



सत्यमेव जयते

File No.: SEAC/HR/2024/203
Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment
Authority(SEIAA), HARYANA)



Dated 24/01/2025



To,

M/S KRISHNA ENTERPRISES
Flat No. 504, G H 04, Sector 27, Panchkula, Haryana. 134116
kotpanchkula.ec@gmail.com

Subject: Environment Clearance for Expansion of River Bed Mining Project at Kot Block/PKL B-8 & 9 at Village Kot and Dabkori Panchkula Capacity Increase from 2.96 LTPA to 8.9 LTPA over an area of 31.59 ha by M/s Krishna Enterprises

Sir/Madam,

This has reference to your Proposal No. SIA/HR/MIN/497190/2024 dated 23.09.2024 subsequent letter dated 10.10.2024 and 16.12.2024 for obtaining **Environment Clearance** under Category 1(a) of EIA Notification dated 14.09.2006 along with submission of due Scrutiny fee (as applicable) of **Rs. 1,50,000/- vide DD No. 000987 dated 12.07.2023** (in compliance of Haryana Government, Environment & Climate Change, Department Notification No. DE&CCH/3060 dated 14.10.2021). The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., Form-1, Form1-A, Conceptual Plan, ToR EIA/EMP Report and additional clarifications furnished in response to the observations of the State Expert Appraisal Committee (SEAC) constituted by MoEF&CC, GoI vide their Notification dated 21.02.2022, in its **301st meeting held on 26.09.2024.**

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC24B0107HR5447657N
(ii) File No.	SEAC/HR/2024/203
(iii) Clearance Type	Fresh EC
(iv) Category	B1
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals Expansion of River Bed Mining Project at Kot Block/PKL B-8&9 at Village Kot and Dabkori Capacity Increase from 2.96 LTPA to 8.9 LTPA over an area of 31.59 ha
(vii) Name of Project	
(ix) Location of Project (District, State)	PANCHKULA, HARYANA
(x) Issuing Authority	SEIAA
(xii) Applicability of General Conditions	No

1. It is inter-alia, noted that the project involves in the **Environment Clearance for Expansion of River Bed Mining Project at Kot Block/PKL B-8&9 at Village Kot and Dabkori Panchkula Capacity increase from 2.96 LTPA to 8.9 LTPA over an area of 31.59 ha.**

