

Ref: Env/ECHC/L-II/252

Date: 29.11.2021

To

The Additional Director, Government of India  
Ministry of Environment, Forest & Climate Change (I.A. Division)  
Indira Paryavaran Bhavan, Aliganj, Jorbagh Road  
New Delhi – 110003

Sub:- Submission of six monthly compliance report (April, 2021 to September, 2021) of EC letter for expansion Project from 1.2 MTPA to 2.9 MTPA of clinker and from 2.0 MTPA to 4.00 MTPA of cement of M/s Dalmia Cement (Bharat) Limited, Rajgangpur, Tehsil Rajgangpur, District – Sundargarh, Odisha.

Ref:- Environment Clearance letter F. No. J-11011/352/2005- 1A II (I) dated 5<sup>th</sup> April 2007.

Dear Sir,

With reference to above letter, we enclose herewith the six monthly compliance report (Ending September, 2021) of conditions stipulated in the Environmental Clearance for the Cement plant.

Thanking you

Yours sincerely,

  
(S. K. ROUT)

**Dy. Executive Director**

Encl: As above

Copy to:

1. The Chairman,  
Central Pollution Control Board  
Parivesh Bhavan  
CBD – cum- Office Complex  
East Arjun Nagar  
NEW DELHI – 110032
2. The Director (S)  
Government of India  
Ministry of Environment and Forest  
Eastern Regional Office  
A/3, Chandrasekharapur  
BHUBANESWAR – 751023
3. The Chairman,  
State Pollution Control Board, Orissa  
Parivesh Bhavan, A/118, Nilakanthnagar, Unit – VIII  
BHUBANESWAR - 751012.

**Dalmia Cement (Bharat) Limited**

Rajgangpur, Sundargarh - 770 017, Odisha, India

T +91 6624 220 121 Toll Free 1800 2020 W [www.dalmiacement.com](http://www.dalmiacement.com) CIN: U65191TN1996PLC035963

Registered Office: Dalmiapuram, District Tiruchtrappalli - 621 651, Tamil Nadu, India

A Dalmia Bharat Group company. [www.dalmiabharat.com](http://www.dalmiabharat.com)

**SIX MONTHLY COMPLIANCE REPORT  
(APRIL, 2021 TO SEPTEMBER, 2021)  
OF  
ENVIRONMENT CLEARANCE LETTER NO.  
J-11011/352/2005-1A II (I) dated 5<sup>th</sup> April 2007  
FOR EXPANSION CUM MODERNISATION PROJECT  
FROM 1.2 MTPA TO 2.9 MTPA OF CLINKER  
AND  
2.0 MTPA TO 4.0 MTPA OF CEMENT  
BY  
DALMIA CEMENT (BHARAT) LIMITED  
RAJGANGPUR – 770017  
DIST- SUNDARGARH  
ODISHA**

Date- 29<sup>th</sup> November, 2021

**Six monthly compliance report (April, 2021 to September, 2021) of conditions stipulated in Environmental Clearance Letter No. F. No. J-11011/352/2005-1A II (I) dated 5<sup>th</sup> April 2007, by MoEF&CC for Dalmia Cement (Bharat) Limited, Rajgangpur.**

