

# Proceedings of the State Environment Impact Assessment Authority Kerala

Present: Prof. (Dr.) K.P. Joy, Chairman, Dr. J. Subhashini, Member and Sri. V. S. Senthil, I.A.S., Member Secretary.

Sub: Environmental Clearance -Application for environmental clearance for the quarry project in Sy. No. 1244 /1 (pt) at Killanur Village, Thrissur Taluk, Thrissur District, by Sri. Dineshmon, N.T., for M/s Rudra Granites. - E.C. Granted- Orders issued.

# STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY

No. 823/SEIAA/EC1/2606/2015

dated, Thiruvananthapuram 09-08-2016

- Read: 1. Application dated 02-07-2015 from Srr, Dineshmon, N.T., Owner, M/s Rudra Granifes, Neenduthalakkal (H), Muttikal, Kundukadu P. O., Thrissur-680 028.
  - 2. Minutes of the 48<sup>th</sup> meeting of SEAC held on 6-7/11/2015.
  - 3. Minutes of the 56<sup>th</sup> meeting of SEAC held on 6-7/06/2016.
  - 4. Minutes of the 55th meeting of SEIAA held on 16/07/2016.

#### **ENVIRONMENTAL CLEARANCE NO.106/2016**

Sri. Dineshmon, N.T., Owner, M/s Rudra Granites, Neenduthalakkal House, Muttikkal Kundukadu P. O., Thrissur ,vide his application received on 07-07-2015 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. No. 1244/1 (pt) at Killanur Village, Thrissur Taluk, Thrissur District for an area of 4.9531 hectares. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50hectares) and as per O.M. No. L-11011/47/2011-IA.II (M) dated 18th May 2012 of Ministry of Environment and Forests. It is further categorized as Category B2 as per the O.M. No. J-13012/12/2013-IA-II (I) dtd. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares.

Basic in	formation about the project			
Name of the Project	M/s. Rudra Granites (Building Stone Quarry)			
Survey Numbers	1244/1(pt).)			
Village	Killannur			
Tehsil	Thrissur			
District	Thrissur			
Extent of land in hectors	4.9531 Ha			
Is the property forest land/Govt. land.	<i>i</i> .			
own land	Own Land			
SWI 14110	Minimum height of excavation (MSL)-15m above			
Minimum and maximum height of	MSL			
excavation (MSL)	maximum height of excavation (MSL)-90m above			
,	MSL			
Life of mine proposed	16years			
Distance of mining area from nearest	100 NF			
human settlement	123m- NE			
Distance from the adjacent quarry	No quarries are there within 500m radius			
Cluster condition (if any)	Not applicable			
Proposed production capacity	2,28,000 MTA			
Expected cost of the project	Rs. 2 Crores			
Interlinked project (if any)	No			
Whether CRZ is applicable	Not applicable			
Status of litigation/ complaint/ cases	Nil as declared			
	The mining activity will have localized impact and			
	create physical change in the existing environment due			
B	to the change in the land use. At the end of life of mine,			
Permanent or temporary change on land use, land cover or topography	the excavated pit will be 4.1528Ha, in which 3.6575			
land use, land cover of topography	Ha will be reclaimed with stacked dumping and			
	overburden and rehabilitated by plantation and the			
	remaining part 0.4953 Ha will be used as a water pond.			
	The topography of the lease area is hilly. The highest			
Topography of land and elevation	elevation of the lease area is 95 m MSL and lowest is			
	65 m MSL			
Vegetation	Part of the proposed land is covered by rubber			
	plantation			
Nearest water body	River – Thanikudam- 2.5 Km –N			
Change in water bodies due to mining activities	Natural drainage will remain unaffected			
D	Quarry area is not susceptible to natural hazard as there			
Proneness to natural hazards	is no history of such incidents			
Environn	nental parameters considered			
	WATER			
The total water requirement for the proposed project ha				
	been estimated to be around 9.0 KLD. About 0.6KLD is required for domestic consumption, 6.0 KLD is required			
	for dust suppression and 2.0 KLD is required for green			
	belt development. The required water will be met from			
open well & bore well.				
	The domestic effluent to the tune of 0.32 KLD would be			
	generated from the mine office will be treated through			
	septic tank & soak pit.			
Facilities for liquid waste	reated through septic tank and soak pit			
	Dogo			