2. The basic details of project are as under:

Sr. No.	Particulars	Details																																																																											
1.	Online Proposal No.	SIA/HR/MIN/497190/2024																																																																											
2.	Category/Item no. (In Schedule)	1(a) Mining of Minerals (Non-Coal Mining) Category B1																																																																											
3.	Area of Project	Lease area 31.59 ha;																																																																											
4.	Date of LOI Granted by Mines & Geology Department, Haryana	16.11.2017																																																																											
5.	Date of Approval of mine plan Granted by Mines & Geology Department, Haryana	22.08.2022																																																																											
6.	Location of Project	Village Kot and Dabkori																																																																											
7.	Project Details Khasra No.	Village Kot- 120 min, 123 min, 124 min Village Dabkori 32//22/1,33/15/16/2,25,34//1,2,9/2min,10/1min,11/1 min)																																																																											
8.	Project Cost	Rs 8.17 Crores																																																																											
9.	Water Requirement	<table border="1"> <thead> <tr> <th>Activity</th> <th>Round off Figure in KLD</th> </tr> </thead> <tbody> <tr> <td>Drinking</td> <td>1.62</td> </tr> <tr> <td>Dust Suppression</td> <td>3.60</td> </tr> <tr> <td>Plantation</td> <td>4.2</td> </tr> <tr> <td>Total</td> <td>9.42 ~ 10 KLD</td> </tr> </tbody> </table>	Activity	Round off Figure in KLD	Drinking	1.62	Dust Suppression	3.60	Plantation	4.2	Total	9.42 ~ 10 KLD																																																																	
Activity	Round off Figure in KLD																																																																												
Drinking	1.62																																																																												
Dust Suppression	3.60																																																																												
Plantation	4.2																																																																												
Total	9.42 ~ 10 KLD																																																																												
10.	Environment Management Plan	INR 32.21 Lakhs (Capital Cost) INR 10.18 Lakhs (Recurring Cost)																																																																											
11.	Renovation of nearby Government School (CER)	25 lakhs																																																																											
12.	Production	Sand Boulder and Gravel																																																																											
13.	Production Capacity	8,90,000 TPA																																																																											
14.	Corner Coordinates	<table border="1"> <thead> <tr> <th>Name</th> <th>latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr><td>A</td><td>N 30° 38' 14"</td><td>E 76° 56' 42"</td></tr> <tr><td>B</td><td>N 30° 38' 18"</td><td>E 76° 56' 43.6"</td></tr> <tr><td>C</td><td>N 30° 38' 18"</td><td>E 76° 56' 48.5"</td></tr> <tr><td>D</td><td>N 30° 38' 19"</td><td>E 76° 56' 49.7"</td></tr> <tr><td>E</td><td>N 30° 38' 24.5"</td><td>E 76° 56' 51"</td></tr> <tr><td>F</td><td>N 30° 38' 36"</td><td>E 76° 56' 58.3"</td></tr> <tr><td>G</td><td>N 30° 38' 46"</td><td>E 76° 57' 05"</td></tr> <tr><td>H</td><td>N 30° 38' 48"</td><td>E 76° 57' 4.3"</td></tr> <tr><td>I</td><td>N 30° 38' 50"</td><td>E 76° 57' 4.3"</td></tr> <tr><td>J</td><td>N 30° 38' 54"</td><td>E 76° 57' 6.3"</td></tr> <tr><td>K</td><td>N 30° 39' 00"</td><td>E 76° 57' 6.1"</td></tr> <tr><td>L</td><td>N 30° 39' 06"</td><td>E 76° 57' 2.5"</td></tr> <tr><td>M</td><td>N 30° 39' 08"</td><td>E 76° 57' 3.4"</td></tr> <tr><td>N</td><td>N 30° 39' 10"</td><td>E 76° 57' 00"</td></tr> <tr><td>O</td><td>N 30° 39' 16.5"</td><td>E 76° 57' 0.6"</td></tr> <tr><td>P</td><td>N 30° 39' 17"</td><td>E 76° 56' 57.1"</td></tr> <tr><td>Q</td><td>N 30° 39' 31.2"</td><td>E 76° 56' 55.5"</td></tr> <tr><td>R</td><td>N 30° 39' 30"</td><td>E 76° 56' 58"</td></tr> <tr><td>S</td><td>N 30° 39' 40"</td><td>E 76° 56' 58"</td></tr> <tr><td>T</td><td>N 30° 39' 40"</td><td>E 76° 57' 03"</td></tr> <tr><td>U</td><td>N 30° 39' 30"</td><td>E 76° 57' 2.8"</td></tr> <tr><td>V</td><td>N 30° 39' 17"</td><td>E 76° 57' 1.7"</td></tr> <tr><td>W</td><td>N 30° 39' 06"</td><td>E 76° 57' 5.4"</td></tr> <tr><td>X</td><td>N 30° 39' 02"</td><td>E 76° 57' 8.2"</td></tr> </tbody> </table>	Name	latitude	Longitude	A	N 30° 38' 14"	E 76° 56' 42"	B	N 30° 38' 18"	E 76° 56' 43.6"	C	N 30° 38' 18"	E 76° 56' 48.5"	D	N 30° 38' 19"	E 76° 56' 49.7"	E	N 30° 38' 24.5"	E 76° 56' 51"	F	N 30° 38' 36"	E 76° 56' 58.3"	G	N 30° 38' 46"	E 76° 57' 05"	H	N 30° 38' 48"	E 76° 57' 4.3"	I	N 30° 38' 50"	E 76° 57' 4.3"	J	N 30° 38' 54"	E 76° 57' 6.3"	K	N 30° 39' 00"	E 76° 57' 6.1"	L	N 30° 39' 06"	E 76° 57' 2.5"	M	N 30° 39' 08"	E 76° 57' 3.4"	N	N 30° 39' 10"	E 76° 57' 00"	O	N 30° 39' 16.5"	E 76° 57' 0.6"	P	N 30° 39' 17"	E 76° 56' 57.1"	Q	N 30° 39' 31.2"	E 76° 56' 55.5"	R	N 30° 39' 30"	E 76° 56' 58"	S	N 30° 39' 40"	E 76° 56' 58"	T	N 30° 39' 40"	E 76° 57' 03"	U	N 30° 39' 30"	E 76° 57' 2.8"	V	N 30° 39' 17"	E 76° 57' 1.7"	W	N 30° 39' 06"	E 76° 57' 5.4"	X	N 30° 39' 02"	E 76° 57' 8.2"
Name	latitude	Longitude																																																																											
A	N 30° 38' 14"	E 76° 56' 42"																																																																											
B	N 30° 38' 18"	E 76° 56' 43.6"																																																																											
C	N 30° 38' 18"	E 76° 56' 48.5"																																																																											
D	N 30° 38' 19"	E 76° 56' 49.7"																																																																											
E	N 30° 38' 24.5"	E 76° 56' 51"																																																																											
F	N 30° 38' 36"	E 76° 56' 58.3"																																																																											
G	N 30° 38' 46"	E 76° 57' 05"																																																																											
H	N 30° 38' 48"	E 76° 57' 4.3"																																																																											
I	N 30° 38' 50"	E 76° 57' 4.3"																																																																											
J	N 30° 38' 54"	E 76° 57' 6.3"																																																																											
K	N 30° 39' 00"	E 76° 57' 6.1"																																																																											
L	N 30° 39' 06"	E 76° 57' 2.5"																																																																											
M	N 30° 39' 08"	E 76° 57' 3.4"																																																																											
N	N 30° 39' 10"	E 76° 57' 00"																																																																											
O	N 30° 39' 16.5"	E 76° 57' 0.6"																																																																											
P	N 30° 39' 17"	E 76° 56' 57.1"																																																																											
Q	N 30° 39' 31.2"	E 76° 56' 55.5"																																																																											
R	N 30° 39' 30"	E 76° 56' 58"																																																																											
S	N 30° 39' 40"	E 76° 56' 58"																																																																											
T	N 30° 39' 40"	E 76° 57' 03"																																																																											
U	N 30° 39' 30"	E 76° 57' 2.8"																																																																											
V	N 30° 39' 17"	E 76° 57' 1.7"																																																																											
W	N 30° 39' 06"	E 76° 57' 5.4"																																																																											
X	N 30° 39' 02"	E 76° 57' 8.2"																																																																											

