

DCBL/ENV/23-24/02

30th November 2023

To,

✓ Deputy Director General of Forest (C)
Ministry of Environment, Forests & Climate Change
Govt. of India
Integrated Regional Office, Law – U – Sib,
Lumbatngen, Shillong – 793021, Meghalaya.

Subject: Half Yearly compliance report for the period April 2023 to September 2023, condition imposed in environment clearance vide letter F. No. J-11015/366/2009-IA.II (M) dated 2nd Jan, 2014 for mining lease (128.52 ha Limestone mining lease and 19.33 ha outside dump) Block – V of M/s Dalmia Cement (Bharat) Limited (Formerly Adhunik Cement Limited) at Vill- Thangskai, P.O. Lumshnong, Dist – East Jaintia Hills, Meghalaya-793200.

Ref: - Environment Clearance letter no. F. No. J-11015/366/2009-IA.II (M) dated 2nd Jan, 2014


Dear Sir,

With reference to above subject and referred letter no, we are submitting herewith half yearly compliance for mining lease (128.52 ha Limestone mining lease and 19.33 ha outside dump) Block – V of M/s Dalmia Cement (Bharat) Limited (Formerly Adhunik Cement Limited) at Vill- Thangskai, P.O. Lumshnong, Dist – East Jaintia Hills, Meghalaya-793200.

We request to kindly acknowledge the receipt of the same.

Thanking you,
Yours faithfully

For - Dalmia Cement (Bharat) Ltd.


Authorized Signatory

Enclosure: Compliance report for the period April 2023 to September 2023.

CC to:

- 1). The Member Secretary, Meghalaya State Pollution Control Board, “Arden” Lumpyngad, and Shillong- 793 014, Meghalaya.
- 2). The Regional Director, Central Pollution Control Board, North Eastern Zonal Office, BSNL Complex, (CTO), Lachumiere, Shillong -793 001, Meghalaya.

Dalmia Cement (Bharat) Limited

Umsoo Mootang, Vill - Thangskai, PO Lumshnong, District - East Jaintia Hills, 793210 (Meghalaya) India
T 91 9612901824/9612895625 Toll free: 1800 2020 W: www.dalmiacement.com CIN: U65191TN1996PLC035963
Registered Office : Dalmiapuram, District - Tiruchirapalli, Tamil Nadu - 621 651, India
ADalmia Bharat Group company, www.dalmiabharat.com

LIMESTONE MINE (BLOCK-V)

128.52 ha Mining lease and 19.33 ha outside dump, Production of 2.0 MTPA

of

M/S. DALMIA CEMENT (BHARAT) LIMITED

Umsoo Mootang, Vill - Thangskai ,P.O. Lumshnong ,Dist - East Jaintia Hills, Meghalaya 793 200

COMPLIANCE STATUS

Environment Clearance Letter No: - F. No. J-11015/366/2009-IA.II (M) dated: 2nd January 2014.

Period Of Compliance : April 2023 to September 2023.

SL No.	Conditions	Compliance Status
A	Specific Conditions	
(i)	Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.	As per ESZ notification vide Gazette notification SO:2942 dated 6 th September 2017 our mines is located out side the ESZ boundary.
(ii)	The project proponent shall obtain Consent to Establish and Consent to Operate from the concerned State Pollution Control Board and effectively implement all the conditions stipulated therein.	Obtained CTE & CTO vide letter No. MPCB/CON -36-2014/2016-2017 / 11 dated 1 st June 2016 and vide letter No. MPCB/CON -35 -2014 /2016-2017/14 dated 15 th March 2017 and CTO is renewed time to time.
(iii)	A bund of about 5 meters height is to be made along the mining lease boundary on the village side with good width of green belt between the village and the mining area.	<p>There does not exist any village in the immediate vicinity of the mining lease boundary. Hence creation of bund is not applicable. However, as per the applicable regulations, a safety barrier of about 7.5 meters has been left all around the ML boundary and plantation has been taken up in phased manner as per the approved mining plan. We request you to kindly exempt us from making Five meter height bund.</p> <p>There already exist natural vegetation along the lease boundary. However, gap plantation has been done. Green belt along the mining lease boundary is implemented.</p>
(iv)	Mining will not be done all sides of the village at any one time and will be sequential manner as per the Mining Plan	There does not exist any village in the immediate vicinity of the mining lease boundary. However mining will be done as per

