



Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To,

The DGM
TAMIL NADU CEMENTS CORPORATION LIMITED
Ariyalur Cement Works, Ariyalur, M/s Tamil Nadu Cement Corporation
Limited IInd Floor, L.L.A. Buildings, 735 Anna Salai, Ariyalur, Tamil Nadu-
600002

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity
under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC)
in respect of project submitted to the Ministry vide proposal number
IA/TN/MIN/211156/2017 dated 05 May 2021. The particulars of the environmental
clearance granted to the project are as below.

- | | |
|---|--|
| 1. EC Identification No. | EC22A001TN114345 |
| 2. File No. | 23-18/2019-IA.III (V) |
| 3. Project Type | New |
| 4. Category | A |
| 5. Project/Activity including
Schedule No. | 1(a) Mining of minerals |
| 6. Name of Project | Expansion in production capacity from
0.28 Million TPA to 1.34 Million TPA, of
Kallankurichi Limestone Mines (G.O. No.
456) by Tamil Nadu Cements Corporation
Limited. |
| 7. Name of Company/Organization | TAMIL NADU CEMENTS
CORPORATION LIMITED |
| 8. Location of Project | Tamil Nadu |
| 9. TOR Date | 16 Dec 2019 |

The project details along with terms and conditions are appended herewith from page
no 2 onwards.

Date: 03/03/2022

(e-signed)
Pankaj Verma
Scientist E
IA - (Non-Coal Mining sector)

*Note: A valid environmental clearance shall be one that has EC identification
number & E-Sign generated from PARIVESH. Please quote identification
number in all future correspondence.*

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F.No.23-18/2019-IA.III (V)
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division

Indira Paryavaran Bhawan
Prithvi Wing, 2nd Floor
Jor Bagh Road, Aliganj
New Delhi-110 003
Date: 03rd March, 2022

To

M/s Tami Nadu Cement Corporation Ltd
(A Govt. of Tamil Nadu Undertaking)
5th Floor, Aavin Illam
No.3 A, Pasumpon Muthuramalinganar Salai
Nandanam, Chennai-6000035
Tamil Nadu

Sub: Proposal for Environmental Clearance of Kallankurichi Limestone Mines (G.O. No. 456; MLA: 194.16.5 Ha) for expansion in production capacity from 0.28 Million TPA to 1.34 Million TPA located at Villages: Periyagalur, Kallankurichi, Ameenabad & Khairulabad, Tehsil: Ariyalur, District Ariyalur, State Tamil Nadu by M/s Tamil Nadu Cements Corporation Limited- reg.

Sir,

This has reference to the proposal no. IA/TN/MIN/211156/2017 for Environmental Clearance of Kallankurichi Limestone Mines (G.O.No.456; MLA:194.16.5 Ha) for expansion in production capacity from 0.28 Million TPA to 1.34 Million TPA located at Villages: Periyagalur, Kallankurichi, Ameenabad & Khairulabad, Tehsil: Ariyalur, District Ariyalur, State Tamil Nadu by M/s Tamil Nadu Cements Corporation Limited.

1. EAC Meeting Details:

EAC meeting	37 th EAC meeting
Date of Meeting	15 th – 17 th September, 2021

2. Project details:

Name of the Proposal	Capacity Expansion from 0.28 million TPA to 1.34 million TPA of GO No.456, Kallankurichi Limestone Mine	
Location	Village	Periyagalur, Kallankurichi, Ameenabad&Kairulabad,
	Tehsil/Taluka	Ariyalur
	District	Ariyalur
	State / UT	Tamil Nadu
	Latitudes	11° 09'12.34" E to 11° 09' 12.37" E
	Longitudes	79° 06'49.24" N to 79° 06'49.32" N
	SoI Topo sheet No.	58M/4
Company's Name	M/s Tamil Nadu cements Corporation Limited	
Accredited Consultant and certificate no.	Mantec Consultants Private Limited NABET/EIA/2023/RA 0205 Valid up to 20-04-2023	
KML file	Submitted	
Seismic zone	II	

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3. Category details:

Category of the project	Category A under Schedule 1(a) – Mining of Minerals activity
Provisions	EIA Notification 2006
Mining lease Area	194.16.5 ha