treatment					
	Garland drains are provided at the quarry top to regulate				
	monsoon water and direct the same to the settling ponds /				
·	quarry pit to contain the quarry wash off and to avoid the				
Water quality meeting	same joining the adjoining surface water bodies / water				
requirements	courses. To arrest the silt, if any, carried by monsoon run-				
requirements	off will be contained by the settling pond from where only				
	clear water will be let out. Water quality should be				
	maintained with in the standard permissible limit as per				
	rules, applicable.				
	The depth to the groundwater level in this area ranges from				
	about 1.4 to12.9 m during pre-monsoon and from 0.59 to				
Water Regime	10.86m during post-monsoon. Groundwater quality is				
water regime	generally good. The ground water level measured from the				
	nearest well is about 12m below the ground level. The				
	ultimate depth of the working of the quarry is 15m MSL.				
	LAND				
Access road to the site –Width	The public road leading to the quarry has a width of about				
& Condition	7m				
Proximity to forest lands	No forest land within 5 km radius of the quarry site.				
8	Explosives will be procured, stored, transported, handled				
Storage of explosives	and used in accordance with Indian Explosive Act 1884 &				
/hazardous	Rules thereof, MSIHC Rules 1989, Mines Act, 1952 and				
	regulations there under.				
	Used oil from maintenance of DG sets, HEMM and				
Hazardous waste management	tippers will be handled as per Hazardous Waste				
	(Management Handling & Trans boundary Movement)				
	Rules, 2008.				
Facility for solid waste	Solid waste will be stacked at designated places during the quarry operations and will be utilized for reclamation				
management	work during mine closure plan				
	Top soil-29,095 MT				
Top soil, overburden etc.	Overburden- 1,38,000 MT				
	MANAGEMENT PLAN:				
	Dust released due to quarry activity (Heavy Earth				
	Movers, Loaders, Rock breaker, etc) will be suppressed				
	periodically by sprinkling of water. Water spraying				
Air pollution	before loading or any other handling operations for solid				
*Har(48**	containing fines - to minimize air pollution. Stockpiles of				
Envt. Mgmt.	aggregate shall be kept covered				
plan/ Eco-	Garland drains are provided at the quarry top to regulate				
restoration	monsoon water and direct the same to the settling ponds /				
plan Water pollution	quarry pit to contain the quarry wash off and to avoid the				
1	same joining the adjoining surface water bodies / water				
	courses.				
Noise	Plantation will be carried out all along the lease periphery,				
	which acts as acoustic barrier for noise transmission.				
•  _	For eco restoration about 3.6575 Ha will be reclaimed				
Eco restoration	with stacked dumping and overburden and rehabilitated by				
plantation					
NOISE Sources of poice pollution					
Sources of noise pollution  • Effective maintenance of machineries and vehicles					
control measures(In detail) at regular and frequent intervals.					

