



F.No.J-11015/22/2019-IA.II (M)
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division

2nd Floor, Prithvi Block
Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj
New Delhi-110003

Date: 05th August, 2021

To

M/s RCCPL Private Limited
2nd Floor, Industry House
159 Churchgate Reclamation Church gate
Mumbai-400020

Subject: Proposal for Environmental Clearance of Persoda Limestone Mine with total excavation of 2.9 MTPA (2.0 MTPA of limestone (ROM), waste & dolomite of 0.815 MTPA and topsoil of 0.085 MTPA) in the mine lease area of 756.15 ha located at Villages Persoda, KothodaKhurd, KothodaBuzurg and Govindpur, Tehsil Korpana, District Chandrapur, Maharashtra by M/s RCCPL Private Limited. [Proposal no: IA/MH/MIN/89273/2018; File No. J110105/22/2019-IA.II(M)] - Environmental Clearance- regarding.

Sir,

This has reference to your proposal no. IA/MH/MIN/89273/2018 for Environmental Clearance of Persoda Limestone Mine with total excavation of 2.9 MTPA (2.0 MTPA of limestone (ROM), waste & dolomite of 0.815 MTPA and topsoil of 0.085 MTPA) in the mine lease area of 756.15 ha located at Villages Persoda, KothodaKhurd, KothodaBuzurg and Govindpur, Tehsil Korpana, District Chandrapur, Maharashtra by M/s RCCPL Private Limited was placed before 31st EAC held during 9th to 11th June and 14th to 15th June, 2021.

EAC Meeting Details:

EAC meeting	31 st EAC
Date of Meeting	9 th to 11 th June and 14 th to 15 th June

2. Project details:

Name of the Project	Proposal for Environmental Clearance of Persoda Limestone Mine with total excavation of 2.9 MTPA (2.0 MTPA of limestone (ROM), waste & dolomite of 0.815 MTPA and topsoil of 0.085 MTPA) in the mine lease area of 756.15 ha
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M/s RCCPL Private Limited, Maharashtra

Location	Village	Persoda, KothodaKhurd, KothodaBuzurg and Govindpur
	Tehsil/Taluka	Korpana
	District	Chandrapur
	State / UT	Maharashtra
	Latitudes	19°43'54.10" N to 19°46'09.78" N
	Longitudes	78°50'41.18" E to 78°52'23.39" E
	SoI Topo sheet No.	E 55 A 13, E 44A14 (56 I/13 & 56 I/14)
Company Name	M/s RCCPL Private Limited	
Accredited Consultant Organisation and its certificate no.	Vimta labs Limited and NABET/EIA/1720/SA 088	
KML file	Submitted	
Seismic zone as per IS-1893	II	

3. Category details:

Category of the project	A
Provisions	EIA Notification dated 14th September, 2006
Mining lease Area (MLA) (in ha.)	756.15 Ha
General Condition	Interstate Boundary of Maharashtra - Telangana

4. ToR Details

ToR Proposal No.	IA/MH/MIN/89273/2018
Online application date for Form-I	22.01.2019
Documents Submitted	Form-I & PFR
EAC meeting date	2 nd EAC Meeting held during 20 th -21 st February 2019
ToR Letter No.	J- 11015/22/2019-IA. II (M)
ToR grant Date	9 th April 2019
Limestone	2 MTPA
Soil	0.085 MTPA
Waste	0.815 MTPA
Total Excavation	2.9 MTPA

5. Lease Detail

Government of Maharashtra issued Lol	Area	756.14 Ha
	vide letter No.	MMN – 1010/ CR.3338/ ind-9
	Dated	14/01/2021
Name changed from Reliance Cementation Private Limited to Reliance Cement Company Private Limited dated	08.08.2011	
Again, name changed from Reliance Cement Company Private Limited to RCCPL Private Limited dated	01.08.2018	

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Lease grant date	14/01/2021
Lease execution and registration date	11/02/2021 and 12/02/2021
Additional information	The PP also submitted a letter No. MMN1010/F.No./3338/Industries-9 dated 4.01.2019 issued by Industry, Energy & Labour Dept. Govt. of Maharashtra addressed to Director, Directorate of Geology & Mining wherein it has mentioned that "as per section 62 of Mineral Concession Rules, 1960, with respect to their 756.14 Ha Prospecting License/Mining lease in village Persoda, Kothoda, Buzurg, and Govindpur, Tehsil: Korpana, District: Chandrapur; company has informed regarding change of name of company within stipulated time. In case prospecting license/mining lease of the company, government hereby approves to take note of change of name of the company as M/s RCCPL Pvt Limited instead of M/s Reliance Cementation Private Limited. Henceforth, correspondence with the company is to be made in the name of M/s RCCPL Pvt Limited."