4. ToR/EC Details:

ToR Proposal No.	IA/TN/MIN/65544/2017
Online application date for Form-I	19.06.2017
ToR Letter No.	23-18/2019-IA-III (V)
ToR grant Date	16.12.2019
Production capacity	1.34 million TPA
Soil	0.055 million TPA
Waste	No waste is generated other than top soil
Total Excavation	9135107.05 MT
Crusher	Available outside the lease area.
EIA/EMP uploaded on	05/05/2021
Documents Submitted	EIA/EMP report Form-2 ToR letter Lease Documents Scheme of Mining Approval letter Past Production details Affidavit by Project Proponent No dues certificate Mine closer Notice Public Hearing Minutes
Date of earlier EAC meetings	17 th EAC meeting (Violation) Committee held on 29 th - 31 st January 2019 for Terms of Reference. 26 th EAC meeting (Violation) committee held on 30 th September-1 st October 2019 for Terms of Reference. 33 rd EAC meeting held during 13 th -16 th July 2021 for EC wherein the Committee noted that this is a violation case as mine was operated without obtaining prior environmental clearance after lease fell, due for renewal in 2005 and also enhanced the production of limestone. Ministry issued closure directions vide letter no.J-11015/137/2014_IA.II (M) dated 14th July, 2014 under section 5 of E (P) Act, 1986 but PP still operated the mine till 18.08.2017 which is for around further 3 years despite of closure directions.

5. Lease Details:

Granted Prospecting Licence	Area	194.16.5 ha
	Execution date	13.11.1985
Validity of mine lease	12.11.2035	
Letter of Intent	Letter No.	RC.NO.6969/MM9/2007
	Date	11.10.2019

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6. Mining plan details:

Mining Plan (approved by Indian Bureau of Mines/DMG)	Letter No.	TN/ALR/LST/ROMP-1596.MDS
	Date	15/09/2020
	Validity	2020-21 to 2024-25
Mining Parameters		Quantitative Description
Bench Height	6 m	
Bench Width	6 m or more	
Method of Mining	Open cast fully mechanized method	
Individual bench slope	60° from horizontal	
Overall pit slope	45°	
Drilling/Blasting	No drilling and blasting will be done.	
RoM output size	6146212 TS	
Life of mine	~15 Years	
Transportation details	Transportation of minerals in the trucks/dumper	
Dumper's capacity	25	

7. Land Area Breakup:

Private land	Patta Land -149.665 ha
Government land	44.5 Ha
Total Mining lease area	194.16.5 Ha

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

Particulars	Particular's Name	Distance & Directions
Nearest Town	Ariyalur	~2.8 km
Railway station	Ariyalur Railway Station	~2.58 km in West direction
Highway	SH-217	~98 meter in NW direction
Nearest Airport	Chennai International Airport	~224 km in NE direction

9. Water requirement

Total water requirement	35 KLD	Fresh water	0.20 KLD
		Treated water	0.80 KLD
Source	Rain water harvesting reservoir located at G.O 344 (Kallankurichi Limestone Mine)		
Permission	No permission is required		

10. Presence of Environmentally Sensitive areas in the study area

Forest Land/ Environmental Sensitivity Zone	Protected Area/Yes/No	Details of Certificate/ letter/ Remarks
Forest Land	No	-
National park	No	
Wildlife Sanctuary	No	

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Schedule-1 species	Yes/No	Details of Certificate/letter/Remarks
Schedule-I species	Yes	PP submitted request letter vide Ref. No. WL5(A)/15830/2021 dated 23.04.2021 to PCCF, Chennai for authentication of Wildlife Conservation Plan. One schedule 1 species was found in the study area i.e., Pavocristatus (Indian Peafowl).

11. Green belt/plantation details:

Proposed area for green belt/plantation	64.07 ha
Budget for green plant& plantation till the end of life of mine.	48.05 Lakhs

Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	1.20.0 Hectares
50 m safety zone of nallah, roads, electric lines	22.51.0 Hectares
500 m safety zones of nearest habitation villages	-
Additional information (if any)	27.79.0 Hectares

12. Baseline detail

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)	
Period of baseline data collection	March 2019-May 2019
Season (Summer / Pre-monsoon / Post-monsoon / Winter)	Pre-monsoon
Baseline data status	The project proponent submitted that the baseline data of air quality, noise levels, water quality, soil quality etc. are well within the standard limits.