	approved by the IBM.	approved mining plan.
(v)	<p>During mining, pollution mitigation measures will be taken up to ensure that the impact on the village and the surrounding area will not occur. Small blasts will be conducted to reduce ground vibrations and noise.</p> <p>Blasted material heaps will be thoroughly wetted before loading to avoid fugitive dust during loading.</p>	<p>There does not exist any village in the immediate vicinity of the mining lease boundary however mitigative measures has been taken up and is in practice to mitigate pollution. Latest technology is used in blasting to reduce ground vibration and noise.</p>
(vi)	<p>Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RPM such as haul road, loading and unloading point 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. Main haul road in the mine will be provided with permanent water sprinklers and other roads will be wetted with water tanker fitted with sprinklers. Crusher and material transfer points will be provided with Bag filters and conveyor will be fully covered to avoid air borne dust.</p>	<p>Regular water sprinkling is carried out to reduce air pollution. A Water tanker fitted with sprinklers is deployed for water sprinkling in all area.</p> <p>Existing Crusher have been provided with bag filter and material is conveyed through fully covered conveyor belt.</p> <p>Permanent water sprinklers is installed in the mines main haul road. A 12 KL water tanker is also in use to sprinkle water on haulage road to suppress fugitive dust</p>
(vii)	<p>Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and installing new piezometers during the mining operation. The periodic monitoring [(at least 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 Shillong, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.</p>	<p>Piezometer is installed. However, there is no perfect water table in this area, only erratic water channels are observed. Hence mining will not intersect ground water table. There are no wells in and around the mine lease.</p> <p>We are not utilising any Groundwater for the operation of Mines nor there is any ground water seepage during operation of the mine because of the terrain as mine is located in Hilly area of Meghalaya.</p> <p>We have visited Central Ground Water Board, North East Regional Office, Guwahati and discussed the matter. We have also submitted one request letter on dated 28-3-2019, dated 4-8-2021 & 2-8-2022 to provide us with necessary recommendation for augmentation of ground water resources in our mining area. Further, we also visited their office in person dated 4-10-2022 and 30-5-23 and approach Regional Director, CGWB. The reply is awaited.</p>

		<p>Quotation collection completed and vendor selection is in final stage for conducting hydrological feasibility study. Once the study complete, we will inform accordingly.</p> <p>Hydrological Feasibility study is started by team of Guwahati University, under the leadership of Prof. Biaskh Gogoi, Head of the Department, Geological Sciences. We will be able to submit the Hydrological Feasibility study report post completion of study by March 2024.</p>
(viii)	The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.	<p>Working pit has been provided with bund and run-off due to rain flows into the pit and seeps down through bottom most bench without much accumulation as rocks is highly fractured. The accumulated silt is blended with limestone and used in cement manufacturing. This helps in arresting silt inside pit as a siltation pond and works effectively. There is no outside discharge.</p> <p>We have also submitted one request letter to Regional Director, Central Ground Water Board to provide us with necessary recommendation for augmentation of ground water resources in our mining area. We have also visited Central Ground Water Board, North East Regional Office, Guwahati on last 30th May 2023 and discussed the matter. Reply is awaited from Central Ground Water Board.</p>
(ix)	Appropriate mitigative measures shall be taken to prevent pollution of the water stream and adjoining water bodies in consultation with the State Pollution Control Board.	<p>Though, we have submitted one request letter to Meghalaya State Pollution Control Board, Shillong on dated 6-4-2019 and reminder letter on 30-5-23 for providing us necessary recommendation to avoid pollution to water stream or water bodies adjoining our mining lease area. The reply is awaited from Meghalaya State Pollution Control Board.</p> <p>However, there is no adjoining water bodies and water stream. Further, there is no outside discharge from the mines. Therefore, we request you to kindly exempt us from this point</p>
(x)	Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office located at Shillong on six monthly basis.	We are submitting compliance status report in every six month.
(xi)	Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and waste water	STP & ETP are operational in colony and workshop respectively. Please find attach latest performance test report of both STP & ETP as

