

Dalmia cement

FUTURE TODAY

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DCBL/MoEF/EC-HYC/2023-24/ 349

Date: 29.05.2024

To,

The Regional Director
Ministry of Environment, Forest & Climate Change
Regional Office (South Zone),
Kendriya Sadan, 4th Floor,
E & F wing, 17th Main Road,
II Block, Koramangala,
Bengaluru – 560034.

Dear Sir,

Sub: Submission of Six Monthly EC Compliance Report of integrated cement plant M/s. Dalmia Cement (Bharat) Limited for the duration of Oct 2023 to Mar 2024.

Ref: F.No.J-11011/119/2007 - IA II (M) Dated. 24th June 2008 & EC extension dated 11th August 2014.

Dear Sir,

With Reference to the above, we are here with attached Six Monthly Environment Clearance compliance reports of integrated cement plant M/s. Dalmia Cement (Bharat) Limited, Yadwad village, Mudalagi Taluk, Belgaum district, Karnataka, for the period of Oct 2023 to Mar 2024.

Kindly request to acknowledge the same.

Yours faithfully

For M/s. Dalmia Cement (Bharat) Limited


Authorised Signatory

- Cc:** 1. The Environmental Officer, Karnataka State Pollution Control Board, Plot No.6816/1/P-5, 5th cross, Harinagar, Chikkodi-591201.
2. The Member Secretary, Karnataka State Pollution Control Board, Parisara Bhavana, 1st to 5th Floor, #49, Chrch street, Bengaluru-560001.
3. Regional Officer, Central Pollution Control Board, Nisarga Bhavan, Thimmaiah Road, 7th D Main Rd, Shivanagar, Bengaluru, Karnataka - 560079.

Dalmia Cement (Bharat) Limited

RS No. 394, Yadwad (Village), Mudalagi (Taluk), Belagavi (District), Karnataka - 591136, India.

T 9606014495 / 96 / 97 / 98 W www.dalmiacement.com CIN : U65191TN1996PLC035963

Registered office : Dalimapuram, Dist. Tiruchirapalli - 621 651, Tamil Nadu, India.

A Dalima Bharat Group company, www.dalmiabharat.com

Half Yearly Compliance Report

On

Environmental Clearance



Dalmia Cement (Bharat) Limited

(An ISO 14001, 18001, 9001 and 50001 Certified Company)

Yadwad village ,
Mudalagi Taluk,
Belagavi District ,
Karnataka, - 591136

Production Capacity:

Cement: 4.0 MTPA,
Clinker: 2.6 MTPA and
Captive Power Plant: 40 MW

PROJECT PROFILE

1	Project type	Industry (I) - Cement and Captive Power Plant
2	Name of the project	Dalmia Cement (Bharat) Ltd. Cement Plant (4.0 MTPA), Clinker (2.60 MTPA), and Captive Power Plant (40MW)
3	Clearance letter No.& date	F. No. J-11011/119/2007-IA II(I), Dated: 24.06.2008.
4	Location: District & State / UT	RS No. 394, Yadwad Village, Mudalagi Taluk, Belagavi District, KARNATAKA – 591136
5	Address for correspondence:	M/s Dalmia Cement (Bharat) Limited, RS No. 394, Yadwad Village, Mudalagi Taluk, Belagavi District, KARNATAKA – 591136 Phone: +918334 4292271 Fax No: +91 40 - 30006955 Web: www.dalmiacement.com
6	Financial Details:	
a	Project cost as originally planned and subsequent revised estimates and the years of price reference	1500.00 Crores
b	Allocations made for environmental management plans, with item breakup	<p>Approximate Cost (INR):</p> <ol style="list-style-type: none"> Online Continuous Ambient Air Quality Monitoring Machine: Rs. 35,25,815 Online Continuous Emission Monitoring System: Rs. 26,38,498 Installation of Air pollution control equipment like Bag filters, Bag House and ESP: Rs. 3,24,62,546 Installation of closed conveyor system: Rs. 5,18,51,062 Construction of closed sheds for Raw material storage: Rs. 37,49,90,000 Construction of Internal Roads: Rs. 7,00,00,000 Green belt development: Rs. 1,20,00,000 Environmental Monitoring: Rs. 44,00,000 Construction of Rain Water Harvesting Lake: Rs. 65,40,000 Construction of Rain Water Harvesting Pond: Rs. 26,32,000 <p>Total Cost: Rs. 56,10,39,921</p>
c	Total expenditure on the Project so far	1600.00 Crores

d	Planned and Actual expenditure incurred on the environmental management plans so far	<ul style="list-style-type: none"> ❖ Planned expenditure on Environmental management system:31.05 Cr ❖ Actual expenditure on Environmental management system:56.10 Cr
7.	Status of construction:	Completed
a.	Date of commencement	1 st October 2012
b.	Date of completion (actual and/or planned)	25 th March 2015 – Cement Production
a.	Date of site visit of Director-MOEF&CC/CPCB Officials	MoEFCC official visit: 13.12.2023 for certified EC compliance