**A. SPECIAL CONDITION**

SI. No.	Description of Conditions	Compliance Status
i	The gaseous and particulate matter emissions from various units shall confirm to the standards prescribed by the Orissa State Pollution Control Board (OSPCB). At no time the particulate emissions shall exceed OSPCB. 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 is shut down automatically.	<p>a. Complied.</p> <p>b. The compliance status of Stack emission is given below. The reading taken from different location are stipulated with respect to the standard prescribed within the norms of emission level. We have installed all the pollution control equipment in order to meet new emission standards, as revised by Gazette Notification G.S.R. 497 (E) dtd. 10<sup>th</sup> May, 2016. Online CEMS (Continuous Emission Monitoring system) have been installed and facility for transmitting online data to OSPCB/CPCB. The gaseous and particulate matter emissions most of time are within the prescribed limits. Action plan for the compliance of notified emission norms, as per the directions under Sec. 5 of The EP Act, 1986 have been submitted for further improvement. We have been also conducted third party monitoring through an accredited agency empaneled by OSPCB. Stack emission monitoring monthly average report is given in <b>Annexure-I</b> Additional mcasures are being taken for operating practices of pollution control equipment. Tripping in kiln ESP is minimized. Facility have been provided to control emission in the event of any tripping or kiln shut down condition.</p>
ii	Continuous on-line monitoring system to monitor gaseous emission shall be controlled with in 50 mg/Nm3 by installing adequate air pollution control system. On-line monitoring data shall be submitted to the OSPCB and CPCB regularly.	Complied. Continuous stack monitoring system has already been installed. On-line data through CEMS and CAAQMS are being transmitted to OSPCB/CPCB. Stack monitoring and Ambient air quality monitoring reports are submitted to SPCB in every month and half yearly basis to Regional office of MoEF&CC, Bhubaneswar.
iii	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 emission shall be carried out regularly in consultation with OSPCB and report submitted to the OSPCB quarterly and to the ministry's Regional office at Bhubaneswar half -	<p>a. Monitoring of ambient air quality is carried out regularly in consultation with SPCB. The values are within the prescribed limit as stipulated under EPA/SPCB. Similarly, data on ambient noise level are within the stipulated norm, as furnished in <b>Annexure-I</b></p> <p>b. Monitoring of ambient air quality and stack emission is carried out regularly in consultation with OSPCB and report is being submitted to the OSPCB on monthly basis and to the Ministry's Regional Office at Bhubaneswar on</p>



	yearly. One ambient air quality monitoring station shall be installed in downwind direction.	be half-yearly basis.
iv	The company shall install adequate dust collection and extraction system to control fugitive dust emission at various transfer points, raw mill handling (unloading, conveying, transporting, stacking), vehicular movement, bagging and packing areas etc. ESP to Cooler, cyclone & bag filter to kiln, CVRM and bag filters shall be provided in the coal mill and cement mills to control air emissions less than 50 mg/ Nm <sup>3</sup> . Jet pulse bag filters/ dust extraction system shall be provided to control fugitive emissions in raw material, coal handling & cement grinding areas. Dust suppression system at unloading hoppers, discharge gate of silos and totally closed operations for all belt conveyors & storage etc shall be used. Raw materials shall stored in closed roof sheds & clinker in silos.	<p><b>Air pollution control measures &amp; systems are adopted:</b></p> <ol style="list-style-type: none"> <li>Dust collection extraction system (Bag filters) have been installed and maintained at various transfer points such as loading/ unloading areas. Raw materials are transported through closed conveyor belts.</li> <li>Coal handling, cement grinding units are equipped with bag filters to control fugitive dust emissions.</li> <li>Bag house installed for CVRM &amp; Coal mill to maintain stack emission as per standard.</li> <li>Road sweeping machines are deployed on regular cleaning of roads. Internal roads are concreted and water sprinkling on the roads are also carried out.</li> <li>Belt conveyors are thoroughly hood covered.</li> <li>Clinker is stored in clinker silo &amp; transported by hatch adopter system.</li> <li>Raw material handling &amp; its storing is carried out by closed shed.</li> <li>Water sprinkling dust suppression systems are installed at raw material handling yards.</li> </ol>
v	Asphalting/concreting of roads and water spray all around the coals stockpiles shall be carried out to control fugitive emissions.	Concreting and black-topping or paving with hard solid reject Refractory bricks are completed. Road sweeping machines deployed & water spray in coal stockpiles are being done as per requirement to control the fugitive emission.
vi	Total water requirement from the Nakti nala and ground water source shall not exceed 5,788 m <sup>3</sup> /d including 785 m <sup>3</sup> /d respectively and prior permission for the drawl of ground water from the State water resources/Minor irrigation Deptt./CGWA shall be obtained. All the treated waste water shall be recycled and reused in the process, dust suppression, green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge shall be adopted. Domestic effluent treated in Sewage Treatment Plant (STP) shall be used for green belt development within the plant and colony area.	<ol style="list-style-type: none"> <li>It is ensured that the water consumption shall not exceed the quantity mentioned and ground water source respectively.</li> <li>The treated water of ETP is reused. There is no effluent discharged outside the factory premises and "zero" discharge is adopted.</li> <li>Domestic sewerage is treated in STP. The treated water is used for green belt development.</li> </ol>
vii	All the cement dust collected from pollution control devices shall be recycled and reutilized in the process. Char from sponge iron plant of M/s. OCL shall be used as raw material in manufacturing cement and mixed with feed. Hazardous waste viz. Used oil from gear boxes and automotive	<ol style="list-style-type: none"> <li>Dust collected from pollution control devices is recycled and reutilized in the process.</li> <li>Char is used as raw material, as per availability.</li> <li>Used oil &amp; batteries are stored at earmarked area and disposed off through the authorized recyclers/ re processors.</li> </ol>

