhi where 25 lakhs people have died in one year due to pollution, this is all due to the mistake of Pollution Control Board, this is all due to the mistake of MCL, this is all due to the mistake of corrupt officers. Why our children will die and for whom. I request SPCB to record this, first they (MCL) comply all the conditions, then conduct public hearing. We are stopping the meeting here. You people record this. Why you come for hearing after so much pollution. In last one month do you have conducted any camp, all ministers oppose this no one has came. What you have done in this one month?"

Again addressing to the shouting peoples ADM said: "You, the people please listen to me for a moment. As the Additional District Magistrate, I have come here in person. I totally agree with you. Your statements will be recorded if you speak in order. Whatever you, the people will say, whether the mine will operate or close this decision can neither be taken by the District Administration nor by the General Manager nor by the officials from the Regional Office, State Pollution Control Board. You people all are called here to render your opinion on Environment & Pollution. You can put your views whatever you say will be recorded and sent to MoEF & CC, New Delhi, GoI. They are the competent authority to take decision. So please give your views on environment one by one".

Sri Sishir Choudhary (Balinga Civilian/Land oustee): "I have a question and I request you all to listen to it. My question is to the MCL authority. Before this also, public hearings have been held. In those meetings too, these questions were raised against which they are not willing to take any steps. This is the biggest fault. 30 years before we

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campaigned and supported to open the mines, but today we are protesting for closure of the mine. Why? Can you answer this question? Is MCL has their any authority to check the pollution along the roads? Do they have any responsibility or not? Look at all the trees and then you need not to ask anyone and there will be no need of any public hearing. Wherever you (MCL) have gone and committed to the people, you did not keep your promises. You have not complied to anything which you have said earlier. Today I ask a question, is today a holiday for MCL employees? Answer me. If they have been from Odisha state Govt. their salary would have been stopped and would have been displayed what are they doing? Why are they wandering here & there? How many people are required here? You should give me tomorrow a list. I know them by name wherever each of them is roaming? The people of this locality are simple so you are doing everything bypassing them. Why the road is not been widened? Why are there accidents? Roads are getting jammed and blocked due to which people are not being able to reach their destination within time. Who is responsible for that? Tell us when you will do it. We (MCL) cannot do it, order will come from higher authority then we will do, these pleas will not work. First answer the old issues, then talk about the new things. (Repeated the same line)".

Sri Kashinath Rout (Zilla Parishad): "We are with the people on last 14th Nov. I was present there and on that day we collectively protested against this and the meeting was cancelled but I have to say something regarding the statement of Rajendra. We went to the Collector, Sundargarh on last 3<sup>rd</sup> (date). He has given some different kinds of directives to fulfill the demands and it is there in writing. Any one among you can have a look at it if you want. The public does not want this meeting to be held. I am with the public. You should not have any doubts, the SPCB has come, the ADM is here and the GM is here".

Civilian (1) (name not known): "Today Pollution Control Board is here, what they observed we want to know. First they should camp in our villages for 5-7 days with affected people. They should see what problem we are facing. Rest of his speech was inaudible due to too much noise".

Civilian (2) (name not known): "My request to SPCB, our Chairperson has spoken, our Zilla Parishad has spoken, what else you want to hear? Not a single person from this public wants this mine to run. I am not here to give lectures here. Close the mine".

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Civilian (3) (name not known): "We, the people from this locality, public representatives, the affected villagers, displaced and affected brothers and sisters, poor, sad mother and aunts want that the public hearing not to be held and the public hearing should be stopped. First of all, the mine that has deprived the people for last 25years should compensate the people for the rights deprived".

Civilian (4) (name not known): "He requested to conduct Gramsabha first then public hearing".

On repeated requests from public to speak on pollution, Regional Officer, SPCB, Jharsuguda replied that we listened your views, I am not here to reply any question we are here to listen the views of public and record it and send to the competent authority.

ADM, Speech 3: "Whatever you are saying, I am listening but whatever you want to say, come here in front of the mikeand speak. I have come here to listen to you, the people only and record your views for onward submission to proper quarters for decision".

Smt. Purabi naik, Zilla parishad member: "The public hearing may be closed".

Smt. Sudharani Raudia, Hemgir Panchayat Samiti, speech 3: "I have kept my views in front of the State Pollution Control Board, Zilla Parishad, all the sarpanch from this area that this public hearing meet may be closed here. We have expressed our difficulties stating the problem of pollution here".

Civilian 5 (name not known): "When the last public hearing was held in Barpali, the ADM was requested to close it and the ADM closed the meeting but that same ADM, being here is not closing the public hearing. I am very hurt as I cannot understand why".

ADM Speech 4: "My decision is not final and the decision from the Regional Officer, State Pollution Control Board is also not final. State Pollution Control Board, Odisha has fixed this date to conduct public hearing and Collector, Sundargarh authorized me to supervise and preside over the meeting. I have been sent here by the Collector as his representative to preside over the meeting. If you have to avoid the meeting, you can but do not obstruct in performing my legitimate duties".

After this ADM, Sundargarh, Regional Officer, SPCB, Jharsuguda and other officials waited up to 01:00PM and invited the public but no one has came forward to speak or give their opinion.

Addl. District Mapistal & of

ADM Final speech: "As nobody is coming forward, so it is declared that the today's meeting is ended".

Further, a number of villagers/local people who are directly affected and & public representatives who were present in the public hearing meeting said to the ADM, Sundargarh that they were not allowed to speak by the public. The ADM asked all such people to given their opinion/views on the proposed project in writing which can be intimated to the proper authorities. The individual written statements (61 Nos.) received from the people supporting the project are enclosed as Annexure-1.

The representation vide No.Nill Dtd:10.01.2018 received from the Sarpanch, Balinga, G.P, Sundargarh, supporting the project is enclosed as Annexure-2.

Under above circumstances and views of the people, appropriate decision in the matter may kindly be taken.

Regional Officer, SPCB Jharsuguda

Regional Officer State Pollution Control Borra JHARSUGUE

Sri Bhaskar Chandra Turuk

Addl. District Magistrate Magistrate SundargarhSUNDARGARH



# ରାଜ୍ୟ ପ୍ରଦୂଷଣ ନିୟକ୍ଷଣ ବୋର୍ଡ, ଓଡ଼ିଶା



(ଜଙ୍ଗଲ ଓ ପରିବେଶ ବିଭାଗ, ଓଡ଼ିଶା ସରକାର)

ପରିବେଶ ଭବନ, ଏ/୧୧୮, ନାଳକଣ ନଗର, ସୁନିଟ୍-୮, ଭୁବନେଶ୍ର-୭୫୧୦୧୨ ଜାରିଖ : 06.12.2017

ଫ୍ରଖ୍ୟା : 15833 /IND-II-PH-741

ବିଜ୍ଞାପନ

ଏତଦ୍ୱାରା ସମୟଙ୍କ ଅବଗତି କ୍ଲିମରେ ଜଣାଇ ଦିଆପାଉଅଛି ପେ, ମେସର୍ସ ମହାନଦା କୋଲ୍ଫିଲ୍ସ ଲିମିଟେଡ୍, ଓଡ଼ିଶାର୍ ସୁନ୍ଦରଗଡ଼ ଜିଲ୍ଲା, ହିମଗିରି ଅଞ୍ଚଳରେ ଅବଶିତ ବସୁଷରା ସେଡ୍ରରେ ୬୩୪.୨୦୫ ହେକ୍ର ପରିମିତ ଅଞ୍ଚଳରେ ଅବଶିତ କୁଲ୍ଡା ସମ୍ପସାରିତ ଖୋଲା କୋଲ୍ଲ୍ୟା ଖଣି ପ୍ରକଲର କୋଲ୍ଲା ଉତ୍ତୋଳନ ଷମତା ବାର୍ଷକ ୧୦ନିୟୁତ ଟନ୍ରୁ ବାର୍ଷିକ ୧୫ ନିୟୁତ ଟନ୍କୁ ବୃଦ୍ଧ କଲ୍ଲିଷ୍ଟା'ନିମରେ ପରିବେଶୀୟ ମଞ୍ଚୁରୀ ପାଇଁ 'ସର୍ବସାଧାରଣ ଶୁଣାଣି' ତା୧୪ା୧୧।୨୦୧୬ରିଷ ଦବା ୧୦.୦୦ ଘଟିକା ସମୟରେ ସୁନ୍ଦରଗଡ଼ ଜିଲ୍ଲା, ହିମଗିରି ହକ ଅନ୍ତର୍ଗତ ବର୍ଦ୍ୱାଲା (ବାଙ୍କାବାହାଲ) ମଧ୍ୟଇଂରାଜ୍ୟ ବିଦ୍ୟାଳୟଠାରେ ହେବାକୁ ଧାର୍ପ୍ୟ ହୋଇଥିଲା । ଉଚ୍ଚ ଶୁଣାଣିର ବିଶେଷ ତଥ୍ୟ ବିଭିନ୍ନ ସମ୍ମାଦପତ୍ର ସଥା: "New Indian Express" ଏବଂ "ଧରିତ୍ରୀ"ରେ ତା୧୩ା୧୦।୨୦୧୬ରିଖରେ ବିଜ୍ଞାପନ ପ୍ରକାଶ କରାଯାଇଥିଲା । କିନ୍ତୁ କେତେକ ଅନିବାର୍ଯ୍ୟ କାରଣବଶତଃ ତା୧୪।୧୧।୨୦୧୬ରିଖରେ ହେବାକୁ ଥିବା ସର୍ବସାଧାରଣ ଶୁଣାଣିକୁ ସ୍ୱରିତ ରଖାଯାଇଥିଲା । ଉଚ୍ଚ ସର୍ବସାଧାରଣ ଶୁଣାଣି ତା୧ଠା୦୧।୨୦୧୮ରିଖ ଦିବା ୧୧.୦୦ ଘଟିକା ସମୟରେ ସୁନ୍ଦରଗଡ଼ ଜିଲ୍ଲା ହିମଗିରି ହକ୍ ଅନ୍ତର୍ଗତ ନିଲିପଡ଼ା, ବସୁନ୍ଧରା ଷେଡ୍ରରେ ଅବସିଟ ଜଗନାଥ ମହିର ସମ୍ଭୁଖ ଷ୍ଟଡିୟମ ପଡ଼ିଆଠାରେ ହେବାକୁ ଥିବା ପୁନଃ ନିର୍ବାରିତ ହୋଇଛି ।

ଦ୍ୱାରତ ସରକାର ପରିବେଶ, ଜଙ୍ଗଲ ଏବଂ ଜଳବାପୁ ପରିବର୍ତ୍ତନ ମନ୍ତଣାଳୟର ପରିବେଶୀୟ ମଞ୍ଚୁରା ନିମିତ୍ତ ଅଧିଯିତ୍ୱର୍ମି ଫୁଖ୍ୟ ଏସ୍.ଓ. ୧୫୩୩ (ଇ), ତା୧୪ା୦୯/୨୦୦୬ ଅନୁସାସୀ ରାଜ୍ୟ ପ୍ରତୁଷଣ ନିସରଣ ବୋର୍ଡ, ଓଡ଼ିଶା, ଭୁବନେଶ୍ୱରଙ୍କୁ ପ୍ରବିପ୍ନାଧାରଣ ଶୁଣାଣି କରିବାର ଷମତା ପ୍ରଦାନ କରିଛନ୍ତି । ଏଥିନିମିତ୍ତ ବୋର୍ଡ, ସର୍ବସାଧାରଣଙ୍କ ସମେତ ପ୍ରକୃତ ଅଧିବାସୀ, ପରିବେଶୀୟ ଫୁସା ଏବଂ ପ୍ରସାବିତ ପ୍ରକଳ୍କ ସାପନ ହେଉଥିବା ସାନରେ ଜନବର୍ଗ, ପ୍ରକଳ୍କ ପୋଗୁଁ ଉଚ୍ଛେଦ ହେଉଥିବା ବାସିଦା, ପ୍ରକଳ୍କ ପୋଗୁଁ ପରିବେଶୀୟ ପ୍ରଭାବ ସମ୍ବଦ୍ଧାର ପ୍ରସ୍ଥାବ, ମତାମତ, ମନ୍ତବ୍ୟ ଓ ଆପତ୍ତି ପତ୍ର ଆହାନ କରୁଛନ୍ତି । ଏଥିନିମିତ୍ତ ବ୍ୟକ୍ତି ଅର୍ଥ କେଳ ନିମ୍ମତେ ବୁଝାସାଉଛି:

(କ) ପରିବେଶୀୟ ମଞ୍ଚୁରୀ ଦ୍ୱାରା ପ୍ରଭାବିତ ହେଉଥିବା ବା ହେବାକୁ ଥିବା ସେକୌଣସି ବ୍ୟକ୍ତି । (ଖ୍) ପ୍ରକଲ୍କ ସମ୍ବନ୍ଧିତ ପରିବେଶୀୟ ମଞ୍ଚୁରୀ ପାଇଁ ଆଗତ ଦରଖାସ୍ତ ପରିପ୍ରେଷୀରେ ତହିଁ ଉପରେ କର୍ଡ୍ହିତ୍ୱ ଜା**ହିଣ୍ଡ** କରିପାରୁଥିବା କୌଣସି ବ୍ୟକ୍ତିବିଶେଷ ।

(ଗ) ପରିବେଶ ଷେତ୍ରରେ କାର୍ଯ୍ୟ କରୁଥିବା କିନ୍ସା/ଏବଂ ପ୍ରସ୍ତାବିତ ପ୍ରକଲ ଦ୍ୱାରା ପ୍ରଭାବିତ ହେଉଥିବା (ପଞ୍ଜାକୃତ ବା ଅଣପଞ୍ଜାକୃତ) ସେକୌଣସି ବ୍ୟକ୍ତି ସମୂହଙ୍କ ସଂଘ ।

(ଘ) ପ୍ରସ୍ତାବିତ ପ୍ରକଲର ପ୍ରାନୀୟ ସୀମାଭୁଲ ନିକଟବର୍ତ୍ତା ଅଞ୍ଚଳରେ ପେକୌଣସି ପ୍ଲାନୀୟ କର୍ତ୍ତୃପଷ ।

ଉପରୋଚ୍ଚ ବ୍ୟକ୍ତିମାନେ ସେମାନଙ୍କର ପ୍ରପ୍ରାବ, ମତାମତ, ମନ୍ତବ୍ୟ ଏବଂ ଆପତ୍ତି ଇତ୍ୟାଦିକୁ ସଦସ୍ୟ ସଚିବ, ରାଜ୍ୟ ପ୍ରଦୁଷଣ ନିୟରଣ ବୋର୍ଡ, ଓଡ଼ିଶାଙ୍କୁ ଲିଖିତ ଆକାରରେ ଏହି ବିଜ୍ଞାପନ ପ୍ରକାଶନର ୩୦ ଦିନ ମଧ୍ୟରେ ରେଜିକ୍ତି ଡାକ ଯୋଗେ ଜଣାଇ ପାରିବେ। ଏନାନ୍ଥଡା ଉଚ୍ଚ ପ୍ରସ୍ତାବିତ ପ୍ରକଳ୍କ ଉପରେ ଲିଖିତ ବା ମୌଖିକ ଭାବେ ମତାମତ ଦେବା ପାଇଁ ଇଚ୍ଚଳ ବ୍ୟକ୍ତିମାନେ ଡା୧ଠାଠ୧/୨୦୧୮ରିଖ ଦିବା ୧୧:୦୦ ଘଟିଳା ସମୟରେ ସୁଦରଗଡ଼ ଜିଲ୍ଲା, ହିମଣିରି ବ୍ଲକ୍ ଅନ୍ତର୍ଗତ ଚିଳିଲିପଡ଼ା, ବୁସନ୍ଧର ଷେତ୍ରରେ ଅବସ୍ଥିତ ଜଗନ୍ନାଥ ମଦିର ସନ୍କୁଖ ଷାଡ଼ିସମ ପଡ଼ିଆଠାରେ ଧାର୍ଯ୍ୟ ସର୍ବସାଧାରଣ ଶୁଣାଣି ସମୟରେ ମଧ୍ୟ ଉପସାପନ କରିପାରିବେ।

ି ପ୍ରପ୍ଲାବିତ ପ୍ରକଲ୍କ ବିଷୟରେ ବିଶଦ୍ ଭାବରେ ଜାଣିବା ପାଇଁ ପରିବେଶୀୟ ପ୍ରଭାବ ମୂଲ୍ୟାୟନ ବିବରଣୀ (Environmental Impact Assessment) ଏବଂ ଏହାର ନିର୍ବାହୀ ସାରାଂଶ (Executive Summary) ଓଡ଼ିଆ ଏବଂ ଇଂରାଜୀ ଭାଷାରେ ନିମ୍ନଲିଖିତ ସ୍ଥାନମାନଙ୍କରେ ମିଳିପାରିବ ।

୧. ଜିଲ୍ଲାପାଳଙ୍କ କାର୍ଯ୍ୟାଳୟ, ସୁଦରଗଡ଼ I

୨. ଜିଲ୍ଲା ଶିଲ୍ଲ କେନ୍ଦ୍ର, ସୁନ୍ଦରଗଡ଼ ।

୩. ଜିଲ୍ଲା ପରିଷଦ ମୁଖ୍ୟ ନିର୍ବାହୀ ଅଧିକାରୀ, ସୁଦରଗଡ଼ ।

୪. ମୁଖ୍ୟ କାର୍ଯ୍ୟାଳୟ, ରାଜ୍ୟ ପ୍ରଦୂଷଣ ନିୟରଣ ବୋର୍ଡ଼, ଓଡ଼ିଶା, ପରିବେଶ ଭବନ, ଏ/୧୧୮, ନୀଳକଣ ନଗର, ଭୁବନେଶ୍ୱର – ୭୫୧୦୧୨।