S.No	Conditions	Compliance Status
A.	Specific Conditions	
i.	<p>Continuous stack monitoring facilities to monitor gaseous emissions from all the stacks shall be provided and limit of particulate matters shall be controlled within 50 mg/Nm³ by installing adequate air pollution control system. Electrostatic precipitator (ESP) to clinker cooler and captive power plant, bag house to raw mill / kiln and cement mill shall be provided to control air emissions within 50 mg/Nm³ and reports submitted to the Ministry's Regional Office at Bangalore, Central Pollution Control Board (CPCB) and Karnataka Pollution Control Board (KPCB).</p>	<p>Complied</p> <ul style="list-style-type: none"> • Online Continuous Emission monitoring systems (OCEMS) for gaseous emissions from all the stacks at Cement plant & CPP are provided and connected to CPCB Server. • The Copy of CEMS report is attached as Annexure 1 • High Efficiency of Electrostatic Precipitators has been installed for clinker cooler and Captive Power Plant, Bag house has been provided mill to maintain the emission well with in stipulated limit. • Copy of statistical analysis of third-party monitoring reports is attached as Annexure 2.
ii.	<p>Secondary fugitive emissions shall be controlled within the prescribed limits and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard shall be followed.</p> <p>Bag filters with ventilation system shall be provided to coal mill, all the raw material handling areas, clinker, cement & fly ash silos, clinker hoppers etc. to control fugitive emissions from the material handling areas.</p> <p>Closed clinker stockpile system shall be adopted and bag filters shall be provided to clinker hoppers.</p> <p>Water sprinkling arrangements shall be made in the material stockyards and cement bags loading areas.</p> <p>To eliminate fugitive emissions, transportation of the ash to the cement plant shall be in closed containers and pneumatic transfer of the ash into ash silos in cement plant.</p>	<p>Complied</p> <ul style="list-style-type: none"> • Bag Filters have been installed in all emission sources. • Bag house for Coal Mill, Raw mill and ESP for clinker cooler have been installed • Closed clinker stockpile system implemented with Bag filter. • Water sprinkling arrangements made as per the conditions. • Fugitive emissions controlled by dust suppression system through water tankers. • In addition to this, to eliminate fugitive emissions, transportation of the ash to the cement plant is being carried out through encapsulated fly ash Bulker only and the ash transfer to ash silos are being carried out pneumatically. • All conveyors are covered. • The Fugitive emissions are within the CPCB standards • Third party monitoring report of Fugitive emissions is enclosed as Annexure 3

<p>iii.</p>	<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>Wagon and truck tippers for unloading and transportation shall be covered with tarpaulin. Internal roads shall be asphalted and sprinkled with water regularly.</p>	<p>Complied</p> <p>Following efforts have been made to reduce the impact of transportation on surrounding environment including agricultural land:</p> <ul style="list-style-type: none"> • The transportation of the raw materials and products through covered vehicles and overloading of materials not allowed. • All the trucks are parked at concreted parking area. • Fully covered conveyor system implemented for transportation of crushed limestone, coal and gypsum within the cement plant. • Covered Raw material, Additive and coal storage yard provided to prevent airborne fugitive dust emission in the surrounding environment. • Covered tarpaulin system implemented at truck tippers for unloading. • Internal roads are made of RCC. • Water tankers are deployed for sprinkling of water at regular intervals on the internal concrete roads, parking area and unloading areas. • Sweeping machines are deployed for regular sweeping of road, parking area and loading area. • Plantations done all along the roads.
<p>iv.</p>	<p>As proposed, total water requirement from Ghataprabha River shall not exceed 3,100 m³/day. No water shall be drawn from Dodahalla nallah. Captive Power Plant shall be provided with air-cooled condensers to reduce the water intake. The process effluent from captive power plant (CPP) shall be treated in effluent treatment plant (ETP) and treated waste water shall be recycled and reused in the cement manufacturing process 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.</p>	<p>As mentioned in EC that total water requirement is 3100 m³/day.</p> <p>Due to design constraint of equipment and low production of plant, existing water usage is 1490 m³/day and remaining water requirement will be Considered after expansion of Plant.</p> <p>Pipeline implementation could not be completed due to geological and topological difficulties.</p> <p>Meanwhile, to meet plant's water requirement, DCBL developed 3 rainwater harvesting pits (Manas Sarovar, Pushkar and Rain water Harvesting Pit). Collected Rain water alone is not sufficient to meet the plant water demand and hence NOC obtained from Karnataka Ground Water Authority for withdrawal of ground water vide letter no. DE0011198953705 dated</p>

		<p>11.01.2022. The information of withdrawal of GW has been informed to MoEF&CC regarding the same vide letter dated 04.01.2013.</p> <ul style="list-style-type: none"> • Captive Power Plant has been provided with air-cooled condensers to reduce the water consumption. • The effluent from captive power plant (CPP) is being treated in ETP and treated wastewater is recycled back to the plant for secondary usage. • No process waste water is discharged outside the factory premises and hence ZLD is adopted.
v.	<p>'Permission' for the drawl of 3,100 m³/day from River Ghataprabha shall be obtained from concerned Department. Captive Power Plant shall be provided with air-cooled condensers to reduce the water intake.</p>	<p>As mentioned in EC that total water requirement is 3100 m³/day.</p> <p>Due to design constraint of equipment and low production of plant, existing water usage is 1490 m³/day and remaining water requirement will be Considered after expansion of Plant.</p> <p>Pipeline implementation could not be completed due to geological and topological difficulties.</p> <p>Meanwhile, to meet plant's water requirement, DCBL developed 3 rainwater harvesting pits (Manas Sarovar, Pushkar and Rain water Harvesting Pit). Collected Rain water alone is not sufficient to meet the plant water demand and hence NOC obtained from Karnataka Ground Water Authority for withdrawal of ground water vide letter no. DE0011198953705 dated 11.01.2022. The information of withdrawal of GW has been informed to MoEF&CC regarding the same vide letter dated 04.01.2013.</p> <p>But, now, company is proposing expansion in Existing Cement Plant for which additional water will be required. It is proposed to use water from Ghattaprabha River in addition to ground water and rain water harvesting. Accordingly, renewal of permission for withdrawal of 3148 KLD water from Ghataprabha river has been Obtained <i>vide</i> order no. WRD/18/NIN/2022, Valid till 05.02.2024 and applied for its renewal.</p> <ul style="list-style-type: none"> • The Captive power plant is provided with air-cooled condensers to minimize the water intake.

