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REGD. A/D

ACL/EMD/F-16/2021/2345

17.05.2021

The Director,

Ministry of Environment, Forest and Climate Change (MoEF&CC), Regional Office, Western Region, "Kendriya Paryavaran Bhavan" Link Road No.3, Ravi Shankar Nagar, Bhopal - 462016, (M.P.)

Sub.: Half Yearly Compliance Status Report of Environmental Clearance of Sugala Limestone Mines.

Ref.: Environmental Clearance No. J-11015/154/2018- IA.II (M) dated 15.01.2021

Sir,

We are pleased to submit herewith half yearly compliance status report (i.e. for the period of (October'2020 to March'2021) of Environmental Clearance No. 11015/154/2018-IA-II (M) dated 15.01.2021 granted by MoEF&CC to Sugala Limestone Mines of Ambuja Cements Ltd., located at village – Sugala & Jagatiya, Taluka - Kodinar, District - Gir Somnath (Gujarat).

Thanking you,

Yours Faithfully,

For Ambuja Cements Ltd.

Anand Prakash Head-Environment

Encl.: As above.

Copy to:

- The Central Pollution Control Board (CPCB), Parivesh Bhawan, Atmajyoti 1) Ashram Rd, Opp. VMC Ward Office No. 10, Subhanpura, Vadodara – 390023 (Gujarat)
- The Member Secretary, Gujarat Pollution Control Board (GPCB), Paryavaran 2) Bhavan, Sector-10-A, Gandhinagar-382010
- The Regional Officer, Gujarat Pollution Control Board (GPCB), Opp. Saint Anne's 3) Church Station Road, Junagadh.

Regd. Office:

PO: Ambujanagar - 362 715, Tal: Kodinar, Dist. : Gir Somnath (Gujarat) Phone: (02795) 221137, 232009, Fax: (02795) 220328

Ambuja Cements Limited (Unit : Ambujanagar)

CIN No.: L26942GJ1981PLC004717 www.ambujacement.com

Corporate Office: Elegant Business Park, MIDC Cross Road 'B' Off Andheri - Kurla Road, Andheri (E) Mumbai - 400 059. Phone : (022) 4066700

MONITORING THE IMPLEMENTATION OF ENVIRONMENTAL SAFEGUARDS

Ministry of Environment & Forests, Regional Office (W), Bhopal Monitoring Report, Part-I