	batteries, etc shall be properly stored in a designated area and sold to authorized recyclers/ re processors.																																																	
viii	The company must harvest the rainwater from the roof tops 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>Following rain water harvesting projects are existing</p> <p>a. Rain water harvesting by storm water drain have been made inside plant &amp; near CPP.</p> <p>b. Roof top rain water-harvesting is being practices in some part of colony areas.</p> <p>c. Rain water harvesting projects from the roof top of raw material shed inside the plant is also being carried out.</p>																																																
ix	Green belt shall be developed in at least 28.0 ha out of total 91.15 ha land in consultation with the local DFO as per the CPCB guidelines.	<p>Green belt cover has already been developed in and around of plant. Distributing of saplings to nearby villagers and plantation are being carried out in regular basis. Statistical data with cumulative figure is given here under:</p> <table border="1"> <thead> <tr> <th colspan="3">DETAILS OF YEAR WISE PLANTATION (CUMULATIVE STATUS)</th> </tr> <tr> <th>YEAR</th> <th>NO. TREES PLANTED</th> <th>PLANTATION IN &amp; AROUND OF INDUSTRY/ SAPLING DISTRIBUTED</th> </tr> </thead> <tbody> <tr> <td>Up to march,2007-08</td> <td>148655</td> <td></td> </tr> <tr> <td>2008-2009</td> <td>155155</td> <td>2300</td> </tr> <tr> <td>2009-2010</td> <td>162401</td> <td>4800</td> </tr> <tr> <td>2010-2011</td> <td>171757</td> <td>6964</td> </tr> <tr> <td>2011-2012</td> <td>177957</td> <td>9964</td> </tr> <tr> <td>2012-2013</td> <td>183957</td> <td>14164</td> </tr> <tr> <td>2013-2014</td> <td>190246</td> <td>19664</td> </tr> <tr> <td>2014-2015</td> <td>196660</td> <td>27664</td> </tr> <tr> <td>2015-2016</td> <td>203892</td> <td>92664</td> </tr> <tr> <td>2016-2017</td> <td>209442</td> <td>130364</td> </tr> <tr> <td>2017-2018</td> <td>212431</td> <td>138922</td> </tr> <tr> <td>2018-2019</td> <td>214819</td> <td>139922</td> </tr> <tr> <td>2019-2020</td> <td>245077</td> <td>139922</td> </tr> <tr> <td>2020-2021</td> <td>255577</td> <td>139922</td> </tr> </tbody> </table>	DETAILS OF YEAR WISE PLANTATION (CUMULATIVE STATUS)			YEAR	NO. TREES PLANTED	PLANTATION IN & AROUND OF INDUSTRY/ SAPLING DISTRIBUTED	Up to march,2007-08	148655		2008-2009	155155	2300	2009-2010	162401	4800	2010-2011	171757	6964	2011-2012	177957	9964	2012-2013	183957	14164	2013-2014	190246	19664	2014-2015	196660	27664	2015-2016	203892	92664	2016-2017	209442	130364	2017-2018	212431	138922	2018-2019	214819	139922	2019-2020	245077	139922	2020-2021	255577	139922
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x	The company shall undertake eco-development measures including community welfare measures in the project area.	Company has been continuously doing eco-development work in the surrounding area.																																																
xi	All the recommendation mentioned in the Charter on the Corporate Responsibility for Environmental Protection (CREP) shall be strictly followed.	It is being complied																																																
xii	High calorific hazardous waste shall be used as fuel in the cement kiln. Accordingly, provision to be made in the kiln.	High calorific hazardous waste is being burnt in cement kiln. We have obtained Hazardous waste handling for co-processing authorization from SPCB, Odisha. Provision were made to utilize the hazardous and non-hazardous waste, as per the statute guideline.																																																
xiii	Prior permission from the State Forest	The plant was constructed over non-forest land and an																																																