vi	All the fly ash shall be utilized as per Fly ash Notification, 1999 subsequently as amended in 2003.	<p>Complied</p> <ul style="list-style-type: none"> During Oct 2023 to Mar 2024 our CPP was not in operation. Fly ash generated from our CPP in past has been utilized in cement manufacturing Process.
vii	Efforts shall be made to use fly ash generated from the power plant maximum in making Pozzolana Portland Cement (PPC). Bed ash shall be collected in ash cooler hoppers and then conveyed to a bed ash storage silo for further use as boiler bed material.	<p>Complied</p> <ul style="list-style-type: none"> During Oct 2023 to Mar 2024 our CPP was not in operation. Fly ash generated from our CPP in past has been utilized in cement manufacturing Process and Bed ash collected in bed ash storage silo for further use as boiler bed material.
viii	All the dust collected from pollution control devices shall be recycled and reused in the process and used for cement manufacturing. Refractory bricks having high recycling values shall be sold to outside agencies or disposed off in environment-friendly manner. Domestic solid waste i.e. sludge shall be composted and used as organic manure for the green belt development within the plant and colony area. Used oil and scrapped auto mobile batteries shall be sold to authorized recyclers/ re-processors only.	<p>Complied</p> <ul style="list-style-type: none"> All the Dust collected from pollution control equipment's are being reused in the process and for cement manufacturing. Refractory bricks are being sold out to outside agencies and while disposing all environment protection measures have been taken to avoid any pollution. Domestic solid waste is converted into organic manure for green belt development. Waste oil are being stored separately in covered leak proof containers on concrete floor and are co-processed in kiln. Used Oil along with grease has been stored scientifically and disposed off to PCB approved vendors. Used batteries are being disposed to authorized recyclers / re-processors or buyback through registered vendor only.
ix	An effort shall be made to use of high calorific hazardous waste viz. municipal solid waste, solvents, spent oil, agro waste, sludge from DG sets and used tyres etc. in the cement kiln and necessary provision shall be made accordingly.	<ul style="list-style-type: none"> The high calorific hazardous wastes are being used in kiln as fuel based on availability and feasibility. We have authorization from KSPCB for co-processing of hazardous and other waste in kiln. Efforts are being made to explore the possibility of increasing the usage of Hazardous and other Waste.
x.	Efforts shall be made to use low grade lime, more fly ash and solid waste in the cement manufacturing.	<p>Complied</p> <ul style="list-style-type: none"> Fly ash is being used in the manufacturing process of cement. Efforts are being made as a continuous process to utilize low

		grade limestone to the optimum level.
xi	As proposed in EIA/EMP, out of total 120 ha., green belt shall be developed in 40 ha (33 %) in and around the plant as per the CPCB guidelines to mitigate the effects of air emissions in consultation with local DFO.	<p>Complied</p> <ul style="list-style-type: none"> • Since Commencement of project work, massive plantation program is undertaken. • Nurturing and watering of the plantation made is being carried out on continuous basis to sustain the survival rate of the green belt Photographs are attached as Annexure -4
xii.	Prior environmental clearance from the Ministry of Environment & Forests for the Captive (Yadwad) limestone mine shall be obtained.	<p>Complied</p> <p>Obtained EC from Ministry of Environment & Forest F.No.J-11015/36/2009- IA.II (M), Dated 13th March 2015.</p>
xii.	All recommendations made in the Corporate Responsibility for Environment Protection (CREP) for cement plants shall be implemented.	<p>Complied</p> <p>All recommendations made by CREP for Cement Plants are implemented.</p>
B	GENERAL CONDITIONS	
i.	The project authority shall adhere to the stipulations made by Karnataka Pollution Control Board (KPCB) and State Government.	<p>Complied</p> <p>All the conditions stipulated by KSPCB in CFO and subsequent directions as well as conditions laid by State Government shall be adhered.</p>
ii.	No further expansion or modification of the plant shall be carried out without prior approval of this Ministry	<p>Complied</p> <p>No modification carried out since commissioning. Any modification or expansion shall be carried out with prior approval from the Ministry.</p>
iii.	The gaseous and particulate matter emissions from various units shall conform to the standards prescribed by the Karnataka Pollution Control Board. At no time, the particulate emissions from the cement plant shall exceed KPCB 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	<p>Complied</p> <ul style="list-style-type: none"> • Interlocking facility had been provided to pollution Control Equipment's so that in the event of the pollution control equipment not working properly the respective unit(s) will shut down automatically. • Report on stack emissions confirming to KSPCB standards is attached as Annexure 1 & 2
iv.	One ambient air quality monitoring station shall be installed in downwind 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	<p>Complied</p> <ul style="list-style-type: none"> • One online Ambient Air Quality monitoring station installed in the downwind direction. Copy of Online AAQM data (day Average) is attached as Annexure 5 • Online Continuous Stack Emission

	and stack emissions shall be carried out regularly in consultation with KSPCB and report submitted to the KPCB quarterly and to the Ministry's Regional Office at Bangalore half-yearly	<p>Monitoring System (OCEMS) is also installed in all the stacks. The data is being uploaded in CPCB server continuously.</p> <ul style="list-style-type: none"> All the emission levels were maintained within standards stipulated by the PCB. A NABL accredited third-party agency is deployed for monitoring of Air, Water, soil, Noise and monitoring on fixed intervals. Copy of statistical analysis of third-party monitoring reports of Ambient Air Quality, Stack emission and Online Ambient Air quality data are enclosed as Annexure 6 Half-yearly reports are being submitted to Ministry's Regional Office at Bangalore.
v.	The company shall install adequate dust collection and extraction system to control fugitive dust emissions at various transfer points, raw mill handling (unloading, conveying, transporting, stacking), vehicular movement, bagging and packing 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 conveyors for transportation of materials shall be provided besides coal, cement, fly ash and clinker shall be stored in silos	<p>Complied</p> <ul style="list-style-type: none"> Adequate dust collection and extraction systems are installed at various transfer points, raw mill handling (unloading, conveying, transporting, stacking) etc. Bag filters had been installed at all emission Sources. 9 km Internal RCC roads developed to control fugitive emissions. Covered sheds for storage of raw materials and coal All conveyors are covered for transportation of crushed limestone, coal and gypsum within the cement plant. RCC Silos for clinker storage, Cement and fly ash.
vi	The company shall harvest the rainwater from the rooftops and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water	<p>Complied</p> <ul style="list-style-type: none"> Nearly 1,89,000 KL Capacity rain water harvesting pond developed with drains to collect all the surface runoff during monsoon to conserve water. The location map of Rain Water Harvesting pond is enclosed as Annexure 7
vii	The company shall undertake Eco-development measures including community welfare measures in the project area	<p>Being Complied</p> <ul style="list-style-type: none"> Efforts are being undertaken Eco development measures. Some of the following measures are being implemented as a continuous development at surrounding villages <ul style="list-style-type: none"> Livelihood and Skill building Programs Health care camps Water Infrastructure facilities