	generated during the mining operation.	Annexure – I & II respectively.
(xii)	Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional Office, Shillong.	DGPS survey is completed. Drone survey also is completed and report received. Report of the DGPS survey and Drone Survey is also submitted to your good office vide letter dated 11-7-2023.
(xiii)	Regular monitoring of ambient air quality shall be carried out and records maintained.	Regular monitoring of ambient air quality is conducting. Please find attach last six months ambient air quality monitoring report as Annexure – III.
(xiv)	Pre - placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.	Complying. Please find attach some report as Annexure – IV.
(Xv)	Implementation of Action plan on issues raised during Public Hearing.	Complied
A	General Conditions	
(i)	The project proponent shall ensure that no natural watercourse and/or water resources are obstructed due to any mining operations. Adequate measures shall be taken for protection of the 1 st order and 2 nd order streams, if any emanating/ passing through the mine lease during the course of mining operation.	There is no water course / streams of 1 st & 2 nd Order emanating /passing through the lease.
(ii)	The top soil, if any shall temporarily be stored at earmarked site(s) only and it should not be kept un - utilized for long. The topsoil shall be used for land reclamation and plantation.	Top soil generated is almost negligible in quantity however generated quantity is used for development of green belt.
(iii)	The over burden (OB) generated during the mining operation shall be stacked at earmarked dump site(s). Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment & Forests and its Regional Office, Shillong on six monthly basis.	Over burden generated is stacked in earmarked area. Dump is dynamic however we have initiated the process to do the plantation.
(iv)	Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, temporary OB and	Present mining operation does not intersect any water channel. However bund has been

	<p>mineral dumps to arrest flow of silt and sediment directly into the adjoining river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly de-silted particularly after the monsoon and maintained properly.</p>	<p>erected along the working pit to use the same as siltation pond and accumulated silt is blended with Run of Mine. Highly fractured rock allows water to percolate down.</p> <p>Garage is provided with ETP and treated water is reused. No outside discharge. Working pit has been provided with bund and run-off due to rain flows into the pit and seeps down though bottom most bench without much accumulation as rocks is highly fractured. The accumulated silt is blended with limestone and used in cement manufacturing. This helps in arresting silt inside pit as a siltation pond and works effectively. Latest performance report of ETP is enclosed as Annexure – II.</p>
(v)	<p>Garland drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and temporary over burden dumps to prevent run off of water and flow of sediments directly into the adjoining river and other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and desilted at regular intervals.</p>	<p>Present mining operation does not intersect any water channel. However, bund has been erected along the working pit to use the same as siltation pond and accumulated silt is blended with Run of Mine. Highly fractured rock allows water to percolate down.</p> <p>An action plan have been prepared and Approved by PWD department and PCCF, Shillong, Meghalaya. Same is followed and is in force.</p>
(vi)	<p>Dimension of the retaining wall at the toe of the temporary OB dumps and the OB benches within the mine to check run-off and siltation should be based on the rain fall data.</p>	<p>Overburden dump is active and is at initial stage. However, we have initiated the process of runoff management and bio diversity.</p>
(vii)	<p>Plantation shall be raised in a 7.5m wide green belt in the safety zone around the mining lease, back filled and reclaimed area, around water body, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within</p>	<p>Natural vegetation is there in 7.5 meter safety zone.</p> <p>However, Green belt development is doing in phased manner by planting the native species in consultation with the local DFO as an where required.</p> <p>An action plan have been prepared and Approved by PWD department and PCCF, Shillong, Meghalaya. Same is under</p>

	first five years.	implementation as per approved plan.
(viii)	Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RSPM such as around crushing and screening plant, loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	Water sprinkling is done to reduce air pollution. Water tanker fitted with sprinklers is continuously deployed on the haul roads to suppress the dust. Existing Crusher have been provided with bag filter and material is transferred with fully covered conveyor belt. Latest Monitoring report Ambient Air Quality and monitoring report of all 12 parameter is enclosed as Annexure – III .
(ix)	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.	Well equipped workshop is maintained for the regular maintenance of HEMM. Loaded trucks for mineral transporting doesn't pass through any public place or habitation. It is a captive mines and premises falls within the ownership of mine owner.
(x)	Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.	Blasting is done by using latest technology like NONEL and slurry explosive in conjunction with ANFO, which controls the ground vibration and minimize the flying fragments. Almost every blast is monitored by using MINIMATE.
(xi)	Drills shall either be operated with dust extractors or equipped with water injection system.	Complied.
(xii)	Mineral handling area shall be provided with the 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 be properly maintained and operated.	Complied.
(xiii)	Provision shall be made for the housing of construction labor 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.	Complied.
(xiv)	The critical parameters such as SPM, RSPM (Particulate matter with size less than 10 micron i.e., PM ₁₀), NO _x in the ambient air within the impact zone, peak	Regular Ambient Air quality monitoring & Water Quality Analysis is carried out. Latest monitoring report for Air and water is enclosed