6. Mining plan

Mining Plan(approved by Indian Bureau of Mines/DMG)	vide Letter No.	CND/LST/MPLN-1178/NGP-2019
	Dated	10.10.2019
Mining Parameters	Quantitative Description	
Bench Height	6-8 m	
Bench Width	25 m	
Method of Mining	Opencast mechanized method utilizing Heavy Earth Moving Machinery (HEMM)	
Individual bench slope	80°	
Overall pit slope	45°	
Drilling/Blasting	drilling, blasting,	
RoM output size	-75 mm	

7. Land Area Breakup

Private land	673.81 Ha
Government land	82.33 ha
Total Mining lease area (MLA)	756.14 ha

R & R details

Particulars	Activity
Project affected village	Persoda, Govindpur, KothodaKhurd and KothodaBuzurg

Total Land affected families as per survey	584
Budget for R & R	Rs 15946.8 Lakhs

8. Nearest village / town/ highway/railway station / water bodies

Particulars	Villages	Directions
Nearest town	Korpana	~13.0 km in E direction
Nearest highways	SH-265 (Adilabad – Korpana Road) 0.25 km, S SH-234 (4.4 km, N) SH-236 (10.9 km, WNW)	
Nearest railway station	Lingti	~10.6 km in WNW direction
Water Bodies & Streams	Penganga River – Adjacent, N	
	Mukutban pond ~ 4.5 km, N	
	Vaidarbhariver ~ 9.9 km, NE	

9. Water requirement

Total water requirement	234 KLD	Fresh water	-
		Treated water	-
Source	Ground water		
Permission	NOC from CGWA is under progress		
Depth of the water in MLA	28.00 m to 90.00 m bgl		
Water Distribution	Dust suppression is 175 KLD,		
	Domestic 5 KLD,		
	Green belt 50 KLD,		
	Workshop 4 KLD		

10. Presence of Environmentally Sensitive areas in the study area

Forest Land/Protected Zone	Area/Environmental Sensitivity	Remarks
Forest Land	No	Letter from PCCF of the Deputy Conservator of Forests, Central Chanda Forest Division vide letter dated 26.12.2019
National Park and Biosphere Reserves	No	
Wildlife corridors, Wildlife Sanctuary, Ramsar Site, Tiger/Elephant Reserves	No	
Reserve Forest nearest to the MLA		Mangalhira RF (0.8 km, SW), PF near Yedsi (0.8 km, E), RF near Pimprod (1.7 km, NW), Pardi RF (4.4 km, E), Akapur RF (4.8 km, NE), Ruikot RF (4.6 km, N), Manikgarh RF (6.2 km, SSE), Satnala RF (6.3 km, S), Chilai RF (6.6 km, NE), Ardwan RF(7.8 km, NW), Kannargoan RF(8.8 km, E) Sekarpur RF (9.5 km, NW)
Water bodiesnearest to the MLA		Penganga River (Adjacent, N), Mukutban pond (4.5 km, N),

	Vaidarbha river (9.9 km, NE)
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Schedule-1 species		
Schedule-I species	No	PP submitted that the authenticated List of Flora and Fauna from Dy. Conservation of Forest, Chendrapur vide letter dated 22.08.2019.