<p>Department shall be obtained regarding likely impact of proposed expansion on the reverse forest viz. Gudiali RF (3km), Tunmura RF (6.5 km) Chudia RF (6.5 km) and Hathidhara R.F. (4 km) and recommendations/ suggestion, if any shall be implemented in a time bound manner.</p>	<p>application to the Forest Deptt. Already submitted in this regard.</p>
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## B. GENERAL CONDITION

Sl. No.	Description of conditions	Compliance Status																		
i	The project authority must adhere to the stipulation made by Orissa State Pollution Control Board and State Government.	All condition laid by Orissa state pollution control board is strictly abiding to all stipulations.																		
ii	No expansion or modification of the plant should be carried out without prior approval of this Ministry.	No expansion or modification have been made.																		
iii	Adequate number of ambient air quality- monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SO <sub>2</sub> and NO <sub>x</sub> are anticipated in consultation with the OSPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including Regional Office at Bhubaneswar and OSPCB once in six months.	<p>a. Four numbers of ambient air quality monitoring stations are installed as per SPCB and CPCB guidelines.</p> <p>b. Data on ambient air quality and stack emission is submitted to SPCB/CPCB and MoEF&amp;CC</p>																		
iv	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 <sup>th</sup> May 1993 and 31 <sup>st</sup> December 1993 or as amended from time to time. The treated waste water shall be recycled in the plant as well as utilization for plantation purposes.	<p>a. Waste water generated in the plant is being treated in the effluent treatment plant (ETP). The last analysis report of ETP outlet [w.r.t GSR 422(E)] is given here under.</p> <table border="1" data-bbox="962 1198 1428 1491"> <thead> <tr> <th>Sl. No.</th> <th>parameter</th> <th>ETP outlet treated water</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>PH value</td> <td>7.3</td> </tr> <tr> <td>2</td> <td>Total suspended solids (mg/l)</td> <td>9.5</td> </tr> <tr> <td>3</td> <td>B.O.D (mg/l)</td> <td>30.0</td> </tr> <tr> <td>4</td> <td>C.O.D (mg/l)</td> <td>84.6</td> </tr> <tr> <td>5</td> <td>Oil &amp; Grease (mg/l)</td> <td>&lt;2.0</td> </tr> </tbody> </table> <p>b. The treated water is utilised in the plant for machineries cooling, sprinkling on road &amp; green belt development.</p>	Sl. No.	parameter	ETP outlet treated water	1	PH value	7.3	2	Total suspended solids (mg/l)	9.5	3	B.O.D (mg/l)	30.0	4	C.O.D (mg/l)	84.6	5	Oil & Grease (mg/l)	<2.0
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5	Oil & Grease (mg/l)	<2.0																		
v	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous waste in accordance with the Hazardous Waste (Management and Handling) Rules, 2003. Authorization from the OSPCB must be obtained for collection, storage, treatment and disposal of hazardous wastes.	<p>Complied.</p> <p>Regular disposal of Hazardous waste, as per Rule are maintained and Form-IV is being submitted to OSPCB with required information.</p>																		
vi	The overall noise levels in and around the plant area shall be kept well within the standards (85dBA) by	Noise monitoring is being carried out regularly at specified locations. Following data is given																		

	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 EPA Rules, 1986 viz. 75 dBA (day time) and 70 dBA (night time).	herewith for four locations. Detail report is enclosed in Annexure-I
vii	The project proponent shall comply with all the environmental protection measures and safeguards recommended in the Environmental Impact Assessment / Environmental management Plan.	Complied
viii	As proposed in EIA / EMP, Rs.31.82 Crores and Rs.2.64 Crores earmarked toward the capital cost and recurring the expenditure / annum for environmental protection measures shall be used judiciously to implement the conditions as well as Ministry of Environment and forests as well as the State Government. The funds so provided shall not be diverted for any other purposes.	Complied.
ix	The Regional Office of this Ministry at Bhubaneswar / Central Pollution Control Board / OSPCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation should be submitted to them regularly	Complied. Six monthly reports are being submitted regularly.
x	The project authorities should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the state pollution Control Board / Committee and may also be seen at Website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> This shall be advertised within seven days from the date of issues 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.	Complied
xi	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.	Complied
xii	The Regional office of the Ministry at Bhubaneswar / Central Pollution Control Board / State Pollution Board will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation should be submitted to them regularly.	Six monthly compliance report along with monitored data is being submitted regularly. Also, as per the notification, it is being sent by e-mail in soft copies.



