

cement! sugar! refractories! power!

DPM: MINES:A&K:MoEF:202

23.08.2022

The Addl .Principal Chief Conservator of Forests(C)
Ministry of Environment and Forests and Climate Change
Regional Office (SEZ),
Ist and IInd Floor,
Handloom Export Promotion Council,
34, Cathedral Garden Road,
Nungambakkam,
Chennai - 34

Sir,

Sub: MoEF First Half Yearly (January 2022 to June 2022) Compliance -

Reg

Ref: Environmental Clearance Letter.No. J.11015/104/2009-IA-II(M)

dated 09.05.11

With Reference to the above subject, we are herewith submitting the following Annexure in respect of Aminabad & Khairulabad Limestone Mine.

- 1. Status of Environmental Clearance compliance conditions- (Annexure-1)
- 2. Environmental Monitoring Reports for the Period January 2022 to June 2022-(Annexure-2)
- 3. Social Welfare activities-(Annexure-3)
- 4. Afforestation Details (Annexure 4)

Hence, we request your good office to kindly acknowledge the receipt of the compliance.

Thanking you

Yours faithfully, For Dalmia Cement (Bharat) Limited,

Lajer Gra C

T.C.Gopi Rajesh Kumar

Manager (Mines)

Encl: As above



Compliance Report on Conditions Issued by MOEF on Expansion of Aminabad & Kairulabad Limestone Mines vide Lr. No. J.11015/104/2009-IA-II(M) dated 09.05.11

S.No	Conditions	Compliance
A	Specific Conditions	
(i)	The company shall undertake regular desiltation of kallar river flowing adjacent to the lease in west during the dry period to prevent inundation of mine during rainy season	Regular desiltation is carried out in kallar river during dry period to prevent inundation of mine during rainy season.
(ii)	The project proponent shall obtain consent to Establish and consent to operate from the Tamil Nadu State Pollution Control Board and effectively implement all the conditions Stipulated therein.	Establish and consent to operate from the Tamil Nadu State Pollution Control Board and
(iii)	Measures for prevention and control of soil erosion and management of silt shall be undertaken. The De-silted material from the river should not be left near the river to avoid it from going back into the river and should be properly disposed of at appropriate site.	Measures are taken to control soil erosion and management of silt is done.
(iv)	The roads through which transportation is undertaken out side the mine lease area should be maintained through the nodal agency in State Government by making financial contribution for the same.	Roads are maintained by nodal agency in the state Government by making financial contribution for the same.

(v)	Trenches/Garland drains shall be constructed at foot of dumps and coco filters installed at regular intervals to arrest silt from being carried to water bodies. Adequate number of check dams and Gully Plugs Shall be constructed across seasonal/Perennial nallahs (if any) following through the ML area and silts arrested. Desilting at regular intervals shall be carried out.	Trenches/Garland drains are constructed all along the foot of dump
(vi)	The optimum charge for blasting shall be determined based on vibration study. Blasting operation shall be carried out only during day time. Controlled blasting shall be practiced. The mitigative measure for control of ground vibrations and to arrest fly rocks and boulders should be implemented.	Blasting is carried out with Milli – Second Delay Detonators & Non Electric Initiation System of Detonators to reduce the charge per delay, noise and ground vibrations.
(iv)	Drills shall either be operated with dust extractors or equipped with water injection System.	Water Mist Dust Suppression system is provided in all the drilling equipment and wet drilling is being practiced.
(v)	Mineral handling area shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should properly maintained and operated.	Water mist system and Water sprinkling system is followed in our Mining Operations.
(vi)	ETP shall also be provided for the workshop and waste water generated during the mining	Up flow filters are provided in workshop.