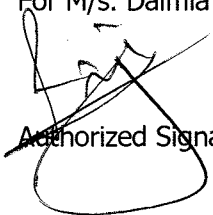
	<p>particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company 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 of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.</p>	<p>in Annexure - III & Annexure - V respectively.</p> <p>Monitoring data is displayed at mining lease main gate.</p>
(xv)	<p>Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.</p>	<p>Noted for Compliance.</p>
(xvi)	<p>No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.</p>	<p>Noted for Compliance.</p>
(xvii)	<p>No change in the calendar plan including excavation, quantum of mineral and waste should be made.</p>	<p>Noted for Compliance.</p>
(xviii)	<p>Conservation measures for protection of flora and fauna in the core & buffer zone should be drawn up in consultation with the local forest and wildlife department and effectively implemented.</p>	<p>A biodiversity plan for conservation and protection of flora and fauna in the core and buffer zone had been prepared and approved by Chief Wildlife Warden. A sum of about Rs. 58.098 lakh have been proposed for conservation of bio-diversity and schedule-I species and is in process of implementation as per the plan suggested therein.</p> <p>We have taken up the matter with State forest department. A letter dated, 20th December 2022 has been received from Principle Chief Conservator of Forest (Bio-Diversity & Wildlife) & Chief Wildlife warden to await some time till ready of Reginal Conservation Plan. Copy of the Said letter is enclosed as Annexure – IV.</p>
(xix)	<p>Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM, SPM, SO₂ & NO_x monitoring. Location of the stations should be decided based on the meteorological data,</p>	<p>Complied.</p>

	topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.	
(xx)	Data on ambient air quality (RSPM, SPM, SO ₂ & NO _x) should be regularly submitted to the Ministry of Environment and Forests including its Regional office located at Shillong and the State Pollution Control Board / Central Pollution Control Board once in six months.	Complied
(xxi)	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.	Adequate number of dust extraction systems is installed in all Conveyor lines to minimize fugitive emissions. Regular water sprinkling is also carried out to reduce air pollution. Water tanker fitted with sprinklers is continuously deployed over the haul roads for the purpose. Latest Fugitive emission monitoring report is enclosed in Annexure - VII.
(xxii)	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.	Complied
(xxiii)	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.	Complied. There is no outside discharge from the mines. Workshop has been provided with ETP for treating the industrial water and same is reused. There is no outside discharge from work shop.
(xxiv)	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.	PPE is provided to all workers, In addition adequate training are imported to workmen on safety and health aspect.
(xxv)	Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Occupational health surveillance program undertaken for workers on regular basis. The program includes Lung function test and sputum analysis, etc.
(xxvi)	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly	Complied

	to the Head of the Organization.	
(xxvii)	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry of Environment and Forests and its Regional Office located at Shillong.	Complied
(xxviii)	The project authorities should inform to the Regional Office located at Shillong regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	Mining activities started after 06/09/2017 and are in initial stage of development.
(xxix)	The Regional Office of this Ministry located at Shillong 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.	Agree.
(xxx)	The project proponent shall submit six monthly 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) to the Ministry of Environment and Forests, its Regional Office Shillong, the respective Zonal Office of CPCB and the SPCB. The proponent shall upload the status of compliance of the EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Shillong, the respective Zonal Office of CPCB and the SPCB.	Six monthly report on the status of compliance of EC is submitted both in Hard Copy as well as by E-Mail. Further we upload the status of compliance on our website.
(xxxi)	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	Complied
(xxxii)	The State Pollution Control Board should display a copy of the clearance letter at	Not applicable.

	the Regional office, District Industry Centre and the Collector's office/ Tehsildar's Office for 30 days.	
(xxxiii)	The environmental statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Shillong by e-mail.	Environmental Statement for FY ending 31 st March 2023 is submitted.
	The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue 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 also at web site of the Ministry of Environment and Forests at http://envfor.nic.in and a copy of the same should be forwarded to the Regional Office of this Ministry located at Shillong.	Complied Published in Mawphor, Shillong (local lang.) and The Shillong Times (English) dated. 14 th Jan 2014. the copy of the same also submitted to your office.