# **ENVIRONMENTAL MONITORING REPORT**

**BASED ON DATA GENERATED**

**FROM**

**APRIL 2021 TO SEPTEMBER 2021**

**FOR**

**DALMIA CEMENT (BHARAT) LIMITED**

**At/Po: RAJGANGPUR, District: SUNDARGARH, ODISHA**

**AT**

**CEMENT PLANT (LINE – 1 & LINE - 2), CPP**

**Prepared by: Environment Management Department  
Dalmia Cement (Bharat) Limited, Rajgangpur, Odisha**



## Monthly average value for PM emission from Stacks

Stack attached to	Particulate matter emission in mg/Nm <sup>3</sup>					
	APR, 2021	MAY, 2021	JUNE, 2021	JULY, 2021	AUG., 2021	SEPT, 2021
Cement VRM-1 B/F	13.4	12.1	18.7	24.1	25.12	15.76
Cement VRM-2 B/F	17.6	14.7	14	21	10.37	9.93
Cement VRM-3 B/F	10.3	12	9	11.5	11.26	13.60
Kiln & VRM BAG HOUSE(L-I)	9.4	Under Shutdown	11.7	10.9	Under Shutdown	11.73
Cooler ESP, L-I	13.4	Under Shutdown	17.3	19.1	Under Shutdown	19.45
Coal Mill B/F, L-I	10	Under Shutdown	19.3	13.3	Under Shutdown	17.07
Kiln & VRM BAG HOUSE (L-II)	9.5	12.4	8.7	10.1		12.23
Coal Mill B/F, L-II	13.3	14.9	17.5	14		16.29
Cooler ESP, L-II	15.9	13.3	14.1	19.8		13.62

## AMBIENT AIR AVG. DATA (FROM APRIL 2021 TO SEPTEMBER 2021)

Location of sampling station	SO <sub>2</sub> (ug/m <sup>3</sup> )	NOX (ug/m <sup>3</sup> )	PM <sub>10</sub> (ug/m <sup>3</sup> )	PM <sub>2.5</sub> (ug/m <sup>3</sup> )	Ozone (o <sub>3</sub> ) (ug/m <sup>3</sup> )	Lead (Pb) (ug/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )	Ammonia (nh <sub>3</sub> ) (ug/m <sup>3</sup> )	Benzene (C <sub>6</sub> H <sub>6</sub> ) (ug/m <sup>3</sup> )	Benzo (a) Pyrene (BaP) – (ug/m <sup>3</sup> )	Arsenic (AS) (ug/m <sup>3</sup> )	Nickel (Ni) (ug/m <sup>3</sup> )
Workshop building	05	19	80	29	< 20	< 0.4	< 0.1	39	< 0.5	< 0.1	< 0.2	< 12.0
Engineering hostel building	06	21	91	29	< 20	< 0.4	< 0.1	43	< 0.5	< 0.1	< 0.2	< 12.0
Project site (near colony)	05	17	50	20	< 20	< 0.4	< 0.1	80	< 0.5	< 0.1	< 0.2	< 12.0
Canteen building	05	20	78	28	< 20	< 0.4	< 0.1	43	< 0.5	< 0.1	< 0.2	< 12.0
Loco gate	05	18	77	27	< 20	< 0.4	< 0.1	54	< 0.5	< 0.1	< 0.2	< 12.0

## NOISE AVG. DATA (FROM APRIL 2021 TO SEPTEMBER 2021)

Particular (Noise level)	Sampling locations							
	Store building	Engg. hostel building	Loco gate	Near canteen	OCL township/colony	Workshop building	CCR building	Near water pond of CPP
Noise level(L day) during day time	64.8	59.5	71.8	59.5	55.8	59.6	60.4	65.3
Noise level (I. night) during night time	62.2	56.2	64.3	56.7	51.6	57.6	58.8	62.1



# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FMS

ULR - TC681621000001862F  
REPORT NO: CPL/R/SE/OCT-21/3

REPORT ISSUE DATE: 04.10.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
 Sample ID No : **CPL/SE/SEPT-21/60**  
 Name of Stack Monitored : **KILN & VRM LINE - 1**  
 Stack Connected To : **KILN VRM**  
 Shape of Stack : **Circular**  
 Date of Sampling : **27.09.2021**  
 Time of Sampling : **16 : 15 Hrs**  
 Method of Sampling : **IS 11255 (Part - 1), (Part - 2) : 1985, RA 2014 & (Part - 7): 2005, RA 2017**  
 Sample Received on : **27.09.2021**  
 Date of Test : **28.09.2021**