		<ul style="list-style-type: none"> o Education o ODF village o Community hall development etc. • Report on Eco development and community development measures is attached as Annexure 8
viii	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 sources 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)	<ul style="list-style-type: none"> • Overall noise levels in and around the plant area are being controlled within the standards prescribed by Board. • Noise monitoring is being carried out by third party agency on regular basis and the reports were confirming to the standards. • The report on Noise monitoring as attached as Annexure 9
ix.	Proper housekeeping and adequate occupational health programmes shall be taken up.	<p>Complied</p> <ul style="list-style-type: none"> • Sweeping Machines have been deployed to maintain proper housekeeping with in plant premises. • Pre-employment medical check-up has been undertaken for all employees. First aid facility is provided at OHC Centre inside the factory premises with 24 hrs ambulance availability. • Health awareness program and first aid training are being provided on continuous basis. Enclosed as Annexure 10
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</p> <ul style="list-style-type: none"> • A dedicated Environment Management Cell has been established with Environment officer under the control of Senior Executive to carry out various environment management and monitoring functions.
xi.	As proposed in EIA/EMP, Rs. 31.05 Corers and Rs. 4.28 Corers earmarked towards capital cost and recurring cost/annum respectively for the environmental pollution control measures shall be suitable 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 purpose.	<ul style="list-style-type: none"> • The funds hence provided are exclusively for the implementation of the Environment Management Plan. • Detail of the Recurring cost incurred to Environment protection and control & measures the pollution by equipments for the FY 2023-24 is Enclosed as Annexure-11 • We have incurred an expenditure of about 56.10 Cr. for Bag house in cement mill, Raw Mill, Coal Mill and ESP of clinker cooler and implementation of EMP as well as for green belt development.

xii	The Regional Office of this Ministry at Bangalore / CPCB / KPCB 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>Complied</p> <ul style="list-style-type: none"> The monitoring activities are being carried out regularly. Six months compliance report and the monitored data along with statistical interpretation submitted to RO Bangalore, CPCB/KPCB regularly.
xiii	The Project Authorities shall inform the Regional Office as well as the 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>Complied</p> <ul style="list-style-type: none"> Date of Financial Closure: 31st March 2016. Date of commencement of land development work: 1st October 2012.
xiv	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 Karnataka Pollution Control Board 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>Complied</p> <ul style="list-style-type: none"> It was advertised in Deccan Herald in English and Prajavani in Kannada and copies of same sent with previous compliance Report. A copy of the same forwarded to the Ministry's Regional Office at Bangalore.



Authorized Signatory

Online Pollution Monitoring Portal

Site Name: M/s.DALMIA CEMENT (BHARAT) LTD.,

From Date: 2024/03/01 To Date: 2024/03/31

Report Name: Custom Report

S.No.	Time	Stack7_Coal Mill-PM - (mg/Nm3) Raw	Stack20_Coo ler-PM - (mg/Nm3) Raw	Stack11_Ceme ntMill-PM - (mg/Nm3) Raw	Stack24_KIL N-PM - (mg/Nm3) Raw	Stack24_KILN NOx - (mg/Nm3) Raw	Stack24_KIL N-SO2 - (mg/Nm3) Raw	Stack_CPP_125TPH_ Boiler-PM - (mg/Nm3) Raw	Stack_CPP_125TPH_ _Boiler-SO2 - (mg/Nm3) Raw	Stack_CPP_125TPH_ _Boiler-NOx - (mg/Nm3) Raw
1	2024-03-01	5.32	8.32	0.25	11.86	279.67	34.69			
2	2024-03-02	5.98	8.36	0.24	10.39	285.1	14.06			
3	2024-03-03	5.84	8.06	0.36	11.55	327.23	42.86			
4	2024-03-04	4.3	7.78	0.46	11.58	346.37	41.29			
5	2024-03-05	5.42	6.4	0.23	11.23	293.23	23.77			
6	2024-03-06	5.66	7.1	0.35	11.43	307.62	41.29			
7	2024-03-07	5.98	8.19	0.26	10.75	349.5	30.67			
8	2024-03-08	5.3	6.02	0.31	3.89	294.92	19.52			
9	2024-03-09	4.75	10.42	0.38	2.09	237.29	14.56			
10	2024-03-10	3.86	7.96	0.34	0.43	211.4	39.46			
11	2024-03-11	5.53	9.05	0.27	0.26	203.19	44.37			
12	2024-03-12	4.36	6.55	0.21	0.09	128.18	16.68			
13	2024-03-13	5.53	5.16	0.24	0.01	194.63	31.33			
14	2024-03-14	4.7	6.42	0.28	10.97	272.46	59.29			
15	2024-03-15	4.62	6.23	0.23	20.93	273.6	52.19			
16	2024-03-16	5.89	5.34	0.3	22	281.27	56.25			
17	2024-03-17	5.16	5.2	0.28	21.84	265.36	51.28			
18	2024-03-18	4.05	5.73	0.1	22.18	242.95	45.7			
19	2024-03-19	4.85	4.37	0.27	19.09	249.47	54.24			
20	2024-03-20	4.41	4.83	0.29	21.59	226.25	47.18			
21	2024-03-21	4.42	2.6	0.23	16.36	178.7	38.59			
22	2024-03-22	4.81	2.88	0.28	20.75	229.28	45.28			
23	2024-03-23	5.86	2.99	0.28	20.69	210.12	26.54			
24	2024-03-24	4.82	3.07	0.13	22.7	181.76	22.12			
25	2024-03-25	4.55	3.1	0.12	23.24	117.18	12.64			
26	2024-03-26	4.76	2.58	0.05	22.16	178.26	56.17			
27	2024-03-27	3.78	2.15	0.21	23.24	202.14	69.88			
28	2024-03-28	4.88	1.9	0.23	22.44	159.39	67.93			
29	2024-03-29	5.7	1.89	0.15	22.92	146.58	77.53			
30	2024-03-30	4.84	1.36	0.19	26.43	302.4	67.89			
31	2024-03-31	5.75	1.36	0.2	28.57	180.21	50.75			
	Prescribed Standards	0 - 30	0 - 30	0 - 30	0 - 30	0 - 600	0 - 100			
	Maximum Value	5.98	10.42	0.46	28.57	349.5	77.53			
	Geometric Mean	5.02	5.27	0.25	15.28	237.28	41.81			