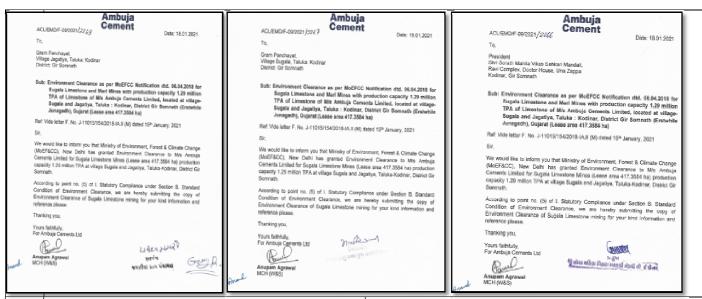
DATA SHEET

C	Douting laws	Doub.
Sr. No.	Particulars	Reply
01	Project type	Mining
02	Name of the project	Sugala Limestone Mining Project
03	Clearance letter(s) / OM no. and date	No. J-11015/6/2000 – IA,II (M), dated 20.06.2002 &
		No. J-11015/154/2018-IA-II(M), dated 15.01.2021
04	Location	
	a) District(s)	Gir Somnath
	b) State(s)	Gujarat
	c) Latitude	20°52' 45" – 20° 54' 45"
	d) Longitude	70° 45' 30" – 70° 46' 45"
05	Address for correspondence	
	a) Address of concerned Project Chief Engineer (with pin code & telephone / telex / fax numbers).	Sh. Anupam Agrawal Manufacturing Cluster Head (W&S) Ambuja Cements Ltd. PO Ambujanagar, Taluka: Kodinar, District: Gir Somnath (Gujarat). Pin.: 362715, Tel: 02795-237011, Fax: 02795 - 220328/232032
	b) Address of Executive Project Engineer / Manager (with pincode / fax numbers.	Sh. Ganpat RAM, Mines Manager, Ambuja Cements Ltd PO:Ambujanagar, Taluka - Kodinar District: Gir Somnath (Gujarat) Pin.: 362715 Tel: 02795-237217, Fax: 02795 - 220328/232032
06	Salient features	133 31 17 133 3 13 3
	a) Present Status of the project	Ambuja Cements Ltd. has cement manufacturing plant at Ambujanagar in Kodinar Taluka of Gir Somnath District. Limestone is the main raw material for the cement plants. The materials are being exploited from company's own captive mines i.e. Sugala Limestone Mine. Sugala is located at a distance of about 18 kms in NNE direction with respect to cement plant. The rated capacity of the limestone is 1.29 MTPA.
	b) of the environmental management plans	 * Mining operations do not involve drilling and blasting for material rising. Limestone excavation being carried out by Surface Miner & Ripper Dozer * Regular monitoring of environmental parameters is carried out as per the norms evolved by MoEF and IBM. * Preventive maintenance of deployed HEMM being undertaken on regular basis. * Dust suppression by water sprinkling on haul roads and in working area. * Afforestation / Green belt development along haul road near office building and lease periphery is being implemented. * Mined-out areas would be converted to plantation / agri-farm and water reservoirs as envisaged in the mining plan partial reclaiming already done. * Socio-economic improvement measures are being undertaken in the project buffer zone as envisaged.

07	Break up of the project area.	
	a) Submergence area(forest & non-forest)	Not Applicable
	b) Others	Private Land - 414.8493 ha , Govt. Land - 2.5091 ha
08	Break up of the project affected population with enumeration of those losing houses / dwelling units only, agricultural land only, both dwelling units & agricultural land & landless labourers / artisans.	Not Applicable, since there is no human settlement in the core zone area,
	a) SC, ST / Adivasis	Not Applicable
	b) Others	Not Applicable
09	Financial details	
	Project cost as originally planned and subsequent revised estimates and the year of price reference.	Limestones raised from Sugala area partially supplement the requirements of existing cement units. As it is a captive mine for the existing cement plants, no separate project costing was made.
	b) Allocation made for environmental management plans with item wise and year wise break-up.	Rs. 10.27 Cr.
	 c) Benefit cost ratio / Internal rate of return and the year of assessment. 	No separate assessment made, as it is a captive mine.
	 d) Whether (c) includes the cost of environmental management as shown in the above. 	Not Applicable.
	e) Actual expenditure incurred on the project so far.	Rs. 7.87 Crores.
	 f) Actual expenditure incurred on the environmental management plans so far. 	Actual expenditure incurred on the environmental management plans so far is Rs. 8.68 Cr.
10	Forest land requirement.	
	 a) The status of approval for diversion of forest land for non-forestry use 	The project area does not comprise of any forest land hence not applicable.
	b) The status of clearing felling	Not Applicable
	c) The status of compensatory afforestation, if any	Not Applicable
	 d) Comments on the viability & sustainability of compensatory afforestation programme in the light of actual field experience so far. 	Not Applicable
11	The status of clear felling in non-forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information. Status of construction.	The project does not involve clear felling of trees.
	a)Date of commencement (Actual and / or planned)	2 nd November 2002
	b)Date of completion (Actual and / or planned).	Ongoing Project
13	Reasons for the delay if the project is yet to start.	Not applicable.
14	Dates of site visits	
	a) The dates on which the project was monitored by the Regional Office on previous occasions, if any.	 1.) 12.10.10 to 13.10.10 by Dr. A. Mehrotra MoEFCC Regional Office, Bhopal 2.) 29/03/2019 by Dr. H.V.C Chary Guntupalli, Regional Director Bhopal
	b) Date of site visit for this monitoring report	1.) 17.08.2016 2.) 29/03/2019
15	Details of correspondence with project authorities for obtaining action plans / information on status of compliance to safeguards other than the routine letters for logistic support for site visits).	Half yearly compliance status report is being regularly submitted and last submission was on 03.11.2020 vide letter No. ACL/EMD/F-16/2020/2230/88130