Ambient Temperature in °C : 36  
 Stack Temperature in °C : 160  
 Average Stack Gas Velocity in m/sec : 15.97  
 Iso-kinetic Flow Rate in LPM : 21  
 Duration of Sampling in minute : 47

	<u>Results Obtained</u>	<u>Permissible Limits</u>
Particulate Matter Concentration	: 18 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>
Sulphur Dioxide as SO <sub>2</sub>	: 24.10 mg/Nm <sup>3</sup>	100 mg/Nm <sup>3</sup>
Nitrogen Dioxide as NO <sub>2</sub>	: 437.1 mg/Nm <sup>3</sup>	800 mg/Nm <sup>3</sup>

Test Done By

Verified By

Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM



\*\*\*\*END OF TEST REPORT\*\*\*\*

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This report refers to the values obtained at the time of testing and results related to the item tested. This report may not be reproduced in part or full without written permission of the Company.

Registered Office:  
D/314, KOELNAGAR, ROURKELA - 769014, Dist: SUNDARGARH, ODISHA

Branch Office & Laboratory:  
D/124, KOELNAGAR, ROURKELA - 769014, Dist: SUNDARGARH, ODISHA  
Tele Fax: 0661 - 2475746, email: cleenviron@gmail.com





# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/PMSE

ULR - TC681621000001861F  
REPORT NO: CPL/R/SE/OCT-21/2

REPORT ISSUE DATE: 04.10.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer	:	<b>DALMIA CEMENT (BHARAT) LIMITED</b>
Address of the Customer	:	RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha
Sample ID No	:	<b>CPL/SE/SEPT-21/63</b>
Name of Stack Monitored	:	Coal Mill B/F, Line - 1
Stack Connected To	:	Coal Mill Bag Filter
Shape of Stack	:	Circular
Date of Sampling	:	28.09.2021
Time of Sampling	:	15 : 15 Hrs
Method of Sampling	:	IS 11255 (Part - 1): 1985, RA 2014
Sample Received on	:	28.09.2021
Date of Test	:	29.09.2021

Ambient Temperature in °C	:	34
Stack Temperature in °C	:	66
Average Stack Gas Velocity in m/sec	:	4.84
Iso-kinetic Flow Rate in LPM	:	18
Duration of Sampling in minute	:	55

	<u>Results Obtained</u>	<u>Permissible Limits</u>
Particulate Matter Concentration	: 24 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>

Test Done By

Verified By

Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM



\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FMS/1

ULR - TC681621000001860F  
REPORT NO: CPL/R/SE/OCT-21/1

REPORT ISSUE DATE: 04.10.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer	:	<b>DALMIA CEMENT (BHARAT) LIMITED</b>
Address of the Customer	:	RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha
Sample ID No	:	<b>CPL/SE/SEPT-21/64</b>
Name of Stack Monitored	:	Cooler ESP, Line - 1
Stack Connected To	:	Cooler, Line - 1
Shape of Stack	:	Circular
Date of Sampling	:	28.09.2021
Time of Sampling	:	11 : 55 Hrs
Method of Sampling	:	IS 11255 (Part - 1) : 1985, RA 2014
Sample Received on	:	28.09.2021
Date of Test	:	29.09.2021

Ambient Temperature in °C	:	36
Stack Temperature in °C	:	284
Average Stack Gas Velocity in m/sec	:	5.68
Iso-kinetic Flow Rate in LPM	:	13
Duration of Sampling in minute	:	76

	<u>Results Obtained</u>	<u>Permissible Limits</u>
Particulate Matter Concentration	: 11 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>

*[Signature]*  
Test Done By

*[Signature]*  
Verified By

*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM



\*\*\*END OF TEST REPORT\*\*\*

Page 1 of 1

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## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FMSI

