

To

The Director,

Ministry of Environment, Forest and Climate Change

Regional Office (SEZ), 1st & 2nd Floor, Handloom Export Promotion Council,

34, Cathedral Garden Road, Nungambakkam,

Chennai – 34.

Respected Sir,

Sub: Half Yearly Environmental Clearance Compliance Report – Apr'22 to Sep'22 of Dalmia Cement (Bharat) Limited, Govindapuram Village, Ariyalur.

Ref: F.No J-11011/751/2007-IA II(I), dated 19.06.2008.

We hereby submit the Half yearly environmental clearance compliance report for “**Cement & Captive Power Plant**” along with the following annexures for the period from April 2022 to September 2022.

- a) Summary report of Stack emission & Noise monitoring – Annexure: 1
- b) Summary of Ambient air quality – Annexure: 2
- c) Ambient Air quality survey report from NABL accredited lab – Annexure:3
- d) Green belt development – Annexure: 4
- e) Ground water clearances from State Ground and Surface Water Resources Data Centre – Annexure: 5
- f) CSR activities – Annexure: 6
- g) Environmental Clearance published in Newspapers – Annexure: 7
- h) Stack emission real time data display in entry gate – Annexure: 8
- i) Awards & Accolades – Annexure: 9

Kindly acknowledge the receipt of the same.

Thanking you

Yours faithfully

For Dalmia Cement (Bharat) Limited, Ariyalur


T Robert
Unit Head

Encl: As stated above.

CC: 1. The Joint Chief Environmental Engineer, TNPCB, Trichy – 620 015.

2. The District Environmental Engineer, TNPCB, Ariyalur – 621 707.



Dalmia Cement (Bharat) Limited

Thamaraikulam, Ariyalur - 621 705, Tamil Nadu, India.

W www.dalmiacement.com CIN : U65191TN1996PLC035963

Registered Office : Dalmiapuram, Dist. Tiruchirapalli - 621 651, Tamil Nadu, India.

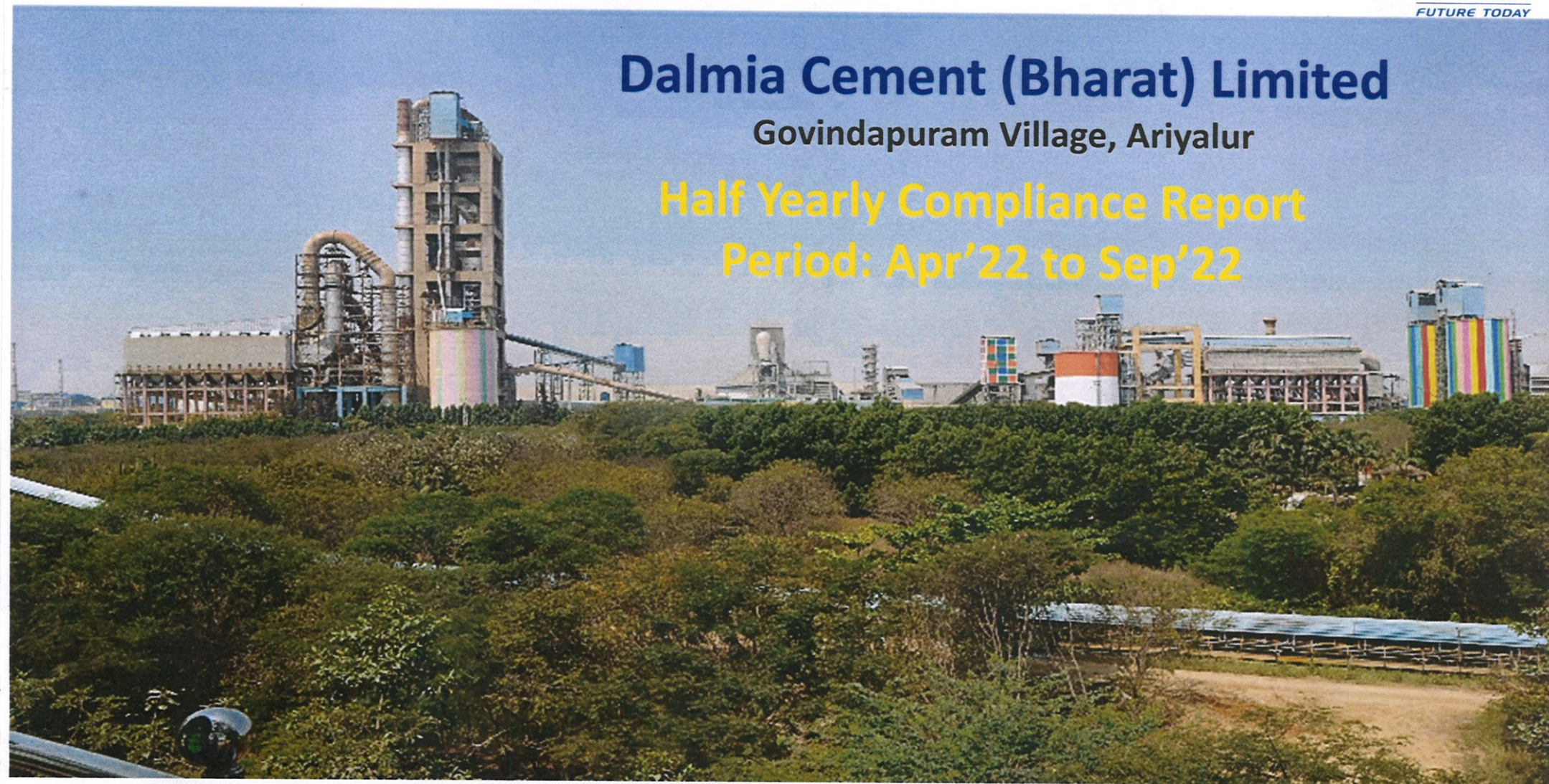
A Dalmia Bharat Group company, www.dalmiabharat.com

Dalmia Cement (Bharat) Limited

Govindapuram Village, Ariyalur

Half Yearly Compliance Report

Period: Apr'22 to Sep'22



To

The Director,

Ministry of Environment, Forest and Climate Change

Regional Office (SEZ), 1st & 2nd Floor, Handloom Export Promotion Council,

34, Cathedral Garden Road, Nungambakkam,

Chennai – 34.

Respected Sir,

Sub: Half Yearly Environmental Clearance Compliance Report – Apr'22 to Sep'22 of Dalmia Cement (Bharat) Limited, Govindapuram Village, Ariyalur.

Ref: F.No J-11011/751/2007-IA II(I), dated 19.06.2008.

We hereby submit the Half yearly environmental clearance compliance report for “**Cement & Captive Power Plant**” along with the following annexures for the period from April 2022 to September 2022.


- a) Summary report of Stack emission & Noise monitoring – Annexure: 1
- b) Summary of Ambient air quality – Annexure: 2
- c) Ambient Air quality survey report from NABL accredited lab – Annexure:3
- d) Green belt development – Annexure: 4
- e) Ground water clearances from State Ground and Surface Water Resources Data Centre – Annexure: 5
- f) CSR activities – Annexure: 6
- g) Environmental Clearance published in Newspapers – Annexure: 7
- h) Stack emission real time data display in entry gate – Annexure: 8
- i) Awards & Accolades – Annexure: 9

Kindly acknowledge the receipt of the same.

Thanking you

Yours faithfully

For Dalmia Cement (Bharat) Limited, Ariyalur


T Robert
Unit Head

Encl: As stated above.

CC: 1. The Joint Chief Environmental Engineer, TNPCB, Trichy – 620 015.
2. The District Environmental Engineer, TNPCB, Ariyalur – 621 707.

Dalmia Cement (Bharat) Limited, Ariyalur

Status of compliance stipulated in Environmental Clearances
(For the period of Apr 2022 to Sep 2022)

Ref: MoEF Letter No J-11011/751/2007-IA II (I) dated 19th June, 2008.

Sl. No	Conditions	Compliance
A	Specific Conditions	
i	Continuous stack monitoring facilities to monitor gaseous emissions from all the stacks shall be provided and limit of SPM shall be controlled by installing adequate air pollution control system Viz. Electrostatic precipitator (ESP) to cooler and captive power plant and bag house /bag filters etc. to other plants within 50 mg/Nm ³ from the cement plant and 100 mg/Nm ³ from captive Power Plant and data submitted to the Ministry's regional office at Bangalore, TNPCB and CPCB regularly. Raw meal, Clinker and fly ash shall be stored in silos.	Complied with. Installed Online Continuous Emission Monitoring Systems in all stacks (Cement mill, Coal mill, Cooler, Raw mill/kiln & Boiler of power plant) and following air pollution control systems were installed & maintained to control the emission levels well within the limits of 30 & 50 mg/Nm ³ ; 1. Cement mill - Bag house, 2. Kiln/Preheater - Bag house, 3. Coal mill - Bag house 4. Cooler - ESP & 5. CPP- ESP. Stack monitoring is being carried manually every month and Quarterly through NABL accredited labs and half yearly by TNPCB. The Monitoring report is being submitted regularly to MoEF on half yearly basis & to TNPCB on monthly basis. Raw meal, clinker and dry fly ash were stored in concrete silos. Refer Annexure: 1 for Ambient Air Quality, Fugitive Emission & Stack emission report from NABL accredited lab.
ii	Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines/code of practice issued by the CPCB in this regard should be followed. The Company shall install adequate dust collection and extraction system to control fugitive dust emissions at various transfer points, raw material handling (unloading, conveying, transporting, stacking), Vehicular movement, bagging and packing	Complied with. Secondary fugitive emissions are controlled by providing closed conveyors and storage sheds. Half yearly fugitive emission monitored through accredited labs & quarterly once internally. Fugitive emission guidelines issued by CPCB is been complied with. Dust extraction system provided at transfer points, raw material handling (Unloading, conveying, transporting, stacking) and packing areas to control fugitive dust. Water sprinkling carried out around stockyard, loading & unloading area, haul roads and other predominant places to control fugitive dust. Road sweeping carried out through sweeping machines daily. Also vacuum sweeping machines is

20/11/22

	<p>areas etc. Asphaltting/concreting of roads and water spray all around the stockyard and loading /unloading areas shall be carried out to control fugitive emissions. Covered sheds for storage of raw materials and fully covered conveyers for transportation of materials shall be provided.</p>	<p>being used for sweeping spilled cement on shop floor and recycled back.</p> <p>Covered sheds provided for raw materials like crushed limestone, Coal, petcoke, Alternative fuels, Fire clay, gypsum and wet Fly ash. Raw meal, Clinker, Cement & dry Fly ash are stored in silos with bag filters.</p> <p>All belt conveyors were fully closed.</p>
iii	<p>Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land.</p>	<p>Complied with.</p> <p>We are getting limestone from Perianagalur, Kallakudi, Kavandukuruchi and Periyathirukonam mines and the transportation enroute has some agricultural lands and settlements. However, so far no complaints have been received from villages. Also all the raw materials vehicles are covered with tarpaulin cover during transportation.</p>
iv	<p>Total ground water requirement shall not exceed 2,500 m³/day. No surface water shall be used. All the treated wastewater treated in a neutralized plant shall be recycled and reused in the cement Plant for cooling purpose and/or for dust suppression, green belt development and other plant related activities etc. No process Waste water shall be discharged outside the factory premises and zero discharge shall be adopted. Domestic treated effluent shall be used for greenbelt development within the plant and colony area.</p>	<p>Complied with.</p> <p>The total ground water requirements not exceed 2500 m³/day and the present water consumption is 1600 m³/day.</p> <p>No surface water is used for the plant operations.</p> <p>Treated waste water from the neutralization plant is recycled back into cement process and also in dust suppression.</p> <p>Domestic waste water generated is treated in the STP and treated water is used for gardening purpose.</p> <p>No process water is discharged outside and Zero discharge condition is maintained.</p>
v	<p>Permission for the drawl of 2,500 m³/day ground water shall be obtained from the state Ground Water Board/Central Ground Water Authority (SGWB/CGWA) and all the recommendations of the SGWB/ CGWA shall be followed</p>	<p>Complied with.</p> <p>Permission for Ground water withdrawal for 1620 m³ obtained from State Ground and Surface water resources data center, valid still 21.02.2023.</p>
vi	<p>All the cement dust collected from pollution control devices like ESPs, bag house, bag filters etc. shall be recycled and reused in the process and used for</p>	<p>Complied with</p> <p>Cement dust collected from pollution control devices is recycled back in the process.</p> <p>Fly ash from Captive Power Plant is used for making PPC.</p>