SN	Environmental Conditions	Compliance status
A.	Specific conditions	
a)	Plantation must be completed within 3 years along the periphery of the lease area.	 Agreed, Total area under greenbelt/plantation up to conceptual stage will be 46.0 ha. As on date 14.6947 ha area has been covered under greenbelt plantation. Remaining 33.0742 ha area will be covered under greenbelt/Plantation up to conceptual stage. The company has planted local species for greenbelt development in consultation with forest department.
b)	Total plantation must be completed within 4 years before the closure of mine which shall be duly approved by IBM and must be incorporated in the approved mining plan.	 Agreed, A conceptual plan will be incorporated in mining plan.
c)	The project proponent shall adopt the appropriate mitigation measures to prevent negative impacts of mining activities on the	, ,

d)	Broad leaved tree sapling of not less than 10 feet height and maintenance of the same shall be carried.	our rain water harvesting initiative the salinity of the ground water has been effectively reduced and now the neighboring farmers are using ground water for watering their crops. They are taking three crops in a year where earlier there was only single crop farming were in practice. • Agreed,
В.	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.	• Noted
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 .	 Noted, As this is running mine since 2002 and no addition of equipment /machinery or expansion of capacity.
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.	 Noted, As this is running mine since 2002 and no addition of equipment /machinery or expansion of capacity. Monthly report is submitted to department of mining and geology.
4	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".	There is no R & R issue related to mining activity.
5	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.	 Complied. EC copy is submitted to concerned panchayats vide our letter nos. ACL/EMD/F-09/2021/2266-68, Dated 18.01.2021.

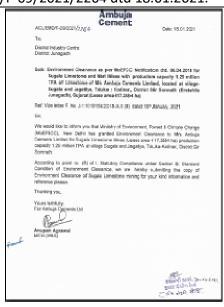


State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.

- Complied.
- Informed to GPCB vide our letter no ACL/EMD/F-09/2021/2259/88444 dtd 18.01.2021, to District development officer ACL/EMD/F-09/2021/2269 18.01.2021, District Collector ACL/EMD/F-09/2021/2263 dtd 18.01.2021, to District Industry Center ACL/EMD/F-09/2021/2264 dtd 18.01.2021.



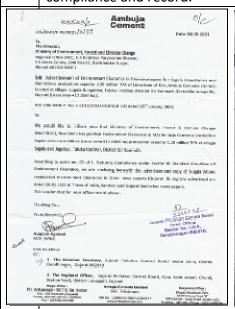




The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has

- Complied.
- The grant of EC has advertised in local news papers & copy of the same is forwarded to MoEFCC RO Bhopal vide our letter no ACL/EMD/F-09/2021/2273/88503/2 dtd 06.02.2021.

been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEF&CC Regional Office for compliance and record.







- 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.
- Noted.

II. Air Quality Monitoring and Preservation

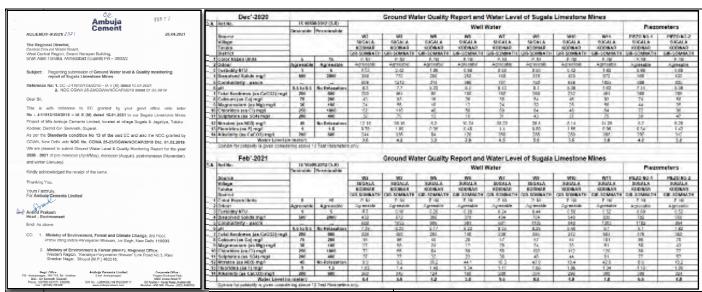
- The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations , of air pollution viz. PM10, PM2.5, N02, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/1, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in
- We have initiated procurement of the CAAQMS, which will be installed in 120⁰ angle considering the predominant wind direction. However manual monitoring of ambient air quality is being regularly monitored at 06 locations.