			tion of green belt around the eriphery.	he haul roads and	
		_	enclosure will be provided	l at source	
	PPE's will be provided.				
NT. * 1			l be monitored as per Env	ironmental	
Noise level monitoring		Management P	lan		
		AIR			
Likely	emissions affecting		emission is the main pollu		
environment		generated from quarry activities and handling operations.			
			sures are proposed in the		
Air quality monitoring		Ambient Air Quality will be monitored and ensured as per Environmental Management Plan			
	<u> </u>	BIODIVE			
Presen	ce of any endangered		1 3 4 3 1 1 1		
	s or red listed category	There are no e	ndangered or rare species	in the area.	
Броото		As per the eco	ological survey carried o	ut, there are only	
Loss o	f native species and	few native species of shrubs, trees etc. these shall be			
genetic	e diversity	planted during restoration and green belt area			
		development.			
_			For eco restoration about 3.6575 Ha will be reclaimed		
			with stacked dumping and overburden and rehabilitated by (3600 saplings) plantation		
	<u>.                                    </u>	SOCIAL AS			
	nity to nearest densely ted or build-up area	Karuvakundu-	18.5 (LEAT) 48	<del></del>	
P · P ····	1,5%	CSR related (	to the project		
Sl. No.	(4) (4) (4) (4) (4) (4) (4) (4) (4) (4)	CSR Activities		Amount	
Installation of rain water harvesting system for five houses near to quarry,		2,00,000			
2 Financial assistance for toilet construction.				1,50,000	
Decided to provide Scholarship for education to GHS School Kattilapoovam			50,000		
4	Providing 5 solar street lig	ht per year along	the road side	2,00,000	
Total			6,00,000		
		GENER	RAL		
			Sri. Dineshmon, N.T.		
Details of Authorized Signatory & Address for correspondence)		Owner, Rudra Granites			
		Neenduthalakkal (H),			
		Muttikal, Kundukadu P O,			
			Thrissur-680 028.		
		<u>.</u>	Oversees Min Tech C	ongultante	
Details of NABET approved EIA consultant		Overseas Min-Tech Consultants 501,5 <sup>th</sup> Floor, Apex Tower,			
		Tonk Road, Jaipur-302015.			
			Tonk Road, Jaidur-30	ZQ1J.	
	ization		QCI/NABET Accredit		

- 3. The proposal was first considered by SEAC in its 48<sup>th</sup> meeting held on 6<sup>th</sup> and 7<sup>th</sup> November, 2015. The Committee opined that more resource can be extracted from the area if the magazine proposed in the project area is shifted from there. The Committee also suggested channelizing the drainage in a proper way and deferred the item for Field Inspection to assess the ground realities including the position of magazine and production of more realistic need based CSR proposal.
- 4. Field visit to the project site was carried out on 18.04.2016 by a sub-committee of SEAC, comprising of Dr. E.A. Jayson and Dr. K.G. Padmakumar. The Proponent was also present at the site. The site inspection report is extracted as follows:

"M/s Rudra Granite Pvt Ltd, Neenduthalakal(H), Mutikkal, Kundukadu P.O, Thrissur District- 680028, vide his application received on 08-07-2015 has sought Environmental Clearance under EIA Notification, 2006 for the quarry project in Sy. No. 1244/I (pt) at Killanur Village, Thrissur Taluk, Thrissur District for an area of 4.9531 hectares. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50 hectares) and as per O.M.No.L-11011/47/2011- IA.II(M) dated 18th May 2012 of Ministry of Environment and Forests. It is further categorized as Category B2 as per the O.M. No.J-13012/12/2013-IA-II (I) dt. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares.

The proposed project site falls within the Lattitude (N) 10° 35'4.69"N to 10° 35'15.00"N and Longitude: 76° 15'30.17"E to 76° 15'39.29"E. The land use classification as per revenue records is private land. The mining activity will have localized impact and create physical change in the existing environment due to the change in the land use. It is proposed that at the end of life of mine, the excavated pit will be 4.1528 Ha, in which 3.6575 Ha will be reclaimed with stacked dumping and over burden and rehabilitated by plantation and remaining part 0.4953 Ha will be used as a water pond.

This is a new granite quarry being proposed in a rubber plantation. No activity has been taken place in the proposed land. The area has been marked with pillars, but not painted with yellow colour. All the pillars have to be fully painted with yellow colour and lat. and long. marked on each pillar stone. The lease area has to be fenced with barbed wire and proper sign boards have to be erected. Two approach roads are

available which has to be black topped and made useful. Magazine is placed in the middle of the leased area in the approved mining plan. This can be shifted to other locality with the proper permission for the full utilization of resources. Compensatory tree planting has to be done in the surrounding area as promised in the Environment Management plan.