13. Public Hearing details

Advertisement for PH	10 th Nov., 2020
Date of PH	10 th Dec., 2020
Venue	S. F. No. 106 Community Hall, Village-Kairulabad, Tehsil- Ariyalur, District- Ariyalur and State- Tamil Nadu
Chaired by	District Collector, Ariyalur
Main issues raised during PH	Employment
Budget proposed for addressing issues raised during PH	Rs. 60.0 Lakhs

14. Court case details:

Court Case	None
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15. Rehabilitation & Resettlement:

R & R details	NA
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16. Affidavit/Undertaking details:

Affidavit/Undertaking	PP submitted an affidavit dated 25.09.2019 stating to comply all statutory requirement and common cause judgment dated 02.08.2017 and the company shall not repeat any such violation.
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17. Previous EC compliance and production details:

Particulars	Letter no. and date
Certified EC compliance report	PP carried out production from 1994-95 to 2017-18 without Environmental Clearance.
Certified past production	PP submitted certified past production details from 1994-95 to 2017-18. Mine is not in operation since 19.08.2017.
Damage assessment report	PP submitted damage assessment report and total damage cost is Rs. 2,85,90,045.35

18. ADS reply:

S.No.	Observation	Reply/ Document
1.	The project proponent needs to submit the justification/clarification for operation of mine after the Ministry issued closure directions vide letter no.J-11015/137/2014_IA. II (M) dated 14th July, 2014 under section 5 of E (P) Act, 1986.	The Justification/Clarification for operation of mine has been submitted.
2.	The project proponent needs to submit the revised damage assessment report including the revised cost of damage as per the discussion during the meeting. PP also needs to submit the revised EMP cost	The revised damage assessment report and cost of damage along with the revised EMP cost has been submitted.
3.	The project proponent needs to submit the block-wise excavation program as approved in mining plan	The Block wise excavation program is has submitted.
4.	Block-2 is totally mined out and no remediation has been noted. The project proponent needs to submit the measures taken for the remediation of mined out Block 2.	<ul style="list-style-type: none"> • Block 2 mining pit is exhausted and currently it's used as water reservoir. • Details of Remediation plans of providing Safety barrier, Boundary Planation, fencing etc is elaborated in Annexure - 4 and conceptual reclamation plan with surface features at end of life of mines has submitted • The commitment for completion of remedial works within next 2 years is given as undertaking in has submitted
5	The project proponent must take up the peripheral plantation with 3 m sapling all around the four blocks and in the non-mineralized zone including the gap plantation.	<ul style="list-style-type: none"> • Details of greenbelt / plantation for all 4 blocks are submitted as an annexure. • Details of Conceptual Remediation plan including plantation / greenbelt development at end of life of mine for all blocks has been attached as an annexure. • The commitment for completion of greenbelt / plantation as per schedule is given as undertaking has submitted

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6	The project proponent needs to submit the proper table indicating the capital investment to address the concerns expressed by the people in the Public Hearing and accordingly the action plan to be taken in 3 years.	<ul style="list-style-type: none"> • Details Of Capital cost breakup has submitted • Action plan for 3 years against 2% of capital cost contributed against public hearing pleading as per OM dated 30/09/2020 has submitted.
7	The project proponent needs to submit the revised total project cost, taking land cost into account and accordingly 2% of the total project cost should be Public Hearing cost.	<ul style="list-style-type: none"> • Breakup of capital cost including Land cost is has submitted. • The details of 2% of capital cost contributed against public hearing pleading as per OM dated 30/09/2020 has submitted
8.	The project proponent needs to submit the revised cost for biodiversity conservation mentioned in Wildlife Conservation Plan.	The revised cost for biodiversity conservation mentioned in wildlife conservation plan has submitted
9.	The project proponent needs to submit the mining plan approved by IBM	The Mining Plan approved by IBM has submitted

19. Details of the EMP

S.no.	Item	Capital cost (Rs. in Lakh)	Recurring cost (Rs. in Lakh per annum)
1.	Environmental Training /awareness	-	1.00
2.	Pollution abatement-Water-sprinkling	-	2.50
3.	Environmental Monitoring cost *	-	3.00
4.	Haul road maintenance	-	3.00
5.	Greenbelt Development	14.75	2.00
Total		14.75	11.50

20. Details of project cost and employment:

Particulars	Details
Capital Cost for Environment Protection	Rs. 0.065 Crore
Budget for addressing the Public Hearing issues	Rs. 0.06 Crore
Total Cost for EMP	0.1475 Crores
Recurring Cost for EMP	Rs. 0.1150 Crores
Project Cost	Rs. 15.39 crore
Employment	30 persons