Thanking You,
Yours Faithfully,
For M/s. Dalmia Cement (Bharat) Limited.


Authorized Signatory.

Name of the Industry: Dalmia Cement (Bharat) Limited

Date: 22.5.2023

Source: STP Out let

Date of Sample Collection: 10.05.23

Report No.: DCBL/B- V/23-24/02

STP - OUTLET – Water Quality Analysis

S. No.	Parameter	Standards	Results
1	Suspended Solids (mg/1) max	100	34
2	pH value	5.5-9.0	7.0
3	Temperature	Shall not exceed 5°C above the receiving water temperature	4
4	Oil & grease	10	1
5	Total Residual Chlorine mg/1 max	1	0.1
6	Ammonical Nitrogen (asN) mg/1 max	50	11
7	Total kjeldahl Nitrogen (asN) mg/1 max	100	20
8	Free Ammonia (asNH ₃) mg/ 1 max	5	2.1
9	Biochemical Oxygen Demand (3 days at 27°C) mg/1 max	30	3
10	Chemical Oxygen Demand, mg/l	250	22

Remarks: The parameter monitored was found within the permissible limits.



Pankaj Baroi, For ENVIROCON

Name of the Industry: Dalmia Cement (Bharat) Limited

Date: 21.5.2023

Source: Oil & Grease Trap – Out let

Date of Sample Collection: 10.05.23

Report No.: DCBL/B- V/23-24/03

Oil & Grease Trap - Outlet – Water Quality Analysis

S. No.	Parameter	Standards	Results
1	Suspended Solids (mg/1) max	100	21
2	pH value	5.5-9.0	6.0
3	Temperature	Shall not exceed 5°C above the receiving water temperature	2
4	Oil & grease	10	4
5	Total Residual Chlorine mg/1 max	1	ND
6	Ammonical Nitrogen (asN) mg/1 max	50	ND
7	Total kjeldahl Nitrogen (asN) mg/1 max	100	ND
8	Free Ammonia (asNH ₃) mg/ 1 max	5	ND
9	Biochemical Oxygen Demand (3 days at 27°C) mg/1 max	30	10
10	Chemical Oxygen Demand, mg/l	250	110

Remarks: The parameter monitored was found within the permissible limits.


Pankaj Baroi, For ENVIROCON

Pankaj Baroi, For ENVIROCON

Annexure III

Dalmia Cement Bharat Ltd.
Ambient Air Quality Monitoring Report
Limestone Mines Block - V
Month: April 2023 – September 2023

Location →	Near Mines office				Near Drilling Point				Near Rock Breaking Point				Near Loading Point				Near Mines View Point				
Parameters →	PM ₁₀	PM _{2.5}	SO ₂	NO _x	PM ₁₀	PM _{2.5}	SO ₂	NO _x	PM ₁₀	PM _{2.5}	SO ₂	NO _x	PM ₁₀	PM _{2.5}	SO ₂	NO _x	PM ₁₀	PM _{2.5}	SO ₂	NO _x	
Month																					
April – 23	55.0	22.3	0.2	ND	51.2	20.2	0.1	ND	55.0	22.1	ND	0.1	51.4	22.4	ND	0.1	55.0	22.1	0.1	ND	
May - 23	55.2	22.4	0.1	ND	55.7	20.1	0.1	ND	51.6	22.6	ND	0.2	52.1	22.0	ND	0.1	51.2	22.4	0.1	ND	
June – 23	55.4	22.0	0.1	ND	51.6	20.2	0.1	ND	55.6	20.1	ND	0.2	52.3	22.1	ND	0.1	55.0	22.4	0.1	ND	
July – 23	56.6	22.8	8.2	2.6	55.2	20.1	8.4	7.3	51.6	22.8	8.2	7.5	55.1	26.2	5.6	0.2	56.1	22.4	9.7	8.2	
August - 23	56.7	22.4	8.0	2.1	55.0	20.2	8.2	7.4	51.2	22.4	8.0	7.4	55.2	26.4	5.5	0.1	56.5	22.1	9.1	8.2	
September - 23	56.1	22.8	8.2	2.2	55.2	20.1	8.4	7.3	51.5	22.4	8.2	7.1	51.2	21.4	5.3	0.2	56.1	22.4	9.2	8.0	