23/

	<p>cement manufacturing Fly Ash from Captive power plant shall be used for manufacturing Pozzolana Portland Cement (PPC). Bottom ash shall be used as boiler bed material. Refractory bricks shall be disposed off in environment-friendly manner. ETP Sludge shall be disposed off at landfill site. STP Sludge shall be used as manure for green belt development. Waste oil and grease and scrapped automobiles batteries shall be sold to authorized recyclers/re-processors only.</p>	<p>The bottom ash is collected in form of dry ash and the same is completely used in cement manufacturing.</p> <p>Some portion of refractory bricks is used for garden decoration and others were utilized in developing internal roads.</p> <p>No ETP sludge is generated as neutralization method is adopted and sludge generated from STP is used as manure for green belt development.</p> <p>Used oil & grease generated from the process is collected and disposed to the authorized recyclers and used lead acid batteries is been send back to manufacturers.</p>
vii	<p>The Project authorities shall adhere to the provisions stipulated in the fly ash Notification, 1999 as amended in 2003.</p>	<p>Complied with.</p> <p>All the fly ash generated from Captive Power Plant is completely used in the cement manufacturing process.</p>
viii	<p>Efforts shall be made to use fly ash maximum in making Pozzolana Portland cement (PPC)</p>	<p>Complied with.</p> <p>The entire fly ash generated is used in the cement manufacturing process. Percentage of fly ash used in PPC for FY 22-23 up to Sep'22 is 33.87%.</p>
ix	<p>An effort shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly</p>	<p>Complied with.</p> <p>Installed Full fledge alternative fuel feeding system for Co-Processing Hazardous/Non hazardous waste in Kiln with shredders, magnetic separators, screen, extractor and closed belt feeding system. Presently, co-processing Non Hazardous waste like Tyre chips, Plastics, Refuse Derived Fuel, Dry municipal waste, foot ware waste and Hazardous waste like Resin, Textile ETP Sludge, Paint sludge & Oil rags in Cement kiln by getting necessary authorization from TNPCB.</p>
x	<p>Efforts shall be made to use low grade lime, more fly ash and solid waste in the cement manufacturing.</p>	<p>Complied with.</p> <p>Low grade Limestone is blended with High grade limestone and used for Cement manufacturing. Also, co-processing Textile ETP sludge as an alternative raw material for replacement of limestone.</p> <p>Maximum quantity of fly ash is used for manufacturing Pozzolana Portland cement. Further, high calorific value hazardous & non Hazardous wastes co-processed in the cement kiln.</p>

Rev
/

xi	As proposed, green belt shall be developed in 33% area in and around the project site as per as the CPCB guidelines to mitigate the effects of air emissions in consultation with local DFO	Complied with. More than 34% of the total area is covered with Green belt. As of Sep'22, 69,909 nos of trees were maintained inside the plant premises in consultation with local DFO initially and with 96% survival rate.		
xii	All recommendations made in the Corporate Responsibility for Environment Protection (CREP) for cement plants shall be implemented.	Complied with.		
		S.No	Conditions	Compliance
		1	Cement Plants, which are not complying with notified standards, will do the following to meet the standards: • Augmentation of existing Air Pollution Control Devices-by July 2003 • Replacement of existing Air Pollution Control Devices-by July 2004	Air Pollution Control Devices installed & maintained in order to meet the emission norms of <30 mg/Nm ³ . Regular checking of Bags is carried out based on the DP value and if any damage is observed, it is replaced immediately. Also during every shutdown/stoppages, Bag house chambers is inspected and maintained.
		2	Cement Plants located in critically polluted or urban areas (including 5km distance outside urban boundary) will meet 100 mg/Nm ³ limit of particulate matter by December 2004 and continue working to reduce the emission of particulate matter to 50 mg/Nm ³	The particulate emissions from pollution control equipment's designed to meet the emission norms of <30 mg/Nm ³ . Regular checking of Bags is being carried out based on the DP value and if any damage is observed, it is replaced immediately. Also during every shutdown/stoppages, Bag house chambers is inspected and maintained.

87

		3	The new cement kilns to be accorded NOC/Environmental Clearance w.e.f 01.04.2003 will meet the limit of 50 mg/Nm ³ for particulate matter emissions	The particulate emissions from pollution control equipment's is within the emission norms of <30 mg/Nm ³ .
		4	CPCB will evolve load based standards by December 2003.	The Load based emission for Particulate matter from Raw mill, kiln and pre-calciner system put together is less than 0.125 kg/ton of clinker.
		5	CPCB and NCBM will evolve SO ₂ and NO _x emission standards by June 2004	The emissions levels of NO _x and SO ₂ are well within the standards proposed by CPCB. We also installed Duoplex burner (low NO _x) in kiln main stack
		6	The Cement industries will control fugitive emissions from all the raw material and products storage and transfer points by December 2003. However, the feasibility for the control of fugitive emissions from limestone and coal storage areas will be decided by the National Task Force (NTF). The NTF will submit its recommendations within three months.	The fugitive emission is controlled by following initiatives, 1. Most of the area including raw material handling area covered with RCC pavement and road sweeping carried out using sweeping machines. 2. All transfer points are fully closed and fugitives controlled by water spraying or extraction to Bag filters. 3. Covered sheds provided for Raw materials like crushed limestone, Imported

22

			<p>Coal, petcoke, Alternative fuels, Lignite, Wet Fly ash and Gypsum</p> <p>4. Raw meal, Clinker, Cement and dry fly ash stored in Silos with bag filters.</p> <p>5. Cement packing rotors/machines equipped with dust extraction system with adequate ventilation.</p> <p>Also, we complied with respect to the CPCB guidelines on fugitive emission control vide PROBES/118/2007. dated 06.07.2007.</p>
		7	<p>CPCB, NCBM, BIS and Oil refineries will jointly prepare the policy on use of petroleum coke as fuel in cement kiln by July 2003.</p> <p>We are using imported/domestic pet coke in the manufacturing process by obtaining necessary permission apart from imported coal and Lignite as a fuel in cement kiln.</p>
		8	<p>After performance evaluation of various types of continuous monitoring equipment and feedback from the industries and equipment manufacturers, NTF will decide feasible unit operations/sections for installation of continuous monitoring</p> <p>The Continuous Emission and Effluent monitoring systems has been installed and readings are connected to TNPCB CAREAIR Centre, Chennai & also to CPCB Server through online. Further, the analyzers are calibrated regularly with respect to their functioning, drift, linearity as per the CPCB guidelines.</p>

82.

			equipment. The industry will install the continuous monitoring systems (CMS) by December 2003	
		9	Tripping in Kiln ESP to be minimized by July 2003 as per the recommendations of NTF	Tripping of ESP is minimized by taking all the necessary precautions like water spraying on flue gas and interlocking system with fan main drive.
		10	Industries will submit the target date to enhance the utilization of waste material by April 2003.	Every monthly the quantity co-processed in kiln is being intimated to TNPCB and yearly to CPCB. Installed Alternative fuel feeding system consisting of Shredders, Magnetic separator, Extractor, hopper, Closed belt conveyor with all safety system. Co-processing emission monitoring carried out with NABL accredited labs half yearly & reports are summited to TNPCB.
		11	NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003	High Calorific Hazardous and non-hazardous waste is co-processed/co-incinerated in the cement kiln.
		12	Cement industries will carry out feasibility study and submit target dates to CPCB for co-generation of	Entire cooler hot gas is being used to dry raw materials in vertical raw mill as well as in the vertical cement mill.

Dr.

		power by July 2003.	
xiii	Recommendation of the state forest department regarding impact of proposed plant on surrounding reserve forests Viz. Vannankurichchi RF (9.5Km, E), Sedalaradi RF (14Km, NE), Manager RF(13Km, ESE), Vilangudi RF (14Km, SE) shall be obtained and implemented	Complied with. District forest officer had given NOC stating that there is no rare, endangered or threatened species of the plant and animals in or near the reserved forest. As per discussion with Forest department, the following plants viz Neem, Gulmohar, Casualina, Pungamia Glubra, Cassia, Bouhiania, etc were planted in our plant premises.	
xiv	No operation of the cement plant shall be carried out till the environmental clearance for the mining project is obtained from the ministry of environment and forests and a copy submitted to the ministry's regional office at Bangalore.	Complied with. The Cement plant is commissioned only after obtaining the environmental clearance for Limestone mines. The required limestone is sourced from own mines located at various locations and there is no single captive mine for this project.	
B	General Conditions		
i	The Project authority shall adhere to the stipulations made by T.N. Pollution control Board (TNPCB) and State Government.	Complied with. All the stipulations made by Tamil Nadu Pollution Control Board and State Government is complied.	
ii	No further expansion or modification of the plant shall be carried out without prior approval of this Ministry	Noted and complied with. As per MoEF&CC S.O 980(E) dated 21.03.2021, we uploaded the information on PARIVESH Portal on 25.06.2021 for 'No increase in Pollution Load' towards modernization and expansion of Cement plant for production of Clinker from 2.0 to 2.5 MTPA and Cement from 3.0 to 4.0 MTPA and obtained acknowledgement with Single Window No. SW/1545/2021. Further, No Increase in Pollution Load Certificate obtained from TNPCB Pollution Load Assessment Committee vide Lr. No T4/TNPCB/F.0038/ARY/2021, dated 11.03.2022. Accordingly, Consent to Establishment obtained from TNPCB under Air and Water act and modernization and expansion work is being carried out.	
iii	The gaseous and particulate matter emissions from various units shall conform to the standards prescribed by the T.N. Pollution control Board. At no time, the particulate emissions	Complied with. Online Emission Monitoring system is installed in all stacks and the monitored data is directly transmitted to Care Air Centre, TNPCB & CPCB. The Gaseous and particulate emissions from all the stacks are well within the prescribed norms.	

PK

	from the cement plant shall exceed TNPCB limit. Interlocking facility shall be provided in the pollution control equipment so that in the event of the pollution control equipment not working, the respective unit(s) is shut down automatically.	All necessary precautions like maintenance of Bag filters have been taken to ensure that the particulate emissions are within the prescribed limits. Interlock facilities provided. If the emission level of Raw mill/kiln, Cooler, Coal mill, Cement mill, CPP boiler goes above the prescribed norms, the ID fans gets tripped automatically and the unit will be tripped.
iv	One ambient air quality monitoring station shall be installed in downward direction. Ambient air quality including ambient noise levels shall not exceed the standards stipulated under EPA or by the state authorities. Monitoring of ambient air quality and stack emissions shall be carried out regularly in consultation with TNPCB and report submitted to the TNPCB quarterly and to the Ministry's Regional office at Bangalore - Half yearly	Complied with. Continuous Ambient Air Quality Monitoring Stations have been established in downwind and leeward direction. Necessary precautions like water spraying, regular cleaning of roads through sweeping machines carried out to control dust levels. Acoustic enclosures provided to control noise levels. Ambient noise, ambient air and stack emission monitoring is being monitored Quarterly through accredited labs. The Monitoring report is being submitted regularly to MoEF on half yearly basis & to TNPCB on monthly basis.
v	The company must harvest the rain water from the rooftops and storm water drains to recharge the ground water and use the same water for the various activities project to conserve fresh water.	Complied with. Roof top rain water harvesting structures provided as well as storm water drainage facilities to recharge ground water. The storm water is routed to two rain water harvesting pond (Logistic pond: 44000 m ³ and Enviro park 9000 m ³) of total capacity 53000 m ³ . In addition to this, two recharge shaft bore well were constructed near logistic Rain water harvesting pond and Raw mill bore well area. The harvested rain water is used for Green belt development and dust suppression activities.
vi	The company shall undertake eco-development measures including community welfare measures in the project area.	Complied with. Eco development measures like de-silting of village ponds, Check dams, Provision of Drinking water facility, Sanitation, Community cleaning and Rain water harvesting structures in schools carried out in nearby community. For community welfare measures, medical camps, fuel efficient stoves, solar lanterns, Livelihood development through skill trainings and awareness in schools & Villages carried out regularly.

RZ.

vii	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all source of noise generation. The ambient noise levels shall conform to the standards prescribed under Environmental (protection) Act, 1986 Rules, 1989 viz 75 dBA (day time) and 70 dBA (night time).	<p>Complied with.</p> <p>Overall noise levels in and around the plant area are well within the TNPCB norms. Acoustic hoods and silencers provided in the noise generating equipment's.</p> <p>Ambient noise levels are being monitored internally every month and Quarterly once through external laboratory during day & night time and the levels are within the prescribed limits.</p> <p>Refer Annexure: 1 for the Noise monitoring report.</p>
viii	Adequate rainwater harvesting measures shall be adopted to recharge the ground water.	<p>Complied with.</p> <p>Roof top rain water harvesting structures provided as well as storm water drainage facilities to recharge ground water. The storm water is routed to two rain water harvesting pond (Logistic pond: 44000 m³ and Enviro park 9000 m³) of total capacity 53000 m³.</p> <p>In addition to this, two recharge shaft bore well were constructed near logistic Rain water harvesting pond and Raw mill bore well area.</p>
ix	Proper housekeeping and adequate occupational health programmes shall be taken up	<p>Complied with.</p> <p>Good housekeeping practice followed and the same is monitored through daily checklist, monthly audits by zone members and top management and quarterly SHE audits.</p> <p>Various Occupational health programmes and awareness campaign like yoga, personal and industrial hygiene, food habits, hand washing, health tips, first aid training, medical camp, fitness etc carried out and records are maintained.</p>
x	A separate environmental management cell to carry out various management and monitoring functions shall be set up under the control of Senior Executive.	<p>Complied with.</p> <p>A full fledge separate environmental cell is in place with two qualified environment professional and a Horticulturist under the direct supervision of Unit Head. Also we have formed department wise SPOC's persons to monitor the Environmental aspects/impacts for taking effective corrective measures through Environment Management programme (EMP).</p>
xi	As proposed, Rs.17.45 Cores and Rs.4.85 Crores/annum shall be earmarked towards the capital cost and recurring cost/annum	<p>Complied with.</p> <p>Capital cost invested for the pollution control measures is 45 crore.</p> <p>Every year, for environmental protection budget is</p>