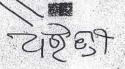
ଆଞ୍ଚଳିକ କାର୍ଯ୍ୟାଳପ୍, ରାଜ୍ୟ ପ୍ରଦୂଷଣ ନିସ୍କରଣ ବୋର୍ଡ, ଓଡ଼ିଶା, ଝାରସୁଗୁଡ଼ା।

୬. ଜଙ୍ଗଲ ଓ ପରିବେଶ (ପରିବେଶ) ବିଭାଗ, ଓଡ଼ିଶା ସରକାର, ଭୁବନେଶ୍ୱର ।

ଏତଦ୍ ବ୍ୟତୀତ ପରିବେଶୀୟ ପ୍ରଭାବ ମୂଲ୍ୟାୟନ ବିବରଣୀର ନିର୍ବାହୀ ସାରଂଶ (Executive Summary) ଓଡ଼ିଆ ଏବ୍ ଇଂରାଜୀ ଭାଷାରେ ରାଜ୍ୟ ପ୍ରଦୂଷଣ ନିୟନ୍ତଣ ବୋର୍ଡ, ଓଡ଼ିଶା ୱେବ୍ସାଇଟ୍ www.ospcboard.orgରୁ ମଧ ମିଳିପାରିବୀ । ଏ ବିଷସରେ ସ୍ୱବିଶେଷ ବିବରଣୀ ପାଇଁ ରାଜ୍ୟ ପ୍ରଦୂଷଣ ନିୟନ୍ତଣ ବୋର୍ଡ, ଓଡ଼ିଶାର୍ ଆଞ୍ଚଳିକ କାର୍ଯ୍ୟାଳୟ, **ଝାରସୁଗୁଡ଼ାସି**ଟ

ଆଞ୍ଚଳିକ ଅଧିକାର କିଁସା ଭୁବନେଶ୍ୱରସ୍ଥିତ ମୂଖ୍ୟ କାର୍ପ୍ୟାଳୟରେ ସବସ୍ୟ ସଚିବଙ୍କ ସହ ପୋଗାପୋଗ କର୍ଗପାଇପାରେ ।

ସ୍ୱା./– ସଦସ୍ୟ ସଚିତ୍



-09-00 EISH-V

Central Library

S.P.C. Board

A/118, Mekantha Nagar UNit-VII, Bhubaneswar-12 The individual written statements of 61 participants along with representation submitted by Sarpanch Balinga, Sundargarh, present during the Public Hearing held on 10.01.2018 are mentioned below (The details are enclosed in Annexure 1 & 2.)

- 1. **Smt. Sheela Kalo, Balinga Village**: "We are the project affected family of Basundhara open cast mine. We welcome the expansion of Kulda Open cast project and also we request MCL authorities to take adequate control measures to make this area pollution free."
- 2. **Smt. Meena Badhai, Balinga Village**: "I belong to the village Balinga which was acquired by MCL. For the development of this area, the expansion of Kulda Project is a must and also I request to take immediate action to control the pollution so that we will be obliged."
- 3. Shri Ravindra Kumar Khutuan, Bankibahal Village: "First of all MCL authorities should take action to control the pollution and also tree plantation should be taken to make this area pollution free along with this, the project affected people should be given employment and also basic amenities should be given importance for the Project affected families. I expect MCL authorities will take immediate action and also I hope they will do it. I fully support this public hearing in favour of expansion of Kulda project."
- 4. Smt Ahalya Naik, Bankibahal Village: "MCL authorities should take adequate action to control the pollution and also plant trees to make the environment clean along with this, the project affected people should be given employment and also basic amenities should be given importance for the Project affected families. I expect MCL authorities will take immediate action and also I hope they will do it. I fully support this public hearing in favour of expansion of Kulda project."

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- 5. **Smt Thunnu Bhua, Balinga Village**: "I support this expansion from my core of heart because of this overall development of this area along with scope for employment will be increased. Along with this I demand for the fulfilment of the following points:
- 1. Pollution due to coal dust should be controlled by means of modern technology.
- 2. Employment should be given to the project affected people of this area. If these works will be taken care whole heartedly, then I support the expansion of this project."
- 6. Shri Chintamani Mahanandia, Balinga Village: "I hereby submit this in writing that I am one of the displaced person due to MCL Mine. If permanent employment to the youth along with the development of this area will be made by MCL along with proper action for pollution control measures by MCL then I don't have any objection for the expansion of this project."
- 7. Shri Ghanshyam Kua: Balinga Village: "MCL authorities should take adequate measures for pollution control and tree plantation to make environment clean. Along with this employment should be given to the unemployed youth. I hope MCL will take necessary action at the earliest. I fully support this Public hearing in favour of expansion of this project. I have no objection for this."
- 8. **Shri Sundarmani Mahanandia**: Balinga Village: "MCL is taking action for pollution control measures. Along with this they should plant trees for clean environment. And also give employment to unemployed youth. I hope MCL will take immediate action for this. I support the expansion of this project."
- 9. Shri Umesh Kala sai: Bankibahal Village: "MCL authorities should take adequate action for pollution control along with tree plantation to

Addl. District Magistrate

make the environment clean. Along with this they should give employment along with minimum basic necessities. I expect with hope and due faith that MCL will do the above. I fully support this Public hearing for expansion of the project."

- 10. Smt Sukanti Nayak : Balinga Village : "I welcome this Public hearing and necessary adequate measures should be taken for the control of coal dust to make this area pollution free for which we will be obliged."
- 11. Shri Sunny Ari Kutuan: Bankibahal Village: "I welcome the expansion of this project. Due to expansion of this project, there will be lot of development in the nearby area. But, necessary action should be taken for the dust pollution."
- 12. Shri Satyanarayan Naik: Bankibahal Village: "I fully co-operate and support this public hearing for expansion of Kulda opencast project. Because of coal mines our area has been developed and also roads have been constructed. The children of all the villages of nearby areas has got scope for employment. If the Kulda expansion will be made, I hope this area will again economically develop. I request to take adequate action to restrict pollution due to plying of coal tippers on road so that it will help smooth movement of the people."
- 13. **Smt. Jemini Majhi**: **Balinga Village**: "I fully support this Public hearing. Due to mining in our area, the area is being developed and the children are getting jobs. I hope due to expansion of the Kulda Mines the unemployed youth will get jobs."
- 14. Shri Prafulla Naik: Balinga Village: "I fully support the Public hearing for expansion of Kulda Opencast project. I hope and have faith that if mines will be there our people will get job. And also this area is being developed day by day because of which I support this expansion."

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- 15. **Shri S.Budha, Balinga:** "I am one of the member of the project displaced people and also I welcome this public hearing for expansion of the project. Action should be taken so that there will be no pollution due to coal dust."
- 16. **Shri Tikeshwar Majhi, Balinga Village :** "I welcome this public hearing for Kulda expansion project. We will be obliged if there will be no dust on the road along with supply of drinking water to us."
- 17. **Shri Mohit Bag, Bankibahal Village:** "I welcome the public hearing for expansion of Kulda Expansion project. If there will be expansion then this area will develop, and economical status will also develop. Due to this I hope the Kulda Expansion project should be made at the earliest."
- 18. **Shri Susanta Kutuan, Bankibahal Village:** "I am one of the member of displaced family due to coal mines of MCL. I welcome the Public hearing for Kulda expansion project. Action should be taken to control the coal dust so that our area should not be polluted."
- 19. **Shri Anil Baiga, Balinga**: "I welcome the Public hearing for Kulda Expansion project. If there will be expansion of this project, there will be development in this area. That is why the environment clearance for this project should be given at the earliest."
- 20. **Smt Asamabati Naik**, **Bankibahal Village**: "Due to coal mining in our area, MCL has taken up lot of development work by them and also different development work has been done by MCL. Every year in summer season, drinking water is being supplied to every villages of this area by MCL. If there will be expansion of Kulda Opencast project then this area will economically progress and develop. I was present in the public hearing and I fully support this."
- 21. Shri Bulu Bagh, Bankibahal Village: "Due to coal mines there is no development in this area whereas due to coal dust our residential

Addl. District Magistrate SUNDARGARH buildings are being damaged and also our health is also being effected. That's why if below mentioned points are being taken care then I don't have any objection in expansion of this project:

- 1. Drinking water supply.
- 2. Coal dust suppression by water.
- 3. Employment for unemployed.

That's why I request to complete the above works so that I have full support for the expansion of this project."

- 22. **Shri Janak Ram Kalsar, Village Bankibahal**: "Due to coal mines we are having lot of problems. Those are:
- 1. Heavy dust pollution.

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- 2. Water pollution & evaporation.
- 3. Employment is not given to unemployed youth.

If these demands are fulfilled then, I have support for this expansion."

- 23. Shri Dhabaleshwar Panda, Village Balinga: "The public hearing which is being held for the expansion of Kulda opencast project, I internally agree with this. Because of this there is lot of development in this area, issue of unemployment, drinking water supply along with education and road development is being made by MCL. And also I request the MCL authorities to plant trees for making clean environment."
- 24. Shri Bhojraj Naik: Village Bankibahal: "I am a permanent resident of Bankibahal village which is being affected by Kulda OCP. I welcome the public hearing for Kulda expansion project. Along with this I request to take necessary action for taking adequate control measures for pollution due to mines in this area and supply adequate drinking water."

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- 25. **Shri Hemanta Pradhan, Village Bankibahal**: "I am a permanent resident of Bankibahal village which is being affected by Kulda OCP. I welcome the public hearing for Kulda expansion project. Along with this our area should not be polluted due to mines for that action should be taken and also for supply of drinking water adequate action should be taken."
- 26. **Smt Bisakha Chhitiki, Village Bankibahal**: "I welcome the Public hearing held for expansion of Kulda OCP. Due to expansion of this mine there will be lot of development in this area. Adequate action should be taken for suppression of coal dust."
- 27. **Shri Dishikesan Rout, Village Bankibahal**: "I am one of the member of the displaced family due to MCL coal mines. I welcome the Public hearing for environmental related issues. I also request to take necessary action for suppression of coal dust in our area so that there will be no pollution for which I will be obliged."
- 28. Shri Jalandhar Naik, Village Bankibahal: "I am one of the member of the displaced family due to MCL coal mines. I welcome the Public hearing for environmental related issues. That is why I request to take necessary action for suppression of coal dust by spraying water daily because of which we will be obliged."
- 29. **Smt Ukia Barik, Village Bankibahal**: "I am one of the member of the displaced family due to MCL coal mines. I welcome the Public hearing for environmental related issues. Along with this I also request to take adequate necessary action to make our area pollution free due to coal dust."
- 30. **Smt Raibari Naik, Village Balinga**: "I was present in the public hearing conducted on 10.01.2018. MCL should take action to control pollution and also plant trees to make the environment clean. Along with

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this they should provide employment and bare minimum necessities. I have full faith and hope on MCL authorities. I fully support this public hearing for the expansion of Kulda opencast project."

- 31. **Shri Dagara Basara, Village Balinga**: "I came to know that, the public hearing is being conducted for the development of our area. This is a very good thing because of which our area will be developed. Unemployed will get jobs, there will be development of our area. That's why I am fully agreed for this."
- 32. **Ranjit Manjhi, Village Balinga**: "I am one of the member of the displaced family due to MCL coal mines. I welcome the Public hearing for environmental related issues. Along with this I request to take adequate necessary action so that there should not be any pollution due to coal dust."
- 33. **Binod Badhai, Village Balinga**: "On dated 10.01.18, public hearing is being conducted in Basundhara field for which I am very much happy because if there will be expansion of mines, then there will be development of the area, people will get more income, unemployed will get jobs. I fully support, if this will happen."
- 34. Shri Shatrughna Rohidas, Village Balinga: "I am a permanent resident of village Balinga and my house and land has been acquired by mines. I am in support of the public hearing held near Basundhara Jagannath temple. For the progress and development of this area, the expansion of Kulda opencast is necessary. I also request to take necessary action to control the pollution due to coal dust so that we will be obliged."
- 35. **Smt Premashila Sahu, Village Balinga**: "We welcome the public hearing conducted for Kulda expansion project for the development of

Addl. District Magistrate SUNDARGARH

our area and we also request to take action to make our area pollution free due to coal dust."

- 36. **Shri Lavanidhar Naik, Village Balinga**: "I welcome the Public hearing for environmental related issues. I also request to supply drinking water so that we will be obliged."
- 37. **Smt Brundabati Naik, Village Balinga**: "I was present in the Public hearing conducted for the expansion of Kulda OCP and I fully support to this. Due to mining in this area, day by day this area is being developed and I hope if the Kulda OCP expansion will be made, then the development will be more. If the Pollution control measures will be strengthened on road then, the general public can smoothly travel and hope MCL authority will take care of this."
- 38. **Smt Manjari Naik, Village Balinga**: "The public hearing conducted on 10.01.2018 for expansion of Kulda Opencast mine is a very good thing. I want that the expansion should be made so that this area will develop, and the youth will get jobs. I don't have any objection for the expansion of this project."
- 39. **Smt Hemavati Sah, Village Balinga**: "I welcome the Public hearing for environmental related issues. I want that our area should develop due to expansion of the project. I request the MCL authorities to take adequate control measures for pollution."
- 40. **Smt Kamalini Basra, Village Balinga**: "I welcome the Public hearing for environmental related issues. I also request by taking care of pollution, the development of this area should be made by expansion of this project."
- 41. **Shri Debanand Basra, Village Balinga**: "I welcome the Public hearing for environmental related issues. Because of which our area will

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be developed. MCL should control the air pollution and supply the drinking water to the public."

- 42. **Shri Kalo Bhoi, Balinga**: "I am one of the member of the displaced family due to MCL Basundhara opencast project. I was present in the public hearing conducted. Due to the MCL mines if our area will develop & the unemployed youth will get job then I support this and also I request MCL to take care of the environment. If the above work will be done then I don't have any objection for expansion."
  - 43. **Smt Punni Choudhary, Village Balinga**: "I am one of the member of the displaced family due to MCL Basundhara opencast project. I support this public hearing and also request to take care the pollution due to coal dust."
  - 44. **Smt Umashiba Deka, Balinga:** "I fully support the public hearing conducted for the expansion of Kulda OCP for which our area will develop. Water pollution should be controlled and drinking water arrangement should be made for the people. Pollution due to coal dust should be controlled."
  - 45. **Smt Harapriya Patta: Village Balinga:** "I was present in the public hearing conducted for expansion of Kulda OCP. MCL should take adequate action to control pollution, by planting trees clean environment should be maintained. Along with this employment should be given to the unemployed youth. I hope MCL will take care of all these points. I whole heartedly support this public hearing and I have no objection in expansion of this project."
  - 46. **Shri Guru Patta, Village Balinga**: "I was present in the public hearing conducted for expansion of Kulda OCP. MCL authorities should control the pollution and plant trees for clean environment. Along with this, the unemployment problem for the displaced area along with bare

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minimum requirement of public should be met by MCL for which I have full faith on MCL that they will do it. I fully support this public hearing for the expansion of Kulda OCP."

- 47. **Shri Bhagyabata Seth, Village Balinga**: "I am one of the member of the displaced family due to MCL Basundhara opencast project. I welcome the public hearing conducted for expansion of Kulda OCP and also I hope, pollution due to coal dust will be controlled for which we will be obliged."
- 48. **Shri Dibakar Naik, Village Balinga:** "I was present in the public hearing conducted for expansion of Kulda OCP. MCL authorities should control the pollution along with plants trees for a clean environment. Along with this they should also provide employment and the basic necessities of the people. I hope MCL will do this. I fully support the public hearing conducted for the expansion of the project."
- 49. **Shri Umesh Chandra Majhi, Village Balinga:** "I am one of the permanent resident of village Balinga and being displaced due to Kulda OCP. I welcome the Public hearing conducted for the expansion of Kulda OCP. If water sprinkling will be made on the main road, then we will get rid from the dust pollution."
- 50. Shri Lipun majhi, Village Balinga: "I was present in the Public Hearing conducted for Kulda OCP. MCL authorities should control the pollution along with plant sufficient trees for clean environment and also take care of unemployment issues and basic necessities of the people. I have full faith on MCL that they will do this. I fully support this public hearing."
- 51. **Smt Himani Majhi, Village Balinga:** "I fully support the public hearing conducted for the expansion of Kulda OCP because of this our area will develop and employment will also increase. Whatever problem

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is there, if that will be solved, then I don't have any problem for the expansion of the project."

- 52. **Smt Bimala Bhua, Village Balinga:** "I support the public hearing conducted for the expansion of Kulda OCP related to environmental issues. Because of which our area will develop and income generation will be created and also I demand the following:
- 1. The coal dust pollution should be controlled by the advanced techniques available.
- 2. Water pollution should be stopped along with permanent solution for drinking water.
- 3. Employment should be given in mines to the unemployed youth of this area.
- If the above demands will be met, then I don't have any objection for expansion of this project."
- 53. Shri Gautam Bhoi, Village Balinga: "I was present in the Public Hearing conducted for Kulda OCP. MCL authorities will take adequate measures to control the pollution. They should plant sufficient trees to make the environment clean. Along with this they should look after the unemployment problem and also provide basic necessities to the people. I have full faith on MCL that they will do this. I fully support this public hearing."
- 54. Shri Vikas kumar Choudhary, Village Balinga: "I am one of the displaced person due to Kulda OCP. I welcome the Public Hearing conducted for Kulda OCP. I request MCL to supply drinking water for which we will be obliged."
- 55. **Shri Akash Choudhary, Village Balinga:** "I am one of the permanent resident of the Village Balinga displaced due to Kulda mines of MCL. I welcome the Public Hearing conducted for Kulda OCP, And also

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I request to take necessary adequate measure to control the dust pollution."