11. Green belt/plantationdetail

Proposed area for green belt/plantation	92.45 Ha(92,450 Saplings)
Proposed Backfilled area for green belt/plantation in the 11 th to 30 th year	164.77 Ha (1,64,770 no.s)
Budget for green plant& plantation till the end of life of mine.	Rs. 75 Lakhs
Recurring cost for greenbelt/plantation	Rs. 1.75 lakh/annum

Particulars for Green belt/plantation	Area covered (in Ha)
50 m barrier zone as well as entire 7.5 m of barrier zone will be converted by plantation	126.33 Ha

12. Baseline detail

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)	
Period of Base Line Data Collection	December 2018 to February 2019
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Winter

Details of the same was presented and PP submitted that these details are mentioned in chapter 3 of EIA/EMP Report.

13. Public Hearing (PH) Details

Advertisements published for PH	Marathi newspaper namely "Loksatta" and English newspaper "The Hitvada"
Advertisements date	18.03.2020
Date of PH	22.09.2020
Venue	online & offline at site near Persoda Gram Panchayat office on 24.04.2020
Chaired by	Shri. Manohar Gavhad, Additional District Magistrate, Chandrapur Shri Ashok M Kare, Regional Officer, Maharashtra State Pollution Control Board, Chandrapur
Main issues raised during PH	land, employability, CSR

	Pollution
Budget proposed for addressing issues raised during PH	Project Proponent informed that cost of land will be based on mutual negotiation. The priority for employment will be given to land owners based on eligibility and availability criteria.

14. Court case details

Court Case	No
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15. Details of Undertaking and affidavit:

PP submitted an undertaking by the way of an affidavit bearing INDL02339997936052Q dated 13.12.2018 to comply all statutory requirement and common cause judgment dated 02.08.2017. Consultant submitted an undertaking that "M/s Vimta Labs Limited has complied with all the prescribed Terms of Reference (TOR) issued by Ministry of Environment, Forests & Climate Change (MoEF&CC) vide Letter no. J-11055/22/2019-IA.II (M) dated 09.04.2019 stipulated for the preparation of ELA Report for the proposed Persoda Limestone mine with total excavation of 2.9 MTPA.

16. Details of the EMP:

BUDGET FOR IMPLEMENTATION OF ENVIRONMENT MANAGEMENT PLAN

Sr. No.	ENVIRONMENT	Cost of EMP (Rs. In crores)	
		Capital Cost	Recurring Cost per Annum
A. AIR ENVIRONMENT			
1	APCE at crusher & conveying system	2.230	0.921
2	Dust suppression system at crusher	0.050	0.005
3	Mobile water sprinklers	0.500	0.150
4	Mist canons on haul road	0.150	0.020
5	Continuous Ambient Air Quality Monitoring Systems (CAAQMS, AAQMS & Meteorology)	0.550	0.128
TOTAL OF AIR ENVIRONMENT		3.480	1.224
B. WATER ENVIRONMENT			
1	Garland drains along mine pit	0.292	0.058
2	Settling ponds	0.360	0.072
3	Embankment design & construction	5.520	-
4	ETP (Oil and grease trap for workshop wastewater)	0.200	0.025
5	STP (Sewage treatment for domestic wastewater)	0.100	0.200

6	Installation of water meter and piezometer	0.050	-
7	Periodic monitoring of water quality	-	0.050
TOTAL OF WATER ENVIRONMENT		6.522	0.405
C. NOISE & GROUND VIBRATION			
1	Periodic noise monitoring	0.010	-
2	Controlled blasting monitoring for vibration	0.100	0.010
TOTAL OF NOISE & GROUND VIBRATION		0.110	0.010
D. SOIL & WASTE DUMP MANAGEMENT			
1	Garland drain along dump	0.220	0.044
2	Toe wall along dump	0.450	-
3	Stabilisation	-	0.005
TOTAL OF SOIL ENVIRONMENT		0.670	0.049
E. PLANTATION & GREEN BELT DEVELOPMENT			
1	Plantation along safety barrier	1.895	0.297
2	Plantation on embankment	0.027	0.097
2	Plantation in back-filled area	3.285	0.514
3	Agri-farm development	2.060	0.024
TOTAL OF PLANTATION		7.267	0.932
F. OTHER EMP MEASURES			
Construction of toilet block		0.288	-
Roof rain water harvesting in Persoda & Raipur villages		0.648	-
TOTAL OF OTHERS		0.936	0.000