As this is a new quarry, flood water chanalisation and settling ponds need to be constructed before the water is allowed to pass through the leased area. As Mattampuram housing colony is hardly 3 km away, the CSR activity has to be targeted to the colony people also. CSR proposal with realistic targets should be obtained from the proponent. As this is a new quarry, mining can be started in a planned manner. As the whole area is a rubber plantation, only few native trees are found in the area.

Based on an overall evaluation of the site, following points may be considered:

- 1. Protection wall (Protective fencing) is needed all along the quarry.
- 2. Over burden is to be stored in the designated place and no compromise should be made on this point.
- 3. The whole area needs planting of trees to convert the area into a more acceptable landscape. For this indigenous species of trees need to be planted all around the quarry in the vacant spaces. This will also help in reducing the dust and sound pollution.
- 4. Considering the topography, garland drains need not be insisted upon.
- 5. The approach road to the quarry from the main road is not maintained at all. This road must be maintained in good condition by the proponent.
- 6. The blasting time must be displayed and strictly adhered to. The PPV values must be less than 10 mm/sec. Steps to be taken to limit fly rock to the quarry area.
- 7. Dust suppression mechanism must be in place.
- 8. In the absence of perennial streams in the vicinity, ultimate depth of mine will depend on the possible benches in the lease area.
- 9. A targeted CSR activity to benefit the close-by residents shall be incorporated".
- 5. On receipt of the inspection report, the proposal was again considered by SEAC in its 56<sup>th</sup> meeting of held on 06/07-06-2016. The Committee appraised the proposal based on Form I, Prefeasibility report, Mining Plan & Field Inspection Report and recommended the application for issuance of E.C. with the usual conditions and subject to the following specific conditions.

- 1) Protection wall (Protective fencing) shall be provided at vulnerable points of the quarry to avoid accidents.
- 2) Over burden is to be stored at the designated place.
- 3) The approach road to the quarry from the main road is not maintained at all. This road must be maintained in good condition by the proponent.
- 4) Dust suppression mechanism must be in place.
- 5) A more realistic CSR shall be prepared and submitted before SEIAA.
- 6. The proposal was considered by SEIAA in its 55<sup>th</sup> meeting held on 16<sup>th</sup> July 2016. The Authority examined the revised CSR undertaking and accepted the recommendations of SEAC and decided to grant E.C accordingly.
- 7. Environmental Clearance under the EIA notification 2006 is therefore granted to the quarry project of Sri. Dineshmon, N.T., Owner, M/s Rudra Granites, Neenduthalakkal (H), Muttikal, Kundukadu P. O., Thrissur-680 028 in Sy. No. 1244 /1 (pt) at Killanur Village, Thrissur Taluk, Thrissur District in 4.9531ha of own land, subject to the specific conditions in para 5 above and general conditions for mining projects annexed hereto. The grant of E.C is also subject to production of non-cluster certificate, affidavit, general conditions stipulated for mining projects and the mitigation measures undertaken in the EMP in the PFR. However if any genuine complaints about the quarry is received, E. C issued shall be reviewed.
- 8. The clearance issued will also be subject to full and effective implementation of all the undertakings given in the application form, mitigation measures as assured in the Environment Management Plan and the mining features including progressive mine closure plan as submitted with the application and relied on for grant of this clearance. The above undertakings and the conditions and undertakings in chapter 4 of mining plan (mining), chapter 5 (blasting), chapter 6 (Mine drainage), chapter 7 (stacking of mineral rejects and disposal of waste) and Chapter 11 (Environment Management Plan) Plan and affidavits as submitted will be deemed to be part of these proceedings as conditions as undertaken by the proponent, as if incorporated herein.
- 9. Validity of the environmental clearance will be five years from the date of this clearance, subject to earlier review in the event of violation or non-compliance of any of the conditions stipulated herein or genuine complaints from residents within the security area of the quarry.