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.

- 10 Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling , mettled 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 machineries and equipments/ 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.
- We have deployed mechanized covered dumpers for transportation of limestone. We have deployed dedicated water tankers for water sprinkling on haul road. We have surface miners equipped with water spray system during loading and excavating the limestone.
- Half yearly ambient air quality monitoring report is being regularly submitted to MoEF&CC, our last submission was on 03.11.2020 vide letter no. ACL/EMD/F-16/2020/2230/88130
- Ambient air quality monitoring results for the period October'2020 to March'2021 is enclosed as under.

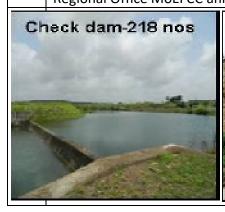
						nt Air Q				ults					
ALCOHOL:	(October'2020 to March'2021) Working Place Sugala Village										18	gatiya Vi	lage		
Month	PM2.5	PM10	502	NOx	co	PM2.5	PM10	502	NOx	CO	PM2.5	PM10	502	NOx	CO
Unit >	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(mg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(mg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(mg/m3)
Oct. 2020	25.6	44.6	11.9	14.2	BDL	26.9	47.9	12.3	15.0	BDL	27.6	50.2	12.1	15.2	BDL
OCL 2020	26.6	39.6	11.5	15.2	BDL	23.5	41.2	12.3	14.0	BDL	24.6	43.2	11.9	15.3	BDL
Nov.2020	27.6	46.8	11.1	20.8	BDI	30.5	50.8	12.2	16.5	BDL	28.9	497	10.9	173	BDL
1101.2020	28.5	48.5	11.5	13.9	BDL	27.6	50.2	10.9	14.8	BDL	31.1	51.6	12.3	15.1	BDL
Dec.2020	28.2	50.9	9.9	16.6	BDL	31.5	48.6	12.4	14.9	BDL	32.8	52.7	11.4	17.1	BDL
D00.2020	30.2	50.1	10.8	16.0	BDL	33.1	49.1	11.4	14.8	BDL	29.4	53.4	9.8	17.1	BDL
Jan. 2021	30.8	52.5	11.5	15.2	BDL	29.5	49.8	12.2	14.8	BDL	33.1	51.3	10.5	16.2	BDL
Jan. 2021	28.5	52.5	10.8	16.2	BDL	31.6	49.5	9.5	14.2	BDL	33.5	51.6	12.5	16.5	BDL
Feb. 2021	26.8	49.8	10.8	14.0	BDL	32.5	46.5	11.9	13.5	BDL	29.1	49.7	12.2	14.9	BDL
Feb. 2021	31.1	49.6	11.6	14.9	BDL	26.8	53.2	12.5	16.5	BDL	28.5	48.8	9.9	15.7	BDU
	32.5	52.5	12.2	14.2	BDL	26.4	46.7	10.8	17.0	BDL	31.9	49.2	9.8	15.9	BDL
Mar. 2021	32.3	45.9	9.6	15.4	BDL	29.4	52.4	12.4	16.2	BDL	26.3	48.4	11.6	14.9	BDL
Month			hachhar V			Nagadala Village					Kansariya Village				
347777	PM2.5	PM10	502	NOx	CO	PM2.5	PM10	502	NOx	CO	PM 2.5	PM 10	S02	NOx	CO
Unit >	(µg/m3)	(µg/m3)	(µg/m3)	(pg/m3)	(mg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(mg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(µg/m3)	(mg/m3
Oct. 2020	29.5	46.1	10.9	13.9	BDL	30.2	44.3	11.6	14.8	BDL	29.8	45.2	10.8	13.5	BDL
1 000010%	31.3	40.2	10.6	14.9	BDL	23.6	41.5	13.0	14.1	BDL	26.6	39.6	12.5	13.9	BDL
Nov.2020	24.5	47.1	11.8	18.2	BDL	31.6	52.8	12.4	17.7	BDL	30.8	48.5	10.9	18.8	BDL
Cidena	29.5	46.8	10.8	14.0	BDL	28.7	47.1	11.4	13.9	BDL	30.3	50.9	10.9	14.8	BDL
Dec 2020	30.5	51.3	10.8	16.1	BDL	28.9	50.8	9.7	15.4	BDL	27.2	49.2	11.5	14.7	BDL
March San	31.1	49.2	13.1	15.8	BDL	26.9	52.2	12.8	14.4	BDL	31.8	51./	11.5	16.3	BDL
Jan 2021	31.6	53.2	12.9	17.1	BDL	29.5	50.2	10.8	14.8	BDL	32.5	51.6	11.8	15.2	BDL
	30.5	50.8	11.8	17.1	BDL	26.8	49.8	12.7	16.5	BDL	29.5	51.7	10.8	15.8	BDL
Feb. 2021	30.5	48.5	9.8	15.8	BDL	31.1	53.5	11.7	16.7	BDL	29.4	54.2	12.1	17.1	BDL
-4.60-	32.5	46.6	13.1	16.4	BDL	31.9	52.2	11.4	15.9	BDL	27.4	49.9	9.6	14.6	BDL
Mar. 2021	28.7	53.2	113	14.6	BDL	30.3	45.9	12.4	162	BDL	28.8	51.8	107	17.2	BDL
mai. 202 I	30.7	51.7	12.2	16.3	BDL	32.7	50.6	10.7	17.2	BDL	28.5	49.2	9.9	15.5	BDL