* CPP is not working since May 2022



THIRD PARTY STACK EMISSION MONITORING - (Oct 2023 to Mar 2024)

Stack Details	Emission Parameter	Standard (mg/Nm3)	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Average	
Kiln	Sulphur Dioxide	100	72.2	25.5	32.1	NA	66.2	72.5	53.7	
	Nitrogen Dioxide	600	285.3	257.1	141.2		153.8	162.5	200.0	
	Particulate Matter	30	18.2	18.3	15.2		13.8	20.5	17.2	
Coal Mill	Particulate Matter	30	15.8	14.9	13.8	14.4	21.5	18.6	16.5	
Cooler	Particulate Matter	30	16.8	20.5	15.3	18.1	16.6	15.8	17.2	
Cement Mill	Particulate Matter	30	19.8	18.7	18.2	20.2	18.4	20.1	19.2	
CPP	Particulate Matter	50	SHUT DOWN							
	Sulphur Dioxide	600								
	Nitrogen Dioxide	450								
	Mercury	0.03								



FUGITIVE EMISSION MONITORING										
S.No.	Station Code	Name of the Station	Standard (g/m3)	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Average
1	FAI	DCBL Main gate	5.00	0.75	1.04	1.10	0.97	0.91	0.90	0.95
2	FAII	Near packing plant	5.00	0.85	0.83	0.86	0.94	0.80	0.92	0.87
3	FAIII	Near Cement Mill	5.00	0.90	0.85	0.90	0.92	0.96	0.97	0.92
4	FAIV	Near Clinker cooler	5.00	0.79	0.84	0.84	0.85	0.81	0.81	0.82
5	FAIV	Near CCR/Coal mill	2.00	0.81	0.82	0.78	0.82	0.91	0.91	0.84
6	FAVI	Near AFR Storage	5.00	0.89	0.91	0.87	0.84	0.88	0.88	0.88
7	FAVII	Additive stack Yard	5.00	1.02	0.94	0.68	0.79	0.90	0.90	0.87
8	FAVIII	Near Coal Stack Yard	2.00	0.81	0.97	0.74	0.85	0.99	0.99	0.89
9	FAVIX	Near Store	5.00	0.96	0.91	0.77	0.78	0.82	0.82	0.84
10	FAX	Near Boiler - CPP	5.00	0.97	0.82	0.74	0.76	0.90	0.88	0.85
11	FAXI	Near Health Center	5.00	1.09	0.99	0.89	0.90	0.82	0.92	0.94



**Dalmia Cement (Bharat) Limited, Yadwad, Belagavi Distric
GREEN BELT DEVELOPMENT REPORT- 2013 to 2024**

S.No	Unit	Year										Total Plantation	
		2013-14	2021-22	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23		2023-24
CEMENT PLANT													
1	No. of Trees Planted	1802	11981	48835	16415	7437	44874	11717	1500	0	5000	3000	152561
2	Area Covered (Ha)	0.72	4.79	19.53	6.57	2.97	17.95	4.69	0.50	0.00	2.50	0.00	60.22
3	Survival Rate (%)	89	91	91	93	94	94	96	95	0	96	95	93