By

	<p>earmarked for environment pollution control measures and judiciously used to implement the conditions stipulated by the Ministry of Environment and Forests as well as the state Government. The funds so provided shall not be diverted for any other purposes.</p>	<p>allotted and wisely spent. In FY 22-23, around 75.0 lakhs utilized as recurring cost for general activities and around 2265.45 lakhs towards environment & Energy improvement capex projects. Also additional funds are being allocated separately for implementing the conditions stipulated by MoEF & PCB from time to time. The funds provided for environmental pollution control measures is not be diverted for other purpose</p>
xii	<p>The regional Office of this Ministry at Bangalore / CPCB / TNPCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.</p>	<p>Complied with. Half yearly compliance report is being submitted to MoEF Regional office & TNPCB. The last compliance report was submitted vide our letter no ARY/MoEF/Cement & CPP/EC/22-23/32 dated 16.05.2022.</p>
xiii	<p>The project authorities shall inform the Regional Office as well as Ministry, the date of Financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.</p>	<p>Complied with. Term loan sanctioned on 25.08.2008 & ECA sanctioned on 06.11.2008. For Cement plant, Date of commencement: 28.07.2008 & commissioning: Feb 2009. For Captive Power plant, Date of commencement: 10.09.2008 & commissioning: Aug 2010</p>
ivx	<p>The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the T.N. Pollution control Board / Committee and may also be seen at website of the Ministry of Environment and Forests at http://envfor.nic.in. This should be advertised within seven days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the Regional office at Bangalore.</p>	<p>Complied with. Environmental clearance had been submitted to TNPCB office and also available in the website of the Ministry of Environment and Forests. Advertisement regarding obtaining of Environment clearance had been published in The Hindu paper and Local Tamil newspaper (Dinamani) on 01/07/08 and same has been submitted to MoEF regional office.</p>

Additional conditions issued by MoEF on 06.04.2011, Ref.No: J-11013/41/2006-IA. II(I)

i	Continuous monitoring of stack emissions as well as ambient air quality (as per notified standards) shall be carried out and continuous records maintained. Based on the monitored data, necessary corrective measures as may be required from time to time shall be taken to ensure that the levels are within permissible limits. The results of monitoring shall also be submitted to the respective Regional office of MoEF regularly. Besides, the results of monitoring will also be put on the website of the company in the public domain.	Installed Continuous Emission Monitoring System in all stacks for monitoring particulate emission and two no's of Continuous Ambient Air Quality Monitoring System. The online monitoring data is connected to the CARE AIR, TNPCB and to CPCB server. The data are being monitored daily and the emission levels are well within the limits. Also, manual monitoring report is being submitted half yearly to MoEF regional office & the compliance report along with monitoring results are uploaded in our website. The real time data is displayed at the main gate.
ii	The six monthly monitoring reports as well as the monitored data on various parameters as stipulated in the environment clearance conditions shall be put on the website of the company and also regularly updated. The monitored data shall also be submitted to respective state pollution control board/UTPCCs and the regional office of MoEF.	We are updating the compliance condition stipulated in Environment clearance regularly in the website. Website address: www.dalmiacement.com (under Sustainability tab click Environmental Clearances and compliances for plant). Also the monitoring data is submitted to TNPCB on monthly basis & MoEF on half yearly regularly.
iii	The ambient air quality data as well as the stack emission data will also be displayed in public domain at some prominent place near the main gate of the company and updated in real time.	Real time Online monitoring data's is displayed in Public domain at the Main gate of the plant.

Rpt.

Annexure - 1

ANNEXURE - 1

Dalmia Cement (Bharat) Limited



Ariyalur Plant

Department : Environment

Plant - Cement & CPP

SUMMARY REPORT OF STACK EMISSION (PM)

PERIOD: Apr 2022 - Sep 2022

UNIT – mg/Nm³

Month	Kiln/Raw mill		Clinker cooler		Coal mill		Cement mill		Boiler ID fan	
	Observed Level	Norms	Observed Level	Norms	Observed Level	Norms	Observed Level	Norms	Observed Level	Norms
Max	14.4	30	24.6	30	23.9	30	23.3	30	33.5	50
Min	5.5		13.4		17.6		11.6		20.7	
Avg	10.2		21.9		21.1		17.2		26.7	
St. Deviation	2.9		4.3		2.4		4.6		6.4	

SUMMARY REPORT OF STACK EMISSION (SO₂ & NO_x)

PERIOD: Apr 2022 - Sep 2022

UNIT – mg/Nm³

Month	SO ₂ Emission				NO _x Emission			
	Kiln/Raw mill		Boiler ID fan		Kiln/Raw mill		Boiler ID fan	
	Observed Level	Norms	Observed Level	Norms	Observed Level	Norms	Observed Level	Norms
Max	2.9	100	264.5	600	592.5	800	42.8	300
Min	1.0		192.4		328.6		9.8	
Avg	2.3		236.9		495.8		31.1	
St. Deviation	0.7		38.9		112.8		18.5	

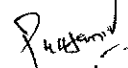
SUMMARY OF NOISE MONITORING REPORT

PERIOD: Apr 2022 - Sep 2022

UNIT – dB (A)

DAY & NIGHT TIME

Month	Northeast Boundary (Near CPP)		Southeast Boundary (Near crusher Transport system)		Southeast Boundary (Near Limestone stacker)		Northwest Boundary (Near substation)		Permissible Limit	
	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
Max	54.2	43.1	53.7	43.9	53.9	43.5	54.1	43.4	55	45
Min	50.0	40.4	50.0	39.6	60.0	40.7	60.3	41.6		
Avg	52.2	42.0	52.3	41.6	52.3	42.0	52.1	42.4		
St. Deviation	1.4	1.0	1.2	1.5	1.0	1.1	1.4	0.7		



B.R. Prasannakumar
Manager - Environment

Annexure - 2

ANNEXURE - 2

Dalmia Cement (Bharat) Limited

Ariyalur Plant

Dalmia
CEMENT

Department : Environment

Plant - Cement & CPP

SUMMARY REPORT OF AMBIENT AIR QUALITY
PARTICULATE MATTER (PM₁₀)
PERIOD: Apr 2022 - Sep 2022
UNIT - µg/m³

Month	Eastern Boundary near HR building	SE - Boundary near Crusher Transport system	SW - Boundary near Limestone Stacker	Western boundary near 110KVA substation	NW - Boundary compound wall	NE - Boundary near CPP	Permissible Limit
Max	68.4	60.5	72.4	64.8	76.2	72.8	100
Min	60.3	53.8	64.8	60.8	69.2	64.9	
Avg	63.9	57.6	68.8	62.6	72.3	69.3	
St. Deviation	2.8	2.3	2.7	1.5	2.7	3.1	

SUMMARY REPORT OF AMBIENT AIR QUALITY
PARTICULATE MATTER (PM_{2.5})
PERIOD: Apr 2022 - Sep 2022
UNIT - µg/m³

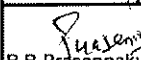
Month	Eastern Boundary (Weigh bridge)	SE - Boundary near Crusher Transport system	SW - Boundary near Limestone Stacker	Western boundary near substation	NW - Boundary compound wall	NE - Boundary near CPP	Permissible Limit
Max	32.4	27.9	33.6	30.1	38.6	36.5	60
Min	25.8	24.3	30.4	24.7	31.3	29.1	
Avg	29.8	26.3	32.2	27.8	35.5	33.2	
St. Deviation	2.7	1.5	1.2	2.0	2.6	2.6	

SUMMARY REPORT OF AMBIENT AIR QUALITY
SULPHUR DIOXIDE (SO₂)
PERIOD: Apr 2022 - Sep 2022
UNIT - µg/m³

Month	Eastern Boundary near HR building	SE - Boundary near Crusher Transport system	SW - Boundary near Limestone Stacker	Western boundary near 110KVA substation	NW - Boundary compound wall	NE - Boundary near CPP	Permissible Limit
Max	30.4	29.5	34.6	33.6	36.5	37.7	80
Min	22.8	24.5	27.1	29.7	32.7	29.7	
Avg	25.6	26.1	30.8	31.1	34.0	33.7	
St. Deviation	3.1	1.8	2.6	1.4	1.5	3.1	

SUMMARY REPORT OF AMBIENT AIR QUALITY
NITROGEN DIOXIDE (NO_x)
PERIOD: Apr 2022 - Sep 2022
UNIT - µg/m³

Month	Eastern Boundary (Weigh bridge)	SE - Boundary near Crusher Transport system	SW - Boundary near Limestone Stacker	Western boundary near substation	NW - Boundary compound wall	NE - Boundary near CPP	Permissible Limit
Max	30.2	32.4	33.4	34.9	36.5	37.4	80
Min	23.7	27.6	29.7	27.8	31.9	29.5	
Avg	27.2	29.8	31.4	31.1	34.7	34.3	
St. Deviation	2.2	1.7	1.4	2.4	1.8	3.1	


B.R. Prasannakumar
Manager - Environment

Annexure - 3



GLens Innovation Labs Pvt Ltd.

NABL ACCREDITED AS PER ISO/IEC 17025:2017, CERTIFIED AS PER ISO 9001:2015 & ISO 45001:2018

TEST REPORT

Report No

: EN22070009-01

ULR No : TC058222000003310F

Report Date

: 12 July 2022

SAMPLE DRAWN BY LABORATORY

Customer Name

: M/S. Dalmia Cements (Bharat) Ltd

Customer Address

: SF-630 Thamaraikulam Village, Ariyalur, Tamilnadu-621705

Sample Name

: Ambient Air Quality

Sample Description

: Ambient Air Quality

Sample No

: EN22030071-08

Sampling Date & Time

: 28 to 29 June 2022

Sampling Location

: Near HR Building

09.35am to 09.35am

Sample Condition

: Fit for Analysis

Sample Received on

: 04 July 2022

Relative Humidity

: 58.1%

Test Started on

: 04 July 2022

Sampling Procedure

: IS 5182 Part V & XIV

Test Completed on

: 12 July 2022

Ambient Temperature

: 31°C

Test Results

Sl.No	Test Name	Test Method	Results	Units	Requirement as per NAAQS Specification
1	Sulphur Dioxide as SO ₂	IS 5182 (Part 2):2001	13.50	µg/m ³	80
2	Nitrogen Dioxide as NO ₂	IS 5182 (Part 6):2006	31.60	µg/m ³	80
3	Particulate Matter (PM 10)	IS 5182 (Part 23):2006	44.90	µg/m ³	100
4	Particulate Matter (PM 2.5)	GL/EN/SOP/062	14.10	µg/m ³	60
5	Ozone as O ₃	IS 5182 (Part 9):1974	BDL(DL:20.0)	µg/m ³	100
6	Lead as Pb	IS 5182 (Part 22):2004	BLQ(LOQ:0.002)	µg/m ³	1
7	Carbon Monoxide as CO (1 hour)	IS 5182 (Part 10):1999	BDL(DL:1.14)	mg/m ³	4
8	Ammonia as NH ₃	GL/EN/SOP/057	BDL(DL:2.0)	µg/m ³	400
9	Benzene	GL/EN/SOP/08	BLQ(LOQ:4.0)	µg/m ³	-
10	Benzo (a)Pyrene (Particulate Phase)	GL/EN-INS/SOP/09	BLQ(LOQ:0.03)	ng/m ³	-
11	Arsenic as As	IS 5182 (Part 22):2004	BLQ(LOQ:1.0)	ng/m ³	-
12	Nickel as Ni	IS 5182 (Part 22):2004	BLQ(LOQ:1.0)	ng/m ³	-

Remarks

: The above Sample complies as per NAAQS limit which is provided in the environmental protection Rule 3 (3B) Nov.2009, against the above tested parameter.

Note

: BDL: Below Detection Limit, DL: Detection Limit / NAAQS: National Ambient Air Quality Standard
BLQ-Below Limit of Quantification, LOQ-Limit of Quantification

End of Report

Authorized Signature

46/1, 1st Floor, Sri Lathi Complex, Murugesan Street, Kalvinayagar Nagar, Arumbakkam, Chennai - 600106.

Terms and Conditions:

*The Test Results relate only to the items tested. * The Test Report shall not be reproduced in full or part without the written approval of GLens. * The Test Report will not be retained for more than 12 days from the date of issue of Test report except in the case as required by the application regulations. * The Laboratory's Responsibility under this report is limited to proven with negligence and will be no case to more than the invoice amount. * A satisfactory test report in no way implies that the product or tested is approved by NABL. * Laboratory is not responsible for the maintenance of photocopied test reports.
WARNING: Attention is drawn to the limitations of the Validity, Indemnification and Jurisdictional issues established there in any holder of their document. It is advised that information contained hereon reflect the company's findings at the time of its intervention only and within the limits of client's instructions, if any. The company's sole responsibility is to its client and this document does not exonerate parties in a transaction from exercising all their rights and obligations under the transaction document.