Sr. No.	SUMMARY OF EMP	Cost of EMP (Rs. In crores)	
		Capital Cost	Recurring Cost per Annum
A	Air environment	3.480	1.224
B	Water environment	6.522	0.405
C	Noise and ground vibration	0.110	0.010
D	Soil and waste dump management	0.670	0.049
E	Plantation & Green Belt	7.267	0.932
F	Others	0.936	0.000
GRAND TOTAL		18.985	2.620

17. Details of project cost and employment:

Particulars	Budget (Rs. In Crore)
Project Cost	352
Employment	105 persons

18. ADS details

Sr. No	ADS Sought	Response
1	Detailed Hydrogeology study needs to be carried out by PP by NABET Accredited under Ground Water Consultant Organization (GWCO) along with impact of mine on surface water bodies and impact of surface water body on mine	Detailed hydrogeology study carried out by NABET Accredited under Ground Water Consultant Organization (GWCO) including impact of mine on surface water bodies and impact of surface water body on mine has been submitted as an Annexure with the ADS reply.
2	PP needs to submit the design of the embankment and its efficacy and details of the flow simulation model carried out.	The design of the embankment and its efficacy and details of the flow simulation model was carried out by Visvesvaraya National Institute of Technology (VNIT), Nagpur, Maharashtra. The report has been submitted as an Annexure with the ADS reply.
3	PP should obtain the NOC from CGWA for ground water withdrawal.	Process of obtaining NOC from CGWA is on progress. Copy of submission of application and recommendation by CGWB Nagpur Regional Office are submitted as an Annexure with the ADS reply.
4	PP needs to submit the incremental noise level and the impact of noise and ground vibration on habitation and surface water bodies.	The report on incremental noise level and the impact of noise and ground vibration on habitation and surface water bodies are submitted as an annexure with the ADS reply.
5	PP needs to submit the periodic monitoring plan to sustain the mine with environment safeguards.	The periodic monitoring plan as per CPCB regulations to sustain the mine with environment safeguards have been submitted as an Annexure with the ADS reply.
6	PP needs to clearly bring out the use of explosives, quantity of explosives to be used, storage of explosives at site and necessary approvals to be obtained from Competent Authority.	Use of explosives, quantity of explosives to be used, storage of explosives at site and necessary approvals to be obtained from competent authority have been submitted as an annexure with the ADS reply.
7	PP should also submit the letter from the Principal Chief Conservator of Forests, Telangana for no involvement of forest land in the mine lease area and national parks, sanctuaries, Biosphere Reserves, Wildlife	Letter from PCCF and Chief Wildlife Warden, Hyderabad along with authenticated maps have been submitted as an annexure with the ADS reply.

	corridors, Ramsar Site Tiger/Elephant Reserves within 10 km radius.	
8	PP informed the Committee that the land affected families are 584 and they are going to be affected through land acquisition only and not going to be disturbed. Hence, PP should submit the undertaking in this regard.	The copy of undertaking regarding no displacement of 584 land affected families has been submitted as an annexure with the ADS reply.
9	PP should submit the document showing the validity of the lease	The validity of Lol has been extended upto 24th July 2021. Lol extension letter no. MMN-1010/C.R.3338/Ind-9 dated 02nd December 2020 has been submitted as an annexure with the ADS reply.
10	PP accorded TOR for mining of minerals only whereas in EC proposal it is observed that the crusher is proposed to install within the mining lease area. A proper clarification with detailed risk assessment on the local environment be submitted	Proposal for installing crusher (700 TPH) within mining lease area was included in Form-1, pre-feasibility report, brief summary of the project etc. submitted during ToR application. The same has also been included in EC proposal and risk assessment and mitigative measures due to installation of crusher is included in EIA report. The impact due to emission from crusher operation was captured while executing the modelling predictions of mining operations. The copy of the same has been submitted as an annexure with the ADS reply.
11	PP should submit the copy of the Attendance Sheet of the participants participated in the Public Hearing.	Attendance Sheet of the participants of public hearing has been submitted as an annexure with the ADS reply.
12	PP should clarify the Distance of Public Hearing Venue from the Proposed Project.	Public hearing was conducted at Niyojan Bhavan, Collector Office, Chandrapur, which is 87 Km. by road from project site. Detailed note has been submitted as an annexure with the ADS reply.
13	The Project Proponent shall submit the time- bound action plan to the concerned	Time-bound action plan for undertaking the activities committed during public consultation will be



	regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020.	submitted to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance.
14	PP should submit the breakup of the budget of the Environment Management Plan.	The breakup of the budget of the environment management plan has been submitted as an annexure with the ADS reply.