- 56. Shri Rajendra Kalo, Village Tikilipara: "I am one of the permanent resident of village Tikilipara. I fully support the Public Hearing conducted for expansion of Kulda OCP. For the economical and social development of our area, the expansion of this project is very much essential. I also request to take adequate measures to control air and water pollution."
- 57. **Shri Bhupendra Naik, Village Barpali:** "I was present in the Public Hearing conducted for expansion of Kulda OCP and also I fully support this. Due to the opening of mines in this area, the area is being developed along with income generation for people, drinking water for people and higher education for children which results in better job opportunity. I hope if the expansion of Kulda OCP will be made then lot of problems of this area will be solved."
- 58. **Shri Mahesh Kalo, Village Balinga:** "I am one of the displaced person of village Balinga due to Kulda mine. I support the public hearing conducted for the expansion of Kulda OCP. The expansion of Kulda OCP is very much required for the progress and development of this area. I request you to take necessary adequate control measures to control the pollution for which we will be obliged."
- 59. **Shri Sachendra Majhi, Ex-Sarpanch, Duduka GP:** "I was present in the public hearing conducted for the expansion of Kulda OCP of MCL. I fully support this. Because of these mines, our area is being developed and the youths are getting jobs. I hope if the expansion will be made for Kulda OCP, then the unemployed youth of this area will get jobs."
- 60. Shri Sandeep Kumar Rai, Village Gopalpur: "I am one of the affected displaced person due to MCL mines. I support this public

Addl. District Magistrate, SUNDARGARH hearing conducted for the expansion of Kulda OCP with regards to environmental issues."

61. Shri Madhusudan Patel, Village Tikilipara: "I am one of the permanent resident of village Tikilipara and being affected due to Basundhara West Mines. I support this public hearing conducted for the expansion of Kulda OCP with regards to environmental issues. Along with this action should be taken to control the pollution generated due to dust."

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#### ANNEXURE - 2

1. Shri Ujagar Baiga, Sarpanch Balinga GP: "I am one of the displaced family member of village Balinga due to Kulda OCP and presently I am working as Sarpanch, Balinga Gram Panchayat and I support this Public Hearing conducted for the expansion of Kulda OCP with regards to environmental issues. Because of expansion of Kulda OCP our area will economically and socially develop. Income generation will be created for the people. Along with this I demand adequate action should be taken to control air, water & noise pollution."

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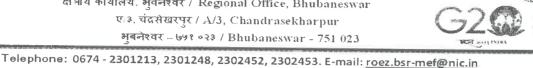
#### भारत सरकार / Government of India



### पर्यावरण, वन एवं जलवाय परिवर्तन मंत्रालय / Ministry of Environment, Forest & Climate Change

क्षेत्रीय कार्यालयः भ्वनेश्वर / Regional Office, Bhubaneswar

ए/३, चंद्रसेखरपुर / A/3, Chandrasekharpur भवनेश्वर - ७११ ०२३ / Bhubaneswar - 751 023





Annexure-X

No. 101-1014/17/2023/EPE

Date: 08.01.2024

To

Dr. Bhardwai Adiraiu.

Joint Director/Scientist 'D' (Impact Assessment Division)

Ministry of Environment, Forest & Climate change.

Indira Paryavaran Bhavan, Jor Bagh Road,

Aligani, New Delhi - 110003

Issue of Certified Compliance Report in respect of expansion of production capacity of Sub: Kulda OCP from 19.6MTPA to 21.0MTPA with respect to Kulda Expansion OCP of M/s Mahanadi Coalfields Limited in ML Area of 634.205 Ha located in Tehsil Himgir, District Sundergarh (Odisha)-reg.

Ref: Ministry's EC 1. J-11015/10/1995-IA.II(M), dated. 24.12.2002, 22.03.2018, 28.03.2019,

10.01.2020, 02.03.2021, 14.02.2022, 24.05.2022 and 09.01.2023

Sir,

I am directed to draw your kind attention to the subject and reference letter cited above and to state that the above project has been monitored by Dr. T. H. Mahato, Scientist-D on 18.12.2023. Based on the observations made during inspection and documents submitted, the monitoring report is enclosed for kind information and further needful action.

Yours faithfully,

Forahat

Encl: As above

(डॉ. टी. एच. महतो/Dr. T. H. Mahato)

वैज्ञानिक-डी / Scientist 'D'

#### Copy to:

- 1. The PPS to Director General of Forest & Special Secretary, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jorbagh Road, Aliganj, New Delhi - 110 003 (Email: dgfindia@nic.in)
- 2. Inspector General of Forests (FC), Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jorbagh Road, Aliganj, New Delhi - 110 003, Email: ramesh.pandey@nic.in
- 3. Mrs. Shruti Rai Bhardwaj, Scientist-E, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jorbagh Road, Aliganj, New Delhi - 110 003, Email: shruti.rai@nic.in
- 4. Sri Manoranjan Das, Project Officer, AT/PO-Basundhara 770076, Dist-Sundergarh (Orissa) email: po.kocp@gmail.com for information.
- 5. Compliance and Monitoring Division (CMD), Ministry of Environment, Forest and Climate Change, Paryavaran Bhawan, Jorbagh Road, Aliganj, New Delhi - 110 003, (Email: moefcc-monitoring@gov.in)

#### Government of India Ministry of Environment, Forests and Climate Change (MoEF&CC) Regional Office – Bhubaneswar

## MONITORING REPORT PART I DATA SHEET

File No: 101-1014/17/EPE

1		Project Type		Opencast Mining
1		River valley / Mining /		Openeast winning
		Industry / Thermal /		
		Nuclear / Other Specify		
2		Name of the project	1	1. Kulda Open Cast coal mine (10.00 MTY)
				2. Expansion of Kulda OCP from 10 MTPA to14 MTPA
				3. Extension of EC validity for one year with respect to Expansion
				of Kulda OCP from 10 MTPA to 14 MTPA
				4. Expansion of Kulda OCP from 10 MTPA to 14 MTPA
				5. Expansion of Kulda OCP from 14 MTPA to 16.8 MTPA
				6. Expansion of Kulda OCP from 16.8 MTPA to 19.6 MTPA
				7. Expansion of Kulda OCP from 19.6 MTPA to21.0 MTPA
				8. Amended EC of Kulda OCP
3		Clearance letter(s) / OM	:	\ //
		No. and dated		2. J-11015/10/1995-I.A.II(M), dt 22.03.2018
				3. J-11015/10/1995-I.A.II(M), dt28.03.2019
				4. J-11015/10/1995-I.A.II(M), dt. 10.01.2020
				5. J-11015/10/1995-I.A.II(M), dt 02.03.2021
				6. J-11015/10/1995-IA-II(M), dt14.02.2022
				7. J-11015/10/1995-IA-II(M), dt24.05.2022
		CORE		8. J-11015/10/1995-IA-II(M), dt09.01.2023
		CTE		Kulda OCP 19.6 MTPA to 21.00 MTPA, issued vide no. –
		СТО	H	19795/IND-II-CTE-6742, Dt. – 27.10.2022, valid for 5 years
		CIO		Kulda OCP 21.00 MTPA, issued vide no. – 4963/IND-I-CON-5125, Dt. – 28.03.2023, valid upto 31.03.2024
4		Locations	::	5125, Dt. – 28.05.2025, valid upto 51.05.2024
	a.	Taluk(s) District	•	Hemgir, Sundargarh
	b.	State (s)	:	Odisha
	c.	Latitudes / Longitudes		Lat: 220 01' 02'' to 22003'03'' North
	0.	Latitudes / Boligitudes		Long: 83043'28'' to 83045'35'' East
5		Address of		20 kg. 650 15 20 to 650 15 55 Edist
		correspondence		
	a.	Address of concerned		Shri Manoranjan Das
		project Chief Engineer		Project Officer
		(with Pin Code &		AT/PO–Basundhara
		telephone / telex / fax		Dist – Sundergarh (Orissa)- 770076
		numbers		Ph No- 9438879813 Fax No. (0661)-286144
				email: po.kocp@gmail.com
	b.	Address of Executive	:	Sri. Niraj Baran Samal
		Project Engineer/		Manager, Kulda OCP
		Manager (with Pin		AT/PO–Basundhara
		Code/fax numbers)		Dist- Sundargarh, Orissa-770076
				Phone no. 9438879836
6		Salient features:		



	a	Salient features of the project		Minable Reserve: 245.71 MT Target Output: 21.00MTPA Average Stripping ratio: 1.08Cum/tonne Project life: 3 Years (as reported by PP)
	b	Details of the environmental management plans	:	Covered in the EIA/EMPs submitted to the Ministry of Environment, Forests and Climate Change (MoEF&CC) for approval at the time of grant of Environmental Clearance (EC)
7		Breakup of the project area:		
	a	Project area	S.	634.205 Ha ( As per the EC accorded)
8		Break up of project affected population with enumeration of those losing houses / dwelling units only, agricultural land only, both dwelling units and agricultural land and landless labourers / artisans		Balinga         Bankibahal         Kulda         Siarmal(P)           SC         905         257         120         223           Others         -         -         115         189           ST         408         165         152         365           Total         1313         422         387         777           (as reported by PP)
	a	SC,ST/Adivasis	-:	-
	b	Others		-
9		Financial Details:		v
	a	Project cost as originally planned and subsequent revised estimates and the years of price reference		Date of EC       Project Cost (in Rs.Cr.)         24.12.2002       302.96 (As per EC)         22.03.2018       622.21(As per EC)         28.03.2019       622.21(As per EC)         10.01.2020       622.21(As per EC)         02.03.2021       622.21(As per EC)         14.02.2022       622.21(As per EC)         24.05.2022       622.21(As per EC)         09.01.2023       622.21(As per EC)         (As reported by PP)
	b	Allocations made for environmental management plans, with item wise and year wise breakup		Date of EC         EMP Allocation in Rs. Cr.           Capital         Recurring           24.12.2002         No details Provided           Provided         Provided           22.03.2018         76.90         22.16           28.03.2019         76.90         22.16           10.01.2020         76.90         22.16           02.03.2021         76.90         26.59           14.02.2022         76.90         31.03           24.05.2022         76.90         33.24           09.01.2023         76.90         33.24           (As reported by PP)
	С	Benefit cost ratio / internal rate of return and the years of assessment	:	No details provided.

	d	Whether (c) includes the cost of environmental management as shown in (b) above	•	No details	No details provided.		
	е	Total expenditure on the Project so far	•	Rs. 498 Cr. (PR preparation for carrying out cost estimation, EC Activity i.e. EIA study, R&R, Prog. Mine Closure Activities, Etc.) as on 30.09.2023. (as reported by PP)			
	f	Actual expenditure	*	# Particulars Up to 30.09.20		Up to 30.09.2023	
		incurred on the		1	R&R Cost	151.85	
		environmental		2	Dust Suppression Cost	41.90	
		management plans so far		3	ETP & STP	0.87	
				4	Garland and storm water	0.69	
				_	discharge	0.22	
				5	Cost of CA	0.32	
				6	Arboriculture including	5.62	
				7	avenue plantation	0.06	
				8	Rain water harvesting	4.31	
				0	Peripheral village community development	4.51	
				9	Environmental Data	0.47	
					Generation Data	0.47	
				-	Total Amount in (Cr.)	206.09	
				(As report		20000	
10		Forest land requirement:				Annual of Section 4 Adversaria Company	
10							
	a	The status of approval for a diversion of forest land for non-forestry use	:	227.89 ha 08.08.200	has been diverted vide no7	– 8-176/1997-FC, Date-	
	b	The status of compensatory afforestation, if any	:	Compensatory afforestation has been carried out in an area of 459.01 Ha at Kumkani R.F. and Dhangergudi R.F. at the cost of Rs. 67,50,510.00/- (as reported by PP)			
	С	The status of clear felling	:	14559 nur	nbers of Trees have been fell	led in six phases.	
				(as reporte	======================================		
	d	Comments on the viability and sustainability of compensatory afforestation programme in the light of actual field experience so far	:	-			
11		The status of clear felling in non-forest area (such as submergence area of reservoir, approach road), if any, with quantitative	:	No details provided.			
		information					

	a	Date of commencement	. 1	Date of EC	Commencement	Completion
		and Date of completion		24.12.2002	07.12.2007	31.03.2046
		(actual and / or planned)		22.03.2018	29.03.2018	31.03.2028
				28.03.2019	29.03.2019	31.03.2028
				10.01.2020	27.03.2020	31.03.2028
				02.03.2021	12.03.2021	31.03.2026
				14.02.2022	25.02.2022	31.03.2026
				24.05.2022	20.01.2023	31.03.2026
				09.01.2023	09.01.2023	31.03.2026
				(As reported by	y PP).	
13		Reasons for the delay if	:	No delay in the	e project. (as reporte	d by PP)
		the project is yet to start.				
14		Date of site visit:				
	a	The dates on which the :		Date of inspections by the ERO, Bhubaneswar:		
		project was monitored by the Regional Office		1. 12.11.2018		
		on previous occasions, if		2. 01.11.2019		
		any		3. 06.11.2020		
				4. 29.10.2021		
				5. 24.01.2023		
	b	Date of site visit for this monitoring report		18.12.2023		

#### **Photographs**

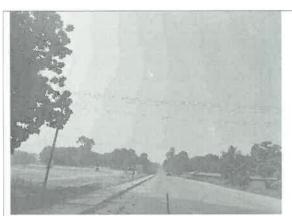


Photo 1: Road constructed towards Taparia



Photo 2: Fog canon in coal yard



Photo 3: Plantation in OB dump



Photo 4 : Surface minor in operation

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Photo 5: Wet drilling arrangement



Photo 6: Water sprinkling arrangement



Photo 7: Under construction conveyer

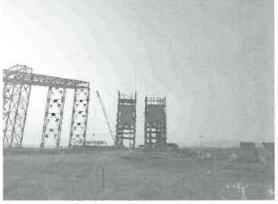


Photo 8: under construction silo loading system



Photo 9 : Sal nursery



Photo 10: Mechanical cleaning machine

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# PART-II&III DESCRIPTIVE REPORT ON STATUS OF COMPLIANCE TO THE CONDITIONS OF THE ENVIRONMENTAL CLEARANCE AND ENVIRONMENTAL MANAGEMENT

Subject:	Kulda OCP with production capacity from 19.6MTPA to 21.0MTPA in mining lease area of 634.205 ha of M/s Mahanadi Coalfields Limited located at village Balinga, Rumulia, Sirmal, Kulda & Bankibahal, Tehsil Himgir, District Sundergarh (Odisha).
Reference:	Ministry EC letter no. J-11015/10/1995-IA-II(M) dated 22.03.2018, J-11015/10/1995-I.A. II(M), dt28.03.2019, J-11015/10/1995-I.A.II(M), dt. 10.01.2020, J-11015/10/1995-IA.II (M) dated 02.03.2021, J-11015/10/1995-IA-II(M) dated 14.02.2022, J-11015/10/1995-IA-II(M) dated 24.05.2022, and J-11015/10/1995-IA. 11 (M) dated 09.01.2023.

#### PRESENT STATUS OF THE PROJECT

Ministry of Environment, Forest and Climate Change accorded Environmental Clearance vide letter no. J-11015/10/95-IA.II (M) dated 24.12.2002 for 10 MTPY coal production capacity within the 878.29 ha of mine lease area. Subsequently the EC accorded vide No. J- 11015/10/1995-IA.II(M), dated 22.03.2018 superseded the previous EC and the mine lease area has been reduced to 634.205 ha with increase in production capacity from 10 to 14 MTPA for a period of one year. Subsequently vide letter dated 28.03.2019 approval accorded for a further period of one year. Further EC expansion of Kulda OCP from 10 MTPA to 14 MTPA has been accorded for the period of 30 years vide letter dated 10.01.2020. Subsequently, Environmental Clearance has been accorded vide letter No. J-11015/10/1995- IA.II (M) dated 02.03.2021, for an expanded capacity of 16.8MTPA. Later on EC was accorded on 14.02.2022 for expansion from 16.8MTPA to 19.6 MTPA and vide letter dated 25.05.2022 for expansion from 19.6 to MTPA to 21MTPA. Vide letter dated 09<sup>th</sup> January 2023, the EC dated 25.05.2022 has been amended.

The above project was monitored by the Regional Office, Bhubaneswar on 18.12.2023 along with the following representatives of the PP:

- i. Mr. Mano Ranjan Das (Projects Officer, Kulda)
- ii. Mr. Raji Joshua (Staff Officer E&F)

During visit the Project was in operation. The report is submitted on the basis of the field visit and as per the information provided by the PP.