TEST REPORT

ULR No : TC858222000003303F

Report No : EN22070009-02 Report Date : 12 July 2022

SAMPLE DRAWN BY LABORATORY

Customer Name : M/S. Daimia Cements (Bharat) Ltd
Customer Address : SF-630 Thamaraikulam Village, Ariyalur, Tamilnadu-621705

Sample Name : Ambient Air Quality
Sample Description : Ambient Air Quality
Sample No : EN22070009-02
Sampling Location : Near O & M Colony
Sample Condition : Fit for Analysis
Relative Humidity : 58.1%
Sampling Procedure : IS 5182 Part V & XIV

Sampling Date & Time : 28 to 29 June 2022
09.50am to 09.50am
Sample Received on : 04 July 2022
Test Started on : 04 July 2022
Test Completed on : 12 July 2022
Ambient Temperature : 31°C

Test Results

Sl.No	Test Name	Test Method	Results	Units	Requirement as per NAAQS Specification
1	Sulphur Dioxide as SO ₂	IS 5182 (Part 2):2001	18.10	µg/m ³	80
2	Nitrogen Dioxide as NO ₂	IS 5182 (Part 6):2006	23.70	µg/m ³	80
3	Particulate Matter (PM 10)	IS 5182 (Part 23):2036	46.30	µg/m ³	100
4	Particulate Matter (PM 2.5)	GL/EN/SOP/062	14.30	µg/m ³	60
5	Ozone as O ₃	IS 5182 (Part 9):1974	BDL(DL:20.0)	µg/m ³	100
6	Lead as Pb	IS 5182 (Part 22):2004	BLQ(LOQ:0.002)	µg/m ³	1
7	Carbon Monoxide as CO (1 hour)	IS 5182 (Part 10):1999	BDL(DL:1.14)	mg/m ³	4
8	Ammonia as NH ₃	GL/EN/SOP/057	BDL(DL:20.0)	µg/m ³	400
9	Benzene	GL/EN/SOP/05	BLQ(LOQ:4.0)	µg/m ³	.
10	Benzo (a)Pyrene (Particulate Phase)	GL/EN-INS/SOP/09	BLQ(LOQ:0.03)	ng/m ³	.
11	Arsenic as As	IS 5182 (Part 22):2004	BLQ(LOQ:2.0)	ng/m ³	.
12	Nickel as Ni	IS 5182 (Part 22):2004	BLQ(LOQ:2.0)	ng/m ³	.

Remarks : The above Sample complies as per NAAQS limit which is provided in the environmental protection Rule 3 (3B) Nov.2009, against the above tested parameter.

Note : BDL: Below Detection Limit, DL: Detection Limit / NAAQS: National Ambient Air Quality Standard
BLQ-Below Limit of Quantification, LOQ-Limit of Quantification

End of Report

Authorized Signature

86/3, 1st Floor, Sri Sathya Complex, Murugesan Street, Balasubramanyam Nagar, Arumbakkam, Chennai - 600106.

Terms and Conditions:

* The Test Results relate only to the item tested. * The Test Report shall not be reproduced in full or part without the written approval of NABL. * The test items will not be retained for more than 15 days from the date of issue of test report except in the case as required by the application regulation. * The Laboratory's Responsibility under this report is limited to proven client negligence and will in no case be more than the involved amount. * A Laboratory test report in no way implies that the product or tested is approved by NABL. * Laboratory is not responsible for the authenticity of photographs and test reports. **WARNING:** Attention is drawn to the limitations of the liability, indemnification and jurisdictional issues established there in any holder of this document is advised that information contained herein reflect the company's findings at the time of its intervention only and within the limits of client's instructions, if any. The company's sole responsibility is to its client and this document does not constitute parties to a transaction from exercising all their rights and obligations under the transaction document.



TEST REPORT

Report No : EN22070009-03 ULR No : TC859222000003304F Report Date : 12 July 2022

SAMPLE DRAWN BY LABORATORY

Customer Name : M/S. Dalmia Cements (Bharat) Ltd
Customer Address : SF-630 Thamarikulam Village Ariyal, Tamilnadu-621705
Sample Name : Ambient Air Quality
Sample Description : Ambient Air Quality Sampling Date & Time : 28 to 29 June 2022
Sample No : EN22070009-03 10.00am to 10.00am
Sampling Location : Near Steel Yard Sample Received on : 04 July 2022
Sample Condition : Fit for Analysis Test Started on : 04 July 2022
Relative Humidity : 58% Test Completed on : 12 July 2022
Sampling Procedure : IS 5182 Part V & XIV Ambient Temperature : 31°C

Test Results

Sl.No	Test Name	Test Method	Results	Units	Requirement as per NAAQS Specification
1	Sulphur Dioxide as SO ₂	IS 5182 (Part 2):2011	11.50	µg/m ³	80
2	Nitrogen Dioxide as NO ₂	IS 5182 (Part 6):2006	18.80	µg/m ³	80
3	Particulate Matter (PM 10)	IS 5182 (Part 23):2006	51.80	µg/m ³	100
4	Particulate Matter (PM 2.5)	GL/EN/SOP/062	23.90	µg/m ³	60
5	Ozone as O ₃	IS 5182 (Part 5):1974	BDL(DL:20.0)	µg/m ³	100
6	Lead as Pb	IS 5182 (Part 22):2004	BLQ(LOQ:0.002)	µg/m ³	1
7	Carbon Monoxide as CO (1 hour)	IS 5182 (Part 10):1999	BDL(DL:1.14)	mg/m ³	4
8	Ammonia as NH ₃	GL/EN/SOP/057	BDL(DL:20.0)	µg/m ³	400
9	Benzene	GL/EN/SOP/08	BLQ(LOQ:4.0)	µg/m ³	-
10	Benzo (a) Pyrene (Particulate Phase)	GL/EN-INS/SOP/09	BLQ(LOQ:0.03)	ng/m ³	-
11	Arsenic as As	IS 5182 (Part 22):2004	BLQ(LOQ:2.0)	ng/m ³	-
12	Nickel as Ni	IS 5182 (Part 22):2004	BLQ(LOQ:2.0)	ng/m ³	-

Remarks : The above Sample complies as per NAAQS limit which is provided in the environmental protection Rule 3 (3B) Nov.2009, against the above tested parameter.

Note : BDL: Below Detection Limit, DL: Detection Limit / NAAQS: National Ambient Air Quality Standard
BLQ-Below Limit of Quantification, LOQ-Limit of Quantification

End of Report

Authorized Signature

86/1st Floor, Sri Lathi Complex, Murugesan Street, Balvignayagar Nagar, Arumbakkam, Chennai - 600106.

Terms and Conditions:

* The Test Results relate only to the items tested. * The Test Report shall not be reproduced in full or part without the written approval of GLens. * The test items will not be returned for more than 15 days from the date of issue of Test report except as the case as required by the application regulations. * The Laboratory's responsibility under this report is limited to proven valid negligence and will be no more than the lowest amount. * A satisfactory test report in no way implies that the product so tested is approved by NABL. * Laboratory is not responsible for the authenticity of photocopied test reports. **WARNING:** No other is drawn to the limitations of the liability, indemnification and jurisdictional issues established there in any holder of their document is advised that information contained herein reflect the company's findings at the time of its intervention only and within the limits of client's instructions, if any. The company's sole responsibility is to its client and this document does not overstate either to a transaction from exercising all their rights and obligations under the transaction document.



Glens Innovation Labs Pvt Ltd.

NABL ACCREDITED AS PER ISO/IEC 17025 : 2017, CERTIFIED AS PER ISO 9001:2015 & ISO 45001 : 2018



TEST REPORT

Report No : EN22070009-04 ULR No : TC858222000003305F Report Date : 12 July 2022

SAMPLE DRAWN BY LABORATORY

Customer Name : M/S. Dalmia Cements (Bharat) Ltd
Customer Address : SF-630 Thamarakulam Village, Ariyalur, Tamilnadu-621705
Sample Name : Ambient Air Quality
Sample Description : Ambient Air Quality
Sample No : EN22070009-04
Sampling Location : Near Circular stack
Sample Condition : Fit for Analysis
Relative Humidity : 57.9%
Sampling Procedure : IS 5182 Part V & XIV

Sampling Date & Time : 28 to 29 June 2022
10.00am to 10.00am
Sample Received on : 04 July 2022
Test Started on : 04 July 2022
Test Completed on : 12 July 2022
Ambient Temperature : 31.6°C

Test Results

Sl.No	Test Name	Test Method	Results	Units	Requirement as per NAAQS Specification
1	Sulphur Dioxide as SO ₂	IS 5182 (Part 2):2001	15.40	µg/m ³	80
2	Nitrogen Dioxide as NO ₂	IS 5182 (Part 6):2006	34.00	µg/m ³	80
3	Particulate Matter (PM 10)	IS 5182 (Part 23):2006	47.60	µg/m ³	100
4	Particulate Matter (PM 2.5)	GL/EN/SOP/062	18.40	µg/m ³	60
5	Ozone as O ₃	IS 5182 (Part 9):1974	BDL(DL:20.0)	µg/m ³	100
6	Lead as Pb	IS 5192 (Part 22):2004	BLQ(LOQ:0.002)	µg/m ³	1
7	Carbon Monoxide as CO (1 hour)	IS 5182 (Part 10):1999	BDL(DL:1.14)	mg/m ³	4
8	Ammonia as NH ₃	GL/EN/SOP/057	BDL(DL:20.0)	µg/m ³	400
9	Benzene	GL/EN/SOP/08	BLQ(LOQ:4.0)	µg/m ³	-
10	Benzo (a) Pyrene (Particulate Phase)	GL/EN-INS/SOP/09	BLQ(LOQ:0.03)	ng/m ³	-
11	Arsenic as As	IS 5182 (Part 22):2004	BLQ(LOQ:2.0)	ng/m ³	-
12	Nickel as Ni	IS 5182 (Part 22):2004	BLQ(LOQ:2.0)	ng/m ³	-

Remarks : The above Sample complies as per NAAQS limit which is provided in the environmental protection Rule 3 (3B) Nov.2009, against the above tested parameter.

Note : BDL: Below Detection Limit, DL: Detection Limit / NAAQS: National Ambient Air Quality Standard
BLQ-Below Limit of Quantification, LOQ-Limit of Quantification

End of Report

Authorized Signature

PGF, 1st Floor, SU Nani Complex, Murugesan Street, Balavanayagam Nager, Arumbakkam, Chennai - 600105.

Terms and Conditions:

1. The Test Results relate only to the items tested. 2. The Test Report shall not be reproduced in full or part without the written approval of GIL. 3. The Test Report will not be returned for more than 15 days from the date of issue of test report, except in the case as required by the application regulations. 4. The Laboratory's responsibility under this report is limited to proven wilful negligence and will in no case be more than the amount. 5. A satisfactory test report in no way implies that the product is approved by GIL. 6. Laboratory is not responsible for the authenticity of photocopied test reports. 7. MAINTAINING ATTENTION is drawn to the limitations of the Liability, indemnification and fundamental terms established there in any holder of this document is advised that information contained hereon reflect the company's findings at the time of its intervention only and within the limits of client's instructions, if any. The company's sole responsibility is to its client and this document does not exonerate parties in a transaction from respecting all due rights and obligations under the transaction document.



TEST REPORT

Report No : EN22070009-05 ULR No : TC858222000003306F Report Date : 12 July 2022

SAMPLE DRAWN BY LABORATORY

Customer Name : M/S. Dalmia Cements (Bharat) Ltd
Customer Address : SF-630 Thamarakulam Village, Ariyalur, Tamilnadu-621705

Sample Name : Ambient Air Quality
Sample Description : Ambient Air Quality
Sample No : EN22070009-05
Sampling Location : Near 110 KVA Sub station
Sample Condition : Fit for Analysis
Relative Humidity : 58%
Sampling Procedure : IS 5182 Part V & XIV

Sampling Date & Time : 29 to 30 June 2022
09.45am to 09.45am
Sample Received on : 04 July 2022
Test Started on : 04 July 2022
Test Completed on : 12 July 2022
Ambient Temperature : 31.6°C

Test Results

Sl.No	Test Name	Test Method	Results	Units	Requirement as per NAAQS Specification
1	Sulphur Dioxide as SO ₂	IS 5182 (Part 2):2001	8.60	µg/m ³	80
2	Nitrogen Dioxide as NO ₂	IS 5182 (Part 6):2006	15.70	µg/m ³	80
3	Particulate Matter (PM 10)	IS 5182 (Part 23):2006	58.30	µg/m ³	100
4	Particulate Matter (PM 2.5)	GL/EN/SOP/062	20.00	µg/m ³	60
5	Ozone as O ₃	IS 5182 (Part 9):1974	BDL(DL:20.0)	µg/m ³	100
6	Lead as Pb	IS 5182 (Part 22):2004	BLQ(LOQ:0.002)	µg/m ³	1
7	Carbon Monoxide as CO (1 hour)	IS 5182 (Part 10):1999	BDL(DL:1.14)	mg/m ³	4
8	Ammonia as NH ₃	GL/EN/SOP/057	BDL(DL:20.0)	µg/m ³	400
9	Benzene	GL/EN/SOP/009	BLQ(LOQ:4.0)	µg/m ³	-
10	Benzo (a)Pyrene (Particulate Phase)	GL/EN-INS/SOP/009	BLQ(LOQ:0.03)	ng/m ³	-
11	Arsenic as As	IS 5182 (Part 24):2004	BLQ(LOQ:2.0)	ng/m ³	-
12	Nickel as Ni	IS 5182 (Part 22):2004	BLQ(LOQ:2.0)	ng/m ³	-

Remarks : The above Sample complies as per NAAQS limit which is provided in the environmental protection Rule 3 (3B) Nov.2009, against the above tested parameter.