Name of the Industry: Dalmia Cement (Bharat) Limited

Date: 20.5.2023

Monitoring Location: Limestone Mines Block - V

Date of Monitoring: 10.05.23 to 11.05.23

Report No.: DCBL/B- V/23-24/01

AMBIENT AIR QUALITY SURVEY REPORT

Pollutants	Locations & Analysis Results					Permissible Limits (in $\mu\text{g}/\text{m}^3$)
	Near Mines Office	Near Drilling Point	Near Rock Breaking Point	Near Loading Point	Near Mines View Point	
Particulate Matter size less than $10\ \mu$ (PM 10)	55.4	56.5	57.6	52.3	55.0	100*
Particulate Matter size less than $2.5\ \mu$ (PM 2.5)	22.0	20.2	20.1	22.1	22.4	60*
Sulfur dioxide (SO ₂)	7.1	6.8	7.3	7.5	7.0	80*
Oxides of Nitrogen (NO _x)	8.3	8.8	8.2	6.8	8.9	80*
Carbon Monoxide (CO)	ND	ND	ND	ND	0.1	4**
Ammonia (NH ₃)	ND	ND	ND	ND	ND	400
Ozone (O ₃)	ND	ND	ND	ND	ND	180
Lead (Pb)	ND	ND	ND	ND	ND	1.0
Benzene (C ₆ H ₆)	ND	ND	ND	ND	ND	5
Benzo (a) Pyrene (BaP)	ND	ND	ND	ND	ND	01
Arsenic (As)	ND	ND	ND	ND	ND	06
Nickel (Ni)	ND	ND	ND	ND	ND	20

Remarks: The parameters analyzed were found to be within the permissible limits of Ambient Air Quality Standards (National) for Industrial, Residential, Rural and Other Areas as per National Ambient Air Quality Standards, Notification dated 18th November 2009.



Pankaj Baroi, For ENVIROCON

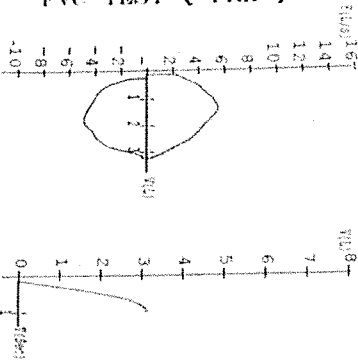
APOLLO HOSPITAL
GURUKHATI 7
0361713500

RMS-HELIOS 702
Ver 1.3.0

Spinal Flow
Patient Information

ID : 001
Name : I
Age : 34 Years
Sex : Male
Weight : 61 kg
Height : 151 cm
Smoker : No
Date : 19/07/23

FVC TEST (PRE)



Parameters	Pred	Pre	1Pred	Parameters	Pred	Pre	1Pred
FVC	3.09	3.13	101	FEF 2-1.2	6.84	5.44	79
FEV 1	2.60	3.13	120	FEF 25	7.68	5.48	71
FEV1/FVC(%)	84.13	100.01	118	FEF 50	5.57	5.02	90
FEF25-75	4.04	4.76	117	FEF 75	2.84	3.50	123
FEFR	8.42	5.55	65	FEV3/FVC	---	78.36	---
FVC	---	3.08	---	FEV3/FVC	97.01	100.01	103
FEV .5	---	2.43	---	FVC Time	---	1.00	---
FEV3	2.99	3.13	104	Exp Time	---	0.23	---
FIFR	---	4.84	---	Lung Age	34	27	---
SEE 75-85	---	2.88	---				

Recorders & Medicare Systems Pvt.Ltd. 0172-2658701-05 URL:www.rmsindia.com

INTERPRETATION
Within Normal Limits
FEV1/FVC>95 & FVC>80

C.O.P.D. Severity
Test within normal limit

Interpretation Set:
Indian Pred. Eqns.