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The status of compliance on the stipulated conditions contained in the EC cited above is given below:

Sl No	Conditions	Status of Compliances		
Environment Clearance Letter No: J-11015/10/1995-1A. 11 (M) dated 09.01.2023				
	SPECIFIC CONDITIONS:			
i.	No further expansion in capacity shall be granted to the project till the compliance of in pit conveyor and silo loading system till railway siding is implemented.	AGREED UPON  PP agreed to abide by the condition.		
ii.	PP shall implement in-pit conveyor system with silo loading facility till railway siding and No road transportation shall be allowed after October. 2023 and accordingly. SPCB shall not grant CTO for road transportation after October, 2023.	PARTIALY COMPLIED  During visit conveyer system was under construction from feeding point of silo loading system to the under-construction silo at Sardega siding. Coal transportation to Kanika siding is being done thorough road transportation. Transportation by the consumer is being done through road. As per the document furnished EAC has recommended for extension of time line, However, approval from Ministry yet to be accorded. Ministry may like to take view on the matter.		
iii.	PP shall deploy only 40-50 tonnes covered trucks/dumper to reduce fleet size till Rapid loading system and conveyor belt system is commenced. (i.e. till October, 2023).	As per the documents furnished, apart from the coal transported through rail mode, the coal consumer who are taking coals by road sale mode are deploying hire capacity track i.e. 40-50 tones capacity truck/tipper to transport coal from Kulda to respective destination. The weighment cum-gate pass slip provided indicate gross as more than 44 and net more than 30. PP informed that the existing contracts operating under Kulda OCP have a requirement for deployment of tipper having capacity of 16 Te-28 Te, and there are 15 contracts, and 335 nos. of tippers were running under Kulda OCP for coal transportation from pit to coal stock and stock to siding.  PP also reported that as per the stipulated condition, PP has already deployed 126 numbers of 35-50 Tonnes covered trucks replacing about 153 nos. of 16 Te- 28Te capacity tippers.		
iv.	PP shall submit the action plan for In-pit belt Conveyor system Kulda OC mine separately to IRO and implement the same before	PARTIALLY COMPLIED  PP furnished a copy of the progress report of Rapid loading system pipe conveyor system		

Sl No	Conditions	Status of Compliances
Envir	onment Clearance Letter No: J-11015/10/1995-	-1A. 11 (M) dated 09.01.2023
	submitting any type of application on PARIVESH portal before October, 2023.	and doubling of Jharsuguda, Barapali, Sardega line. However, the inpit conveyor system as well as rapid loading system yet to be implemented. As per the document furnished EAC has recommended for extension of time line, however, approval from Ministry yet to be accorded. Ministry may like to take view on the matter.
V.	All other terms and conditions as prescribed in Ministry's letter dated 22 <sup>TM</sup> March, 2018, 10.01.2020 02.03.2021, 14.02.2022 and 24.05.2022 needs to be complied by PP.	AGREED UPON PP agreed to abide by the condition.

Sl. No.	Conditions	Status of Compliances
As per E	CC letter No. – J-11015/10/1995-IA-II(M), D	ate - 24.05.2022
	Specific Condition	
i.	PP shall submit Certified Compliance Report of the EC vide No. F. No. J- F No. J-11015/10/1995-IA-II(M) dated 14 <sup>th</sup> February, 2022 granted for total 40% expansion, along with EIA/EMP report, prepared based on standard ToRs for the additional capacity of 10% on PARIVESH portal within six months of enhancement of production beyond 40%.	PLEASE REFER BELOW  PP informed that as per the EAC meeting held on date 18.11.2022 on 4:00PM, it was advised by EAC that Kulda shall submit the CCR & EIA/EMP by 31.01.2023. The project was monitored on 24.01.2023 and the report submitted on date 31.01.2023 by the Regional Office. PP also reported that the EIA-EMP report for 21.00 MTPA has been submitted or date 07.02.2023.
ii.	In view of above para (i), Ministry shall ascertain the adequacy of the proposed environmental safeguards and stipulate necessary condition, if required, which shall be monitored as a part of the EC compliance monitoring.	AGREED UPON  PP agreed to abide by the condition.
iii.	PP shall obtain necessary prior consent for	BEING CONMPLIED
	enhance capacity from State Pollution Control Board under Air and Water Act.	For a production capacity of 21.00 MTPA:
	Control Board under Air and water Act.	1. Consent to Establish has been accorded vide no. – 19795/IND-II-CTE-6742, Date – 27.10.2022 and
		2. Consent to Operate has been accorded vide no 4963/IND-I-CON-5125, Dt 28.03.2023
iv.	Environment quality parameter arising out	BEING COMPLIED

Sl. No.	Conditions	Status of Compliances
	of proposed expansion shall be within the prescribed norms and the same shall be maintained as per prescribed norms.	During visit ambient air quality data shown to be with the daily limit of NAAQS. PP reported that the Environmental quality parameter for PM10, PM2.5, SO2, NOx, and CO is being maintained within the prescribed norms and being monitored using the CAAQMS installed at location—Nursinghpur, CMPDI camp Gopalpur, and Near Jagannat Temple., which is being displayed in the company's website <a href="http://apps.coalindia.in/ords/f?p=159:1:11060649192480">http://apps.coalindia.in/ords/f?p=159:1:11060649192480</a> .
V.	Hon'ble Supreme Court in an writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India & Ors vide its judgment dated 8 <sup>th</sup> January, 2020 has directed the Union of India to impose a condition in the mining lease holder shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent".	AGREED UPON  The Kulda OCP is an operating mines and PP is agreed to abide by the stipulated condition as per the mine closure plan.
vi.	All other terms and condition as prescribed in Ministry's letter dated 10.01.2020 02.03.2021 & 14.02.2022 shall remain the same and this enhancement shall be read with EC dated 14.02.2022, which needs to be complied by PP.	AGREED UPON PP agreed to abide by the condition.
As per t	the EC letter no . – J-11015/10/1995-IA-II(M	I), Date – 14.02.2022
i.	PP shall obtain Consent to Establish/Operate for 19.6 MTPA capacity prior to production.	BEING COMPIED  For a production capacity of 19.60 MTPA:  1. Consent To Establish has been accorded vide no. – 3044/IND-II-CTE-6652, Date – 23.02.2022 and  2. Consent To Operate has been accorded vide no 3139/IND-I-CON-5125, Dt. –
	DD 1 II	25.02.2022
ii.	PP shall comply as per time bound action plan submitted with 17.59 Crore budget	PARTIALLY COMPLIED
	with activities such as sprinkler, fog canon, wheel washing, wind barrier, plantation etc.	During visit, fog canon, mobile water tanker has been observed. PP reported that activity such as mist sprinkler and wind barrier system is under progress, and activity such as mobile



Sl. No.	Conditions	Status of Compliances
		water tanker 12 KL one no, Static fog canon (8nos), mechanical road sweeper (3nos) has been deployed and contract has been awarded for the one road sweeper. 3 nos of wheel washing system has been constructed and plantation of 27513 nos completed.
iii.	PP shall implement activities listed for	AGREED UPON
	plantation of Rs. 24 Crore within 3 years at external dump, backfilled area, safety zone and outside mine lease area.	During visit plantation has been observed at the over burden dump. PP reported that plantation has been done at backfilled area (45750 nos.), safety zone (43000 nos.), external OB Dump (11,250 nos.) & outside mine lease area (1,50,000 nos.) and Plantation of 87050 Nos. in external OB dump and 11,625 (3-Tier plantation) at safety zone is under progress and the balance plantation activities shall be completed within 2025.
iv.	PP to address the issues raised during	PARTIALLY COMPLIED
	public hearing with proposed respective budget like development of providing drinking facilities, control blasting, settling the land issues etc.	PP reported that the pollution level (for both air and water) is maintained well within limits. Drinking water is being supplied to the nearby 17 nos. of villages. 341 out of 393 eligible candidates have been provided with employment and 429 out of 501 families have been rehabilitated till date. The PP has implementing the sequentially controlled blasting technique by using electric/non-
		electric detonators for the removal of OB only when it is required.
V.	PP shall implement in-pit conveyor system	PARTIALLY COMPLIED
	with silo loading facility till railway siding and no road transportation shall be allowed after December'2022 and accordingly, SPCB shall not grant CTO for road transportation after December'2022.	The condition has been amended vide letter dated 09.01.2023 with "PP shall implement in-pit conveyor system with silo loading facility till railway siding and no road transportation shall be allowed after October 2023 and accordingly, SPCB shall not grant CTO for road transportation after October 2023". MoEF&CC has extended the time limit up to 31.10.2023 in the amended EC issued on date – 09.01.2023. Further PP reported that Ministry has been approached for time extension till 31.12.2023, which is awaited. Ministry may like to take in view in the matter. During visit construction activity observed at the silo. It was also informed that the construction of silo loading system with conveyor system is under progress and is expected to be completed by 31.12.2023.

Sl. No.	Conditions	Status of Compliances
vi.	PP shall conduct carrying capacity assessment study within 1 year and submit to Ministry's IRO and further recommendation shall be complied with strict timeline.	PARTIALLY COMPLIED  Carrying capacity assessment study carried out by CMPDI has been furnished. However, details of implementation status of recommendation has not been furnished.
vii.	PP shall engage third party independent expert agency for monitoring/auditing of compliance of EC condition every year.	BEING COMPLIED  Third party Audit for compliance of EC condition carried out by NERRI of report indicated November 2023 has been furnished.
viii.	PP shall engage dedicated agency for plantation in mine site by April 2022 instead of depending on State Forest Department. PP may seek inputs and expertise from forest department.	PP reported that dedicated agency of plantation like CGRVVNL has engaged for carrying out plantation. Plantation has been done at backfilled area (45750 nos.), safety zone (43000 nos.), external OB Dump (11,250 nos.).
ix.	PP should not transportation of coal through road passing through any village and further ensures that its consumers of coal are also not using village road and passing through any sensitive location such as schools, hospitals etc. PP shall take legal undertaking from its consumers accordingly.	PARTIALLY COMPLIED  PP reported that PP is not sending coal through road passing through any villages. It was also informed that MCL has already issued a notice vide no. – MCL/GM/BA/M&S/2022-23/140, date – 23.05.2022, to submit a legal undertaking to MCL office. However, legal undertaking from consumers yet to be furnished. On the way from Kulda to Taparia, vehicles are passing through village.  Further, it was also informed that PP has
		submitted 1.278 Crore as environment compensation to SPCB, Odisha in this regard, on date – 10.05.2023.
X.	PP had diverted a State highway so the plantation along the alternative diversion road provided on the top of embankment against Basundhara river and Chattarjhor nallah to be taken by PP along with its proper maintenance. The detail of this alternative road (length, width, carrying capacity in respect to the State Highway) with photographs to be furnished with six monthly compliance report of IRO and respective state pollution board.	As per the documents furnished the state highway of Sundargarh-Raigarh has been diverted for mining purpose and a four lane road of length 2700m with concrete road having width 12m and carrying capacity of 45Te – 55Te for HMV and bituminous road having width 8.5m and carrying capacity of 25Te-30Te for LMV has been provided along Basundhara river.
	respective state politition board.	Village road to Tumulia has been diverted for mining purpose and a two lane road of length 1995m & width-10m, & carrying capacity of 15Te to 20Te for LMV has been provided along Chattarjhor nallah. The photo of the roads has been furnished along with six

Sl. No.	Conditions	Status of Compliances
		monthly compliance.
xi.	PP in collaboration with CMPDI must develop a dedicated laboratory with NABL certification for measuring water quality, soil quality and heavy metals in water, air and soil etc. at its operational place, which would also serve for other nearby mines of M/s MCL.	PLEASE REFER BELOW  CMPDI Bhubaneswar has been doing the environmental monitoring work which is NABL accredited. Environmental laboratory at the site yet to be established.
xii.	PP to develop on more plant nursery with 80% dominance of Sal trees and 20% other trees in 85 Ha scatter patch area located at south west and its detail with photographs to be provided to IRO, MoEF&CC and concerned pollution bard in its six monthly compliance report of June 2022.	BEING COMPLIED  During visit a nursery has been shown with dominance of Sal tree. It was informed that the land is part of the 85 ha patch.
xiii.	PP also to provide drinking water facilities like installation of RO with proper water supply pipe fittings to nearby rural areas and also to install hand pumps by seeking consent from panchayat of the villages located within study area of 10 km radius buffer zone within two year	BEING COMPLIED  As per the document furnished drinking water treated from its WTP provided to 17 numbers of peripheral villages. PP also informed that 2 numbers of borewell installed at Tiklipara and Garjanbahal village and one hand pump at Khamarpara village.
xiv.	PP to install solar lights within 1 year from the grant of this EC along the road used for transportation of minerals to avoid the accidents at night and also seek its maintenance. PP is asked to also identify the rural areas for installation of solar light with its maintenance within the study area of 10km radius buffer zone within one year.	PARTIALLY COMPLIED  PP reported that 15, 29, 25 nos. of solar street lights has been installed in the Kuisira, Ratansara and Ratanpur village respectively. It was also informed that village panchayats and Tehesildar of Hemgir block has approached for identifying the requirement of more numbers of solar street lights in the peripheral villages. Further PP submitted that solar lights are not viable in the roads used for transportation of minerals as heavy vehicles ply in these roads. It requires lights of larger illumination at these roads. PP has installed lights with better illumination in the coal transportation roads. Ministry may like to take a view in the matter.
XV.	PP to provide bio toilets to the villages located within the study areas within 1 year from the grant of this EC.	PARTIALLY COMPLIED  As per the documents furnished 100 numbers of toilets in the peripheral villages of the mines, namely Barpali, Kuisira, & Balinga has been provided. It was further informed that the village panchayats and Tehesildar of Hemgir block has been approached for identifying the requirement of bio-toilets in the peripheral villages. However, Bio toilet has not been observed during visit.



Sl. No.	Conditions	Status of Compliances
xvi.	PP shall deploy only 40-50 tonnes covered trucks/dumper to reduce fleet size till rapid	PARTIALLY COMPLIED
	loading system and conveyor belt system is commenced.	During visit 40-50 tonnes tippers has been shown. Truck/ dumpers of size less than 40-50 tonnes were also found to be in operation for transportation of coal from stock yard to siding. PP informed that the existing contracts operating under Kulda OCP have a requirement for deployment of tipper having capacity of 16 Te-28 Te, and there are 15 contracts, and 335 nos. of tippers were running under Kulda OCP for coal transportation from pit to coal stock and stock to siding.
	*	PP reported that as per the stipulated condition, PP has already deployed 126 numbers of 35-50 Tonnes covered trucks replacing about 153 nos. of 16 Te- 28Te capacity tippers.
	·	As per the documents furnished, apart from the coal transported through rail mode, the coal consumer who are taking coals by road sale mode are deploying hire capacity track i.e. 40-50 tones capacity truck/tipper to transport coal from Kulda to respective
		destination. The weighment cum-gate pass slip provided indicate gross as more than 44 and net more than 30.
xvii.	PP shall obtain No Objection Certificate	PARTIALLY COMPLIED
	(NOC) for extraction of Ground water from Central water authority for expansion capacity.	NoC has been accorded by CGWA with validity up to 08-12-2022 vide NoC No.CGWA/ NOC/ MIN/ORIG/2020/9245 dated 09.12.2020 as per the document furnished online application submitted for renewal of approval vide dated 29.11.2022, However renewed NOC is awaited.
xviii.	Adequate effectiveness of EMP should be	BEING COMPLIED
	analyzed from the offset/hike of air pollution data from continuous monitoring stations and quarterly report shall be generated and submitted with six monthly compliance report to RO, MoEF&CC.	PP reported that the effectiveness of Air quality control measures as mentioned in EMP is being analyzed with the pollution data and to keep the pollution level within control various initiatives have been taken particularly augmenting the pollution control measures.
		Ambient Air quality monitoring data for the period of (April'23 to Sept'23) from continuous monitoring station has been furnished with 6 monthly compliance report to RO, MoEF&CC.