	operation	
(vii)	Fugitive dust generation shall be controlled. Fugitive dust emission shall regularly monitored at locations of nearest human habitation(including school and other public amenities located nearest to sources of dust generation as applicable) and records submitted to the Ministry.	Water sprinkling is being done on haul roads regularly to reduce fugitive dust emission. Dust emission is monitored every fortnightly and data maintained.
(viii)	The project authority shall implement suitable conservation measures including suitable rain water harvesting measures to augment ground resources in the area in consultation with Regional Director, Central Ground water Board.	Suitable rain water harvesting measures with consultation with Regional Director, Central Ground water Board is implemented.
(ix)	Regular monitoring of ground water level and quality including Arsenic shall be carried out in and around the mine lease by establishing a network of existing wells and constructing new piezometers during the mining operation. The periodic monitoring [(at four times in a year- Pre monsoon (April-May),monsoon(August), Post-monsoon(November) and winter(January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office, Bangalore, the	Regular monitoring of ground

	Central Ground Water Authority	water level is done once in a Quarter
	and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the ground water table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.	and report is submitted.
(x)	Mineralogical composition of the dust to assess the silica content in the dust particle and particle size analysis shall be carried out periodically and records maintained. Personal exposure monitoring for dust shall also be carried out for the workers	Personal dust samplers are used for monitoring the dust and records are maintained.
(xi)	Land use pattern of the nearby village shall be studied, including common property resource available for conversion into productive land. Action plan for abatement and compensation for damage to agricultural land/common property land(if any) in the nearby villages, due to mining activity shall be submitted to the ministry with in six months	Land use pattern of the nearby villages has been studied and found no damage to agricultural land/common property land due to mining activity.
(xii)	Need based assessment for the nearby villages shall be conducted to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc can form a part of such programme. Company shall	Need based assessment of the nearby villages have been conducted to study economic measures and the report is readily available with the company. Persons have been identified by the company in nearby village and helped them for their self-employment and income is being generated regularly by them. Company has provided separate budget for community development activities every year for CSR activities.

	provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self-employment and jobs.	
(xvi)	Occupational health and safety measures for the workers including identification of work related health hazards, training on malaria eradication, HIV and health effects on exposure to mineral dust etc. shall be carried out. The company shall engage a full time qualified doctor who is	All the employees are subjected to medical examination at regular intervals. The company has appointed a qualified doctor on Occupational Health.
	trained in occupational health. Periodic monitoring for exposure to respirable mineral dust on the workers shall be conducted and records maintained including health records of the workers. Awareness programme for	Periodical monitoring of respirable dust on the workers is carried using a Personal dust sampler and proper records are maintained.
	workers on impact of mining on their health and precautionary measures like use of personal equipments etc. shall be carried out periodically. Review of impact of various health measures undertaken (at interval of five years of less) shall be conducted followed by follow up action where wherever required.	Awareness programme for workers on impact of mining on their health and precautionary measures is given as per Mines Vocational Training Rules 1966.
(xvii)	The Company shall stress upon the preventive aspects of occupational health. Preplacement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose,	Pre-placement medical examination and periodical medical examination of the workers engaged in the project has been carried out and records are maintained.

	schedule of health examination of the workers should be drawn and followed accordingly	
(xviii)	Green belt shall be raised first in the northern portion of the mine where the nearest habitation is at distance of 600m. The greenbelt plantation all around the mine lease should be completed within 5 years of grant of environment clearance. Greenbelt development and selection of plant species shall be of native species. The density of the trees should be around 2000 plants per ha. Herbs and shrubs shall also form a part of afforestation programmes besides tree plantation. Details of year wise afforestation programme including rehabilitation of mined out area shall be submitted to the ministry within six months.	Plantations in the area is being developed in a phased manner. Green belt is developed all around the mine lease area.
(xix)	Vehicular emission shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operation and in transportation of mineral within the lease up to the stockyard. The mineral transportation within the mine lease shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded. The mineral transportation outside the mine lease shall be carried out through the tarpaulin covered trucks only and the vehicles	Emission certificate issued by Regional Transport Office is maintained in all vehicles involved in Limestone Transport. All vehicles transporting Limestone are covered with tarpaulin. Vehicles are loaded

	carrying the mineral shall not be overloaded. There shall be no spillage of mineral enroute up to the delivery point.	only up to body level to avoid spillage of material.
(xx)	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Employees employed in the mine are from the nearby villages and reporting to work. Safe drinking water at work place & medical health facilities are provided.
(xxi)	The critical parameters such as RSPM(Particulate matter with size less than 10 micron i.e., PM 10) and NOx in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored[(TDS,DO,PH and Total Suspended Solids(TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the company in public domain. The Circular No.J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.	The Critical Parameters are periodically monitored and uploaded in website.