ULR - TC681621000001863F  
REPORT NO: CPL/R/SE/OCT-21/4

REPORT ISSUE DATE: 04.10.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer	: <b>DALMIA CEMENT (BHARAT) LIMITED</b>
Address of the Customer	: RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha
Sample ID No	: <b>CPL/SE/SEPT-21/65</b>
Name of Stack Monitored	: CVRM - 1, Line - 1
Stack Connected To	: CVRM - 1 Bag filter
Shape of Stack	: Circular
Date of Sampling	: 28.09.2021
Time of Sampling	: 10 : 22 Hrs
Method of Sampling	: IS 11255 (Part - 1): 1985, RA 2014
Sample Received on	: 28.09.2021
Date of Test	: 29.09.2021

Ambient Temperature in °C	:	34
Stack Temperature in °C	:	86
Average Stack Gas Velocity in m/sec	:	6.97
Iso-kinetic Flow Rate in LPM	:	25
Duration of Sampling in minute	:	40

		<u>Results Obtained</u>	<u>Permissible Limits</u>
<b>Particulate Matter Concentration</b>	:	<b>26 mg/Nm<sup>3</sup></b>	<b>30 mg/Nm<sup>3</sup></b>

*[Signature]*  
Test Done By

*[Signature]*  
Verified By

*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM



\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FMS#

ULR - TC681621000001864F  
REPORT NO: CPL/RISE/OCT-21/5

REPORT ISSUE DATE: 04.10.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED


Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
Sample ID No : **CPL/SE/SEPT-21/59**  
Name of Stack Monitored : CVRM - 2, Line - 1  
Stack Connected To : CVRM - 2 Bag filter  
Shape of Stack : Circular  
Date of Sampling : 27.09.2021  
Time of Sampling : 13 : 10 Hrs  
Method of Sampling : IS 11255 (Part - 1): 1985, RA 2014  
Sample Received on : 27.09.2021  
Date of Test : 28.09.2021

Ambient Temperature in °C : 34  
Stack Temperature in °C : 105  
Average Stack Gas Velocity in m/sec : 7.02  
Iso-kinetic Flow Rate in LPM : 23  
Duration of Sampling in minute : 43

	<u>Results Obtained</u>	<u>Permissible Limits</u>
Particulate Matter Concentration	: 19 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>

  
Test Done By

  
Verified By

  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM



\*\*\*\*END OF TEST REPORT\*\*\*\*

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## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FM/56

ULR – TC681621000001865F

REPORT NO: CPL/R/SE/OCT-21/6

REPORT ISSUE DATE: 04.10.2021

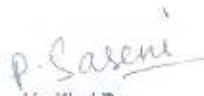
SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer : RGP Cement Factory, Rajgangpur – 770017, Dist: Sundargarh, Odisha  
 Sample ID No : **CPL/SE/SEPT-21/58**  
 Name of Stack Monitored : CVRM – 3, Line – 1  
 Stack Connected To : CVRM – 3 Bag filter  
 Shape of Stack : Circular  
 Date of Sampling : 27.09.2021  
 Time of Sampling : 12 : 10 Hrs  
 Method of Sampling : IS 11255 (Part – 1): 1985, RA 2014  
 Sample Received on : 27.09.2021  
 Date of Test : 28.09.2021

Ambient Temperature in °C : 37  
 Stack Temperature in °C : 105  
 Average Stack Gas Velocity in m/sec : 9.27  
 Iso-kinetic Flow Rate in LPM : 31  
 Duration of Sampling in minute : 32

	<u>Results Obtained</u>	<u>Permissible Limits</u>
<b>Particulate Matter Concentration</b>	<b>: 14 mg/Nm<sup>3</sup></b>	<b>30 mg/Nm<sup>3</sup></b>

  
 Test Done By

  
 Verified By

  
 Authorized Signatory  
 Subhanga Praharaj  
 Managing Director/QM



\*\*\*\*END OF TEST REPORT\*\*\*\*

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## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FM/28

ULR – TC681621000001869P

REPORT NO: CPL/R/SE/OCT-21/10

REPORT ISSUE DATE: 04.10.2021

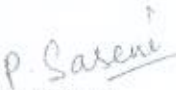
SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer : RGP Cement Factory, Rajgangpur – 770017, Dist: Sundargarh, Odisha  
 Sample ID No : **CPL/SE/SEPT-21/70**  
 Name of Stack Monitored : KILN & VRM RABH, LINE – 2  
 Stack Connected To : KILN VRM  
 Shape of Stack : Circular  
 Date of Sampling : 29.09.2021  
 Time of Sampling : 12 : 15 Hrs  
 Method of Sampling : IS 11255 (Part – 1), (Part – 2) : 1985, RA 2014 & (Part – 7): 2005, RA 2017  
 Sample Received on : 29.09.2021  
 Date of Test : 30.09.2021