Sl. No.	Conditions	Status of Compliances
xix.	PP to install 1 more continuous air quality monitoring stations at suitable locations preferably village side and with consultation of SPCB. The real time data so generated shall be uploaded on company website. In addition, data should also be displayed digitally at the entry and exit gate of mine lease area for public display.	PARTIALLY COMPLIED  PP reported that already one CAAQMS has been installed near the mines as per the earlier stipulated condition. Installation of one more CAQMS is under process.  The real time data generated by already installed CAAQMS is being uploaded in company website: <a href="http://apps.coalindia.in:8080/apex/f?p=159:1:10556120434404">http://apps.coalindia.in:8080/apex/f?p=159:1:10556120434404</a> Monitoring data is being displayed before the main gate in public domain.
XX.	PP shall conduct substantial (at least 50,000 nos.) tree plantation at village namely Teleimal, Tumulia, Chakrapur and Kaletpani within 2 years and mark it for certification for any statutory authorities.	PARTIALLY COMPLIED  PP reported that plantation of around 72000 numbers has already been done in the village of Kaletpani. It was also reported that Teleimal & Chakrapur does not have vacant space for plantation and Tumulia is under the mining zone of adjacent mine of Siarmal OCP, hence plantation in these three villages are not feasible. Ministry may like to appropriate view in the matter.
xxi.	PP shall install fixed fog canon (mist sprayer) all along the haul road till CHP, Railway siding and OB dump area and accordingly sufficient number of fog canons (not less than 10 nos.) with 40m jet length shall be installed within 6 months. It should be ensured that air pollution level confirm to the standards prescribed by the MoEF&CC/CPCB	PARTIALLY COMPLIED  Fixed fog canon has been observed at coal storage area, railway siding. However, fixed fog canon all along the haul road and OB dump area yet to be provided. PP provided mobile fog canon along the transportation routes to railway siding. Ambient air quality data reported was within daily norms.
xxii.	Project Proponent to plant 1,50,000 nos. of native trees with broad leaves along the transportation route in three years to prevent the effect of air pollution. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer.	PP reported that a total of 232513 nos. of plants has been planted in the period of 2022-23. Plantation has been done outside mine lease area (1,50,000 nos.) along the transportation routes of Kulda OCP. Endorsement letter from district forest officer has not been furnished.
		However, plantation all along transpiration route from Kulda to Taparia yet to be provided. The EC accorded on 14.02.2022 three years yet to be completed.
xxiii.	Continuous monitoring of occupational safety and other health hazards, and the corrective actions need to be ensured.	PP reported that IME/PME is being done for the work force engaged in the mining. PP's are providing regular awareness on the use of PPE's and for monitoring and ensuring



Sl. No.	Conditions	Status of Compliances
		surprise visit are being done during the shifts.
xxiv.	Project Proponent shall supply drinking water and for domestic purpose for the people coming under the zone of influence of this mining activity.	BEING COMPLIED  There is a water treatment facility at Basundhara Area of 1.6MGD capacity. PP reported that drinking water is being supplied from this treatment plant to the nearby 17 numbers of villages.
XXV.	Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and maintain records accordingly; also, Occupational health check-ups for workers having some aliments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measures for burns, malaria and provision of anti-snake venom including all other paramedical safeguards may be ensured before initiating the mine activities.	PP reported that IME of 375 personnel and PME of 53 personnel was carried out in 2023-24. During visit it was informed that persons are provided with DGMS approved dust masks and provided with adequate training regularly and at every 5 years interval, occupational health surveillance is being done.  It was also reported that 118 personnel were identified as the workforce engaged in active mining operations and were subjected to health check-up for occupational diseases. None of the case reported for Hearing Impairment and Occupational Disease. Preventive measures for burns, malaria and provision of anti-snake venom is being ensured at Basundhara Hospital.
XXVI.	Persons of nearby villages shall be given training on livelihood and skill development to make them employable.	PP reported that training on sustainable livelihood and skill development to make them employable are being provided  MCL-BAIF Comprehensive Community Development Programme" named as 'CCDP-Uthan has been implemented to give training in Cattle development Programme through breeding services, Goat development programme, Backyard poultry farming, Fodder development programme, Agro-Horti* (WADI**) Development Programme & Awareness Creation & Capacity Building Programme
		PP arranged for a training programme at CIPET Bhubaneswar for 6- months residential training to the 24 youth. Candidates have been imparted basic skills of repair and maintenance of domestic/agricultural pumps, submersible pumps, agricultural tools, tractor driven equipment like tillage, plough, cultivation and sowing equipment.  'Handyman' will be basic repair-maintenance

Sl. No.	Conditions	Status of Compliances
	. 13	service provider available at his doorstep. Each candidate has been given a tool kit on completion of training. Total project cost reported is Rs.41 lakhs.
xxvii.	The illumination and sound at night at	BEING COMPLIED
	project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/masks away from the villagers and keeping the noise levels well within the prescribed limits for day/night hours.	PP reported that the illumination and sound at night is prevented by eliminating blasting at night, by orienting the mine's flood lights away from the villagers and keeping the noise levels well within the prescribed limits for day/night hours.
xviii.	PP shall implement rain water harvesting	BEING COMPLIED
	mechanism in order to recharge the ground water or as water conservation measure in addition to the proposed structure. PP shall carry out regular monitoring of Ground water level and quality.	PP reported that mine sump of 20 lakh cum capacity has been provided for harvesting rain water which is being used for various industrial purposes.
		The ground water level monitoring data furnished for two dug wells and two nos. of piezometers.
		The monitoring of ground water level is being done four times a year
		Ground water quality monitoring data has been furnished from the piezometers.
xxix.	PP shall pay to farmers of agricultural land if there is any loss due to pollution found by concerned District Commissioner as per the extent rules or norms.	PLEASE REFER BELOW
		During visit it was stated that no communication has been received from District commission for loss due to pollution. PP assured that, if found and demanded for crop loss, MCL shall fully cooperate and pay for any loss arising due to the pollution caused by Kulda OCP, if any.
XXX.	Hon'ble Supreme Court in an Writ	AGREED UPON
	Petition(s) Civil No. 114/2014, Common Cause vs Union of India &Ors vide its judgment dated 8 <sup>th</sup> January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operation, undertake re-grassing the mining area and any other area which	The Kulda OCP is an operating mines and it is being agreed to abide by the stipulated condition as per the mine closure plan.

Sl. No.	Conditions	Status of Compliances
	may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEF&CC.	
4.1	(a) Statutory Compliance	
i.	The project proponent shall obtain forest clearance under the provision of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.	BEING COMPLIED  Forest Clearance has been accorded for forest land area of 227.89Ha vide no F.No 8-176/1997-FC, Date- 08-08-2007. It was started that mining is being done on diverted land only.
ii.	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	PLEASE REFER BELOW  PP reported that condition is not applicable for Kulda OCP (21.00MTPA), as there is no land expansion required and the mining activity is being carried out in the existing land of 634.205Ha.
iii.	The project proponent shall prepare a site-Specific Conservation Plan/ Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendation 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 sixmonthly compliance report (in case of the presence of schedule-I species in the study area).	PARTIALLY COMPLIED  PP reported that there is no Schedule-I species present in the study area, as per the EIA-EMP report of Kulda OCP and Kulda OCP, has deposited the required amount for the implementation of Regional Wild Life Management Plan (RWLMP) to the Forest Department:  However, details on site specific conservation plan as per the condition has not been furnished.
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.	BEING COMPLIED  For a production capacity of 21.00 MTPA:  1. Consent to Establish has been accorded vide no. – 19795/IND-II-CTE-6742, Date – 27.10.2022 and  2. Consent to Operate has been accorded vide no 4963/IND-I-CON-5125, Dt. – 28.03.2023.
V.	The project proponent shall obtain the necessary permission from the Central Ground Water Authority.	PARTIALY COMPLIED  AS per the document furnished NoC has been accorded by CGWA with validity upto 08-12-

Sl. No.	Conditions	Status of Compliances
	*	2022 vide NoC No.CGWA/NOC/MIN/ORIG/2020/9245 dated 09.12.2020. However, details of renewal has not been furnished.
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.	BEING COMPLIED  Hazardous waste authorization has been accorded vide no IND-IV-HW-1038/4010, date- 18-03.2023, and valid till 31.03.2024, in accordance to the Hazardous and Other Waste Management Rules, 2016.
	(b) Air quality monitoring and preservation	on
i.	Continuous ambient air quality monitoring station as prescribed in the statue 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 station shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive target in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring station 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.	PARTIALLY COMPLIED  PP reported that continuous Air Quality Monitoring Stations are established in core as well as buffer zone in consultation with the RO, SPCB, PP furnished the copy of approval from SPCB for installation of continuation ambient air quality monitoring station.  It was also informed that additionally, 04 routine monitoring stations has been established in consultation with SPCB - External CT Road, West of Working Face, South of Working Face, North of CHP. Heavy metals such as As, Ni, monitoring report furnished. However, monitoring data of Hg, Cd and Cr has not been furnished.
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 <sup>th</sup> 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.	PARTIALLY COMPLIED  Core zone monitoring data of one location has been furnished. Data reported was within norms. However, heavy metal monitoring data of Hg, Cd and Cr has not been furnished.
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 PM <sub>10</sub> ,/PM <sub>2.5</sub> ) such as haul road, loading/unloading and transfer points.	BEING COMPLIED  During visit covered trucks has been observed.  Fog Cannon, water tanker, rain gun has been provided in critical areas such as haul road, coal stock yard, transportation road. Fugitive emission monitoring data is being furnished along with the submitted six monthly



Sl. No.	Conditions	Status of Compliances
	Fugitive dust emission 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.	compliance.  Ambient air quality data reported with the six monthly compliance was with in the daily norms of air quality standards.
iv.	The transportation of coal shall be carried	PARTIALLY COMPLIED
	out as per the provision and 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	PP reported that transportation of the coal from mine to stock yard/Sardega Siding is done by tipper through the existing road bypassing the village area.
	proposed to construct a 'bypass' road, it should be so constructed so that the impact	Special corridors have been constructed for coal transportation as follows:
	of sound, dust and accidents could be appropriately mitigated.	25 Km four lanes dedicated coal corridor from Duduka to Kanika was completed with an expenditure of 209.40 Crores.
		A separate coal corridor is presently under construction from Bankibahal to Bedabahal with an estimate of Rs. 600 Crores, and shall be completed by 31.03.2024.
		A road has been constructed from Kulda to Taparia which passes through villager. Prinformed that the road transportation from Kulda to Taparia is being done by the consumer. Ministry may like to take a view in the matter.
V.	Vehicular emissions shall be kept under	BEING COMPLIED
	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 centers.	During visit checked vehicle was found to be with valid PUC.
vi.	Coal stock pile/crusher/feeder and breaker material transfer point shall invariably be provided with dust suppression system.	BEING COMPLIED  Coal stocks have been provided with 7 nos. of fog canon.
	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.	During visit conveyor system to CHP was not in operation. PP started that crusher is not in operation since 2017. Drills observed are of wet drilling type.
vii.	Coal handling plant shall be operated with	PLEASE REFER BELOW
	effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.	During visit CHP was not in operation. Prinformed that the CHP is not in action since December 2017, however, The crusher is provided with 12 mist type nozzles/sprinklers the belt conveyor with 5 numbers and the bunker with 10 nos. of mist nozzles.

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SI. No.	Conditions	Status of Compliances
V L	(c) Water quality monitoring and preserv	ation
i.	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the water Act, 1974 Coal Standards vide GSR 742 (E) dated 25th September, 2000 and as amended from time to time by the Central Pollution Control Board.	PARTIALLY COMPLIED  Workshop effluent is treated in Effluent Treatment Plant (450 KLD) with Oil & Grease skimmer unit.  Effluent monitoring data has been furnished along with six monthly compliance for PH, TSS, COD. Monitoring data as per the condition has not been furnished.
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-20012/2006-1A.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.	BEING COMPLIED  The monitoring data is being uploaded in the company's website along with six monthly compliance.  The monitoring data is being displayed in LED display board installed at the entrance of mine for display in public domain.
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 level 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 MoEFCC/RO.	BEING COMPLIED  Ground water level and quality data has been furnished along with the six monthly compliance.
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.	BEING COMPLIED  The surface water quality monitoring data has been furnished along with six monthly compliance for upstream of Basundhara River near Bankibahal Bridge, and downstream of Basundhara river near Barpali village.
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.	BEING COMPLIED  PP reported that only mine sump water is used for all industrial purposes.  The run-off water generated is being channelized into the mine sump (capacity 20 lakh cum) of Kulda OCP, which ultimately leads to ground water recharge.
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	BEING COMPLIED  Garland drains of reported dimension (7632m x 1.5m x 1.5m) and Berm of reported dimension (4809m x 1.5m x 1.5m) has been



Sl. No.	Conditions	Status of Compliances
	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 settling of silt material. The water so collected in the sump shall be utilized 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.	provided. Catch drains of reported dimension (3349m x 1m x 1m) has been provided at coal stocks and internal dump. PP reported that water collected in the catch drains has been channelized into the mine sump (capacity 20 lakh cum) of Kulda OCP, which is further utilized for industrial purposes like dust suppression and fire- fighting, green belt development etc. Fresh Plantation has been observed on the external dump. PP reported Plantation of 25000 nos. over an area of 10 ha at the toe of the external OB Dump.
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).	PP reported that the mine run-off generated is being channelized into the mine sump (capacity 20 lakh cum) of Kulda OCP, which ultimately leads to ground water recharge.  Water treatment facility at Basundhara Area of 1.6MGD capacity has been observed. PP reported that drinking water is being supplied from this treatment plant to the nearby villages at stipulated times.
viii.	Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected 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.	BEING COMPLIED  PP reported that CHP is non-operational since 2017. ETP of 450KLD capacity has been provided for workshop and the waste water is directed into the mine sump after treatment from the ETP.
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.	PP reported that the mine seepage water & the mine catchment area water is stored in mine sump/ worked out quarry and is being used for dust suppression, vehicle washing, cleaning of roads, plantation works etc. It was also informed that the drains are cleaned and de-silted pre-monsoon and post-monsoon, annually twice.
X.	The surface drainage plan including	BEING COMPLIED

Sl. No.	Conditions	Status of Compliances
	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.	PP reported that 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., has been prepared and implemented by the project proponent vide plan no.: MCL/BGA/KOCP/SURV-07 dated 16/08/2008. The plan is updated every month as per the progression of the mines.  It was also informed that Chatnajhor nallah has been straightened with the competent approval from State Government and embankment has been provided all along the stream.  PP also reported that embankment of 2.7Km has been constructed near Kulda OCP on the banks of Basundhara nallah to prevent sudden rush of water. Stone pitching has been done along the embankment. Plantation of 1350 nos. of plants has been planted at the edge of embankment to prevent soil erosion.  It was also informed that Garland drains (7632m x 1.5m x 1.5m) and Berm (4809m x 1.5m x 1.5m) has been provided all around
		the mine boundary and External dump, to prevent the surface run-off from outside the mine lease area to enter the mines.
xi.	The project proponent shall take all	PARTIALLY COMPLIED
	precautionary measures to ensure riverine/riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation/water resource department in the state government.	PP informed that the riverine/riparian ecosystem management plan is under preparation for Basundhara river and The estimation has been completed. It was also informed that the plan will be implemented as per the direction of irrigation department of Odisha Government.
	(d) Noise and Vibration monitoring and p	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 equipment's (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	BEING COMPLIED  PP reported that all the operators of HEMM (both Departmental and Contractual) have been provided with Ear muffs. 20 ear muffs have been provided in the period of 2022-23. Noise level data furnished with six monthly compliances. Data reported was with in norms.



Sl. No.	Conditions	Status of Compliances
	usage of such accessories to be monitored.	
ii.	Controlled blasting techniques shall be practiced in order to mitigate ground vibration, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.	BEING COMPLIED  During visit coal production being done by using by blast free surface miner technology. PP furnished that sequentially controlled blasting technique implemented by using electric/non-electric detonators for the removal of OB only when it is required to mitigate ground vibrations and fly rocks.
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.	BEING COMPLIED  Noise level data reported along with six monthly compliances to the Regional Office.  Data reported was within norm.
	(e) Mining Plan	
i.	Mining shall be carried out under strict adherence to provision of the Mines Act 1952 and subordinate legislation made there-under as applicable.	As per the documents furnished mining is being done under the provision of Mines Act 1952 interalia including permission has ben obtained from coal controller, register has been maintained at the office of safety department for maintaining record of any
		accidents, all the working personal are mandatorily provided with one rest after working continuously for 48 hours, woman has not been deployed beyond 6.00Am to 7.00 PM etc.
ii.	Mining shall be carried out as per the	BEING COMPLIED
	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).	During visit mining activity was in operation. PP informed that Mining has been carried out complying to the provisions of the Mining Laws and related to mining and relevant DGMS circular.
iii.	No mining shall be carried out in forest	BEING COMPLIED
	land without obtaining Forest Clearance as per Forest (Conservation) Act, 1980.	Forest Clearance was obtained vide noF.No8- 176/1997-FC, for an area 227.89Ha. PP reported that mining is being done in the diverted forest land only.
iv.	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.	BEING COMPLIED  During visit it was observed that LED light has been provided to reduce energy consumption. PP reported 655Nos of LED bulbs installed in the period of 2022-23. It was also informed that 69 nos of solar light has been installed in the Kuisira, Ratansara



Sl. No.	Conditions	Status of Compliances
	-	and Ratanpur village.
	(f) Land reclamation	
i.	Digital Survey of entire lease hold	BEING COMPLIED
	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).	Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey for 2022 has been furnished to the Regional Office.
ii.	The final mine void depth should	AGREED UPON
	preferably be as 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	During visit project was in operation. PP agreed to comply the condition as per the mine closure plan. It was also informed that a. Total excavated area: 313.35 Ha b. Backfilled Area: 142.74 Ha c. Mine Sump Area: 13.70 Ha
	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 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-à-vis the post mining land use pattern shall be submitted to the MoEFCC/RO.	PARTIALLY COMPLIED  PP furnished the details of post mining land use details and present land use details. The details regarding excavation, back filling, external dumping in comparison to during mining land use pattern at present has not been furnished.
iv.	Fly ash shall be used for external dump of	PLEASE REFER BELOW
	overburden, backfilling or stowing of mine as per provision 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 and SPCB.	During visit utilization of fly ash has not been observed. It was informed that the as per the approved Mining Plan, the total OB generated is being dumped in the internal dump; hence, the void is not available for dumping of fly ash. Ministry may like to take a view on the matter.
V.	Further, it may be ensured that as per the	PARTIALY COMPLIED