Online Pollution Monitoring Portal

Site Name: M/s.DALMIA CEMENT (BHARAT) LTD.,

From Date: 2024/03/01 To Date: 2024/03/31

Report Name: Custom Report

Report Created by DCBPL on 2024-05-06 17:14:26

Sl No.	Time	CAAQMS_1- PM10 - (ug/m3) Raw	CAAQMS_1- PM2.5 - (ug/m3) Raw	CAAQMS_1- SO2 - (ug/m3) Raw	CAAQMS_1- NOx - (ug/m3) Raw	CAAQMS_1- CO - (mg/m3) Raw	CAAQMS_1- Atmospheric_T emperature - (Degree) Raw	CAAQMS_1- Rain - (mm) Raw	CAAQMS_1- Relative humidity - (%) Raw	CAAQMS_1- Wind_Spee d - (m/s) Raw	CAAQMS_1- Wind_Direc tion - (Degree) Raw	CAAQMS_1- Atmospheri c Pressure - (Bar) Raw	CAAQMS_1- Solar Radiation - (W/m2) Raw
153	2024-03-01	22.35	8.77	10.14	18.01	0.69	36.23	0	44.83	13.24	20.93	832.56	237.23
154	2024-03-02	24.01	9.58	10.85	21.14	0.8	36.24	0	44.88	13.41	21.32	833.16	241.1
155	2024-03-03	33.24	11.48	9.09	18.19	0.76	36.18	0	45.13	13.08	20.79	832.8	238.81
156	2024-03-04	42.85	12.18	10.11	18.24	0.74	36.18	0	45.15	13.3	21.12	832.68	238.21
157	2024-03-05	69.58	24.52	10.55	18.25	0.85	36.21	0	44.97	13.22	21.1	832.71	238.28
158	2024-03-06	50.3	20.52	11.37	18.12	0.8	36.22	0	44.92	13.47	21.03	832.57	237.23
159	2024-03-07	56.76	19.08	11.87	18.14	0.84	36.19	0	45.02	13.31	20.99	832.93	239.66
160	2024-03-08	57.61	21.53	10.7	18.55	0.75	36.3	0	44.7	13.84	21.56	841.03	297.06
161	2024-03-09	44.26	20.78	10.93	18.21	0.8	36.32	0	44.8	14.44	21.59	852.11	376.06
162	2024-03-10	4.56	24.44	10.32	18.11	0.85	36.45	0	44.77	15.44	22.6	875.07	521.98
163	2024-03-11	4.65	21.88	11.98	18.09	0.87	36.53	0	44.69	16.22	23.24	882.51	491.64
164	2024-03-12	19.71	20.06	10.38	17.75	0.8	36.52	0	44.64	16.2	23.01	882.22	460.44
165	2024-03-13	51.94	13.05	11.19	33.49	0.9	36.46	0	44.79	15.69	22.89	874.1	440.2
166	2024-03-14	47.77	10.76	9.96	18	0.74	36.39	0	45.31	16.35	23.22	882.75	574.07
167	2024-03-15	58.77	15.31	9.89	18.3	0.79	36.56	0	44.92	17.31	23.71	891.32	449.66
168	2024-03-16	70.4	19.57	11.03	19.4	0.77	36.52	0	44.9	17.15	23.58	884.97	448.37
169	2024-03-17	83.67	17.63	11.09	30.37	0.86	36.5	0	44.81	16.83	23.27	884.66	456.76
170	2024-03-18	62.28	9.63	10.6	21.85	0.79	36.49	0	44.9	16.36	23.37	885.09	474.79
171	2024-03-19	72.26	14.4	8.26	20.16	0.96	36.43	0	45.14	16.44	23.27	886.18	479.64
172	2024-03-20	138.9	22.39	10.28	25.83	0.82	36.49	0	44.84	16.64	23.28	884.05	484.52
173	2024-03-21	37.19	20.08	8.21	16.97	0.67	36.42	0	45.25	16.34	23.2	881.68	477.48
174	2024-03-22	40.25	16.51	10.34	17.02	0.62	36.56	0	44.94	16.67	23.58	882.27	511.92
175	2024-03-23	44.78	15.62	11.91	27.15	0.87	36.67	0	44.72	17.22	24	871.91	487.31
176	2024-03-24	54.22	18.26	9.65	16.98	0.76	36.64	0	44.62	16.43	23.44	870.75	467.87
177	2024-03-25	26.32	11.96	11.01	28.83	0.68	36.71	0	44.51	16.88	23.5	874.77	441.84
178	2024-03-26	27.98	11.54	9.3	26.95	0.71	36.71	0	44.5	17.15	24.05	876.88	437.77
179	2024-03-27	25.21	11.87	9.78	17.42	0.74	36.72	0	44.5	16.91	23.25	875.56	441.3
180	2024-03-28	38.18	12.9	9.53	25.67	0.72	36.7	0	44.42	16.4	23.04	870.54	422.95
181	2024-03-29	46.88	14.28	9.88	16.95	0.71	36.71	0	44.43	16.8	23.57	871.23	439.06
182	2024-03-30	33.81	11.26	9.32	21.75	0.76	36.76	0	44.51	17.24	23.6	877.34	454.84
183	2024-03-31	31.69	7.53	10.71	23.54	0.8	36.74	0	44.41	16.75	23.54	874.26	421.02
184	Prescribed Standards	0 - 100	0 - 60	0 - 80	0 - 80	0 - 2	NA	NA	NA	NA	NA	NA	NA
185	Maximum Value	155.32	89.05	34.02	33.49	1.02	36.76	5.89	46.02	17.31	24.05	891.32	574.07
187	Minimum Value	4.56	0.85	2.89	10.96	0.3	35.85	0	44.41	12.37	14.33	826.7	195.29
189	Geometric Mean	33.71	20.2	10.2	13.99	0.77	36.06	0.05	45.51	13.31	18.91	835.76	247.55
191	Standard Deviation	29.77	12.03	3	4.26	0.11	0.22	0.46	0.4	1.26	2.44	16.35	84.06
194	Data Availability %	89.07	89.07	89.07	89.07	89.07	100	100	100	100	100	100	100