21. During the 37th EAC (Non Coal Mining) meeting held during 15th – 17th September, 2021 and 40th EAC meeting (Corrigendum minutes) held during 26th – 27th October, 2021, the Committee observed that the project proponent submitted the revised cost for damage assessment, which is 3.55 Crores as per the Guidelines of calculating damage assessment. After detailed deliberations, the Committee **recommended** the proposal for Environmental Clearance of Kallankurichi Limestone Mines (G.O. No. 456; MLA: 194.16.5 Ha) for expansion in production capacity from 0.28 Million TPA to 1.34 Million TPA located at Villages: Periyagalur, Kallankurichi, Ameenabad & Khairulabad, Tehsil: Ariyalur, District Ariyalur, State: Tamil Nadu by M/s Tamil Nadu Cements Corporation Limited with subject to submission of following information: (i)The project proponent should submit a breakup of Rs. 60 lakhs to be spent for addressing public hearing concerns.

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(ii) The project proponent should revise and submit the cost of EMP for public hearing concerns by recalculating the project cost based on the present market value of the land and is advised to prepare a budget for Rs.250 Lakhs for capital expenditure in 3 years to cover following aspects:

(a) Infrastructure for environment including drinking water and sanitation; (b) Power; (c) Health; (d) Education and (e) Communication along with following specific conditions.

22. ADS was raised dated 07.10.2021 on PARIVESH to furnish information by the proponent. The proponent furnished information dated 22.10.2021 are as follows:

S.No.	Description of activity	Locations	Rate	Total quantity	Total Cost (Rs.)	Year I cost (Rs.)	Year II cost (Rs.)	Year III cost (Rs.)
Infrastructure development (including drinking water & sanitation)								
1	Installation of 250 LPH Reverse Osmosis Water treatment plants and water tanks in nearby villages	Srinivasapuram Kattupiringiyam	Rs.2,0000 per unit	2	4,00,000	2,00,000	2,00,000	-
2	Construction of public toilets	Usenbad Kallankurichi Srinivasapuram Kaattupitingiyam Kayaralbath	Rs.2,00,000 per each	5	10,00,000	6,00,000	4,00,000	-
3	Construction of drainages lines connecting main gutters to sewage treatment plants	Usenbad Kallankurichi Srinivasapuram Kayaralbath	Rs.1,00,000 per 100 m	1500 m	15,00,000	-	5,00,000	10,00,000
4	Construction of public bus stop shelters	Kallankurichi	Rs.1,00,000 per each	1	1,00,000	1,00,000	-	-
Power								
5	Supply & installation of solar operated lamp	Usenbad Kallankurichi	Rs.50,000 per each	6	3,00,000	1,50,000	1,50,000	-
Public health								
6	Supply of following equipments for public health prevention and diagnosis 1. Mobile X-rays equipment – 1 Nos @ Rs.2,00,000 per each 2. Shycocan (air & surface borne pathogen attenuater) 10 Nos @ Rs.25,000 per each 3.ECG Machine – 1 Nos @ Rs.50,000 per each.	Kadugur	Rs.5,00,000	LS	5,00,000	5,00,000	-	-

7	Supply of battery operated door to door garbage collection vehicles to nearby village panchayats (to encourage source sorting and avoid littering public places)	Usenbad Kallankurichi Kayaralbath	Rs.2,50,000 per vehicle	3	7,50,000	5,00,000	2,50,000		
Education									
8	Installation of sanitary pad dispenser @ Rs.20,000 per each unit and supply 3800 Nos of free pad in government girls high school annually for next 3 years	Ariyalur girls high school Kayaralbath Arasunagar matric higher secondary school	Rs.2,50,000 per school	2	5,00,000	1,86,640	1,56,680	1,56,680	
9	Supply of smart class equipments like wide white screen boards, projectors, speakers, microphones, learning softwares and internet / moem / routers	Kayaralbath Arasunagar matric higher secondary school	Rs.2,00,000	LS	2,00,000	2,00,000	-	-	
Communication (under skill development for local unemployed youths)									
10	Supply and installation of skill development softwares like CADD, adobe Designer & Tolly to nearby schools /ITI	Usenbad Kayaralbath	Rs.3,75,000 per school / ITI	LS	7,50,000	2,50,000	2,50,000	52,50,000	
Grand total in Rs.						60,00,000	27,50,000	20,00,000	12,50,000