Note : BDL: Below Detection Limit, DL: Detection Limit / NAAQS: National Ambient Air Quality Standard
BLQ-Below Limit of Quantification, LOQ-Limit of Quantification

End of Report

Authorized Signature

86/1st Floor, 3rd 10th Complex, Marudasan Street, Balaram Nagar, Anna Nagar, Chennai - 600105.

Terms and Conditions

* The Test Results Relate only to the Sample tested. The Test Report shall not be reproduced in full or part without the written approval of GLS. * The test report will not be retained for more than 12 days from the date of issue of test report except in the case as required by the application regulations. * The Laboratory's Responsibility under this report is limited to proven valid negligence and will in no case be more than the incurred amount. * A satisfactory test report in no way implies that the product or service is approved by GLS. * Laboratory is not responsible for the authenticity of photocopied test reports. **WARNING:** Attention is drawn to the fact that the test results, interpretation and conclusions are established there in any holder of their document is advised that information contained herein relies on the company's findings of the time of its reference only and within the limits of client's instructions. If any. The company's sole responsibility is to its client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document.



TEST REPORT

DLR No : TC853222000003307F

Report No : EN22070009-06 Report Date : 12 July 2022

SAMPLE DRAWN BY LABORATORY

Customer Name : M/S. Dalmia Cements (Bharat) Ltd
Customer Address : SF-630 Thamarakulam Village, Ariyalur, Tamilnadu-621705
Sample Name : Ambient Air Quality
Sample Description : Ambient Air Quality
Sample No : EN22070009-06
Sampling Location : Near coal crusher
Sample Condition : Fit for Analysis
Relative Humidity : 58%
Sampling Procedure : IS 5182 Part V & XIV

Sampling Date & Time : 29 to 30 June 2022
09.55am to 09.55am
Sample Received on : 04 July 2022
Test Started on : 04 July 2022
Test Completed on : 12 July 2022
Ambient Temperature : 31.6°C

Test Results

Sl.No	Test Name	Test Method	Results	Units	Requirement as per NAAQS Specification
1	Sulphur Dioxide as SO ₂	IS 5182 (Part 2):2001	14.70	µg/m ³	80
2	Nitrogen Dioxide as NO ₂	IS 5182 (Part 6):2006	21.00	µg/m ³	80
3	Particulate Matter (PM 10)	IS 5182 (Part 23):2006	55.10	µg/m ³	100
4	Particulate Matter (PM 2.5)	GL/EN/SOP/062	22.80	µg/m ³	60
5	Ozone as O ₃	IS 5182 (Part 9):1974	BDL(DL:20.0)	µg/m ³	100
6	Lead as Pb	IS 5182 (Part 27):2004	BLQ(LOQ:0.002)	µg/m ³	1
7	Carbon Monoxide as CO (1 hour)	IS 5182 (Part 10):1999	BDL(DL:1.14)	mg/m ³	4
8	Ammonia as NH ₃	GL/EN/SOP/057	BDL(DL:20.0)	µg/m ³	400
9	Benzene	GL/EN/SOP/088	BLQ(LOQ:4.0)	µg/m ³	-
10	Benzo (a)Pyrene (Particulate Phase)	GL/EN-INS/SOP/1-9	BLQ(LOQ:0.03)	ng/m ³	-
11	Arsenic as As	IS 5182 (Part 22):2004	BLQ(LOQ:2.0)	ng/m ³	-
12	Nickel as Ni	IS 5182 (Part 22):2004	BLQ(LOQ:2.0)	ng/m ³	-

Remarks : The above Sample complies as per NAAQS limit which is provided in the environmental protection Rule 3 (3B) Nov.2009, against the above tested parameter.

Note : BDL: Below Detection Limit, DL: Detection Limit / NAAQS: National Ambient Air Quality Standard
BLQ-Below Limit of Quantification, LOQ-Limit of Quantification

End of Report

Authorized Signature

ISO 15185 Floor, 3rd Floor Complex, Murugesan Street, Balavanayagam Nagar, Arumbakkam, Chennai - 600106.

Terms and Conditions:

* The Test Results apply only to the items tested. * The Test Report shall not be reproduced in full or part without the written approval of GIL. * The Test Report will not be retained for more than 15 days from the date of issue of Test Report, except in the case as required by the applicable regulations. * The Laboratory's Responsibility under this report is limited to proven value negligence and will in no case be more than the invoiced amount. * A satisfactory test report is so very complex that the customer to request is approved by GIL. * Laboratory is not responsible for the authenticity of photographs test reports. **WARNING:** Attention is drawn to the fact that the Laboratory's findings at the time of its intervention only and within the limits of client's instructions. If any, The company's sole responsibility is to its client and this document does not constitute parties to a transaction from exercising their rights and obligations under the transaction documents.



TEST REPORT

Report No : EN22070009-07 DLR No : TC858222000003308F
Report Date : 12 July 2022

SAMPLE DRAWN FY LABORATORY

Customer Name : M/S. Dalmia Cements (Bharat) Ltd
Customer Address : SF-630 Thamaraikulam Village, Ariyalur, Tamilnadu-621705

Sample Name : Ambient Air Quality
Sample Description : Ambient Air Quality
Sample No : EN22070009-07
Sampling Location : Near coal crusher
Sample Condition : Fit for Analysis
Relative Humidity : 57.8%
Sampling Procedure : IS 5182 Part V & XIV

Sampling Date & Time : 29 to 30 June 2022
10.10am to 10.10am
Sample Received on : 04 July 2022
Test Started on : 04 July 2022
Test Completed on : 12 July 2022
Ambient Temperature : 32°C

Test Results

Sl.No	Test Name	Test Method	Results	Units	Requirement as per NAAQS Specification
1	Sulphur Dioxide as SO ₂	IS 5182 (Part 2):2001	8.60	µg/m ³	80
2	Nitrogen Dioxide as NO ₂	IS 5182 (Part 6):2006	13.00	µg/m ³	80
3	Particulate Matter (PM 10)	IS 5182 (Part 23):2016	48.30	µg/m ³	100
4	Particulate Matter (PM 2.5)	GL/EN/SOP/062	17.30	µg/m ³	60
5	Ozone as O ₃	IS 5182 (Part 9):1974	BDL(DL:20.0)	µg/m ³	100
6	Lead as Pb	IS 5182 (Part 22):2004	BLQ(LOQ:0.002)	µg/m ³	1
7	Carbon Monoxide as CO (1 hour)	IS 5182 (Part 10):1999	BDL(DL:1.14)	mg/m ³	4
8	Ammonia as NH ₃	GL/EN/SOP/057	BDL(DL:20.0)	µg/m ³	400
9	Benzene	GL/EN/SOP/06	BLQ(LOQ:4.0)	µg/m ³	-
10	Benzo (a)Pyrene (Particulate Phase)	GL/EN INS/SOP/09	BLQ(LOQ:0.03)	ng/m ³	-
11	Arsenic as As	IS 5182 (Part 22):2004	BLQ(LOQ:2.0)	ng/m ³	-
12	Nickel as Ni	IS 5182 (Part 22):2004	BLQ(LOQ:2.0)	ng/m ³	-

Remarks : The above Sample complies as per NAAQS limit which is provided in the environmental protection Rule 3 (3B) Nov.2009, against the above tested parameter

Note : BDL: Below Detection Limit, DL: Detection Limit / NA/ QS: National Ambient Air Quality Standard
BLQ-Below Limit of Quantification, LOQ-Limit of Quantification

End of Report

Authorized Signature

86/3, 1st Floor, Sri Sathya Complex, Marudhan Street, Balasambas Nagar, Arumbakkam, Chennai - 600106.

Terms and Conditions

1. The Test Results relate only to the items tested. 2. The Test Report shall not be reproduced in full or part without the written approval of BVIL. 3. The Test Report will not be retained for more than 15 days from the date of issue of Test Report except in the case as required by the application regulations. 4. The Laboratory's Responsibility under this report is limited to results which are significant and will not cover more than the lowest amount. 5. A satisfactory test cannot in any way imply that the product as tested is approved by BVIL. 6. Laboratory is not responsible for the authenticity of photocopied test reports. **WARNING:** Attention is drawn to the limitations of the liability, indemnification and jurisdictional issues established there in any holder of this document is advised that information contained herein reflect the company's findings at the time of its intervention only and within the limits of client's instructions, if any. The company's sole responsibility is to its client and this document does not constitute parties by a transition from exercising all their rights and obligations under the transaction document.



TEST REPORT

ULR No : TC858222000003399F

Report No : EN22070009-08 Report Date : 12 July 2022

SAMPLE DRAWN BY LABORATORY

Customer Name : M/S. Dalmia Cements (Bharat) Ltd
 Customer Address : SF-630 Thamarakulam Village, Ariyalur, Tamilnadu-621705
 Sample Name : Ambient Air Quality
 Sample Description : Ambient Air Quality Sampling Date & Time : 29 to 30 June 2022
 Sample No : EN22070009-08 10.20am to 10.20am
 Sampling Location : Near WTP Sample Received on : 04 July 2022
 Sample Condition : Fit for Analysis Test Started on : 04 July 2022
 Relative Humidity : 51% Test Completed on : 12 July 2022
 Sampling Procedure : IS 5182 Part V & XIV Ambient Temperature : 32°C

Test Results

Sl.No	Test Name	Test Method	Results	Units	Requirement as per NAAQS Specification
1	Sulphur Dioxide as SO ₂	IS 5182 (Part 2):2001	11.10	µg/m ³	80
2	Nitrogen Dioxide as NO ₂	IS 5182 (Part 6):2006	27.90	µg/m ³	80
3	Particulate Matter (PM 10)	IS 5182 (Part 23):2006	46.60	µg/m ³	100
4	Particulate Matter (PM 2.5)	GL/EN/SOP/062	15.00	µg/m ³	60
5	Ozone as O ₃	IS 5182 (Part 9):1974	BDL(DL:20.0)	µg/m ³	100
6	Lead as Pb	IS 5182 (Part 2):2004	BLQ(LOQ:0.002)	µg/m ³	1
7	Carbon Monoxide as CO (1 hour)	IS 5182 (Part 10):1999	BDL(DL:1.14)	mg/m ³	4
8	Ammonia as NH ₃	GL/EN/SOP/057	BDL(DL:20.0)	µg/m ³	400
9	Benzene	GL/EN/SOP/08	BLQ(LOQ:4.0)	µg/m ³	-
10	Benzo (a)Pyrene (Particulate Phase)	GL/EN-INS/SOP/09	BLQ(LOQ:0.03)	ng/m ³	-
11	Arsenic as As	IS 5182 (Part 22):2004	BLQ(LOQ:2.0)	ng/m ³	-
12	Nickel as Ni	IS 5182 (Part 22):2004	BLQ(LOQ:2.0)	ng/m ³	-

Remarks : The above Sample complies as per NAAQS limit which is provided in the environmental protection Rule 3 (3B) Nov.2009, against the above tested parameter.

Note : BDL: Below Detection Limit, DL: Detection Limit / NAAQS: National Ambient Air Quality Standard
 BLQ-Below Limit of Quantification, LOQ-Limit of Quantification

End of Report

Authorized Signature

46/1, 1st Floor, Sri Jothi Complex, Murugesan Street, Balaramayagar Nagar, Arumbakkam, Chennai - 600105.

Terms and Conditions:

* The test results relate only to the items tested. * The test report shall not be reproduced in full or part without the written approval of NABL. * The test report will not be retained for more than 15 days from the date of issued test report except in the case as required by the regulatory regulations. * The Laboratory's responsibility under this report is limited to provide valid negligence and will in no case be more than the received amount. * A satisfactory test report in no way implies that the product or tested is approved by NABL. * Laboratory is not responsible for the authenticity of photocopied test reports. **WARNING:** Attention is drawn to the limitation of the liability, indemnification and jurisdictional issues established therein to any holder of this document is advised that information contained herein reflects the company's findings at the time of its intervention only and within the limits of client's instructions, if any. The company's sole responsibility is to its client and this document does not constitute parties to a transaction from exercising all their rights and obligations under the transaction document.



GLens Innovation Labs Pvt Ltd.

NABL ACCREDITED AS PER ISO/IEC 17025 : 2017, CERTIFIED AS PER ISO 9001:2015 & ISO 45001 : 2018



TEST REPORT

ULR No : TC858222060003314F

Report No : EN22070009-17 Report Date : 12 July 2022

SAMPLE T RAWN BY LABORATORY

Customer Name : M/S. Dalmia Cements (Bt. arat) Ltd
Customer Address : SF-630 Thamarakulam Village, Ariyalur, Tamilnadu-621705

Sample Description : Stack Emission
Sample No : EN22070009-17 Sampling Date : 28 June 2022
Sampling Location : Line 1 Kiln Stack Sample Received on : 04 July 2022
Sample Condition : Fit for Analysis Test Started on : 04 July 2022
Sampling Procedure : GL/EN/SOP/111 Test Completed on : 12 July 2022

Test result:

S.No	Test Name	Test Method	Results	Units	Limit as per CPCB Standard
1	Stack Temperature	IS 11255 (Part -3):2008	360	K	-
2	Velocity	EPA Method 1-3	14.30	m/sec	-
3	Volume of Gas Discharge	IS 11255 (Part -3):2008	667866	Nm ³ /hr	-
4	Oxygen as O ₂	GL/EN/SOP/149	12.60	%	-
5	Carbon Monoxide as CO	GL/EN/SOP/149	51	mg/Nm ³	-
6	Carbon Dioxide as CO ₂	GL/EN/SOP/149	7.60	%	-
7	Particulate Matter	GL/EN/SOP/113	16.70	mg/Nm ³	30
8	Sulphur Dioxide as SO ₂ *	EPA Method 6	07	mg/Nm ³	100
9	Oxides Of Nitrogen as NOx *	GL/EN/SOP/149	593	mg/Nm ³	800

Note: * Results at 10% Oxygen level

.....End of Report.....