AMBIENT AIR QUALITY MONITORING																
Date	YA I. – Yadwad village:				DA II. –Near DCBL Entrance gate				GA III. –At Guest House				MA IV. –Manami Village			
	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)
06.10.2023	14	16	52	16	15	17	54	15	12	17	48	12	12	14	56	19
07.10.2023	17	18	51	18	19	11	49	13	18	15	51	14	18	17	53	14
11.10.2023	16	19	49	12	17	19	45	20	17	20	49	11	17	20	49	11
12.10.2023	18	20	54	17	16	18	59	15	15	14	42	20	13	20	40	15
18.10.2023	16	20	48	18	11	20	54	13	18	20	48	16	15	18	45	13
19.10.2023	12	17	43	13	13	16	52	16	19	18	43	15	13	19	43	14
23.10.2023	14	19	45	16	11	13	48	12	15	19	54	21	17	21	54	11
24.10.2023	13	16	44	15	14	17	43	13	11	13	49	14	17	18	52	13
04.11.2023	17	18	52	14	15	17	49	16	13	18	55	15	15	13	50	16
06.11.2023	14	15	49	16	18	14	51	12	19	17	58	17	18	17	52	18
15.11.2023	20	19	44	18	17	20	44	11	17	19	45	20	14	10	40	15
16.11.2023	18	20	47	15	15	9	42	20	16	12	50	15	16	20	48	18
20.11.2023	11	13	48	12	15	19	50	21	17	21	46	11	14	19	45	16
21.11.2023	9	18	42	13	11	16	42	12	14	16	44	15	10	17	47	12
24.11.2023	14	15	50	17	14	13	48	11	10	15	50	13	17	13	50	17
25.11.2023	10	12	49	13	10	11	44	13	11	17	47	13	16	11	47	16
06.12.2023	20	18	41	17	17	20	50	14	10	17	45	20	10	16	64	18
07.12.2023	17	15	58	16	13	15	55	16	17	20	46	13	16	18	52	13
15.12.2023	17	20	53	14	12	17	45	19	12	16	48	16	12	14	47	19
16.12.2023	12	15	54	11	19	13	55	11	20	16	52	10	13	16	54	17
20.12.2023	13	18	55	12	17	15	53	16	20	14	52	13	12	14	54	17
21.12.2023	16	19	48	18	16	12	54	17	13	14	54	17	13	20	48	15
26.12.2023	14	20	49	19	12	18	49	14	17	20	50	18	19	15	53	14
27.12.2023	18	12	52	15	15	12	50	17	16	13	49	18	19	15	54	19
04.01.2024	17	14	52	17	13	15	50	14	12	19	53	19	12	18	55	13
05.01.2024	15	17	48	13	16	17	54	18	19	17	56	15	17	16	57	14
10.01.2024	19	13	57	19	17	13	51	16	16	15	57	13	16	14	52	16
11.01.2024	18	16	50	14	12	18	52	13	13	14	47	16	14	19	57	18
19.01.2024	14	18	55	16	11	18	48	15	14	16	51	14	13	15	47	12
20.01.2024	16	15	47	12	15	19	55	12	17	13	48	11	11	13	50	15
24.01.2024	13	12	53	15	18	12	53	17	15	11	54	18	15	17	56	17
25.01.2024	17	19	51	18	19	13	47	11	18	12	55	12	18	11	53	16
07.02.2024	17	24	51	16	10	15	53	17	9	17	45	14	17	20	49	13
08.02.2024	21	18	46	20	12	25	58	20	15	14	49	17	9	12	52	18
14.02.2024	12	16	52	13	18	20	60	14	13	11	51	12	18	22	57	20
15.02.2024	16	19	49	18	15	16	54	19	11	20	54	10	13	12	51	14
21.02.2024	19	14	53	14	19	21	56	18	18	16	55	15	15	17	55	12
22.02.2024	10	20	58	21	9	19	59	15	20	18	48	20	17	18	53	23
28.02.2024	17	13	54	17	14	17	62	20	19	22	50	16	20	15	48	19
29.02.2024	15	19	48	22	16	22	55	13	14	19	49	13	19	23	56	21
06.03.2024	14	17	54	16	12	13	51	15	16	15	57	14	15	17	48	12
07.03.2024	20	18	57	15	13	18	47	21	14	12	48	11	12	13	50	16
15.03.2024	16	14	52	13	17	14	50	14	17	18	55	12	14	16	56	20
16.03.2024	18	15	50	14	15	16	59	19	11	20	50	17	13	12	49	14
20.03.2024	15	19	48	16	16	17	58	18	15	14	52	18	15	18	53	15
21.03.2024	11	20	54	12	14	19	52	11	14	19	54	15	17	19	59	13
28.03.2024	16	13	50	16	19	17	49	18	13	17	56	19	19	14	58	14
29.03.2024	12	17	48	11	14	11	48	17	15	20	57	16	18	16	55	17
Average	15.4	16.9	50.3	15.5	14.7	16.2	51.4	15.5	15.1	16.5	50.5	15.1	15.1	16.3	51.5	15.7
NAAQS STD	80	80	100	60	80	80	100	60	80	80	100	60	80	80	100	60



Annexure-7

Rain Water Harvesting System at M/s Dalmia cement Bharat Limited, Belagavi



Dalmia Cement (Bharat) Limited, Yadwad, Belagavi Distric		
CSR expenses done during 2023-24		
Program	Program Activities	2023-24
Soil and water conservation	Watershed and watershed plus Project	602,030
	Sub Total	602,030
Skil and livlihood	Gram Perivertan Project	2,226,718
	Assistant Electrician Course	108,000
	Diksha Project	2,506,750
	Sub Total	4,841,468
Social Dvelopment	Support to Differently abled person	195,344
	Canal Clearance Work	249,960
	Awarness program	1,700
	Training & Exposure visit	25,000
	Community development projects/Village Infrastructure	344,114
	Community Enagagment events/ observation of days	15,487
	Health Camp/Pulse Polio Camp	9,600
Sub Total	841,205	
Programme Execution Cost	Salaries	1,055,350
	Stationery and communication	2,915
	Travel & phone bill reimbursements	114,496
	Sub Total	1,172,761
Grand Total		7,457,464

Watershed activity photos



1. PVC pipes distribution under watershed project
2. FYM manure preparation at farmers field
3. Seeds distribution for kitchen garden
4. Farmers' training to Kannerj Math KVK, Kolapur
5. Summer ploughing by the farmer
6. Watershed committee meeting at Hulakund



Livelihood activities



1. Vermicompost Bag distribution programme at Yadwad
2. Support for milch animal under livelihood
3. Azolla cultivation for animal husbandry
4. Sewing machine under Livelihood support

Social Infrastructure development activities



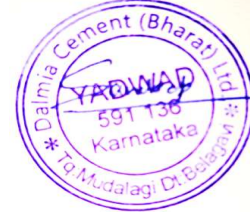
1. Desilting of Yadwad water distribution canal No 3
2. Motorized 3 wheeler distribution to physically handicapped
3. Community infrastructure development at Kulagod
4. RO plant at Yadwad