III.	Water quality monitoring and preservation		
11	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 hydrogeological study of the area.	•	Noted.
12	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.	•	Ground water level & Analysis monitoring is being done regularly by establishing a network of ground water monitoring stations. Report is submitted to MoEF&CC regional office Bhopal, CGWB, CGWA and GPCB on yearly (April'2020 to March'2021) basis. Last submitted on 26.04.2021 vide letter no ACL/EMD/F-9/2021/2321
13	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 including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-a-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.	•	Ground water level & Analysis monitoring is being done regularly by establishing a network of ground water monitoring stations. Report is submitted to MoEF&CC regional office Bhopal, CGWB, CGWA and GPCB on yearly (April'2020 to March'2021) basis. Last submitted on 26.04.2021 vide letter no ACL/EMD/F-9/2021/2321



- 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.
- No waste water or mine drainage from mining operations. The waste water generated from vehicle washing after oil & grease separation is recycled for vehicle washing purpose. The waste water quality is monitored regularly.

- 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.
- We through our CSR arm Ambuja Cement Foundation have implemented rainwater harvesting measures on long term basis to augment ground water resources in consultation with govt authorities.













- 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.
- The waste water generated from vehicle washing after oil & grease separation is recycled for vehicle washing purpose. The waste water quality is monitored regularly.
- 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.
- The water consumption is for drinking purpose, green belt development & vehicle washing only. The waste water generated from vehicle washing after oil & grease separation is recycled for vehicle washing purpose. The waste water quality is monitored regularly.

IV. Noise and vibration monitoring and prevention

- The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
- Not Applicable, we are doing mining through eco-friendly surface miners.
- 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.
- We are operating our mines during day time only i.e. 06:00 AM to 06:00 PM.
- Mining is done by using eco-friendly surface miners. Tree plantation has been done around the periphery of lease area. The day and night time noise level is very well within the prescribed limit and monitored and reported to GPCB & MoEF&CC regularly.
- Last six month of Ambient Noise monitoring report is attached below:

	Ambient Noise Level Monitoring (October'2020 to March'2021)												
		Noise Levels in dB(A)											
Month	Near Surf	ace Miner	Haul road		Mines Office		Sugala Village		Chidivav Village				
	Leq (Day)	I eq (Night)	Leq (Day)	I eq (Night)	Leq (Day)	Leq (Night)	Leq (Day)	Leq (Night)	Leq (Day)	Leq (Night)			
Oct-20	70	64	66	64	64	55	48	45	53	4/			
Nov-20	71	65	68	64	64	55	48	45	46	45			
Dec-20	69	66	68	62	64	50	46	44	50	45			
Jan-21	68	65	66	65	65	61	57	47	51	45			
Feb-21	70	6/	68	65	64	51	4/	46	50	44			
Mar-21	75	68	66	63	68	62	62	51	55	49			

- 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.
- Mining is being done by using eco-friendly surface miners. All the HEMM has been provide acoustic cabins for drivers and also has been provided ear plugs to all workers along with other PPEs like safety helmet, safety shoes, safety goggles and reflective jackets.
- All the machines are emitting noise well 85 dB(A) have deployed loader from LIEBHERR Germany which is the lowest noise generation machine in the world. Last six month of HEMM Noise monitoring report is attached below:

	Noise Level of HEMM distance (October'2020 to March'2021)									
Machine		Surface Min	er		Loader		Dozer			
Month	Conditions	Noise Levels (dB) Leq		Conditions	Noise Leve	ls (dB) Leq	Conditions	Noise Levels (dB) Le		
Month	Conditions	At 5m.	At 10m.	Conditions	At 5m.	At 10m.	Conditions	At 5m.	At 10m.	
Oct-20	the	70	67	the	74	71	the	70	64	
Nov-20	_	71	68		74	71	_	74	72	
Dec-20	dozing laterial	72	68	zin	zin eria	75	72	dozing laterial	70	65
Jan-21	e dozing material	77	74	e dozing material	76	73	e dozing material	7 5	73	
Feb-21	While	74	70	While dozing material	75	72	While	75	68	
Mar-21	≥	68	65	≥	72	69	≥	68	62	

V. | Mining plan

22

- The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.); mining technology; lease area; scope of working (method of mining, overburden & dump management, O.B. & dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure; land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.).
- Noted.

- The shall be governed as per the approved Mining Plan. The excavation vis-a-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self sustaining. The compliance status shall be submitted half-yearly to the MoEF&CC and its concerned Regional Office.
- Noted.
- The half yearly compliance status is being regularly submitted to MoEF&CC and GPCB. The latest half yearly report submitted vide our letter no ACL/EMD/F-16/2020/2230/88130 dtd 03.11.2020.

VI Land reclamation

- The Overburden (O.B.), waste and topsoil 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 / waste dumps / topsoil dump
- Noted,
- There is no OB. The topsoil is being used for reclamation and plantation.

	like height, width and angle of slope shall be		
	governed as per the approved Mining Plan and the		
	guidelines/circulars issued by D.G.M.S. The topsoil		
	shall be used for land reclamation and plantation.		
24	The slope of dumps shall be vegetated in scientific	•	Noted,
	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 micro-climate. 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/ gee-membranes I		
	clay liners / Bentonite etc. shall be undertaken for		
	stabilization of the dump.		
25	Catch drains , settling tanks and siltation ponds of	•	Noted,
	appropriate size shall be constructed around the mine	•	Catch drains has been constructed around
	working, mineral yards and Top Soil/OB/Waste dumps		mine working area.
	to prevent run off of water and flow of sediments		0 1 1
	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.		
26	Check dams of appropriate size, gradient and length		There is no OB generation however garland
	shall be constructed around mine pit and OB dumps to		drains around the mine pits have been
	prevent storm run-off and sediment flow into adjoining		constructed to avoid runoff into water
	water bodies. A safety margin of 50% shall be kept for		bodies around lease.
	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		
1/11	constructed at the corners of the garland drains.		
VII	Transportation		We have death and death at the second of
27	No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In	•	We have deployed dedicated water tankers for
	such cases, PP shall construct a 'bypass' road for the		spraying water on haul roads and roads are being continuously wetted for suppressing the
	purpose of transportation of the minerals leaving an		dust emission. We have obtained PUC for our
	adequate gap (say at least 200 meters) so that the		all vehicles.
	adverse impact of sound and dust along with chances	•	
	of accidents could be mitigated. All costs resulting	•	Vehicular emissions are being checked &
	from widening and strengthening of existing public		monitored regularly. Detail of P.U.C certificate by Somnath P.U.C Center (Approved by
	road network shall be borne by the PP in consultation		Government of Gujarat) is attached as under:
	with nodal State Govt. Department. Transportation of		Government or Gujarat) is attached as under:
	with houdi state dovt. Department. Hansportation 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. [If applicable in case of road transport]