Authorized Signature

85/1, 1st Floor, Sri Lathi Complex, Marudasan Street, Balakrishnan Nagar, Arumbakkam, Chennai - 600106.

Terms and Conditions:

* The Test Results Relate only to the Items tested. * The Test Report shall not be reproduced in full or part without the written approval of GLens. * The Test Report will not be retained for more than 25 days from the date of issue of test report except in the case as required by the application regulations. * The Laboratory's responsibility under this report is limited to proven careful negligence and will in no case be more than the agreed second. * A satisfactory test report in no way implies that the product as tested is approved by GLens. * Laboratory is not responsible for the authenticity of photocopied test reports. **Warning:** Attention is drawn to the fact that the findings of the Laboratory, Instrumentation and personnel are established there in any form of their document is advised that information contained herein reflect the company's findings at the time of its intervention only and within the limits of client's instructions, if any. The company's sole responsibility is to its client and this document does not constitute parties to a transaction from exercising all their rights and obligations under the transaction document.



TEST REPORT

ULR No : TC85E222000003312F

Report No : EN22070009-18

Report Date : 12 July 2022

SAMPLE DRAWN BY LABORATORY

Customer Name : M/S. Dalmia Cements (Bharat) Ltd

Customer Address : SF-630 Thamarakulam Village, Ariyahur, Tamilnadu-621705

Sample Description : Stack Emission

Sample No : EN22070009-18

Sampling Date : 28 June 2022

Sample Identification : Cement MILL-PPC-DIP

Sample Received on : 04 July 2022

Sample Condition : Fit for Analysis

Test Started on : 04 July 2022

Sampling Procedure : GL/EN/SOP/111

Test Completed on : 12 July 2022

Test result

S.No	Test Name	Test Method	Results	Units	Limit as per CPCB Standard
1	Stack Temperature	IS 11255 (Part - 3):2008	365	K	-
2	Velocity	EPA Method 1-3	13.03	m/sec	-
3	Volume of Gas Discharge	IS 11255 (Part - 3):2008	233682	Nm ³ /hr	-
4	Oxygen as O ₂	GL/EN/SOP/149	20.8	%	-
5	Carbon Monoxide as CO	GL/EN/SOP/149	BDL(DL:1.14)	mg/m ³	-
6	Carbon Dioxide as CO ₂	GL/EN/SOP/145	0.2	%	-
7	Particulate Matter	GL/EN/SOP/113	16.80	mg/Nm ³	30
8	Sulphur Dioxide as SO ₂	EPA Method 6	BDL(DL:3.0)	mg/m ³	-
9	Oxides Of Nitrogen as NO ₂	GL/EN/SOP/149	BDL(DL:2.0)	mg/m ³	-

Note: BDL-Below Detection Limit, DL- Detection Limit

.....End of Report
Page 1 of 1

Authorized Signature

40/1st Floor, Sri Jothi Complex, Murugesan Street, Balasubramanyam Nagar, Arambakkam, Chennai - 600106.

Terms and Conditions:

* The Test Results Relate only to the items tested. * The Test Report shall not be reproduced in full or part without the written approval of GIL. * The test items will not be returned for more than 15 days from the date of issue of test report except in the case as required by the application regulatory. * The Laboratory's Responsibility under this report is limited to proven valid negligence and will in no case be more than the invoiced amount. * A satisfactory test result in no way implies that the product or service is approved by GIL. * Laboratory is not responsible for the authenticity of photographs of test samples. * **WARNING:** Attention is drawn to the limitations of the Liability, indemnification and consequential losses established there in any holder of this document is advised that information contained herein reflects the company's findings at the time of its intervention only and within the limits of client's instructions. If any. The company's sole responsibility is to its client and this document does not constitute part of a transaction from exercising all their rights and obligations under the transaction document.



TEST REPORT

ULR No : TC858222000003316F

Report No : EN22070019-19 Report Date : 12 July 2022

SAMPLE DRAWN BY LABORATORY

Customer Name : M/S. Dalmia Cements (Bharat) Ltd
Customer Address : SF-630 Thamarakulam Village Ariyalur, Tamilnadu-621705
Sample Description : Stack Emission
Sample No : EN22070009-19 Sampling Date : 29 June 2022
Sample Identification : Cooler Sample Received on : 04 July 2022
Sample Condition : Fit for Analysis Test Started on : 04 July 2022
Sampling Procedure : GL/EN/SOP/111 Test Completed on : 12 July 2022

Test result

S.No	Test Name	Test Method	Results	Units	Limit as per CPCB Standard
1	Stack Temperature	S 11255 (Part -3):2003	579	K	-
2	Velocity	EPA Method 1-3	14.45	m/sec	-
3	Volume of Gas Discharge	IS 11255 (Part -3):2005	254617	Nm ³ /hr	-
4	Oxygen as O ₂	GL/EN/SOP/149	20.80	%	-
5	Carbon Monoxide as CO	GL/EN/SOP/149	BDL(DL:1.14)	mg/m ³	-
6	Carbon Dioxide as CO ₂	GL/EN/SOP/149	0.2	%	-
7	Particulate Matter	GL/EN/SOP/113	20.00	mg/Nm ³	30
8	Sulphur Dioxide as SO ₂	EPA Method C	BDL(DL:1.3)	mg/m ³	-
9	Oxides Of Nitrogen as NO ₂	GL/EN/SOP/149	BDL(DL:2.0)	mg/m ³	-

Note: BDL-Below Detection Limit, DL - Detection Limit

End of Report
Page 1 of 1

Authorized Signature

86/L, 1st Floor, Sri Jothi Complex, Murugesan Street, Balavanmayagar Nagar, Annambakkam, Chennai - 600106.

Terms and Conditions

"The Test Results Relate only to the Items tested." The Test Report shall not be reproduced in full or part without the written approval of BDL. "The Test Report will not be retained for more than 15 days from the date of issue of test report except in the case as required by the application regulations. "The Laboratory's Responsibility under this report is limited to proven value negligency and will in no case be more than the invoice amount. "A satisfactory test report is no way implies that the product is tested as approved by brand. "Laboratory is not responsible for the authenticity of photographs test report. "WARNING: Attention is drawn to the limitations of the Liability, indemnification and jurisdictional issues established there in any holder of this document is advised that information contained herein reflects the company's findings at the time of its intervention only and within the limits of client's instructions, if any. The company's sole responsibility is to its client and this document does not exonerate parties from exercising all their rights and obligations under the transaction document.

TEST REPORT

ULR No : TC858222000003311F

Report No : EN22070009-20

Report Date : 12 July 2022

SAMPLE DRAWN BY LABORATORY

Customer Name : M/S. Dalmia Cements (Bharat) Ltd

Customer Address : SF-630 Thamaraikulam Village, Ariyatur, Tamilnadu-621705

Sample Description : Stack Emission

Sample No : EN2Z070009-20

Sampling Date : 29 June 2022

Sample Identification : Coal Mill

Sample Received on : 04 July 2022

Sample Condition : Fit for Analysis

Test Started on : 04 July 2022

Sampling Procedure : GL/EN/SOP/111

Test Completed on : 12 July 2022

Test result

S.No	Test Name	Test Method	Results	Units	Limit as per CPCB Standard
1	Stack Temperature	IS 11255 (Part-3):2008	347	K	-
2	Velocity	EPA Method 1-3	10.40	m/sec	-
3	Volume of Gas Discharge	IS 11255 (Part -3):2008	99964	Nm ³ /hr	-
4	Oxygen as O ₂	GL/EN/SOP/149	10.90	%	-
5	Carbon Monoxide as CO	GL/EN/SOP/149	54	mg/Nm ³	-
6	Carbon Dioxide as CO ₂	GL/EN/SOP/149	9.20	%	-
7	Particulate Matter	GL/EN/SOP/113	28.50	mg/Nm ³	30
8	Sulphur Dioxide as SO ₂	EPA Method 6	BDL(DL:3.0)	mg/m ³	-
9	Oxides Of Nitrogen as NO ₂	GL/EN/SOP/149	544	mg/Nm ³	-

Note: BDL-Below Detection Limit, DL- Detection Limit

.....End of Report.....

Page 1 of 1

Authorized Signature

86/1, 1st Floor, 3rd Lane, Campbell, Maragesan Street, Rajawathy Nagar, Annambakkam, Chennai - 600106.

Terms and Conditions

The Test Report shall be made only by the tester tested. The Test Report shall not be reproduced in full or part without the written consent of EMI. The Test Report shall not be released for more than 15 days from the date of receipt of Test Report except in the case as required by the application regulations. The Test Report's Responsibility under this report is limited to protect against negligence and will in no case be more than the licensed amount. The Test Report is not a warranty in any way implies that the product is tested is covered by EMI. EMI is not responsible for the accuracy of information that appears. EMI's attention is drawn to the limitations of the testing, interpretation and presentation of the information and the responsibility of the user to ensure that the information is used in the manner intended. The Test Report is the property of EMI and shall be returned to EMI at the time of the interpretation only and within the limits of EMI's instructions. If any, The company's sole responsibility is to its client and this document does not constitute either a transaction from accepting all their rights and obligations under the transaction document.



TEST REPORT

ULR No : TC358222000003317F

Report No : EN22070009-21

Report Date : 12 July 2022

SAMPLE DRAWN BY LABORATORY

Customer Name : M/S. Dalmia Cements (Bharat) Ltd

Customer Address : SF-630 Thamarakulam Village, Ariyair, Tamilnadu-621705

Sample Description : Stack Emission

Sample No : EN22070009-21

Sampling Date : 29 June 2022

Sample Identification : Packer-1

Sample Received on : 04 July 2022

Sample Condition : Fit for Analysis

Test Started on : 04 July 2022

Sampling Procedure : GL/EN/SOP/111

Test Completed on : 12 July 2022

Test result

S.No	Test Name	Test Method	Results	Units	Limit as per CPCB Standard
1	Stack Temperature	IS 11255 (Part-3):2008	305	K	-
2	Velocity	EPA Method 1-3	18.30	m/sec	-
3	Volume of Gas Discharge	IS 11255 (Part-3):2008	50030	Nm ³ /hr	-
4	Oxygen as O ₂	GL/EN/SOP/149	20.80	%	-
5	Carbon Monoxide as CO	GL/EN/SOP/149	BDL(DL:1.14)	mg/m ³	-
6	Carbon Dioxide as CO ₂	GL/EN/SOP/149	0.1	%	-
7	Particulate Matter	GL/EN/SOP/143	6.90	mg/Nm ³	30
8	Sulphur Dioxide as SO ₂	EPA Method 6	BDL(DL:3.0)	mg/m ³	-
9	Oxides Of Nitrogen as NO ₂	GL/EN/SOP/149	BDL(DL:2.0)	mg/m ³	-

Note: BDL-Below Detection Limit, DL- Detection Limit

End of Report

Page 1 of 1

Authorized Signature

46/1, 1st Floor, Adithi Complex, Marudhan Street, Balasubramanian Nagar, Arumbakkam, Chennai - 600106.

Terms and Conditions:

1. The Test Results Relate only to the data tested. 2. The Test Report shall not be reissued in full or part without the written approval of NABL. 3. The test items will not be returned for more than 15 days from the date of report of test result except in the case as indicated by the application regulations. 4. The Laboratory's Responsibility under this report is limited to provide with diligence and will in no case be more than the tested amount. 5. A satisfactory test report is being issued that the product is found to be approved by NABL. 6. Laboratory is not responsible for the authenticity of documents and reports. 7. Laboratory's Responsibility is limited to the test results only and within the limits of client's instructions. 8. The company's sole responsibility is to its client and this document does not constitute a contract for a transportation from shipping all their items and obligation under the transportation regulations.



TEST REPORT

ULR No : TC658222000003319F

Report No : EN22070009-22 Report Date : 12 July 2022

SAMPLE DRAWN BY LABOKATORY

Customer Name : M/S. Dalmia Cements (Bharat) Ltd
 Customer Address : SF-630 Thamaraikulam Village, Ariyalur, Tamilnadu-621705
 Sample Description : Stack Emission
 Sample No : EN22070009-22 Sampling Date : 29 June 2022
 Sample Identification : Packer-2 Sample Received on : 04 July 2022
 Sample Condition : Fit for Analysis Test Started on : 04 July 2022
 Sampling Procedure : GL/EN/SOP/111 Test Completed on : 12 July 2022

Test result

S.No	Test Name	Test Method	Results	Units	Limit as per CPCB Standard
1	Stack Temperature	IS 11255 (Part -3):2002	31.3	K	-
2	Velocity	EPA Method 1-3	16.40	m/sec	-
3	Volume of Gas Discharge	IS 11255 (Part -3):2002	43446	Nm ³ /hr	-
4	Oxygen as O ₂	GL/EN/SOP/149	20.80	%	-
5	Carbon Monoxide as CO	GL/EN/SOP/149	BDL(DL:1.14)	mg/m ³	-
6	Carbon Dioxide as CO ₂	GL/EN/SOP/149	0.1	%	-
7	Particulate Matter	GL/EN/SOP/113	9.80	mg/Nm ³	30
8	Sulphur Dioxide as SO ₂	EPA Method 6	BDL(DL:3.0)	mg/m ³	-
9	Oxides Of Nitrogen as NO ₂	GL/EN/SOP/149	BDL(DL:2.0)	mg/m ³	-

Note: BDL-Below Detection Limit, DL- Detection Limit

.....End of Report.....
 Page 1 of 1

Authorized Signature

86/1, 1st Floor, Sri Jothi Complex, Murugesan Street, Palayamkottai Nagar, Arumbakkam, Chennai - 600106.