Sl. No.	Conditions	Status of Compliances
	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 utilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilized 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 managements of rehabilitated areas shall continue the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.	During visit top soil dump has not been observed. PP reported that 265798.95m³ of top soil has been spread on the top of the internal dump as well as external dump.  It was also submitted that the total top soil produced is used to blanket the internal Dump as well as external Dump as a part of technical reclamation followed by biological reclamation under the supervision of DFO, Sundargarh. Plantation has been dome in internal as well as external OB dump. As per the document furnished. 301175 nos of plantation has been done an over burden dump, road side safety zone and vacant area has been backfilled. However, stabilization with native grass species has been shown in part not in all the dump.
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 area for livestock grazing, if any. In this context, the project proponents shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.	PLEASE REFER BELOW  PP reported that no grazing land is involved in core zone. Hence the point in not applicable for Kulda OCP, Basundhara Area.
	(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	BEING COMPLIED  PP reported that for implementation of Regional Wild Life Management Plan (RWLMP) Kulda OCP has deposited fund to the Forest Department:  S.N Amount Paid Date of Payme
	Department.	nt 1 Rs. 2,00,85,000.00/- 13.08.2014
		Rs. 2,30,97,750.00/-  Rs. 2,30,97,750.00/-  (Additional amount as per revised rate)
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	PARTIALLY COMPLIED  As per the document furnished 301175 nos of plantation has been done on over burden dump, Road site safety zone and vacant area. However, 7.5m green belt all along the mine lease area as well as major approach/coal



Sl. No.	Conditions	Status of Compliances			
	approach/coal transportation roads.	transportation road yet to be developed.			
	(h) Public hearing and Human health issues				
i.	Adequate illumination shall be ensured in all mine location (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.	BEING COMPLIED  Mine illumination survey report of dated 15.09.2023 has been furnished. Data reported was within norms. PP reported that following action to improve illumination:			
		<ol> <li>Lighting along Haul road.</li> <li>Installation of lighting DG at the working area.</li> </ol>			
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 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.	PP reported that persons are provided with DGMS approved dust masks and provided with adequate training regularly and at every 5 years interval, occupational health surveillance is being done.  PP also reported that IME of 591 nos. and PME of 74 personnel were carried out in 2022-23.  It was also informed that 118 personnel were identified as the workforce engaged in active mining operations and were subjected to health check-up for occupational diseases. None of the case reported for Hearing Impairment and Occupational Disease.			
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.	BEING COMPLIED  PP reported that all personnel working in core zone are provided with N95 dust masks and training is provided to both departmental as well as contractual employees 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 task/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.	PARTIALLY COMPLIED  PP reported that drinking water is being supplied to the nearby 17 nos. of villages. 341 out of 393 eligible candidates have been provided with employment and 429 out of 501 families have been rehabilitated till date. The employment is being provided to all the land loosers as per the recommendation of the Claims Commission set up by Hon'ble Supreme Court of India.			
V.	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II	PARTIALLY COMPLIED  PP reported that activity such as use of surface miner, Dust suppression system, ETP,			



Sl. No.	Conditions		Status of	Compliance	ces
	(M) dated 29th October, 2014, titled 'impact of mining activities on habitations-issues related to the mining projects wherein habitations and village are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.	per the noise develop of graz sprinkle Howev through be arrange	R&R plan, rain the residence, controlling land, firer provided over road from a village for implemented.	ninimize illudential area of blasting, xed and men the transport Kulda to Twhich bypa which bypa to be inado	lease area as amination and a, green belt development to able water cortation road. Caparia passes as road yet to sprinkling equate on the
	(i) Corporate Environment Responsib	oility			
i.	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 and/or shareholders/ stake holders.	enviror Enviror	mitted that th	y, i.e. CI 2012. And	has a well laid L Corporate M/s MCL is a
iii.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control senior Executive, who will directly to the head of the organization.			-	E <b>D</b> ell has been
iv.		have be expended expended. The years) to Kuld	the EMP Rs een allotted iture respect iture. ear-wise exp under Enviro la OCP repor	as capital tively for benditure (forment head ted is as followed	d Rs 31.03 Cr and recurring environmental for past three d with respect ows:
	Compliance Report.	to Ruida OCI	Revenue Nature		
		1	2019-20	1.24Cr	4.59Cr
		2	2020-21	0.50Cr	5.16Cr
		3	2021-22	0.71Cr	4.74 Cr
V.	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall		orted that is		D Environmental every quarter.

Sl. No.	Conditions	Status of Compliances
	carried out.	The audit committee reviews all the compliance of the condition laid in the Environmental as well as Forest Clearance.
		Third party assessment of EC Compliance has been done by NEERI and report submitted on Nov. 2023.
	(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.	PARTIALLY COMPLIED  As per the document furnished advertisement regarding accord of Environmental clearance has been published in two local newspapers namely The New Indian Express on 23.06.2022 and the Samaja on 23.06.2022. However, the clause of seven days has not been followed. Advertisement as per the condition has not been made and advertisement as per the condition has not been made.
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.	PP submitted that A copy of the environmental clearance has been sent to the concerned State Pollution Control Board, Regional Office, District Industry Sector and Collector's Office/Tahsildar Office.
iii.	The project proponent shall upload the	BEING COMPLIED
	status of compliance of the stipulated environment clearance conditions, including result of monitored data on their website and update the same on half-yearly basis.	The compliance status for the period Apr23 to Sep23 has been uploaded on the company's website: https://www.mahanadicoal.in.
iv.	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx, (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.	PM10, SO2, NOx, (ambient levels) monitoring data has been furnished. The monitoring reports are being uploaded in the website along with six monthly compliance at https://www.mahanadicoal.in and displayed in LED Display Board in front of the project in public.
V	The project proponent shall submit sixmonthly report 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.	PARTIALLY COMPLIED  Six monthly compliances for the period April 2023 to Sept. 2023 has been submitted to Regional Office and uploaded on the MCL company's website. However, six monthly compliance yet to be uploaded on Environmental clearance portal.



Sl. No.	Conditions	Status of Compliances
vi.	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 habitationsissues related to the mining projects wherein habitations and village are surrounded by the mine lease area'.	Same as condition no 4.1.h. v
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 on the website of the company.	BEING COMPLIED  As per the documents furnished the Environmental Statement in Form-V has been submitted to the State Pollution Control board, Odisha Environment Statement for the period of 2022-23 has been uploaded in the MCL's Website also.
viii.	The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.	BEING COMPLIED  PP reported that the commencement of mining operation as 25.02.2022
ix.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	BEING COMPLIED  Consent order has been accorded vide no 4963/IND-I-CON-5125, Date- 28.03.2023, by Odisha State Pollution Control Board.
X.	The project authority 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.	AGREED UPON  Status of compliance of the stipulated EC condition has already been indicated in the compliance status. Recommendation of EIA/EMP such as use of surface miner, wet drill arrangement, fixed sprinkler in roads towards sardega siding, fog canon at coal storage area etc has been implemented. However, In pit Silo loading system, avenue plantation provide in part not in all the transportation route, fixed water sprinkling arrangement system provided in part not in all the transportation route etc yet to be implemented. PP agreed to abide by the condition.
xi.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of environmental, Forests and Climate Change.	PLEASE REFE BELOW  EC has been accorded vide letter no dated 14.02.2022 for the production of 19.6 MTPA and vide letter dated 24.05.2022 for 21 MTPA. Consent to operate has been accorded by Pollution control board for 18.5 MTPA (2021-22), 19.6 MTPA (2022-23) vide letter dated 25.02.2022 and for 21 MTPA vide letter dated 20.01.2023. The production details reported for 2020-21, 2021-22, 2022-23 as

SI. No.	Conditions	Status of Compliances
		15.73 MT, 18.49 MT, 20.99 MT respectively Ministry may like to take a view on the matter.
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.	AGREED UPON PP agreed to abide by the condition.
xiii.	The Ministry may revoke or suspend the clearance, if implementation of the above conditions is not satisfactory.	AGREED UPON PP agreed to abide by the condition.
xiv.	The Ministry reserves the right to stipulated additional if found necessary. The company in a time bound manner shall implement these conditions.	AGREED UPON  PP agreed to abide by the condition.
XV.	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authority should extent full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.	PLEASE REFER BELOW  The project is being monitored by Regional Office.
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 Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules made their under and any other Court of Law relating to the subject matter.	PARTALLY COMPLIED  Consent To Establish has been accorded vide letter no. – 19795/IND-II-CTE-6742, Date – 27.10.2022 and consent to operate accorded vide letter no. 4963/IND-I-CON-5125 dated 28.03.2023 for production of 21 TPA valid up to 31.03.2024. Hazardous waste authorization was obtained vide no IND-IV-HW-1038/4010, date- 18.03.2023, and valid till 31.03.2024. However, detail on Public liability insurance has not been furnished.
5	The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report as well as during presentation to the EAC. All the commitments made on the issued raised during public hearing shall also be implemented by the EC in letter and spirit.	PLEASE REFER BELOW  Same as condition no 4.1.j.x.
6	The proponent shall obtain all necessary clearance/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 stipulated any further condition for	REPORTEDLY COMPLIED  PP reported that all the required Consent from the State Government has been taken before the commencement of mining operation.



Sl. No.	Conditions	Status of Compliances
	environmental protection.	
7	Any appeal against this Environment Clearance (EC) 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.	AGREED UPON  PP agreed to abide by the condition.
8	The coal company/project proponent shall be liable to pay the compensation against 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.	AGREED UPON  PP agreed to abide by the condition.
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.	AGREED UPON PP agreed to abide by the condition.
10	This Environment Clearance (EC) 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.	AGREED UPON  PP agreed to abide by the condition.
11	All the conditions stipulated in Environment Clearance vide Ministry's letter No. J-11015/10/95-IA.II(M) dated 24th December, 2002, 22nd March,2018, 28th March,2019, 10th January, 2020 and 2nd March, 2021.	AGREED UPON  PP agreed to abide by the condition.

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EC letter dated J-11015/10/1995/-IA-II(M) dated 02		2.03.2021
	SPECIFIC CONDITIONS:	
i.	All previous Environmental clearances issued by ministry for this project shall be applicable along with these conditions.	AGREED UPON  PP agreed to abide by the condition.
ii.	All the 3 continuous air quality monitoring station should be made operation by March 2021 and the real time data so generated to	BEING COMPLIED  As per the information provided three continuous ambient air quality station

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	be uploaded on company website. In addition, data should also be displayed digitally at entry and exist gate of mine lease area for public display.	approved by SPCB are in operation. Data is being uploaded on the website of the company and a digital display board provided to display digitally at the entrance and exit of the mine.
iii.	Adequate effectiveness of EMP should be analyzed from the offset/hike of air pollution data from continuous monitoring station and quarterly report shall be generated and submitted with 6 monthly compliance report to RO, MoEF&CC.	Same as condition no. – 4.xviii of EC issued on date – 14.02.2022
iv.	The PP shall complete all non-compliance in one year and the action taken report shall be submitted to Regional Office of the MoEF&CC.	AGREED UPON  PP agreed to abide by the condition.
V.	PP should opt specific mitigative measures	BEING COMPLIED
	for the straightening of Chattan Jhor. Regular monitoring of the flow rate of chattan Jhor Nallah shall be carried out and record maintain.	Chhatnajhor nallah has been straightened with the competent approval from State Government and embankment has been provided all along the stream.
		The flow rate has been submitted with the half yearly EC compliance report.
vi.	Quality of polluted water generated from the operations which include COD and acid mine drainage and metal contamination shall be monitored along with TDS, DO, TSS. The monitored data shall be uploaded on the website of the company as well as displayed at the <b>site in</b> public domain.	PARTIALLY COMPLIED  PP furnished effluent monitoring data for PH. TSS and COD. However, monitoring data as per the condition has not been furnished.
vii.	PP shall submit 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's Regional Office.	Same as condition no. – 4.vii of EC issued on date – 14.02.2022
viii.	Continuous Monitoring at Occupational safety and health hazards and the Corrective action need to be ensured.	Same as condition no. – 4.xxiii of EC issued on date – 14.02.2022
ix.	Persons of nearby villages shall be given training on livelihood and skill development to make them employable.	Same as condition no. –4.xxvi of EC issued on date – 14.02.2022
Х.	PP to plant 100,000 nos. of native trees with broad leaves along the villages and 50,000 no of trees along the transportation route to prevent the effect of air pollution	PARTIALLY COMPLIED  PP reported that a total of 232513 nos. of plants has been planted in the period of 2022-23. Plantation has been done outside mine



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	in 2 years. A proper mechanism to be put in place for massive plantation by hiring expert agency in 2 years for proper survival of trees.	lease area (1,50,000 nos.) as on 30.09.2023 along the transportation routes of Kulda OCP.  However, plantation all along transpiration route from Kulda to Taparia yet to be provided. The EC accorded on 02.03.2021.
xi.	Mining shall be carried out only by surface miners for the project (as proposed) and silo loading till railway siding through inpit conveyor should be installed to avoid road.	PARTIALLY COMPLIED  During visit surface miner has been observed at the mine for mining activity. However, silo loading system was under construction during visit.
xii.	Hon'ble Supreme Court in an Writ Petition(s) Civil No. 114/2014, Common Cause vs Union of India &Ors vide its judgment dated 8 <sup>th</sup> January, 2020 has directed the Union of India to impose a condition in the mining lease and a similar condition in the environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operation, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Regional Office of the MoEF&CC.	Same as condition no. – 4.xxx of EC issued on date – 14.02.2022
4.1		
a	Statutory compliance	
i.	The project proponent shall obtain forest clearance under the provision 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.	Same as condition no. – 4.1.a.ii of EC issued on date – 14.02.2022
iii.	The project proponent shall prepare a site- Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendation of the approved Site- Specific Conservation Plan/Wildlife	Same as condition no. – 4.1.a.iii of EC issued on date – 14.02.2022

Sl. No.	Conditions	Status of Compliances
	Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the sixmonthly compliance report (in case of the presence of schedule-I species in the study area).	wist Lydian
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.	Same as condition no. – 4.1.a.iv of EC issued on date – 14.02.2022
V.	The project proponent shall obtain the necessary permission from the Central Ground Water Authority.	Same as condition no. – 4.1.a.v of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.a.vi of EC issued on date – 14.02.2022
Ъ	Air quality monitoring and preservation	n = ==
i.	Continuous ambient air quality monitoring station as prescribed in the statue 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 station shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive target in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring station 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.	Same as condition no. – 4.1.b.i of EC issued on date – 14.02.2022
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 <sup>th</sup> 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	Same as condition no. – 4.1.b.ii of EC issued on date – 14.02.2022



Sl. No.	Conditions	Status of Compliances
	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 PM <sub>10</sub> ,/PM <sub>2.5</sub> ) such as haul road, loading/unloading and transfer points. Fugitive dust emission 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.	Same as condition no. – 4.1.b.iii of EC issued on date – 14.02.2022
iv.	The transportation of coal shall be carried out as per the provision and 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.	Same as condition no. – 4.1.b.iv of EC issued on date – 14.02.2022
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 centers.	Same as condition no. – 4.1.b.v of EC issued on date – 14.02.2022
vi.	Coal stock pile/crusher/feeder and breaker material transfer point 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.	Same as condition no. – 4.1.b.vi of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.b.vii of EC issued on date – 14.02.2022
С	Water quality monitoring and preservation	n e e e e e e e e e e e e e e e e e e e



Sl. No.	Conditions	Status of Compliances
i.	The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the water Act, 1974 Coal Standards vide GSR 742 € dated 25 <sup>th</sup> September, 2000 and as amended from time to time by the Central Pollution Control Board.	Same as condition no. – 4.1.c.i of EC issued on date – 14.02.2022
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-20012/2006-1A.11 (M) dated 27 <sup>th</sup> May, 2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.	Same as Common in condition no. – 4.1.c.ii of EC issued on date – 14.02.2022
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 level 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 MoEFCC/RO.	Same as condition no. – 4.1.c.iii of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.c.iv of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.c.v of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.c.vi of EC issued on date – 14.02.2022



Sl. No.	Conditions	Status of Compliances
	The drains/ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly settling of silt material. The water so collected in the sump shall be utilized 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).	Same as condition no. – 4.1.c.vii of EC issued on date – 14.02.2022
viii.	Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected 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.	Same as condition no. – 4.1.c.viii of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.c.ix of EC issued on date – 14.02.2022
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	Same as condition no. – 4.1.c.x of EC issued on date – 14.02.2022



Sl. No.	Conditions	Status of Compliances
	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 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation/water resource department in the state government.	Same as condition no. – 4.1.c.xi of EC issued on date – 14.02.2022
d	Noise and Vibration monitoring and prev	ention
Í.	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 equipment's (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.	Same as condition no. – 4.1.d.i of EC issued on date – 14.02.2022
ii.	Controlled blasting techniques shall be practiced in order to mitigate ground vibration, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.	Same as condition no. – 4.1.d.ii of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.d.iii of EC issued on date – 14.02.2022
е	Mining Plan	,
i.	Mining shall be carried out under strict adherence to provision of the Mines Act 1952 and subordinate legislation made there-under as applicable.	Same as condition no. – 4.1.e.i of EC issued on date – 14.02.2022
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).	Same as condition no. – 4.1.e.ii of EC issued on date – 14.02.2022
iii.	No mining shall be carried out in forest land without obtaining Forest Clearance as	Same as condition no. – 4.1.e.iii of EC issued

Sl. No.	Conditions	Status of Compliances
	per Forest (Conservation) Act, 1980.	on date – 14.02.2022
iv.	Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.	Same as condition no. – 4.1.e.iv of EC issued on date – 14.02.2022
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).	Same as condition no. – 4.1.f.i of EC issued on date – 14.02.2022
ii.	The final mine void depth should preferably be as 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 27 <sup>th</sup> August, 2009 and subsequent amendments.	Same as condition no. – 4.1.f.ii of EC issued on date – 14.02.2022
iii.	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-à-vis the post mining land use pattern shall be submitted to the MoEFCC/RO.	Common in condition no. – 4.1.f.iii of EC issued on date – 14.02.2022
- <b>i</b> V <sub>.5</sub> ;	Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provision contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3 <sup>rd</sup> 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,	Common in condition no. – 4.1.f.iv of EC issued on date – 14.02.2022

Sl. No.	Conditions	Status of Compliances
	backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC 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 utilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilized 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 managements of rehabilitated areas shall continue the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.	Common in condition no. – 4.1.f.v of EC issued on date – 14.02.2022
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 area for livestock grazing, if any. In this context, the project proponents shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.	Same as condition no. – 4.1.f.vi of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.g.i of EC issued on date – 14.02.2022
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	Same as condition no. – 4.1.g.ii of EC issued on date – 14.02.2022

Sl. No.	Conditions	Status of Compliances
	approach/coal transportation roads.	
	Public hearing and Human health issues	1
i.	Adequate illumination shall be ensured in all mine location (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.	Same as condition no. – 4.1.h.i of EC issued on date – 14.02.2022
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 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 safety and health aspects.	Common in condition no. – 4.1.h.ii of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.h.iii of EC issued on date – 14.02.2022
iv.	Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the task/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.	Same as condition no. – 4.1.h.iv of EC issued on date – 14.02.2022
V.	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29 <sup>th</sup> October, 2014, titled 'impact of mining activities on habitationsissues related to the mining projects wherein habitations and village are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.	Same as condition no. – 4.1.h.v of EC issued on date – 14.02.2022
i	Corporate Environment Responsibility	U

Sl. No.	Conditions	Status of Compliances
i.	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 and/ or shareholders/ stake holders.	Same as condition no. – 4.1.i.i of EC issued on date – 14.02.2022
ii.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control senior Executive, who will directly to the head of the organization.	Same as condition no. – 4.1.i.iii of EC issued on date – 14.02.2022
iii.	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company 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.	Same as condition no. – 4.1.i.iv of EC issued on date – 14.02.2022
iv.	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall 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.	Advertisement regarding accord of environmental clearance has been published in Samaja and The New Indian express on 24.03.2021. However, the clause of seven days has not been followed and advertisement as per the condition has not been furnished.
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	REPORTEDLY COMPLIED  During visit PP informed that the copy of EC has been communicated to the concerned authority.