The Main haulage road within the mine lease

28 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.



We have deployed dedicated water tankers for water spraying on the haulage road and roads are being continuously and regularly wetted to suppress the dust emission.



Green Belt VIII

29 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.

- Agreed,
- Total area under greenbelt/plantation up to conceptual stage is 46.0 ha. As on date 14.6947 ha area has been covered under greenbelt plantation. Remaining 33.0742 ha area will be covered under greenbelt/Plantation up to conceptual stage. The company has planted local species for greenbelt development consultation with forest department.

















- 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.
- We have developed green belt along lease boundary and maintaining the density 2500 sapling per hectare with native type of species, in consultation with local DFO.
- We have also developed pasture land on an area of 32.87 Ha in consultation with Krishi Vigyan Kendra (KVK), Gir-Somnath



31 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.

We have developed 9.0 hectares of fodder plot at Sabdharvidi, Jamvala jointly with Forest Department. The fund was allotted in two stages: In first stage, fund of Nine Lakhs Twenty Six Thousand Eight Hundred and Fifty Seven thousand (926857/-) was released vide our letter No. GACL/SEP/06/5952 dtd. 03/11/2006. In second Stage, fund of Twelve Lakhs Ninety Nine Thousand Eight Hundred Thirty Nine (1299839/-) was released vide our GACL/GEO/TRR/05 letter No. 15/02/2005. Details of fodder plot developed has been already submitted to MoEF vide our submission dtd. 25.12.2010 vide letter no. ACL/EMD/F-16/2010/55926.

IX	Public hearing and human health issues		
32	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, creche for kids etc. The housing may be provided in the form of temporary structure\$ 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.	•	Not applicable as it is existing mine. There is no requirement of any type of labour or /work force.
X	Miscellaneous		
34	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 .	•	We carry out digital processing of the entire lease area once in every three year. Year 2019 report has been submitted to MoEF&CC, New Delhi and its Regional Office Bhopal on Dated 02.03.2020 vide letter No. ACL/EMD/F-9/2020/2092/87092. Arrbuga
35	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.	•	Point noted. This is an existing and on-going project. This is a running mine and lease is valid till 01/09/2032 (extended till 01/09/2052) Once we will reach at final phase of mine closure we will intimate to inform to the Regional Office located at Bhopal as well as to the Ministry of
			Environment & Forests and Climate Change.
36	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.	•	We are submitting six monthly compliance reports to MoEF&CC, RO MoEF&CC and GPCB regularly. The latest six monthly compliance report submitted vide our letter no ACL/EMD/F-16/2020/2230/88130 dtd 03.11.2020.

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37	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.	A well established Environmental Management Division (EMD) with suitable qualified personnel is in place. Head of environmental management cell directly report to the Works Head of the organization. EMD organization chart is enclosed as under: Organization Chart Deputy Manager Sector officer Environment Cofficer Environment E
38	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 <i>I</i> information <i>I</i> monitoring reports.	 Point noted. Full support and co-operation is being extended during the visit of officers from Ministry of Environment & Forest and Climate Change, CPCB as well as GPCB.
39	In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations , undertake re-grassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder , flora , fauna etc.	Point noted and agreed