Total revised project cost:

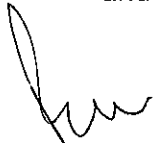
S.No.	Description of project cost	Previous cost in Rs.	Revised Cost in Rs.
1	Land (49.665 ha)	Rs.18,48,362.00(cost @Rs.12.350 / ha)	Rs.13,03,58,215.00(cost @Rs.8,71.000 / ha)
2	Machinery	Rs.1,70,08,000.00	Rs.1,70,08,000.00
3	Infrastructure	Rs.65,00,000.00	Rs.65,00,000.00
4	Safety equipment	Rs.1,00,000.00	Rs.1,00,000.00
	Total project cost	Rs.2,54,48,363.00	Rs.15,39,66,215.00

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23. 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 37th meeting of the Expert Appraisal Committee for Environmental Appraisal of Mining Projects (Non-Coal) held during 15th – 17th September, 2021 and 40th EAC meeting (Corrigendum minutes) held during 26th – 27th October, 2021. Based on the documents submitted and presentation made by the Project Proponent and the Consultant, the Ministry accepted the recommendations of EAC and accords the proposal for grant of Environmental Clearance under Ministry's SO-804, dated 14.03.2017 for Kallankurichi Limestone Mines (G.O. No. 456; MLA: 194.16.5 Ha) for expansion in production capacity from 0.28 Million TPA to 1.34 Million TPA located at Villages: Periyagalur, Kallankurichi, Ameenabad & Khairulabad, Tehsil: Ariyalur, District Ariyalur, State Tamil Nadu by M/s Tamil Nadu Cements Corporation Limited along with following specific conditions and standard conditions subject to compliance of the followings terms and conditions and environmental safeguards mentioned below.

A. Specific conditions

1. The project proponent shall ensure the reclamation of BLOCK 2 to be completed in one-year period as committed during the meeting.
2. The project proponent shall ensure to spend Rs.60 lacs over a period of three years under EMP as per the O.M. dated 30th Sept, 2020 with the specific areas covering Health, Education, Skill development and Infrastructure development to the neighborhood with specific and monitorable activities.
3. The Project Proponent shall ensure that the protection and management of the water bodies should include provision of utilizing available water to the villagers by installing solar pumps as well as project proponent shall explore the possibility for installing floating solar panels for generation of electricity and distribution of power supply to the villagers.
4. Mist spray arrangement shall be made at all the transfer points. PP should also provide duct hoods at all dust generating points including transfer points along with Bag filter.
5. Personnel Protective Equipment (PPE) shall provide to all the personnel engaged at potential dust generating sources.
6. Regular surveillance on Silicosis shall be carried through regular occupational health checkup of 1/3 of the persons every year.
7. The Project Proponent shall install the adequate number of monitoring station to undertake air quality and water quality monitoring in the vicinity of 5 km of the mine and water bodies and the six monthly data should be submitted to the Ministry.
8. The Project Proponent shall organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skills of the local people.
9. As many activities have been proposed for the health of people, Project Proponent shall prepare a comprehensive health management plan which can benefit all the people in the region.
10. The Project Proponent should undertake the plantation with the survival of not less than 90% and causalities should be replaced with new saplings every year. Causalities replaced should be counted separately other than the total proposed saplings and the data for such saplings should be furnished during six monthly compliance report along with the progressive plantation.
11. The EC will be valid till 11.11.2035, in line with the lease validity.
12. EAC recommended for an amount of Rs 3.55 Crores towards Remediation plan and Natural and Community Resource Augmentation plan to be spent within a span of three years. The details of Remediation plan, Natural resource Augmentation plan and Community Resource Augmentation plan provision are mentioned below:



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Remediation plan with budgetary provision

S.No.	Component Remediation	Remediation Proposed	Total Cost in Lakhs	Phasing years in Lakhs		
				Year- I	Year- II	Year- III
1	Air & Noise Environment	Dust suppression	43,20,000	14,40,000	14,40,000	14,40,000
2	Noise Environment and Ecology	Avenue Plantation	75,00,000	37,50,000	18,75,000	18,75,000
3	Water Environment	Surface Water Conservation & Ground Water recharge	20,00,000	15,00,000	2,50,000	2,50,000
Total			1,38,20,000	66,90,000	35,65,000	35,65,000