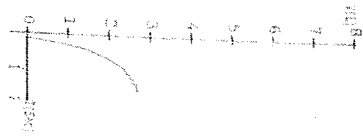
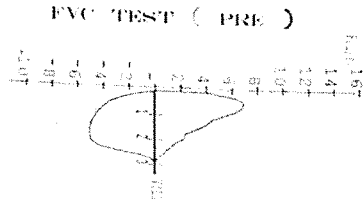
Sign :
Dr. DR. K R SARMAH

Amrta - IV

APOLLO HOSPITALS
GUWAHATI 7
03617185500

Hardwar Charkon

Age: 46 years
Sex: Male
Height: 157 cm
Weight: 60 kg
Smoker: No
Date: 17/6/23
HRS-HELPER 202
Ver 1.3.0



Parameters	Pred	Pct	zPred	Parameters	Pred	Pct	zPred
FVC	2.47	2.75	111	FEF 2-1.2	5.56	5.95	101
FVC 1	1.96	2.51	126	FEF 25	7.13	6.39	89
FVC1/FVC(12)	80.39	91.19	113	FEF 50	4.97	2.64	73
FVC 1-75	3.33	3.95	92	FEF 75	2.20	1.42	63
FEF 25	7.35	4.91	64	FEV1/FVC	72.29	---	---
FEF 50	---	2.76	---	FEV2/FVC	97.01	100.01	103
FEF 75	---	1.99	---	FVC Time	---	2.03	---
FEV1	2.39	2.75	114	EXP Time	---	0.04	---
FEV1/FVC	---	5.00	---	Time Ago	45	33	---
FEV1/FVC 75	---	1.01	---				

Recorders & Medicare Systems Pvt. Ltd. 0172-268701-05 URL: www.msindia.com

Interpretation Set:
Indian Pred. Rpts.

Sign:
Dr. Dr. K. R. SARRAH

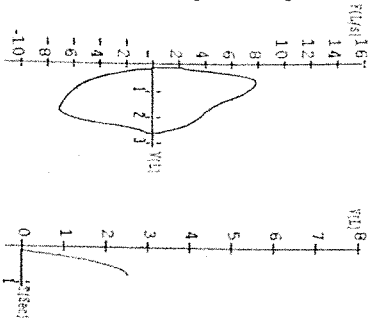
INTERPRETATION
Within Normal Limits
ZFEV1/FVC<95 & ZFEV2/FVC<80

C.O.P.D. Severity
Test within normal limit

RMS-HELIOS 702
Ver 1.3.0

Patient Information
 ID : 22
 Name : Hemanta Sarda
 Age : 22 years
 Sex : Male
 Height : 153 cm
 Weight : 47 kg
 Date : 28/07/23
 Smoker : Yes

FVC TEST (PRE)



Parameters	Pred	Pre	%Pred	Parameters	Pred	Pre	%Pred
FVC	2.85	2.56	89	FEF 2-1.2	7.25	7.16	98
Rev 1	2.53	2.56	101	FEF 25	7.64	7.77	101
Rev1/FVC(%)	88.58	100.01	112	FEF 50	5.72	5.38	94
FEF25-75	4.43	5.20	117	FEF 75	3.22	3.54	109
2FEF	8.27	7.95	96	Rev.5/FVC	---	92.66	---
3FEF	---	2.53	---	Rev3/FVC	97.01	100.01	103
Rev .5	---	2.37	---	FVC Time	---	0.76	---
Rev3	2.77	2.56	92	Exp Time	---	0.06	---
2IFR	---	7.08	---	Lung Age	22	21	---
FEF 75-85	---	3.03	---				

Recorders & Medicare Systems Pvt. Ltd. 0172-2658701-05 URL:www.rmsindia.com
 Interpretation Sect:
 Indian Pred. Eqns.
 Sign :
 Dr. DR K R SARMAH

INTERPRETATION
 Within Normal Limits
 %FEV1/FVC>95 & %FVC>80
 C.O.P.D. Severity
 Test within normal limit

DALMIA CEMENT (BHARAT) LTD, MEGHALAYA

Medical Laboratory Report, OHC

Name: Ignesh Horo

Report Date: 28.05.2023

Age: 34Yrs

Sample collection Date: 28.05.2023

Gender: Male

Lab Report No.: 113

Sl. No.	Test Name	Results	Unit	Normal Range
	Blood			
1	Blood glucose (Fasting)	96	mg/dl	70-110
2	Blood glucose (P.P)	118	mg/dl	Upto 150
	Others			
1	Urine RE			
2	AFB Smear	✓ No AFB seen		

End of Report



DALMIA CEMENT (BHARAT) LTD, MEGHALAYA				
Medical Laboratory Report, OHC				
Name: Haridwar Chauhan		Report Date: 28.05.2023		
Age: 46Yrs		Sample collection Date: 28.05.2023		
Gender: Male		Lab Report No.: 112		
Sl. No.	Test Name	Results	Unit	Normal Range
	Blood			
1	Blood glucose (Fasting)	96	mg/dl	70-110
2	Blood glucose (P.P)	118	mg/dl	Upto 150
	Others			
1	Urine RE	✓		
2	AFB Smear	No AFB seen		

End of Report.