19. Observation of the Committee: During the presentation PP submitted that at the end of life of the mine, 126.33 ha area will be converted by plantation with 7.5 m of barrier zone. The Committee directed that this plantation should be mandatorily done. The Committee observed that as a part of EMP cost, PP has included the cost of air quality monitoring which should not be done. Therefore, EMP budget has to be revised. The Committee also observed that R & R cost was not properly addressed. Project proponent vide letter dated 12.06.2021 has submitted the revised EMP budget.

20. Recommendation of the Committee: After detailed deliberations made by the Project Proponent and the Consultant, the Committee **Recommended** the proposal for Environmental Clearance of Persoda Limestone Mine with total excavation of 2.9 MTPA (2.0 MTPA of limestone (ROM), waste & dolomite of 0.815 MTPA and topsoil of 0.085 MTPA) in the mine lease area of 756.15 ha located at Villages Persoda, KothodaKhurd, Kothoda Buzurg and Govindpur, Tehsil Korpana, District Chandrapur, Maharashtra by M/s RCCPL Private Limited along with specific conditions.

21. The Ministry has examined the proposal in accordance with the Environmental Impact Assessment Notification, 2006 and further amendments thereto; and after accepting the recommendation of 31st EAC held during 9th to 11th June and 14th to 15th June, 2021. Based on the documents submitted and presentation made by the Project Proponent and the Consultant, the Committee recommended the proposal for grant of Environmental Clearance of Persoda Limestone Mine with total excavation of 2.9 MTPA (2.0 MTPA of limestone (ROM), waste & dolomite of 0.815 MTPA and topsoil of 0.085 MTPA) in the mine lease area of 756.15 ha located at Villages Persoda, KothodaKhurd, KothodaBuzurg and Govindpur, Tehsil Korpana, District Chandrapur, Maharashtra by M/s RCCPL Private Limited with the following specific conditions and standard conditions subject to compliance of the followings terms and conditions and environmental safeguards mentioned below.



M/s RCCPL Private Limited, Maharashtra

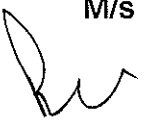
A. Specific conditions

- 1) PP shall construct garland drains with protective bunds around area to be excavated, to avoid entrance of surface run off into pit and mixing with ground water. Furthermore, PP shall make garland drains/storm water drains along with siltation/settling tanks at regular interval around the mine pits that will be active through proper plan which follow the natural slope of surface run off and/or to avoid its mixing with groundwater.
- 2) PP shall comply all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes.
- 3) Dust control measures need to be installed and strengthened during initial road transportation to eliminate impact on air quality.
- 4) PP shall make progressive greenbelt and plantation like bench plantation and also do plantation around mineral storage, top soil stack, road, magazine and other places as committed.
- 5) PP shall establish the Environment Management Cell (EMC) and engage sufficient number of qualified staff for the implementation of Environmental Clearance Conditions and other statutory requirements.
- 6) Adequate Safety Measures like Proper Safety Bunds and Fencing shall be provided by the PP around the water bodies to ensure Safety.

B. Standard conditions

I. Statutory compliance

- (1) This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
- (2) The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
- (3) The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
- (4) This Environmental Clearance shall become operational only after receiving formal NBWL Clearance from MoEF&CC subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.



- (5) This Environmental Clearance shall become operational only after receiving formal Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.
- (6) Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish / Consent to Operate from the concerned State Pollution Control Board/Committee.
- (7) The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS) and Indian Bureau of Mines from time to time.
- (8) The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made there under in respect of lands which are not owned by it.
- (9) The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- (10) The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.
- (11) A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
- (12) State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
- (13) The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.

- (14) The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

II. Air quality monitoring and preservation

- (1) The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO₂, CO and SO₂ etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
- (2) Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.