Sl. No.	Conditions	Status of Compliances
	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.	Same as condition no. – 4.1.j.iii of EC issued on date – 14.02.2022
iv.	The project proponent shall monitor the criteria pollutants level namely; PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> (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.	Same as condition no. – 4.1.j.iv of EC issued on date – 14.02.2022
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 an environment clearance portal.	Same as condition no. – 4.1.j.v of EC issued on date – 14.02.2022
vi.	The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/512014-IA.II (M) dated 29 <sup>th</sup> October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining project wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.	Same as condition no. – 4,1,j,vi of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.j.vii of EC issued on date – 14.02.2022
viii.	The project authorities shall inform to the regional Office of the MoEFCC regarding commencement of mining operations.	COMPLIED  Date of commencement of mining operation of higher capacity after the accord of EC for higher capacity reported to be 12.03.2021
ix.	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Same as condition no. – 4.1.j.ix of EC issued on date – 14.02.2022
- X.	The project proponent shall abide by all the commitments and recommendations	Same as condition no. – 4.1.j.x of EC issued

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	made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentations to the Expert Appraisal Committee.	on date – 14.02.2022
xi.	No further expansion or modifications in the plant shall be out without prior approval of the Ministry of Environment, Forest and Climate Change.	PLEASE REFER BELOW  EC has been accorded vide letter no dated 14.02.2022 for the production of 19.6 MTPA and vide letter dated 24.05.2022 for 21 MTPA.
xii.	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provision of Environment (Protection) Act, 1986.	Same as condition no. – 4.1.j.xii of EC issued on date – 14.02.2022
xiii.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Same as condition no. – 4.1.j.xiii of EC issued on date – 14.02.2022
xiv.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Same as condition no. – 4.1.j.xiv of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.j.xv of EC issued on date – 14.02.2022
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 Transboundary 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.	Same as condition no. – 4.1.j.xvi of EC issued on date – 14.02.2022
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	Same as condition no. – 5 of EC issued on date – 14.02.2022



Sl. No.	Conditions	Status of Compliances
141	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.	Same as condition no. – 6 of EC issued on date – 14.02.2022
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.	AGREED UPON
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 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 & others.	AGREED UPON
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.	AGREED UPON
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.	AGREED UPON

Sl. No.	Conditions	Status of Compliances
MoEF&	CC EC letter No. J-11015/10/1995-I.A.II(M),	dated 10.01.2020
tā.	A. SPECIFIC CONDITIONS:	



Sl. No.	Conditions	Status of Compliances
i.	EAC asked project proponent to plant 50,000 nos. of native trees with broad leaves along the villages and transportation route to prevent the effect of air pollution. After completion of tree plantation, number of trees shall be duly endorsed from District Forest Officer.	PARTIALLY COMPLIED  PP reported that a total of 232513 nos. of plants has been planted as a part of compliance in the period of 2022-23. Plantation has been done outside mine lease area (1,50,000 nos.) as on 30.09.2023 as per the stipulated condition in the vacant spaces along the transportation routes of Kulda OCP. However, endorsement from DFO has not been furnished.
ii.	EAC desired that the MoC may direct CIL subsidiaries to comply the EC/FC/CTO conditions strictly within certain time bound manner so that the mining operations will be environmentally sustainable/viable etc.	AGREED UPON  Details of direction from MoC to CIL has not been furnished. PP agreed to abide by the condition.
iii.	The project proponent shall complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2 <sup>nd</sup> August 2017 in write petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India and Ors. State Government shall ensure that the entire compensation levied, if any, for illegal mining paid by the project proponent through their respective Department in strict compliance of judgment of Hon'ble Supreme Court dated the 2 <sup>nd</sup> August 2017 in writ Petition (Civil) No. 114 of 2014 in the matter of common cause versus Union of India and Ors.	AGREED UPON PP agreed to abide by the condition.
iv.s	Project proponent shall obtain the necessary prior permission from the Central Ground Water Authority (CGWA) in case of intersecting the Ground water table. The intersecting ground water table can only be commence after conducting detailed hydrogeological study and necessary permission from the CGWA. The report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry, CGWA and State Pollution Control Board.	PARTIALLY COMPLIED  NoC has been accorded by CGWA with validity up to 08-12-2022 vide NoC No.CGWA/ NOC/ MIN/ORIG/2020/9245 dated 09.12.2020 as per the document furnished online application submitted for renewal of approval vide dated 29.11.2022, However renewed NOC is awaited. However, details regarding intersection of ground water table has not been furnished.
V.	Proponent shall appoint an Occupational Health Specialist for Regular and periodical medical examination of the workers engaged in the project and maintains records accordingly. also	Same as condition no. – 4.1.h.ii of EC issued on date – 14.02.2022

Sl. No.	Conditions	Status of Compliances
	Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smoking, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. The Recommendations of National Institute for ensuring good occupational environment for mine workers shall be implemented; The prevention measures for burns, malaria and provision of anti snake venom including all other paramedical safeguards may be ensured before initiating the mining activities.	
vi.	Project Proponent shall follow the mitigation measures provided in Office Memorandum No. Z-11013/57/2014-IA.II(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.	Same as condition no. – 4.1.h.v of EC issued on date – 14.02.2022
Vii.	The illumination and sound at night at project sites disturb the village in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed. By orienting the floodlights/ mask away from the villagers and keeping the noise levels well within the prescribed limits for day light/night hours.	Same as condition no. –4.xxvii of EC issued on date – 14.02.2022
viii.	The Project Proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna, if any, spotted in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. A copy of action plan shall be submitted to the ministry of Environment, Forest and Climate Changes and its Regional Office.	Same as condition no. – 4.1.g.i of EC issued on date – 14.02.2022
ix.	Hon'ble Supreme Court in an writ	Same as condition no. – 4. xxx of EC issued

Petition(s) Civil No. 114/2014, Common Cause vs. Union of India & Ors vide its judgment dated 8 <sup>th</sup> January 2020 has directed the union of India to impose a condition in the mining lease and similar condition in the Environmental clearance and the mining plan to the effect that the	Sl. No.	Conditions	Status of Compliances
mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Ministry's Regional Office for site inspection/verification.		Cause vs. Union of India & Ors vide its judgment dated 8 <sup>th</sup> January 2020 has directed the union of India to impose a condition in the mining lease and similar condition in the Environmental clearance and the mining plan to the effect that the mining lease holders shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. compliance of this condition after the mining activity is over at the cost of the mining lease holders/Project Proponent". The implementation report of the above said condition shall be sent to the Ministry's Regional Office for site	on date – 14.02.2022

### Environment Clearance Letter No: J-11015/10/1995-IA-II(M) dated 22.03.2018

Sl. No.	Conditions	Status of Compliances
	SPECIFIC CONDITIONS:	
i.	The project proponent shall collect and analyse one season base line data for environmental parameters, preferably during April-June, 2018, and submit for consideration of the EAC before 31st December, 2018.	REPORTEDLY COMPLIED  PP reported that one season base line data generation for environmental parameters, during April-June, 2018 has been collected and analysed. The reports have been submitted for the consideration of the EAC and environmental clearance has been granted to Kulda OCP, vide letter no J-11015/10/1995-IA.II(M) dated 28.03.2019.
ii.	The project proponent shall submit the details regarding action taken on different observations of the Regional Office before 31st 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.	PLEASE REFER BELOW  PP reported that details regarding action taken on different observations of the Regional Office along with the certified compliance report issued by the Ministry of Environment, Forest and Climate Change vide Ref No.:  MCL/PO/KOCP/2018-19/630 dated 28.12.2018.
iii.	To control the production of dust at source, the crusher and in-pit belt conveyors shall be provided with mist type sprinklers.	PLEASE REFER BELOW  PP reported that CHP is provided with sprinklers. During visit CHP was not in

Sl. No.	Conditions	Status of Compliances
		operation, PP informed that the CHP unit is not in operation since December 2017.
iv.	Mitigative measures shall be undertaken to	PARTIALLY COMPLIED
-	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	During visit water sprinkler as well as tanker has been observed to be plying on the road from mine to sardega siding. PP reported that 4 tankers of capacity 28 kl, 2 nos. of 20 kl tankers and 2 nos. of 12 kl does the work of suppressing dust inside the mine premises. A total number of 70 fixed sprinklers are
98 98 98	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.	provided at locations such as near weighbridges, on the external CT road, near office building, etc. to suppress dust. 3 numbers of instant water showering systems are also present at the entry and exit of the mines. 7 nos. of static fog canon and 10 nos. of mobile fog canon have been provided for dust suppression in and outside the mine area. However, wind barrier wall, vertical greenery system yet to be provided.
V.	Persons of nearby villages shall be given training on livelihood and skill development to make them employable.	Same as condition no. –4. xxvi of EC issued on date – 14.02.2022
vi.	To ensure health and welfare of nearby	BEING COMPLIED
3	villages, regular medical camps shall be organized at least once in six months.	PP reported that Medical camps are conducted by the hospital authorities of MCL, Basundhara Area, where people are subjected to medical check-ups and provided with medicine for free of cost, if required.
vii.	Thick green belt of 75 m width at the final	PARTIALLY COMPLIED
	boundary in the down wind direction of the project site shall be developed to mitigate/check the dust pollution.	During visit plantation has been observed. However, thick green belt of 75m yet to be developed.
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.	Same as condition no. –4. vii of EC issued on date – 14.02.2022
	General conditions	
	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.	Same as condition no. – 4.1.e.i of EC issued on date – 14.02.2022
ii.	No change in mining method i.e. OC to	BEING COMPLIED
	UG, calendar programme and scope of work shall be made without obtaining prior	During visit OC mine observed.

Sl. No.	Conditions	Status of Compliances
	approval of the Ministry of Environment, Forest and Climate Change (MoEF & CC).	
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).	Same as condition no. – 4.1.e.ii of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.e.iii of EC issued on date – 14.02.2022
	B. Land reclamation and water conservat	ion
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).	Same as condition no. – 4.1.f.i of EC issued on date – 14.02.2022
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 in rush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS.	Same as condition no. – 4.1.c.x of EC issued on date – 14.02.2022
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. Postmining land be rendered usable for agricultural/forestry purposes and shall be	Same as condition no. – 4.1.f.ii of EC issued on date – 14.02.2022



Sl. No.	Conditions	Status of Compliances
×	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 27th 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	Common in condition no. – 4.1.f.iii of EC issued on date – 14.02.2022
, Ruy "	Environment, Forest and Climate Change/Regional Office on six monthlybasis.	
↓V.	The top soil shall temporarily be stored at earmarked site(s) only and shall not be kept	
H-2	unutilized for long. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilized 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 disposa	I
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	Same as condition no. – 4.1.b.iii of EC issued on date – 14.02.2022
	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	

Sl. No.	Conditions	Status of Compliances
	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.	Same as condition no. – 4.1.g.ii of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.b.iv of EC issued on date – 14.02.2022
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 centers.	Same as condition no. – 4.1.b.v of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.b.vi of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.b.vii of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.c.v of EC issued on date – 14.02.2022
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	Same as condition no. – 4.1.c.vi of EC issued on date – 14.02.2022



Sl. No.	Conditions	Status of Compliances
	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 utilized 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,	Same as condition no. – 4.1.c.viii of EC
25	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.	issued on date – 14.02.2022
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.	Same as condition no. – 4.1.c.vii of EC issued on date – 14.02.2022
	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.	Same as condition no. – 4,1.h.i of EC issued on date – 14.02.2022
ii.	Adequate measures shall be taken for control of noise levels below 85 dB(A) in the work environment. Workers engaged in	Same as condition no. – 4.1.d.i of EC issued on date – 14.02.2022

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	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 program 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.	Same as condition no. – 4.1.d.ii of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.d.iii of EC issued on date – 14.02.2022
	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.	Same as condition no. – 4.1.h.ii of EC issued on date – 14.02.2022
ĭí.	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.	Same as condition no. – 4.1.h.iii of EC issued on date – 14.02.2022
iii.	Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standard in mines.	BEING COMPLIED  PP reported that Safety talks are being given before starting every shift regularly and are being reported to the highest authority of 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	Same as condition no. – 4.1.g.i of EC issued on date – 14.02.2022.

Sl. No.	Conditions	Status of Compliances
	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.	Same as condition no. – 4.1.h.iv of EC issued on date – 14.02.2022
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.	PARTIALLY COMPLIED  PP reported the details of activities and expenditure on CSR for the Basundhara area. Separate activity and expenditure for Kulda coal mine has not been furnished.
iii.	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'.	Same condition no. – 4.1.h.v of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.f.vi of EC issued on date – 14.02.2022
	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	Same as condition no. – 4.1.i.i of EC issued on date – 14.02.2022

Sl. No.	Conditions	Status of Compliances
	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	BEING COMPLIED
	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.	Environment management cell has been established in Project. The details are uploaded in the company's website <a href="https://mahanadicoal.in/">https://mahanadicoal.in/</a> along with six monthly compliance.
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.	Common in condition no. – 4.1.i.iii of EC issued on date – 14.02.2022
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.	Common in condition no. – 4.1.i.iv of EC issued on date – 14.02.2022
V.	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Common in condition no. – 4.1.i.v. of EC issued on date – 14.02.2022
	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.	AGREED UPON  PP agreed to abide by the condition.
ii.	This environmental clearance shall be subject to obtaining wildlife clearance, if applicable, from the Standing Committee of National Board for Wildlife.	Same as condition no4.1 a.ii of EC issued on date - 24.05.2022
iii <u>.</u>	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.	Same as condition no. – 4.i of EC issued on date – 14.02.2022.
iv.	The project proponent shall obtain the	Same as condition no 4.xvii of EC issued
+	14	



SI. No.	Conditions	Status of Compliances
	necessary permission from the Central Ground Water Authority (CGWA).	on date – 14.02.2022.
	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.	Same as condition no. – 4.1.b.i of EC issued on date – 14.02.2022.
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.	Same as condition no. – 4.1.b.ii of EC issued on date – 14.02.2022
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 25.9.200 and as amended from time to time by the Central Pollution Control Board.	Same as condition no. – 4.1.c.i of EC issued on date – 14.02.2022
iv.	The monitoring data shall be uploaded on	Same as condition no. – 4.1.c.ii of EC issued
-	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.	on date – 14.02.2022.
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	Same as condition no. – 4.1.c.iii of EC issued on date – 14.02.2022

Sl. No.	Conditions	Status of Compliances
	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.	Same as condition no. – 4.1.c.iv of EC issued on date – 14.02.2022
vii.	The project proponent shall submit six monthly reports on the status of the	BEING COMLIED
	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.	Six monthly compliance report has been furnished for the period Apr23 to Sep23 to the Regional Office.
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.	Common in condition no. – 4.1.j.xv of EC issued on date – 14.02.2022
	K. Miscellaneous	
i.	Efforts should be made to reduce energy consumption by conservation, efficiency improvements and use of renewable energy.	Common in condition no. – 4.1.e.iv of EC issued on date – 14.02.2022
ii.	The project authorities shall inform to the Regional Office regarding commencement of mining operations.	As per the document furnished the commencement of mining operation for EC dated 22.03.2018 reported to be 29.03.2018
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/Tahsildar Office for information in public domain within 30	REPORTEDLY COMPLIED  During visit PP informed that the copy of EC has been communicated to the concerned authorities.