Handwritten signature

DALMIA CEMENT (BHARAT) LTD, MEGHALAYA

Medical Laboratory Report, OHC

Name: Hemanta Sinha

Report Date.28.05.2023

Age: 22Yrs

Sample collection Date.28.05.2023

Gender: Male

Lab Report No.: 111

Sl. No.	Test Name	Results	Unit	Normal Range
Blood				
1	Blood glucose (Fasting)	90	mg/dl	70-110
2	Blood glucose (P.P)	115	mg/dl	Upto 150
Others				
1	Urine RE			
2	AFB Smear	✓ No AFB seen		

End of Report



Annexure - V

WATER QUALITY ANALYSIS

Parameters	Unit	Locations & Analysis Results		Standard for Inland Surface Water*
		Nearby Stream Water (upstream)	Nearby Stream Water (downstream)	
Temperature	°C	4.6	4.6	Shall not exceed the 5 °C above the receiving water temperature
pH Value		7.0	7.0	5.5-9.0
Suspended Solid	mg/l	44.2	41.3	100
Total Hardness (as CaCO ₃), mg/l	mg/l	112	115	300 [IS:100500, Desirable] 600 [IS:100500, Permissible]
Oil & Grease	mg/l	Nil	Nil	10
Total Residual Chlorine	mg/l	Nil	Nil	1.0
Ammonical Nitrogen (as N)	mg/l	11	11	50
Total Kjeldahl Nitrogen (as NH ₃)	mg/l	44	44	100
Free Ammonia (as NH ₃)	mg/l	1.2	1.1	5.0
BOD	mg/l	2.1	2.1	30
COD	mg/l	23.2	21.5	250

Annexure VJ

GOVERNMENT OF MEGHALAYA
OFFICE OF THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS,
(BIODIVERSITY & WILDLIFE) & CHIEF WILDLIFE WARDEN,
MEGHALAYA, SHILLONG.

No FWC/CLEARANCE/15/3677

Dated Shillong, the 20th December, 2022

To

✓ The Dalmia Cement (Bharat) Limited,
Umsoo Mootang, Vill-Thangskai, P.O Lumshnong,
East Jaintia Hills, District.

Sub: Deposit of fund for Implementation of Biodiversity Conservation Plan approved by the Chief Wildlife Warden, Forest Department of Meghalaya, to comply the condition of Environment Clearance.

Ref: No Nil, dt 24.11.2022.

Sir,

With reference to your letter and subject cited above, I am to inform you that a Regional Conservation Plan to minimise and mitigate impacts of Developmental Projects on wild animals and their habitats in East Jaintia Hills District is being prepared by the Department. Hence you are requested to await for the completion of the said Regional Conservation Plan which is under process.

This is for your information and necessary action.

Yours faithfully,



(F. S. Wann, MFS),
Deputy Conservator of Forests,
Wildlife, Meghalaya: Shillong

Memo No FWC/CLEARANCE/15

Dated Shillong, the __ December, 2022

Copy to -

The Divisional Forest Officer, Jaintia Hills Wildlife Division, Jowai for information and necessary action.

Deputy Conservator of Forests,
Wildlife, Meghalaya: Shillong

Annexure – VII

Dalmia Cement Bharat Ltd. Fugitive Monitoring Report Limestone Mines Block - V Month: April 2023 – September 2023				
Location →	Near Mines Office ($\mu\text{g}/\text{m}^3$)	Near Rock Breaking Point ($\mu\text{g}/\text{m}^3$)	Near Loading Point ($\mu\text{g}/\text{m}^3$)	Inside Hyva ($\mu\text{g}/\text{m}^3$)
Month				
April – 23	220	212	214	233
May – 23	224	217	214	236
June – 23	220	210	217	235
July – 23	228	217	214	230
August – 23	224	218	215	231
September - 23	234	217	212	234