Natural Resource Augmentation plan with budgetary provision

S.No.	Component Remediation	Remediation Proposed	Total Cost in Lakhs	Phasing years in Lakhs		
				Year- I	Year- II	Year- III
1	Natural Resource Augmentation Plan	Energy Conservation by adapting Green Energy technology	80,00,000	40,00,000	20,00,000	20,00,000
Total			80,00,000	40,00,000	20,00,000	20,00,000

Community Resource Augmentation plan with budgetary provision

S.No.	Component Remediation	Remediation Proposed	Total Cost in Lakhs	Phasing years in Lakhs		
				Year- I	Year- II	Year- III
1	Community Resource Augmentation Plan	Development of Infrastructure & Facilities	15,00,000	15,00,000	--	--
			52,50,000	17,50,000	17,50,000	17,50,000
			30,00,000	20,00,000	--	--
			22,50,000	15,00,000	7,50,000	--
			17,70,000	5,56,000	5,56,000	2,78,000
Total			1,37,70,000	58,06,000	30,56,000	20,28,00
Grand Total			3,55,90,000	1,79,96,000	86,21,000	75,93,000

Summary

Sl. No	Activities	Estimated Cost (Rs. in Lacs)
01	Remediation plan	138.20
02	Natural Resource Augmentation Plan	80.00
03	Community resource Augmentation Plan	137.70
Total		355.90

13. Total budgetary provision with respect to Remediation plan and Natural & Community Resource Augmentation plan is Rs 3.55 Crores. Therefore, project proponent shall be required to submit a bank guarantee of an amount of Rs. 3.55 Crores/- towards Remediation plan and Natural and Community Resource Augmentation plan with the SPCB prior to the grant of Environmental Clearance.
14. Remediation plan along with the Natural and Community Resource Augmentation Plan shall be completed in 3 years whereas bank guarantee shall be for 5 years. The bank guarantee will be released after successful implementation of the remediation plan and Natural and Community Resource Augmentation Plan, and after the recommendation by regional office of the Ministry, Expert Appraisal Committee and approval of the Regulatory Authority.
15. Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.
16. The Environmental Clearance will not be operational till such time the Project Proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
17. State Government concerned shall ensure that mining operation shall not commence 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 the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
18. Effective dust suppression system shall be adopted at the transportation site and in the other parts of the mining lease to arrest the fugitive dust emission.
19. Project proponent shall take necessary other clearances/permissions under various Acts and Rules if any, from the respective authorities / department.
20. The mining lease holder shall, after ceasing mining operations, under take re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to condition which is fit for growth of fodder, flora and fauna etc.

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.



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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 of 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.

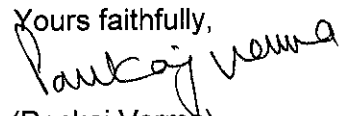
24. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

25. 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.

26. 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 Tamil Nadu and any other Court of Law relating to the subject matter.

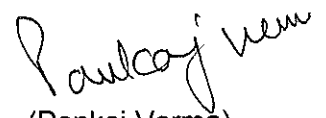
27. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

28. 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-110 001.
2. The Secretary, Department of Mines & Geology, Government of Tamil Nadu, Secretariat, Chennai.
3. The Secretary, Department of Environment, Government of Tamil Nadu, Secretariat, Chennai.
4. The Secretary, Department of Forests, Government of Tamil Nadu, Secretariat, Chennai.
5. The Chief Wildlife Warden, Forest Department, Chennai.
6. The Dy. Director General of Forests, Ministry of Environment, Forest and Climate Change, Regional Office (SEZ), 1st & 2nd Floor, Handloom Ex[port Propomotion Council, 34, Cathedral Road, Nungambakam, Chennai-34
7. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110 032.
8. The Member Secretary, Central Ground Water Authority, 18/11, Jam Nagar House, Man Singh Road, New Delhi-110 011.
9. The Chairman, Tami Nadu State Pollution Control Board, 76, Mount Salai, Gundy, Chennai- 32
10. The Controller General, Indian Bureau of Mines, Indira Bhawan, Civil Lines, Nagpur-440 001.
11. The District Collector, Ariyalur District.
12. Guard File.
13. MoEF&CC Website.


(Pankaj Verma)
Scientist E