Term and Conditions

* The Test Results relate only to the items tested. * The Test Report shall not be reproduced in full or part without the written approval of GLens. * The Test Report will not be returned for more than 30 days from the date of issue of Test Report except in the case as required by the application regulations. * The Laboratory's responsibility under this report is limited to origin with negligence and will in no case be more than the localized amount. * A satisfactory test report in no way implies that the product or service is approved by GLens. * Laboratory is not responsible for the authenticity of photocopied test reports. * Attention is drawn to the limitations of the Liability, indemnification and jurisdictional issues established there in any holder of their document is advised that information contained herein reflect the company's findings at the time of its intervention only and within the limits of client's instructions, if any. The company's sole responsibility is to its client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document.



TEST REPORT

UIR No : TC358222000003318F

Report No : EN22070009-23 Report Date : 12 July 2022

SAMPLE DRAWN BY LABORATORY

Customer Name : M/S. Dalmia Cements (Bharat) Ltd

Customer Address : SF-630 Thamarakulam Village, Ariyalur, Tamilnadu-621705

Sample Description : Stack Emission

Sample No : EN22070009-23 Sampling Date : 29 June 2022

Sample Identification : Packer 3 Sample Received on : 04 July 2022

Sample Condition : Fit for Analysis Test Started on : 04 July 2022

Sampling Procedure : GL/EN/SOP/111 Test Completed on : 12 July 2022

Test result

S.No	Test Name	Test Method	Results	Units	Limit as per CPCB Standard
1	Stack Temperature	IS 11255 (Part -3):2008	303	K	-
2	Velocity	EPA Method 1-3	19.40	m/sec	-
3	Volume of Gas Discharge	IS 11255 (Part -3):2008	53870	Nm ³ /hr	-
4	Oxygen as O ₂	GL/EN/SOP/149	20.80	%	-
5	Carbon Monoxide as CO	GL/EN/SOP/149	BDL(DL:1.14)	mg/m ³	-
6	Carbon Dioxide as CO ₂	GL/EN/SOP/149	0.1	%	-
7	Particulate Matter	GL/EN/SOP/113	6.40	mg/Nm ³	30
8	Sulphur Dioxide as SO ₂	EPA Method 6	BDL(DL:3.0)	mg/m ³	-
9	Oxides Of Nitrogen as NO ₂	GL/EN/SOP/119	BDL(DL:2.0)	mg/m ³	-

Note: BDL- Below Detection Limit, DL- Detection Limit

..... End of Report.....
Page 1 of 1

Authorized Signature

96/3 Jst Floor, Sri Jothi Complex, Murugesan Street, Balasubramanyam Nagar, Arumbakkam, Chennai - 600106.

Terms and Conditions:

* The Test Results relate only to the items tested. * The Test Report shall not be reproduced in full or part without the written approval of GIL. * The test items will not be retained for more than 15 days from the date of issue of test report except in the case as implied by the application regulations. * The Laboratory's responsibility under this report is limited to the scope and shall in no case be more than the fee charged amount. * A satisfactory test report in no way implies that the product as tested is approved by GIL. * Laboratory is not responsible for the authenticity of photographs and signatures. * Attention is drawn to the limitations of the liability, indemnification and jurisdictional issues established there in any holder of this document is advised that information contained herein reflects the company's findings at the time of its intervention only and within the limits of client's instructions, if any. The company's sole responsibility is to its client and this document does not associate parties to a transaction from exercising all their rights and obligations under the transaction document.



TEST REPORT

ULR No : TC858222000003322F to 3329F

Report No : EN22070009-27 to 34

Report Date : 12 July 2022

SAMPLE DRAWN BY LABORATORY

Customer Name : M/S. Dalmia Cements (Bharat) Ltd

Customer Address : SF-630 Thamarakulam Village, Ariyalur, Tamilnadu-621705

Sample Description : Fugitive Emission

Sampling Date : 28 June 2022

Sample No : EN22070009-27 to 34

Sample Received on : 04 July 2022

Sample Condition : Fit for Analysis

Test Started on : 04 July 2022

Test Completed on : 12 July 2022

Test result

S.No	Sample Location	Test Name	Test Method	Results	Units
1	Green Fuel Shed	Respirable Suspended Particulate matter	NIOSH-0600	166.60	µg/m ³
2	Cooler	Respirable Suspended Particulate matter	NIOSH-0600	62.50	µg/m ³
3	Coal Tippler	Respirable Suspended Particulate matter	NIOSH-0600	41.60	µg/m ³
4	Packing Plant	Respirable Suspended Particulate matter	NIOSH-0600	145.80	µg/m ³
5	LS Crusher	Respirable Suspended Particulate matter	NIOSH-0600	104.10	µg/m ³
6	Coal Yard	Respirable Suspended Particulate matter	NIOSH-0600	125.0	µg/m ³
7	Coal Crusher	Respirable Suspended Particulate matter	NIOSH-0600	177.08	µg/m ³
8	CPP Boiler	Respirable Suspended Particulate matter	NIOSH-0600	129.10	µg/m ³

.....End of Report.....

Page 1 of 1

Authorized Signature

#6/1, 1st Floor, Sri Jothi Complex, Murugesan Street, Balakrishna Nagar, Arumbakkam, Chennai - 600106

Terms and Conditions:

¹ The Test Results Relates only to the items tested. The Test Report shall not be reproduced in full or part without the written approval of NABL. ² The test items will not be returned for more than 10 days from the date of issue of test report except in the case as required by the application regulations. ³ The Laboratory's responsibility under this report is limited to proven whilst negligible and will in no case be more than the invoiced amount. ⁴ A satisfactory test report in no way implies that the product as tested is approved by NABL. ⁵ Laboratory is not responsible for the authenticity of photocopied test reports.

WARNING: Attention is drawn to the limitations of the liability, indemnification and jurisdictional issues established there in any holder of this document is advised that information generated herein reflect the company's findings at the time of its intervention only and within the limits of client's instructions, if any. The company's sole responsibility is to its client and this document does not constitute parties to a transaction from exercising all their rights and obligations under the transaction document.

Annexure - 4

Green Belt



Plantation: 69,9909 Nos (40% Plant area)

96% Sustenance Rate

Individual Zone Owner Responsibility

**Plant in the Garden & not Garden in the
plant**

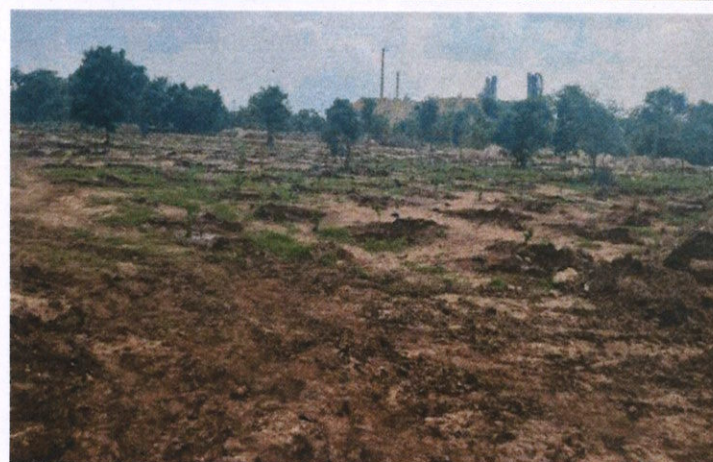
Good Biodiversity, 94 Acre

Development of Biodiversity Park

2500 plants covering 32 varieties planted in 6.5 acre land for attracting birds

26 varieties of bird species identified in plant premises

S.No	Particulars	Quantity (Nos)
1	Acerola-Barbados Cherry Fruit	100
2	Sweet Cherry Fruit	50
3	Singapore Cherry	150
4	Country Fig	100
5	Grafted Fig	100
6	Elanthai Fruit	100
7	Noni Fruit	75
8	Jack Fruit	25
9	Black Jamun	50
10	White Jamun	50
11	Water Apple	50
12	Sweet Star Fruit	40
13	Guava - Thaiwan Pink	100
14	Guava - L 49	100
15	Kodukapulli	200
16	Pomegranite Fruit	200
17	Mango-Himanupasandhu	50
18	Amla Small	50
19	Pomegranite Fruit	150
20	People Tree	50
21	Indian Almond Tree	75
22	Mahilam Tree	100
23	Arabian Date Palms	10
24	Bael Tree	50
25	Babul Tree	50
26	Arjuna Tree	50
27	Vagai Tree	50
28	Illuppai Tree	100
29	Vanni Tree	100
30	Perumarudhu Tree	50
31	Vilvam Tree	25
32	Champaka Tree	50
Total		2500



Annexure - 5



GOVERNMENT OF TAMIL NADU
WATER RESOURCES DEPARTMENT

From:

Er. S.Prabakaran, B.E.,
Chief Engineer, WRD,
State Ground & Surface Water
Resources Data Centre
Tharamani, Chennai 600 113.
Phone : 91-44-22542223 (Direct)
91-44-22541526/27(Board)
Email: cegwchennai@gmail.com
Web site: www.groundwaternpwd.org

To:

M/s. Dalmia Cement (Bharat) Ltd.,
SF.NO.630,Tmaraikulam Village,
Ariyalur Block & Taluk,
Ariyalur-621 705.

Lr.No.OT 8/AG-2/273/Renewal of NOC /Trichy/ 2022 dated: 25.04.2022.

Sir,


Sub: "Renewal of No Objection Certificate" for drawal of ground water to
M/s. Dalmia Cement (Bharat) Ltd., Govindapuram and Ottakovil
Village, Ariyalur Block, Ariyalur Taluk, Ariyalur District - 7th
Renewal of NOC - Reg.

Ref: 1.This Office Lr.No. OT8/AG-2/325/renewal of NOC/Trichy/2021
dt:16.08.2021
2.The firm Renewal of NOC application date: 18.01.2022
3.This Office Lr.No:29DD(G)/AG-VI/Renewal of
NOC/2022Dt:28.01.2022
4.SE.GWC,ThanjavurLr.No:81st/AG/T.F44C(TRY)/NOC/GWC/TNJ/2022
Dt:05.04.2022

Please find the enclosed "Renewal of No Objection Certificate", for drawal of
ground water to M/s. Dalmia Cement (Bharat) Ltd., Govindapuram and Ottakovil
Village, Ariyalur Block, Ariyalur Taluk, Ariyalur District. As per the G.O.(Ms).No
142 PW(R2)Department dt:23.07.2014, NOC should be renewed every year for the
water based industries. You are requested to strictly adhere to the quantity permitted
and conditions mentioned in the certificate and apply for renewal of NOC before two
months from the date of expiry i.e., 21.02.2023 without fail.

Enclosure:

1. Renewal of No Objection Certificate & Conditions


Chief Engineer (SG & SWRDC),
WRD, Tharamani, Chennai-113



Certificate No.273/2022 (R-7)

Dated: 25.04.2022

GOVERNMENT OF TAMIL NADU
WATER RESOURCES DEPARTMENT
STATE GROUND & SURFACE WATER RESOURCES DATA
CENTRE CHENNAI – 113
Renewal of No Objection Certificate

This is to certify that "M/s. Dalmia Cement (Bharat) Ltd", Govindapuram and Ottakovil Village, Ariyalur Block, Ariyalur Taluk, Ariyalur District, is falling under the "Safe Category" as on 2009 Categorisation, is hereby given the "Renewal of No Objection Certificate" for the drawal of total quantity of 16,20,000 LPD (Sixteen Lakh and Twenty Thousand Litres per day) of groundwater for the purpose of "Industry (Cement Industry)" from the Groundwater structure listed below with strict adherence of stipulated conditions.

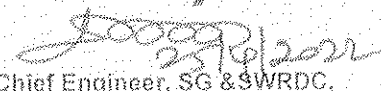
Sl. No	Referred Well / Bore Well & SF. No	Village/Block	Co-ordinates		Quantity Permitted for pumping in LPD
			Latitude	Longitude	
1.	TW1/630/1 2B	Govindapuram/Ariyalur	11° 10' 85" N	79° 06' 01" E	2,43,000
2.	TW2/640/0 5	Govindapuram/Ariyalur	11° 11' 05" N	79° 06' 08" E	2,43,000
3.	TW3/614/0 8B	Govindapuram/Ariyalur	11° 10' 59" N	79° 05' 96" E	3,73,500
4.	TW4/158/0 5	Ottakovil/Ariyalur	11° 11' 17" N	79° 06' 01" E	3,73,500
5.	TW5/162/1 1	Ottakovil /Ariyalur	11° 10' 23" N	79° 05' 19" E	3,87,000
Total					16,20,000

This renewal certificate is valid from 22.02.2022 to 21.02.2023 and the NOC is accorded under the conditions laid down over leaf.