		Y	N 30° 38' 54"	E 76° 57' 8.2"
		Z	N 30° 38' 48"	E 76° 57' 5.8"
		2	N 30° 38' 46"	E 76° 57' 9.4"
		A2	N 30° 38' 42"	E 76° 57' 5.8"
		B2	N 30° 38' 42"	E 76° 57' 59.2"
		C2	N 30° 38' 32"	E 76° 56' 59.2"
		D2	N 30° 38' 23"	E 76° 57' 49.4"
15.	Green Belt Plantation	10 ha ;10,500 plants		
16.	Machinery Required	Chain Mounted Excavators, JCB, Water Tankers & Trucks/Tippers		
17.	Power Requirement	Electric connection will be taken for office and security purpose from Electricity Board		

EMP Budget

Sr.No.	Measures	Capital Cost(In Rs.)	Recurring Cost (In Rs.)			
			1 st year	2 nd year	3 rd year	4 th year
1.	Pollution Control Dust Suppression /Water Sprinkling	8,91,000	1,00,000	1,00,000	1,00,000	1,00,000
2.	Baseline Monitoring	--	1,48,000	1,48,000	1,48,000	1,48,000
3.	Green belt development	9,80,000	2,40,000	2,40,000	2,40,000	2,40,000
4.	Maintenance of haul road including cleaning of roads from spilled minerals	12,00,000	5,00,000	5,00,000	5,00,000	5,00,000
5.	RWH pits (3 pits) @ Rs. 50,000/pit	1,50,000	30,000	30,000	30,000	30,000
Total		32,21,000	10,18,000	10,18,000	10,18,000	10,18,000

EMP Budget outside Project Site (CER)

Particular	Amount(INR Lakh)
Renovation of nearby Government School (CER)	Rs. 25.00