- 10. Compliance of the conditions herein will be monitored by the Authority or its agencies and also by the regional office of the Ministry of Environment & Forests, Govt. of India, Bangalore.
  - Necessary assistance for entry and inspection should be provided by the project proponent and those who are engaged or entrusted by him to the staff for inspection or monitoring.
  - ii. Instances of violation if any shall be reported to the District Collector, Thrissur to take legal action under the Environment (Protection) Act, 1986.
- 11. The given address for correspondence with the authorised signatory of the project is Sri. Dineshmon, N.T., Owner, M/s Rudra Granites, Neenduthalakkal (H), Muttikal, Kundukadu P. O., Thrissur-680 028.

Sd/
V.S. SENTHIL, I.A.S.,
Member Secretary, SEIAA
&

Addl. Chief Secretary
Environment & Forests Department
Government of Kerala.

To,

Sri. Dineshmon, N.T., Owner, M/s Rudra Granites, Neenduthalakkal (H), Muttikal, Kundukadu P.O., Thrissur-680 028.

#### Copy to:

- MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E&F Wing, II Block, Koramangala, Bangalore-560034
- 2. Additional Chief Secretary to Government, Environment Department, Government of Kerala
- 3. The District Collector, Thrissur
- 4. Director, Mining & Geology, Thiruvananthapuram- 4.
- 5. Secretary, Mulankunnathukavu Panchayath, Mulankunnathu P.O., Thrissur, 680 581
- 6. Chairman, SEIAA, Kerala
- √Website
- 8. E.C File
- 9. S/f, O/c



Forwarded/ By order

Administrator SEIAA

### STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA

## GENERAL CONDITIONS (for mining projects)

- 1. Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR / KPBR, unless otherwise specified.
- 2. Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.
- 3. Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, including of approach road and internal roads.
- 4. Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.
- 5. Sprinklers shall be installed and used in the project site to contain dust emissions.
- 6. Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.
- 7. At least 10 percent out of the total excavated pit area should be retained as water storage areas and the remaining area should be reclaimed with stacked dumping and overburden and planted with indigenous plant species that are eco-friendly, if no other specific condition on reclamation of pit is stipulated in the E.C.
- 8. Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented
- 9. The lease area shall be fenced off with barbed wires to a minimum height of 4ft around, before starting of mining. All the boundary indicators (boards, stores, markings, etc) shall be protected at all times and shall be conspicuous.
- 10. Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per stipulations of Explosive Department.
- 11. Control measures on noise and vibration prescribed by KSPCB should be implemented.
- 12. Quarrying activities should be limited to day time as per KSPCB guidelines/specific conditions.
- 13. Blasting should be done in a controlled manner as specified by the regulations of Explosives Department or any other concerned agency.
- 14. A licensed person should supervise/ control the blasting operations.
- 15. Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials.
- 16. Overburden materials should be managed within the site and used for reclamation of mine pit as per mine closure plan / specific conditions.
- 17. Height of benches should not exceed 5 m, and width should not be less than 5 m, if there is no mention is the mining plan/specific condition.
- 18. Mats to reduce fly rock blast to a maximum of 10 PPV should be provided.
- 19. Maximum depth of mining from general ground level at site shall not exceed 10m
- 20. No mining operations should be carried out at places having a slope greater than 45°.
- 21. Acoustic enclosures should have been provided to reduce sound amplifications in addition to the provisions of green belt and hollow brick envelop for crushers so that the noise level is kept within prescribed standards given by CPCB/KSPCB.
- 22. The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.
- 23. Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.
- 24. The transportation of minerals should be done in covered trucks to contain dust emissions.
- 25. The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project.
- 26. Disposal of spent oil from diesel engines should be as specified under relevant Rules/Regulations.
- 27. Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department.
- 28. A minimum buffer distance of 100 m from the boundary of the quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided.
- 29. 100 m buffer distance should be maintained from forest boundaries.