III. Water quality monitoring and preservation

- (1) In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
- (2) Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water

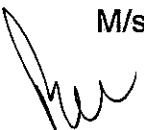


table in open dug wall located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

- (3) Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
- (4) The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
- (5) Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
- (6) Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.

- (7) Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
- (8) The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.

IV. Noise and vibration monitoring and prevention

- (1) The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
- (2) The illumination and sound at night at 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.
- (3) The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

V. Mining plan

- (1) The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form to Short Term Permit (STP), Query license or any other name.

- (2) The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office of the Ministry of Environment, Forest and Climate Change for record and verification.
- (3) The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.

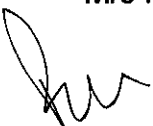
VI. Land reclamation

- (1) The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.
- (2) The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
- (3) The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.
- (4) The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.

- (5) The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF&CC.
- (6) Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
- (7) Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
- (8) The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

VII. Transportation

- (1) No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.
- (2) The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other



areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

VIII. Green Belt

- (1) The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.
- (2) The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
- (3) The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.
- (4) The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.
- (5) And implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry.

IX. Public hearing and human health issues

- (1) The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like BP, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the same may be sent to MoEFCC Regional Office and DGMS on half-yearly basis.
- (2) The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.
- (3) The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium- Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminium, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).
- (4) The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there



should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1), Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEFCC annually along with details of the relief and compensation paid to workers having above indications.

- (5) The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
- (6) Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.
- (7) The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

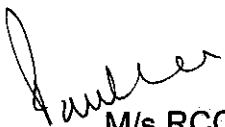
X. Corporate Environment Responsibility (CER)

- (1) The activities and budget earmarked for Corporate Environmental Responsibility (CER) as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 or as proposed by EAC should be kept in a separate bank account. The activities proposed for CER shall be implemented in a time bound manner and annual report of implementation of the same along with documentary proof viz. photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.
- (2) Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEFCC and its concerned Regional Office.



XI. Miscellaneous

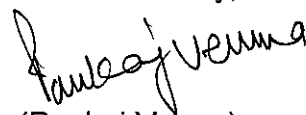
- (1) The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
 - (2) The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
 - (3) The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
 - (4) A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEFCC.
 - (5) The concerned Regional Office of the MoEFCC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEFCC officer(s) by furnishing the requisite data / information / monitoring reports.
21. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
22. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attracts action under the provisions of Environment (Protection) Act, 1986.
23. 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 made there under and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of Chhattisgarh and any other Court of Law relating to the subject matter.
24. 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.



M/s RCCPL Private Limited, Maharashtra

25. This issues with the approval of Competent Authority.

Yours faithfully,

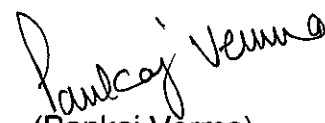


(Pankaj Verma)

Scientist E

Copy to

1. The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
2. The Secretary, Department of Environment, Government of Maharashtra, Secretariat, Madam Cama Road, Hutatma Rajguru Chowk, Nariman Point, Mumbai, Maharashtra - 400 032.
3. The Secretary, Department of Mines and Geology, Government of Maharashtra, Secretariat, Madam Cama Road, Hutatma Rajguru Chowk, Nariman Point, Mumbai, Maharashtra - 400 032.
4. The Secretary, Department of Forests, Government Maharashtra, Secretariat, Madam Cama Road, Hutatma Rajguru Chowk, Nariman Point, Mumbai, Maharashtra - 400 032.
5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum- Office Complex, East Arjun Nagar, Delhi-110032.
6. The Addl. Principal Chief Conservator of Forests (C) , Ministry of Environment and Forests (WCZ), Ground Floor East Wing, New Secretariat Building, Civil Lines, Nagpur – 440 001.
7. The Chairman, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th floor, Road No. 8, Sion Cir, opp. PVR Theater, Mumbai, Maharashtra – 400 022.
8. The Controller General, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440001.
9. The Member Secretary, Central Ground Water Authority, A2, W3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
10. The District Collector, Chandrapur.
11. Guard File.
12. MoEF Website.



(Pankaj Verma)

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