(xxii)	A Final Mine closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment& Forests 5 years in advance of final mine closure for approval.	Final Mine closure Plan along with details of Corpus Fund will be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.
В	General Conditions	
(i)	No change in technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.	Mechanized method of Mining is followed and there is no change in mining technology.
(ii)	No change in the calendar plan including excavation, quantum of limestone, waste / OB dumps should be made.	The quantity of limestone is restricted as per the plan.
(iii)	At least four ambient air quality-monitoring stations should be established in the core zone as well as buffer zone for RSPM(Particulate matter with size less than 10 micron i.e,PM10) and NOx monitoring. Location of the ambient air quality stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and the frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.	Ambient Air quality readings are taken from the stations already established in the core zone and buffer zone in consultation with the State Pollution Control Board
(iv)	Data on ambient air quality[(RSPM(Particulate matter with size less than 10 micron i.e,PM10) and NOx] should be regularly submitted to the Ministry including its Regional Office at Bangalore and the State Pollution Control Board / Central	The season wise data on ambient air quality collected are submitted to the MoEF, Regional Office at Bangalore and the State Pollution Control Board once in six months.

	Pollution Control Board once in six months.	
(v)	Fugitive dust emissions from all sources should be controlled regularly water spraying arrangements on haul roads,	Drills are operated with water mist system for dust suppression.
	loading and unloading points and transportation of minerals, etc.	Water sprinkling is done on haul roads.
		Vehicles carrying Limestone were covered with tarpaulin to prevent the dust from being airborne.
(vi)	Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM etc., should be provided with ear plugs/muffs.	Noise level is maintained well below 85 dBA. Periodical monitoring is carried out by TNPCB on yearly basis. Persons are provided with PPE.
(vii)	Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422(E) dated 19 th May 1993 and 31 st December 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of Workshop effluents.	The workshop water is properly collected in the up flow filters before discharge, in order to trap the oil and grease in the effluent. The water is then used for afforestation purposes.
(viii)	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.	All our mine employees are provided with protective equipments such as dust mask, earplugs, shoes, helmets etc. Periodical Medical Examination is done for all our Mine employees regularly.
	Occupational health surveillance programme of the workers should	Occupational health surveillance

	be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	programme of the workers is done on a regular basis.
(ix)	A separate environmental management cell with suitable qualified personnel should be set -up under the control of a Senior Executive, who will report to the Head of the Organization.	Environmental management cell is formed.
(x)	The funds earmarked for environmental protection measures should be kept in separate account and not diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Bangalore.	The fund earmarked is spent for the Environmental Protection measures only.
(xi)	The project authorities should inform to the Regional Office located at Bangalore regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	The final approval of the project was informed to the MoEF, Regional Office at Bangalore. The fund required for the project was managed from the resources internally from the company. Hence the date of Financial Closure is not applicable.
(xii)	The Regional Office of this Ministry located at Bangalore shall monitor compliance of the stipulated environmental conditions. The project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.	_

(xiii)	The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by email) to the Ministry of Environment and Forests, its Regional Office Bangalore, the respective Zonal Office of Central Pollution Control Board and the State Pollution Board. The Proponent shall upload the status of compliance of the environmental clearance conditions including results of monitored data on their website and shall updated the same periodically. It Shall simultaneously be sent to the Regional Office of Ministry of Environment and Forests, Bangalore, the respective Zonal Officer of Central Pollution Control Board and the State Pollution Control Board and the State	-
(xii)	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban Local Bodies and the /Local NGO, if any, from whom any suggestion/representation, if any, were received while processing the proposal. The clearance letter shall also be put on the Website of the company by the proponent.	A copy of the clearance letter was given to Panchayat as advised.
(xiii)	The State Pollution Control Board should display a copy of the clearance letter at the Regional	_

	office, District Industry Centre and the Collector's/Tahsildar's office for 30 days.	
(xiv)	The Project authorities should advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within 7 days of issuance of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and may also be seen at web site of the Ministry of Environment & Forests at http://envfor.nic.in .	The Advertisement was given in two local newspapers as advised by you and the copy of the same was submitted to your Regional office.