- 30. Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating mining activity.
- 31. All other statutory clearances should be obtained, as applicable, by project proponents from the respective competent authorities including that for blasting and storage of explosives.
- 32. In the case of any change(s) in the scope of the project, extent quantity, process of mining technology involved or in any way affecting the environmental parameters/impacts as assessed, based on which only the E.C is issued, the project would require a fresh appraisal by this Authority, for which the proponent shall apply and get the approval of this Authority.
- 33. The Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- 34. The stipulations by Statutory Authorities under different Acts and Notifications should be complied with, including the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
- 35. The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which (both the advertisement and the newspaper) shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Environment Impact Assessment Authority (SEIAA) office and may also be seen on the website of the Authority at www.seiaakerala.org. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.
- 36. A copy of the clearance letter shall be sent by the proponent to concerned Grama Panchayat/ District Panchayat/ Municipality/Corporation/Urban Local Body and also to the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The Environmental Clearance shall also be put on the website of the company by the proponent.
- 37. The proponent shall submit half yearly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) and upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the respective Regional Office of MoEF, Govt. of India and also to the State Environment Impact Assessment Authority (SEIAA) office.
- 38. The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extent of lease area and boundaries shall be depicted at the entrance of the quarry, visible to the public
- 39. The proponent should provide notarized affidavit (indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously followed.
- 40. No change in mining technology and scope of working should be made without prior approval of the SEIAA, No further expansion or modifications in the mine shall be carried out without prior approval of the SEIAA, as applicable.
- 41. The Project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.
- 42. Monitoring of Ambient Air Quality to be carried out based on the Notification 2009, as amended from time to time by the Central Pollution Control Board. Water sprinkling should be increased at places loading and unloading points & transfer point to reduce fugitive emissions.
- 43. The top soil, if any, shall temporarily be stored at earmarked site(s) only for the topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8m and width 20m and overall slope of the dumps shall be maintained to 45°. The OB dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.

- 44. Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
- Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM<sub>10</sub> and PM<sub>2.5</sub> such as haul Road, loading and unloading points and transfer points it shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- 46. Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
- 47. Measures should be taken for control of noise levels below 85 dBA in the work environment.
- 48. A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- The funds earmarked for environmental protection measures and CSR activate should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the State Environment Impact Assessment Authority (SEIAA) office.
- 50. The Regional Office of MOEF & CC located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (S) of the Regional Office by furnishing the requisite data/information/monitoring reports.
- 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.
- 52. Concealing the 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 attract action under the provisions of Environment (Protection) Act, 1986.
- 53. The SEIAA may revoke or suspend the order, for non implementation of any of the specific or this implementation of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- 54. The above conditions shall prevail not withstanding anything to the contrary, in consistent, or simplified, contained in any other permit, license on consent given by any other authority for the same project.
- 55. This order is valid for a period of 5 years or the expiry date of mine lease period issued by the Government of Kerala, whichever is earlier.
- 56. The Environmental Clearance will be subject to the final order of the courts in any pending litigation related to the land or project, in any court of law.
- 57. The mining operation shall be restricted to above ground water table and it should not intersect ground water table.
- 58. All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution taking centre. Washing of all vehicles shall be inside the lease area'
- 59. Project proponent should obtain necessary prior permission of the competent authorities for drawal of requisite quantity of surface water and ground water for the project.
- 60. Regular monitoring of flow rates and water quality upstream and downstream of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the six monthly reports to SEIAA.
- Occupational health surveillance program of the workers should be under taken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

For Member Secretary, SEIAA Kerala

G. RAIDEV
Administrator
Etate Environment Impact Assessment Authority
Frailinguakhan, Pottab
Thirdyeneanth apparamon 90024
Phone. 0672-2742264