Annexure 9

WORK PLACE NOISE LEVEL MONITORING																	
S.No.	Code	Sampling Location	Unit	Oct-23		Nov-23		Dec-23		Jan-24		Feb-24		Mar-24		Average	
				Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1	N1	At Packing plant-truck loading	dB	67.2	63.1	66.2	62.1	65.2	61.9	66.1	62.1	65.3	63.1	66.2	63.4	67.2	61.9
2	N2	At Cement mill	dB	68.1	62.4	69.2	63.2	68.4	62.4	67.2	63.2	68.2	62.3	67.3	61.8	69.2	61.8
3	N3	At CCR	dB	66.2	61.1	65.3	62.7	64.2	63.4	65.2	64.3	64.3	61.8	65.8	62.3	66.2	61.1
4	N4	At main gate Security office	dB	64.2	62.3	66.2	63.2	65.3	62.6	62.5	61.1	63.1	62.0	64.2	61.4	66.2	61.1
5	N5	At Clinker cooler	dB	65.2	61.9	64.8	62.5	66.2	61.9	65.8	62.3	64.6	61.8	63.2	60.7	66.2	60.7
6	N6	At Raw Mill	dB	66.1	63.2	67.2	64.2	65.2	63.2	66.2	63.2	65.2	63.1	66.5	62.1	67.2	62.1
7	N7	At Coal mill	dB	69.2	63.5	68.9	61.7	67.2	62.1	67.2	61.9	64.5	62.2	65.6	62.7	69.2	61.7
8	N8	At Health center	dB	62.4	61.0	63.1	60.9	62.8	61.9	63.8	62.2	63.3	61.8	61.9	60.4	63.8	60.4
9	N9	At CCR-PPP	dB	67.8	63.8	68.7	64.5	67.2	62.2	68.9	61.7	65.8	62.8	62.8	62.1	68.9	61.7
10	N10	At Turbine floor	dB	68.7	63.8	66.2	62.8	65.3	61.1	66.7	62.4	65.8	63.2	66.2	64.5	68.7	61.1
11	N11	At LS crusher	dB	69.8	62.5	69.7	63.4	68.7	62.5	69.2	63.2	68.8	64.3	67.9	64.8	69.8	62.5
12	N12	At Guest House	dB	68.1	63.8	66.5	61.8	65.3	62.5	65.3	61.2	64.7	62.6	66.8	63.8	68.1	61.2
13	N13	At Store	dB	69.7	65.2	68.2	64.2	67.2	63.2	66.2	62.8	65.9	63.9	65.7	62.8	69.7	62.8
14	N14	Near Packer-Packing Plant	dB	68.2	64.2	66.8	63.4	65.2	61.9	64.9	62.2	63.6	62.0	66.5	63.7	68.2	61.9
15	N15	At Mines office	dB	66.2	62.1	67.2	63.6	66.2	62.1	65.2	62.8	64.2	62.4	65.1	63.4	67.2	62.1
16	N16	Inside HEME equipment cabin	dB	65.8	63.2	64.2	62.7	63.2	61.2	64.3	62.5	63.9	61.9	64.8	62.2	65.8	61.2

AMBIENT NOISE LEVEL MONITORING																			
S.No.	Code	Sampling Location	Unit	Oct-23		Nov-23		Dec-23		Jan-24		Feb-24		Mar-24		Average		STD	
				Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
1	N1	West side of Working Pit	dB	54.1	53.2	54.7	53.0	52.1	50.9	52.8	51.1	53.1	52.4	54.1	53.0	53.5	52.3	75.0	70.0
2	N2	South side of Working Pit	dB	57.8	52.5	58.2	53.7	51.2	51.2	53.7	52.9	54.2	53.3	53.2	52.7	54.7	52.7	75.0	70.0
3	N3	North side of Working Pit	dB	63.8	58.7	62.9	59.2	62.6	59.2	61.1	57.2	62.3	58.4	62.7	51.5	62.6	57.4	75.0	70.0
4	N4	East side of Working Pit	dB	57.2	54.2	57.1	53.4	54.2	53.6	52.8	51.8	61.8	55.2	60.7	53.3	57.3	53.6	75.0	70.0
5	N1	At Main Entrance gate	dB	57.2	56.3	56.6	54.3	55.2	53.2	54.9	52.9	53.2	52.2	53.1	52.1	55.0	53.5	75.0	70.0
6	N2	Yadwad village	dB	53.8	44.2	54.1	45.2	52.9	44.2	53.2	43.8	52.2	44.5	52.8	44.4	53.2	44.4	55.0	45.0
7	N3	Manami village	dB	53.9	43.7	52.9	44.2	53.4	43.9	52.1	43.8	51.8	42.8	53.4	44.7	52.9	43.9	55.0	45.0
8	N4	At Guest House	dB	54.1	43.1	53.8	42.9	52.8	41.9	52.8	42.3	51.2	41.1	51.6	43.4	52.7	42.5	55.0	45.0



**Occupational Health Safety Program
M/s Dalmia cement Bharat Limited, Belagavi**

Stress management workshop for O&M supervisors.



Vaccination of food handlers with Typhoid vaccine.



CPR training for O&M associates.



Conducted an awareness session on Monsoon related illness and its prevention for Ladies club members.



Environmental Recurring cost for Fy 2023-24 (in Crores)

Sl.No	Expenditure incurred	2023-2024
	Air	
1	Space Cost Bag filter Maintenance	0.7
2	Electricity for bag filters & emission monitoring equipment.	9.6
3	Expenditure for Concerting of Road	2.19
4	Road Cleaning Maintenance	0.39
	Water	
5	STP & ETP Operation and Maintenance	0.063
6	Pond & Drain cleaning	0.26
	Environment Monitoring	
7	Service, maintenance, calibration of Opacity meter, CEMS and CAAQMS	0.048
8	Third Party Monitoring	0.066
	Green Development	
9	Greenery Development, Maintenance including the Manpower	0.5
	Total	13.817