Chief Engineer (SG & SWRDC),
WRD, Tharamani, Chennai-113

Conditions pertaining to M/s. Dalmia Cement (Bharat) Limited, Ariyalur District

- 1 This No Objection certificate issued for ground water extraction applies to the referred ground water abstraction structure only.
- 2 All the other ground water abstraction structures (dug wells/bore wells/dug-cum bore wells) other than the permitted one inside the plant area should not be considered for this permission.
- 3 Such structures as said in Condition No.2 should be closed or used only for Rain water harvesting purposes.
- 4 This Certificate is applicable for drawal of permitted Quantity of ground water only and not for transportation.
- 5 The Company should install necessary "flow meters" to the referred well /bore well and monitor the quantity which should not exceed the permitted level. Proper Records should be maintained continuously from the date of drawal. Monthly statement of daily drawal of water should be sent to the Executive Engineer, Groundwater Division, Trichy as per format enclosed.
- 6 As and when the officials of Ground Water Wing of PWD inspect the site/premises, perusal of drawal records and water quality observations should be allowed.
- 7 Rain water harvesting structure is to be established as per the direction of this department. Rain water harvesting structures already exist inside the plant premises, it should be maintained properly.
- 8 Violation of the above stipulations in any form may lead to cancellation of the permission accorded by the Government.
- 9 The Company should be ready to pay the levy/charges for drawal of ground water for commercial purposes, if Government / Ground Water Authority imposes any such orders in future.
- 10 As per the G.O.(Ms) No. 142 PW(R2)Department dt/23.07.2014, NOC should be renewed every year for the water based industries.
- 11 It is also informed that during the renewal of the NOC, depending upon the hydrogeological condition the category of the area and the site conditions, the quantity will be vary from permitted quantity.
- 12 The handed over Bore Well to this Department for Water Level monitoring purpose should be maintained properly.
- 13 This No Objection Certificate is applicable only for the purpose of "Cement Industry". If any deviation in the usage of ground water is found, the NOC accorded is automatically deemed to be cancelled.
- 14 The Executive Engineer, Ground Water Division of the respective District would inspect either the rain water harvesting structures established in the premises of the firm or the records maintained or even the drawal of ground water as and when needed and it is the mandatory of the firm to maintain the Rain water harvesting structure/ structures properly and show the records needed.
- 15 If any information / Documents submitted by this firm is found to false / in correct or any data provided by the firm is found to be incorrect, the NOC issued to the firm will be cancelled by this department without any prior notice.


Chief Engineer, SG & SWRDC,
WRD, Tharamani, Chennai-113.

Annexure - 6

Sustainability Oriented Priorities

**One Million
Livelihoods
by 2030**

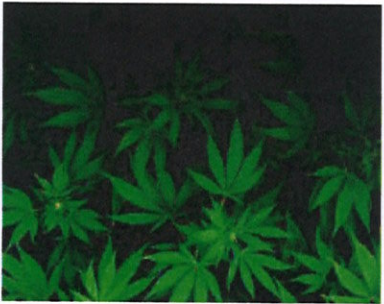
- Enroll maximum number of beneficiaries the mission journey through intense field interventions
- Best utilization of “Gram Parivartan” project team to reach out to optimal number of beneficiaries for livelihood creation
- Partnership with NABARD, RSETI, HP, Tamil Nadu Govt. Skills Dept, etc. for funding support
- Collaboration with KVK, Govt. Projects for technical and convergence support
- Working with Financial Institutions for Credit Support
- Trainings, farm demonstrations, Livestock best practices, creation of micro enterprises and job referrals



Sustainability Oriented Priorities

Farming and Agriculture

- To enroll optimal number of beneficiaries for **One Million Livelihoods** mission Journey - 2030
- To support plant achieve **20 times water positivity** well before 2025
- Extensive works to be carried out in the agriculture front aiming Water and Soil conservation inevitable for a sustainable livelihood



Demand Oriented Priorities

**Community
needs**

- **Drinking water** accessibility
 - Community RO Plants
 - Water tanks
 - Drinking water borewells
- **Infrastructure support** for sports, education and health sectors
 - Class room renovations, school sanitation, teaching aides
 - Support for PHC - Clinical equipments, hospital amenities
 - Play grounds, sports materials
- **Village Infrastructure**
 - Tower lights, street lights,
 - Roads, drainages, community sanitation
 - Ration shop building



Farmers meetings to address issues during cropping seasons

Dalmia
cement
FUTURE TODAY



Modern farming practices to farmers through road side meetings

Dalmia
cement
FUTURE TODAY



Village pond deepening activity at Tamaraikulam, Ariyalur District

Dalmia
cement
FUTURE TODAY



Livestock support camps



Livelihoods activities

Women trained in Fast Food preparation in collaboration with RSETI



Making women entrepreneurs through collaborative efforts



Annexure - 7

Santhamurthy

174330

1 & Grand Children

JUMBO CRATES



PALLETS



loading goods, unloading WOTIES..

Use Pallets, crates & pallet trucks, durable and a convenient way to transport products, your factory / warehouse / yard etc. Applications: Agriculture, Dairy, Fishery, etc.



Dall

High Quality Products

City Computers

Intel Core 2 Duo / 2 GHz Processor / 2GB RAM / 160GB HDD / 15.5" LCD / 1.5" Floppy Drive / 1.5" CD Drive / 1.5" DVD Drive / 1.5" Super Wide LCD / 1.5" Monitor / 1.5" Keyboard / 1.5" Mouse / 1.5" Joystick / 1.5" Joystick

PUBLIC NOTICE

The Ministry of Environment & Forests, New Delhi had accorded Environmental Clearance to the Proposed Project of 2.0 MTPA Clinker & 3.0 MTPA Cement and 27 MW Power Plant by M/S. Dalmina Cement (Bharat) Limited at Govindapuram Village of Ariyalur Taluk, Ariyalur District, Tamil Nadu.

The Copies of the clearance are available with Tamil Nadu Pollution Control Board and also in the website of Ministry of Environment & Forest at <http://envfor.nic.in>.

Management

The
Hade
01/04/14

၁။ ဂန္ထဝင် အကျဉ်းချုပ်
 ၂။ ဂန္ထဝင် အကျဉ်းချုပ်
 ၃။ ဂန္ထဝင် အကျဉ်းချုပ်
 ၄။ ဂန္ထဝင် အကျဉ်းချုပ်
 ၅။ ဂန္ထဝင် အကျဉ်းချုပ်
 ၆။ ဂန္ထဝင် အကျဉ်းချုပ်
 ၇။ ဂန္ထဝင် အကျဉ်းချုပ်
 ၈။ ဂန္ထဝင် အကျဉ်းချုပ်
 ၉။ ဂန္ထဝင် အကျဉ်းချုပ်
 ၁၀။ ဂန္ထဝင် အကျဉ်းချုပ်

[illegible]

bioassayed

Lịch sử phát triển

[illegible][illegible]

[Faint, illegible handwritten notes]

[illegible]

0102100

Annexure - 8

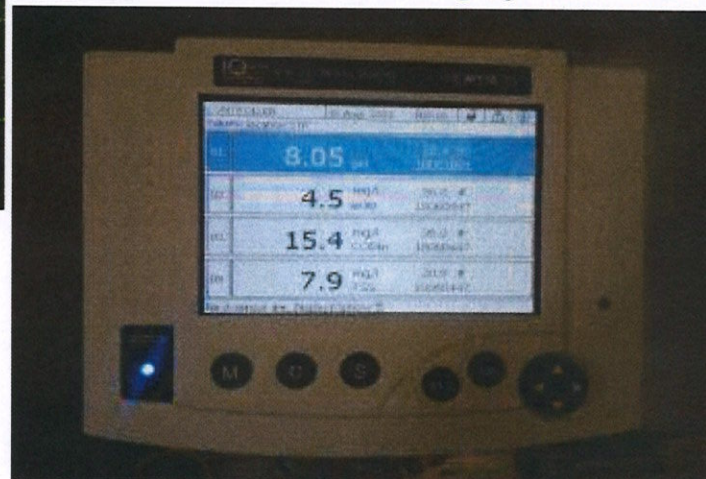
Online Monitoring System and real time display



Real Time display at Gate



Online Effluent monitoring system at ETP



Online Effluent monitoring system at STP



Online Emission Monitoring System

Annexure – 9

Awards & Accolades

Green Champion Award from Tamil Nadu Pollution Control Board



Awards & Accolades

Platinum Award for Environmental Excellence 2021 by Apex India Foundation



Dalmia
cement
FUTURE TODAY

Gold Award for CSR Excellence 2021 by Apex India Foundation



Awards & Accolades

**Platinum Award for Sustainability in Green Crest
Environment Management Awards - 2022 by
Green Maple Foundation.**

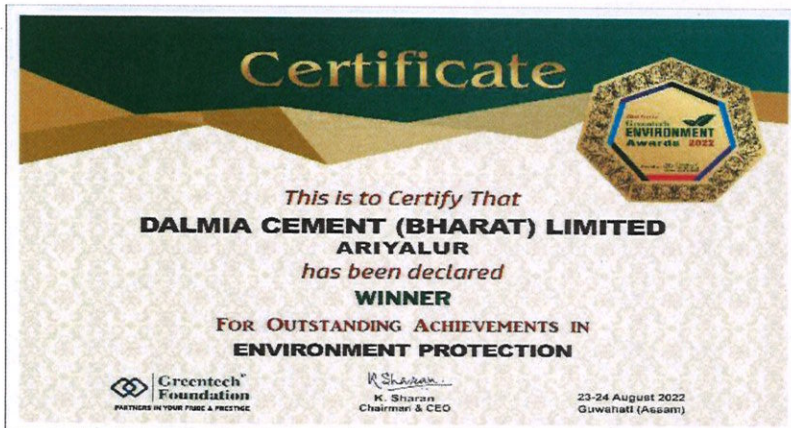


**Energy Leader award and Excellent in Energy
management award 2021 from CII for 11th
consecutive time**



Awards & Accolades

Winner in 22nd Greentech Environment Award
2022 organized by Greentech Foundation



Runner up in Best Zero Liquid Discharge CPP
during water Optimization Award 2022 by
Mission India Foundation



Awards & Accolades

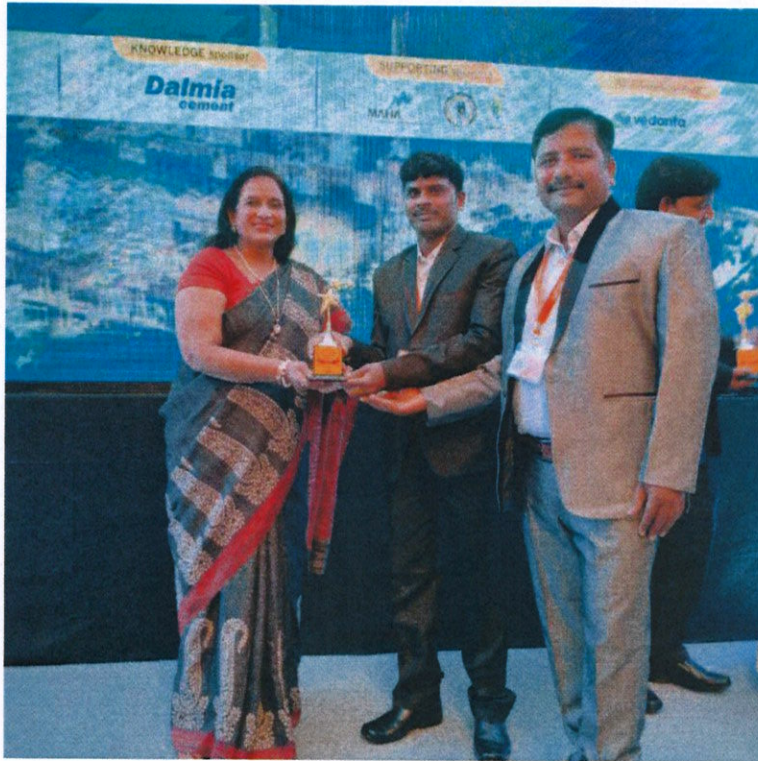
**Winner in Smart Factory of the year 2022 from
Manufacturing today**



**Runner up in Excellence in Human Resource 2022
(Large) from Manufacturing today**



Awards & Accolades



Fly Ash utilization Award Winner for Green Building Material - Cement, 2022

Awards & Accolades

**Platinum Award for Occupational Health & Safety
2022 by Apex India Foundation**



**Winner in Sustainability for Captive Power Plant
operations by Council of Enviro Excellence**



*This is to certify that
Dalmia Cement (Bharat) Limited - Ariyalur,
has participated and been awarded
"Winner" for CEE National Award for Excellence In Environ
Sustainability - 2022 in CPP - Lignite Category.*

*has been based on evaluation done by the panel of jury
for CEE National Award for Excellence In Environmental Sustainabi
held on 18th August 2022 on Next-Gen Virtual platform.*

ankaj Batra
ankaj Batra

V N Choudh
V N Choudha



Thank You