3. In view of the recommendations made by State Expert Appraisal Committee (SEAC) in the said case and further consideration of the documents/details submitted by the Project Proponent; the Authority after discussions decided during **190th Meeting held on 16.12.2024** to **“GRANT ENVIRONMENT CLEARANCE”** to **M/s Krishna Enterprises Category B1,1(a) till the validity of Mining Plan or LoI (whichever is earlier)**, under EIA Notification dated 14.09.2006 issued by the Ministry of Environment and Forest, Government of India for River Bed Mining Project at Kot Block/PKL B-8 & 9 at Village Kot and Dabkori and Capacity Increase/Expansion from 2,96,000 TPA to 8,90,000 TPA over an area of 31.59 ha as mentioned in LOI/Mining Plan/EIA Report/ToR/DSR/Replenishment Report for plan period with maximum depth upto 3.0 m as mentioned in Replenishment Study Report approved by Director Mines & Geology, Haryana and for quantity of 8,90,000 TPA of EIA Notification dated 14.09.2006 of the Ministry of Environment and Forest, Government of India.

Copy To

1. Director (IA Division), MoEF & CC, GoI, Indira Paryavaran Bhavan, Zorbagh Road-New Delhi-110003.
2. Chairman, State Environment Impact Assessment Authority, Bay's No. 55-58, Prayatan Bhawan, Sector-2, Panchkula, Haryana.
3. Chairman, Haryana State Pollution Control Board, C-11, Sector-6, Panchkula.
4. Director, Environment & Climate Change Department, Haryana, Bay's No. 55-58, Prayatan Bhawan, Sector-2, Panchkula, Haryana.
5. Director General, Mines & Geology Department, Mines & Geology Department, Second Floor, DHL Square, Plot

No. 9, Sector-22, IT Park, Panchkula, Haryana

6. Regional Office, Ministry of Environment, Forests & Climate Change, Govt. of India, Bay's No. 24-25, Sector 31-A, Dakshin Marg, Chandigarh-160018.

7. Concerned File/ Office Copy.

Annexure 1

Specific EC Conditions for (Mining Of Minerals)

1. Specific Conditions

S. No	EC Conditions
1.1	The PP shall construct the pucca link roads connected to the main road at the mining site before the start of mining.
1.2	The plantation shall be done on both sides of the road to prevent dust spreading
1.3	The PP shall construct the Haul roads of width 10 meters.
1.4	The PP shall provide only one exit and one entry to the Mining Project area and all the mining shall be dispatched through E-billing.
1.5	The PP shall maintain an un-mined block of 50 meters width after every block of 1000 meters over which mining is undertaken or at such distance as may be directed by the Director or any officer authorized by him.
1.6	The PP shall restrict mining within the central 3/4th width of the river/rivulet.
1.7	The PP shall not permit any mining in an area up to width of 500 meters from the active edges of embankments in case of River Yamuna, 250 mtrs. in case of Tangri, Markanda and Ghaggar and 100 mtrs. on either side of all other rivers/rivulets.
1.8	Traffic management plan as submitted shall be implemented in letter and spirit. Apart, a detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms. radius of the project is marinated and improved upon after the implementation of the project.
1.9	The Project Proponent shall obtain all necessary clearance/permission from all relevant agencies before commencement of work.
1.10	Consent to establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
1.11	The PP shall take precautions to suppress the dust in and around the mining site. The PP shall use high pressure water sprinkler in the mining site for containing dust suppression.
1.12	The PP shall create environment division unit in the project for implementing the conditions of

S. No	EC Conditions
	Environment clearance.
1.13	The PP shall obtain the permission regarding withdrawal of ground water from CGWA before the start of the project and also obtained the CTO from HSPCB after the approval from CGWA.
1.14	The PP shall adhere to the approved mining plan and approved closure plan by the competent authority.
1.15	Action plan for the public hearing issues shall be complied in letter and spirit.
1.16	The Proponent will provide adequate sanitary facility in the form of mobile toilets to the labours engaged for the project work.
1.17	The Project proponent shall comply all the measures, conditions suggested in the approved mining plan with post closure mine plan, Environmental Management Plan (EMP) in a letter and spirit.
1.18	The PP shall not use forest land for entry and exit at the proposed site without permission of competent authority.
1.19	Any change in stipulations of EC of the approved mining plan will lead to Environment Clearance void-ab-initio and PP will have to seek fresh Environment Clearance
1.20	The PP shall comply with Sand Mining Rules 2016 and NGT directions from time to time.
1.21	The PP shall get the Wildlife Conservation Plan approved from the Competent Authority before the start of Mining Operations
1.22	The PP shall restrict maximum mining depth upto 3 meters above the Ground Water Table.
1.23	The PP shall develop total 10 hac. of community/panchayti area in the nearby village and project site area as green belt in consultation with local people and other stake holders to meet with the demand of public hearing and shall do plantation of 10,500 trees on the project site as proposed.
1.24	That Project Proponent should submit within a month revised green area plan and the PP shall maintain 04 Acres land of the green area as block plantation of orchard in nearby village.
1.25	That Project Proponent should use High pressure sprinkler in the mining site to contain dust pollution.
1.26	The Project proponent will be responsible for annual maintenance of panchayat roads which will be used for evacuation of mined material.
1.27	The PP will adopt a nearby government school for improvement of infrastructure with a budget of Rs. 25 lakhs.
1.28	The Replenishment study every year to be submitted by the project proponent.