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Sl. No.	Conditions	Status of Compliances
	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.	BEING COMPLIED  THE EC has been uploaded on company website. The compliance status of EC dated 22.03.2018 has been uploaded.
Ÿ.	The project authorities shall advertise at	COMPLIED
·	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.	Advertisement regarding accord of Environmental clearance has been published in the New Ind Exp and Samaj on 4.4.18. However, the clause of seven days has not been followed.
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.	Same as condition no. – 4.1.j.vii of EC issued on date – 14.02.2022
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.	Same as condition no. – 4.1.j.xvi of EC issued on date – 14.02.2022
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	Same as condition no. – 5 of EC issued on date – 14.02.2022

Sl. No.	Conditions	Status of Compliances
	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.	Same as condition no. – 6 of EC issued on date – 14.02.2022.
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.	Same as condition no. – 7 of EC issued on date – 14.02.2022.
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 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 & others'.	Same as condition no. – 8 of EC issued on date – 14.02.2022.
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.	AGREED UPON
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.	AGREED UPON

#### **Observations:**

The PAs have complied or are in process of complying the conditions stipulated by the Ministry. In this context, information/action plans have been sought on following points:

As per the EC letter no. J-11015/10/1995-1A. 11 (M) dated 09.01.2023

## The following Partially compliance to the environmental clearance conditions were observed:

1. During visit conveyer system was under construction from feeding point of silo loading system to the under-construction silo at Sardega siding. Coal transportation to Kanika siding is being done thorough road transportation. Transportation by the consumer is being done through road. As per the document furnished EAC has recommended for extension of time line. However, approval from Ministry yet to be accorded. Ministry may like to take view on the matter.(Specific condition no. ii)

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- 2. As per the documents furnished, apart from the coal transported through rail mode, the coal consumer who are taking coals by road sale mode are deploying hire capacity track i.e. 40-50 tones capacity truck/tipper to transport coal from Kulda to respective destination. The weighment cum-gate pass slip provided indicate gross as more than 44 and net more than 30. PP informed that the existing contracts operating under Kulda OCP have a requirement for deployment of tipper having capacity of 16 Te-28 Te, and there are 15 contracts, and 335 nos. of tippers were running under Kulda OCP for coal transportation from pit to coal stock and stock to siding. PP also reported that as per the stipulated condition, PP has already deployed 126 numbers of 35-50 Tonnes covered trucks replacing about 153 nos. of 16 Te- 28Te capacity tippers. (Specific condition no. iii)
- 3. PP furnished a copy of the progress report of Rapid loading system pipe conveyor system and doubling of Jharsuguda, Barapali, Sardega line. However, the inpit conveyor system as well as rapid loading system yet or be implemented. As per the document furnished EAC has recommended for extension of time line, however, approval from Ministry yet to be accorded. Ministry may like to take view on the matter. (Specific condition no. iv)

#### As per the EC letter no . - J-11015/10/1995-IA-II(M), Date - 14.02.2022

## The following partially compliance to the environmental clearance conditions were observed:

- 1. During visit, fog canon, mobile water tanker has been observed. PP reported that activity such as mist sprinkler and wind barrier system is under progress, and activity such as mobile water tanker 12 KL one no, Static fog canon (8nos), mechanical road sweeper (3nos) has been deployed and contract has been awarded for the one road sweeper. 3 nos of wheel washing system has been constructed and plantation of 27513 nos completed. (Specific condition no. ii)
- 2. PP reported that the pollution level (for both air and water) is maintained well within limits. Drinking water is being supplied to the nearby 17 nos. of villages. 341 out of 393 eligible candidates have been provided with employment and 429 out of 501 families have been rehabilitated till date. The PP has implementing the sequentially controlled blasting technique by using electric/non-electric detonators for the removal of OB only when it is required. (Specific condition no. iv)
- 3. The condition has been amended vide letter dated 09.01.2023 with "PP shall implement in-pit conveyor system with silo loading facility till railway siding and no road transportation shall be allowed after October 2023 and accordingly, SPCB shall not grant CTO for road transportation after October 2023". MoEF&CC has extended the time limit up to 31.10.2023 in the amended EC issued on date 09.01.2023. Further PP reported that Ministry has been approached for time extension till 31.12.2023, which is awaited. Ministry may like to take in view in the matter. During visit construction activity observed at the silo. It was also informed that the construction of silo loading system with conveyor system is under progress and is expected to be completed by 31.12.2023. (Specific condition no. v)
- 4. Carrying capacity assessment study carried out by CMPDI has been furnished. However, details of implementation status of recommendation has not been furnished. (Specific condition no. vi)

- 5. PP reported that PP is not sending coal through road passing through any villages. It was also informed that MCL has already issued a notice vide no. MCL/GM/BA/M&S/2022-23/140, date 23.05.2022, to submit a legal undertaking to MCL office. However, legal undertaking from consumers yet to be furnished. On the way from Kulda to Taparia, vehicles are passing through village. Further, it was also informed that PP has submitted 1.278 Crore as environment compensation to SPCB, Odisha in this regard, on date 10.05.2023. (Specific condition no. ix)
- 6. PP reported that 15, 29, 25 nos. of solar street lights has been installed in the Kuisira, Ratansara and Ratanpur village respectively. It was also informed that village panchayats and Tehesildar of Hemgir block has approached for identifying the requirement of more numbers of solar street lights in the peripheral villages. Further PP submitted that solar lights are not viable in the roads used for transportation of minerals as heavy vehicles ply in these roads. It requires lights of larger illumination at these roads. PP has installed lights with better illumination in the coal transportation roads. Ministry may like to take a view in the matter. (Specific condition no. xiv)
- 7. As per the documents furnished 100 numbers of toilets in the peripheral villages of the mines, namely Barpali, Kuisira, & Balinga has been provided. It was further informed that the village panchayats and Tehesildar of Hemgir block has been approached for identifying the requirement of bio-toilets in the peripheral villages. However, Bio toilet has not been observed during visit. (Specific condition no. xv)
- 8. During visit 40-50 tonnes tippers has been shown. Truck/ dumpers of size less than 40-50 tonnes were also found to be in operation for transportation of coal from stock yard to siding. PP informed that the existing contracts operating under Kulda OCP have a requirement for deployment of tipper having capacity of 16 Te-28 Te, and there are 15 contracts, and 335 nos. of tippers were running under Kulda OCP for coal transportation from pit to coal stock and stock to siding. PP reported that as per the stipulated condition, PP has already deployed 126 numbers of 35-50 Tonnes covered trucks replacing about 153 nos. of 16 Te- 28Te capacity tippers. As per the documents furnished, apart from the coal transported through rail mode, the coal consumer who are taking coals by road sale mode are deploying hire capacity track i.e. 40-50 tones capacity truck/tipper to transport coal from Kulda to respective destination. The weighment cum-gate pass slip provided indicate gross as more than 44 and net more than 30. (Specific condition no. xvi)
- 9. NoC has been accorded by CGWA with validity up to 08-12-2022 vide NoC No.CGWA/ NOC/ MIN/ORIG/2020/9245 dated 09.12.2020 as per the document furnished online application submitted for renewal of approval vide dated 29.11.2022, However renewed NOC is awaited. (Specific condition no. xvii)
- 10. PP reported that already one CAAQMS has been installed near the mines as per the earlier stipulated condition. Installation of one more CAQMS is under process. The real time data generated by already installed CAAQMS is being uploaded in company' website: <a href="http://apps.coalindia.in:8080/apex/f?p=159:1:10556120434404">http://apps.coalindia.in:8080/apex/f?p=159:1:10556120434404</a> . Monitoring data is being displayed before the main gate in public domain (Specific condition no. xix)
- 11. PP reported that plantation of around 72000 numbers has already been done in the village of Kaletpani. It was also reported that Teleimal & Chakrapur does not have vacant space for plantation and Tumulia is under the mining zone of adjacent mine of Siarmal OCP, hence plantation in these three villages are not feasible. **Ministry may** like to appropriate view in the matter. (Specific condition no. xx)
- 12. Fixed fog canon has been observed at coal storage area, railway siding. However, fixed fog canon all along the haul road and OB dump area yet to be provided. PP provided

- mobile fog canon along the transportation routes to railway siding. Ambient air quality data reported was within daily norms. (Specific condition no. xxi)
- 13. PP reported that there is no Schedule-I species present in the study area, as per the EIA-EMP report of Kulda OCP and Kulda OCP, has deposited the required amount for the implementation of Regional Wild Life Management Plan (RWLMP) to the Forest Department: However, details on site specific conservation plan as per the condition has not been furnished. (4.1, Statutory Compliance condition no. iii)
- 14. AS per the document furnished NoC has been accorded by CGWA with validity upto 08-12-2022 vide NoC No.CGWA/ NOC/MIN/ORIG/2020/9245 dated 09.12.2020. However, details of renewal has not been furnished. (4.1, (a)Statutory Compliance condition no. v)
- 15. PP reported that continuous Air Quality Monitoring Stations are established in core as well as buffer zone in consultation with the RO, SPCB, PP furnished the copy of approval from SPCB for installation of continuation ambient air quality monitoring station. It was also informed that additionally, 04 routine monitoring stations has been established in consultation with SPCB External CT Road, West of Working Face, South of Working Face, North of CHP. Heavy metals such as As, Ni, monitoring report furnished. However, monitoring data of Hg, Cd and Cr has not been furnished. (4.1, (b)Air quality monitoring and preservation condition no. i)
- 16. Core zone monitoring data of one location has been furnished. Data reported was within norms. However, heavy metal monitoring data of Hg, Cd and Cr has not been furnished. (4.1, (b)Air quality monitoring and preservation condition no. ii)
- 17. PP reported that transportation of the coal from mine to stock yard/Sardega Siding is done by tipper through the existing road by-passing the village area. Special corridors have been constructed for coal transportation as follows. 25 Km four lanes dedicated coal corridor from Duduka to Kanika was completed with an expenditure of 209.40 Crores. A separate coal corridor is presently under construction from Bankibahal to Bedabahal with an estimate of Rs. 600 Crores, and shall be completed by 31.03.2024. A road has been constructed from Kulda to Taparia which passes through villager. PP informed that the road transportation from Kulda to Taparia is being done by the consumer. Ministry may like to take a view in the matter. (4.1, (b) Air quality monitoring and preservation condition no. iv)
- 18. Workshop effluent is treated in Effluent Treatment Plant (450 KLD) with Oil & Grease skimmer unit. Effluent monitoring data has been furnished along with six monthly compliance for PH, TSS, COD. Monitoring data as per the condition has not been furnished. (4.1, (c) Water quality monitoring and preservation condition no. i)
- 19. PP informed that the riverine/riparian ecosystem management plan is under preparation for Basundhara river and The estimation has been completed. It was also informed that the plan will be implemented as per the direction of irrigation department of Odisha Government. (4.1, (c) Water quality monitoring and preservation condition no. xi)
- 20. PP furnished the details of post mining land use details and present land use details. The details regarding excavation, back filling, external dumping in comparison to during mining land use pattern at present has not been furnished. (4.1, (f) Land reclamation condition no. iii)
- 21. During visit top soil dump has not been observed. PP reported that 265798.95m³ of top soil has been spread on the top of the internal dump as well as external dump. It was also submitted that the total top soil produced is used to blanket the internal Dump as well as external Dump as a part of technical reclamation followed by biological reclamation under the supervision of DFO, Sundargarh. Plantation has been dome in internal as well as external OB dump. As per the document furnished. 301175 nos of plantation has been

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- done an over burden dump, road side safety zone and vacant area has been backfilled. However, stabilization with native grass species has been shown in part not in all the dump. (4.1, (f) Land reclamation condition no. v)
- 22. As per the document furnished 301175 nos of plantation has been done on over burden dump, Road site safety zone and vacant area. However, 7.5m green belt all along the mine lease area as well as major approach/coal transportation road yet to be developed. (4.1, (g) Green Belt condition no. ii)
- 23. PP reported that drinking water is being supplied to the nearby 17 nos. of villages. 341 out of 393 eligible candidates have been provided with employment and 429 out of 501 families have been rehabilitated till date. The employment is being provided to all the land loosers as per the recommendation of the Claims Commission set up by Hon'ble Supreme Court of India. (4.1, (h) Public hearing and Human health issues condition no. iv)
- 24. PP reported that activity such as use of surface miner, Dust suppression system, ETP, shifting of village from mining lease area as per the R&R plan, minimize illumination and noise in the residential area, green belt development, control blasting, development of grazing land, fixed and movable water sprinkler provided on the transportation road. However road from Kulda to Taparia passes through village for which bypass road yetto be implemented. Water sprinkling arrangement found to be inadequate on the way from Kulda to Taparia. (4.1, (h) Public hearing and Human health issues condition no. v and vi)
- 25. As per the document furnished advertisement regarding accord of Environmental clearance has been published in two local newspapers namely The New Indian Express on 23.06.2022 and the Samaja on 23.06.2022. However, the clause of seven days has not been followed. Advertisement as per the condition has not been made and advertisement as per the condition has not been made. (4.1, (j) Miscellaneous condition no. i)
- 26. Six monthly compliances for the period April 2023 to Sept. 2023 has been submitted to Regional Office and uploaded on the MCL company's website. However, six monthly compliance yet to be uploaded on Environmental clearance portal. (4.1, (j) Miscellaneous condition no. v)
- 27. EC has been accorded vide letter no dated 14.02.2022 for the production of 19.6 MTPA and vide letter dated 24.05.2022 for 21 MTPA. Consent to operate has been accorded by Pollution control board for 18.5 MTPA (2021-22), 19.6 MTPA (2022-23) vide letter dated 25.02.2022 and for 21 MTPA vide letter dated 20.01.2023. The production details reported for 2020-21, 2021-22, 2022-23 as 15.73 MT, 18.49 MT, 20.99 MT respectively Ministry may like to take a view on the matter. (4.1, (J). miscellaneous condition no.xi)
- 28. Consent to Establish has been accorded vide letter no. 19795/IND-II-CTE-6742, Date 27.10.2022 and consent to operate accorded vide letter no. 4963/IND-I-CON-5125 dated 28.03.2023 for production of 21 TPA valid up to 31.03.2024. Hazardous waste authorization was obtained vide no.- IND-IV-HW-1038/4010, date- 18.03.2023, and valid till 31.03.2024. However, detail on Public liability insurance has not been furnished. (4.1, (j) Miscellaneous condition no. xvi)

#### EC letter dated J-11015/10/1995/-IA-II(M) dated 02.03.2021

### The following partially compliance to the environmental clearance conditions were observed:

1. PP furnished effluent monitoring data for PH, TSS and COD. However, monitoring data-as per the condition has not been furnished. (Specific condition no. vi)

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- 2. PP reported that a total of 232513 nos. of plants has been planted in the period of 2022-23. Plantation has been done outside mine lease area (1,50,000 nos.) as on 30.09.2023 along the transportation routes of Kulda OCP. However, plantation all along transpiration route from Kulda to Taparia yet to be provided. The EC accorded on 02.03.2021. (Specific condition no. x)
- 3. During visit surface miner has been observed at the mine for mining activity. However, silo loading system was under construction during visit. (Specific condition no. xi)
- 4. Advertisement regarding accord of environmental clearance has been published in Samaja and The New Indian express on 24.03.2021. However, the clause of seven days has not been followed and advertisement as per the condition has not been furnished. (4.1, (j) Miscellaneous condition no. i)

#### MoEF&CC EC letter No. J-11015/10/1995-I.A.II(M), dated 10.01.2020

### The following partially compliance to the environmental clearance conditions were observed:

- 1. PP reported that a total of 232513 nos. of plants has been planted as a part of compliance in the period of 2022-23. Plantation has been done outside mine lease area (1,50,000 nos.) as on 30.09.2023 as per the stipulated condition in the vacant spaces along the transportation routes of Kulda OCP. However, endorsement from DFO has not been furnished. (Specific Condition no. i)
- 2. NoC has been accorded by CGWA with validity up to 08-12-2022 vide NoC No.CGWA/ NOC/ MIN/ORIG/2020/9245 dated 09.12.2020 as per the document furnished online application submitted for renewal of approval vide dated 29.11.2022, However renewed NOC is awaited. However, details regarding intersection of ground water table has not been furnished. (Specific condition no. iv)

#### Environment Clearance Letter No: J-11015/10/1995-IA-II(M) dated 22.03.2018

# The following partially compliance to the environmental clearance conditions were observed:

- 1. During visit water sprinkler as well as tanker has been observed to be plying on the road from mine to sardega siding. PP reported that 4 tankers of capacity 28 kl, 2 nos. of 20 kl tankers and 2 nos. of 12 kl does the work of suppressing dust inside the mine premises. A total number of 70 fixed sprinklers are provided at locations such as near weighbridges, on the external CT road, near office building, etc. to suppress dust. 3 numbers of instant water showering systems are also present at the entry and exit of the mines. 7 nos. of static fog canon and 10 nos. of mobile fog canon have been provided for dust suppression in and outside the mine area. However, wind barrier wall, vertical greenery system yet to be provided. (Specific condition no. iv)
- 2. During visit plantation has been observed. However, thick green belt of 75m yet to be developed. (Specific condition no. vii)
- 3. PP reported the details of activities and expenditure on CSR for the Basundhara area. Separate activity and expenditure for Kulda coal mine has not been furnished. (General condition of (g) Public hearing, R&R and CSR condition no. ii)

(डॉ.टी. एच. महतो/Dr. T. H. Mahato)

वैज्ञानिक-डी/ Scientist 'D'