AMINABAD & KAIRULABAD LIMESTONE MINE

(General condition No. B (iv) of environmental clearance letter No. No. J.11015/104/2009-IA-II(M) dated 09.05.2011)

AIR QUALITY - AMINABAD & KHAIRULABAD LIMESTONE MINE- FIRST HALF YEARLY REPORT

(January 2022 to March 2022)

Abstract of Ambient Air quality data for the period January 22 to March 22

Station Name	PM - 10 (μg/m ³⁾	PM - 2.5 (μg/m3)	SO ₂ (μg/m ³⁾	NO _x (µg/m³)	CO (µg/m3)	
No. of Observations	8	8	8	8	8	
Periyanagular Limestone Mines	46.56	15.52	5.79	14.92	<114.5	
Perianagular Village	46.82	18.39	5.73	14.96	<114.5	
Kopilankudikkadu Village	46.19	18.29	6.5	14.89	<114.5	
Kallankurichi Village	43.13	17.14	6.13	13.67	<114.5	
Reddipalayam Village	47.63	18.81	6.18	15.29	<114.5	
Pudupalaiyam Village	50.52	19.85	5.97	16.43	<114.5	
Hastinapuram Village	50.12	19.64	6.14	16.28	<114.5	
Valajanagaram Village	46	18.08	6.03	14.66	<114.5	
NAAQ Norms*	100.0	350.0	80.0	80.0	40 milligram /cu.m	

(April 2022 to June 2022)

Abstract of Ambient Air quality data for the period April 22 to June 22

Station Name	PM - 10 (μg/m ³⁾	PM - 2.5 (μg/m3)	SO₂ (µg/m³)	NOx (µg/m³)	CO (µg/m3)
No. of Observations	8	8	8	8	8
Periyanagular Limestone Mines	50.97	16.9	6.14	16.39	<114.5
Perianagular Village	50.67	19.95	6.26	16.27	<114.5
Kopilankudikkadu Village	53.38	20.89	7.57	17.14	<114.5
Kallankurichi Village	46.62	18.39	6.31	14.98	<114.5
Reddipalayam Village	54.4	21.41	7.06	17.48	<114.5

NAAQ Norms*	100.0	350.0	80.0	80.0	40 milligram /cu.m
NA A O N = *	400.0	250.0	00.0	00.0	40 :!!:
Valajanagaram Village	48.78	19.22	6.06	15.67	
					<114.5
Hastinapuram Village	56.17	22.03	6.84	18.05	
					<114.5
Pudupalaiyam Village	54.43	21.3	6.45	17.47	
					<114.5

<u>Livelihood & Enterprise Development Programme in Sirukadampur,</u> <u>Ariyalur District</u>



Mask Distribution in Government Hospitals, <u>Ariyalur District</u>





Medical Camp in Kattuppringiyam Village, Ariyalur District



Veterinary Camp in Asthinapuram Village, Ariyalur District



Village Level Program Self Help Groups in Surrounding Villages, Ariyalur District





Details of Green Belt for Aminabad & Khairulabad Limestone Mine						
	No of S	aplings	Extent(Ha)			
	Within	Outside	Within	Outside		
	lease	lease	lease	lease		
Year	area	area	area	area		
Total as on 30.06.2022	7618	1308	6.20	1		
Total	7618	1308	6.20	1		

AFFORESTATION DONE IN AMINABAD & KHAIRULABAD LIMESTONE MINES