Standard EC Conditions for (Mining of minerals)

1. Statutory Compliance

S. No	EC Conditions
1.1	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
1.2	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 &Others before commencing the mining operations
1.3	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
1.4	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.
1.5	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
1.6	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
1.7	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), Mines & Geology Department, Haryana and Indian Bureau of Mines from time to time.. Also adhere to Haryana Minor Mineral Concession, Stocking, Transportation of Minerals and Prevention of Illegal Mining Rules, 2012
1.8	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.
1.9	The Project Proponent shall follow the mitigation measures provided in MoEF& CC 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".
1.10	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
1.11	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

S. No	EC Conditions
1.12	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.
1.13	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 MoEF&CC Regional Office for compliance and record.
1.14	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.

2. Air Quality Monitoring And Mitigation Measure

S. No	EC Conditions
2.1	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 climatologically 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. PM ₁₀ , PM _{2.5} , NO ₂ , CO and SO ₂ 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.
2.2	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 PM ₁₀ and PM _{2.5} 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 MoEF&CC/Central Pollution Control Board.

3. Water Quality Monitoring And Mitigation Measures

S. No	EC Conditions
3.1	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 MoEF&CC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-

S. No	EC Conditions
	geological study of the area.
3.2	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.
3.3	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 piezometer 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.
3.4	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 MoEF&CC. 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.
3.5	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.
3.6	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 MoEF&CC annually.
3.7	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

S. No	EC Conditions
	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.
3.8	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.

4. Noise And Vibration Monitoring And Prevention

S. No	EC Conditions
4.1	The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
4.2	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
4.3	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

5. Mining Plan

S. No	EC Conditions
5.1	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
5.2	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 and SEIAA for record and verification

S. No	EC Conditions
5.3	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 MoEF&CC and its concerned Regional Office

6. Land Recalvation

S. No	EC Conditions
6.1	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.
6.2	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.
6.3	The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.
6.4	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
6.5	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/SEIAA
6.6	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
6.7	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

S. No	EC Conditions
	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.
6.8	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.

7. Public Hearing And Human Health Issues

S. No	EC Conditions
7.1	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 MoEF&CC Regional Office and DGMS on half-yearly basis.
7.2	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.
7.3	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, Aluminum, 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).
7.4	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 -

S. No	EC Conditions
	<p>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, MoEF&CC annually along with details of the relief and compensation paid to workers having above indications.</p>
7.5	<p>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.</p>
7.6	<p>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.</p>
7.7	<p>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.</p>
7.8	<p>Green Belt 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 irrespective of the stipulation made in approved mine plan.</p>
7.9	<p>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.</p>
7.10	<p>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</p>
7.11	<p>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</p>

S. No	EC Conditions
	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. 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.
7.12	The PP shall ensure that the area marked for greenery and trees will not be rendered impervious by any means like soil, compaction or cement concrete or brick or tiles or rubber or plastic cover or any other impervious material in any manner and the area must be maintained pervious for water infiltration/percolation and air flow in the soil. It must be straight on earth and not on any roof or slab of any tile

8. Corporate Environment Responsibility

S. No	EC Conditions
8.1	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.
8.2	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 MoEF& CC and its concerned Regional Office.
8.3	<p>Transportation</p> <p>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.</p>
8.4	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

9. Miscellaneous

S. No	EC Conditions
9.1	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.
9.2	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
9.3	The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEF&CC &its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board
9.4	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, MoEF&CC
9.5	The concerned Regional Office of the MoEF&CC including other authorized organization shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) including other authorized officer by furnishing the requisite data/information.