Ambient Temperature in °C : 36  
 Stack Temperature in °C : 141  
 Average Stack Gas Velocity in m/sec : 8.07  
 Iso-kinetic Flow Rate in LPM : 24  
 Duration of Sampling in minute : 41

	<u>Results Obtained</u>	<u>Permissible Limits</u>
Particulate Matter Concentration	: 17 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>
Sulphur Dioxide as SO <sub>2</sub>	: 38.26 mg/Nm <sup>3</sup>	100 mg/Nm <sup>3</sup>
Nitrogen Dioxide as NO <sub>2</sub>	: 427.7 mg/Nm <sup>3</sup>	800 mg/Nm <sup>3</sup>

  
 Test Done By

  
 Verified By

  
 Authorized Signatory  
 Subhanga Praharaj  
 Managing Director/QM



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## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FMS8

ULR - TC681621000001867F  
REPORT NO: CPL/R/SE/OCT-21/8

REPORT ISSUE DATE: 04.10.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer	:	<b>DALMIA CEMENT (BHARAT) LIMITED</b>
Address of the Customer	:	RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha
Sample ID No	:	<b>CPL/SE/SEPT-21/69</b>
Name of Stack Monitored	:	Coal Mill B/F, Line - 2
Stack Connected To	:	Coal Mill Bag Filter
Shape of Stack	:	Circular
Date of Sampling	:	29.09.2021
Time of Sampling	:	16 : 17 Hrs
Method of Sampling	:	IS 11255 (Part - 1): 1985, RA 2014
Sample Received on	:	29.09.2021
Date of Test	:	29.09.2021

Ambient Temperature in °C	:	36
Stack Temperature in °C	:	73
Average Stack Gas Velocity in m/sec	:	4.56
Iso-kinetic Flow Rate in LPM	:	17
Duration of Sampling in minute	:	58

	<u>Results Obtained</u>	<u>Permissible Limits</u>
Particulate Matter Concentration	: 15 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>

*[Signature]*  
Test Done By

*[Signature]*  
Verified By

*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM



\*\*\*\*END OF TEST REPORT\*\*\*\*

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## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FM/08

ULR - TC681621000001866F  
REPORT NO: CPL/R/SE/OCT-21/7

REPORT ISSUE DATE: 04.10.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
 Sample ID No : **CPL/SE/SEPT-21/68**  
 Name of Stack Monitored : Cooler ESP, Line - 2  
 Stack Connected To : Cooler, Line - 2  
 Shape of Stack : Circular  
 Date of Sampling : 29.09.2021  
 Time of Sampling : 17 : 40 Hrs  
 Method of Sampling : IS 11255 (Part - 1): 1985, RA 2014  
 Sample Received on : 29.09.2021  
 Date of Test : 29.09.2021

Ambient Temperature in °C : 34  
 Stack Temperature in °C : 105  
 Average Stack Gas Velocity in m/sec : 7.63  
 Iso-kinetic Flow Rate in LPM : 26  
 Duration of Sampling in minute : 38

	<u>Results Obtained</u>	<u>Permissible Limits</u>
<b>Particulate Matter Concentration</b>	: 10 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>

*[Signature]*  
Test Done By

*[Signature]*  
Verified By

*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM



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## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPLFM57

ULR – TC881621000001874F  
REPORT NO: CPL/R/AAQ/OCT-21/2

REPORT ISSUE DATE: 04.10.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: A/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA  
Sampling Method : IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341

Environmental Conditions During Monitoring : Min. Temp.: 22.4°C | Max. Temp.: 33.8°C | Min. RH: 65% | Max. RH: 95%

Sample ID No	:	CPL/AAQ/SEPT-21/219
Location of Sampling	:	Near Stores Building (Line – 1)
Date of Sampling	:	27.09.2021 – 28.09.2021
Sampling Period	:	1110 – 1107 Hrs
Time of Sampling	:	23.53 Hrs
Sample Received on	:	28.09.2021
Date of Test	:	28.09.2021 – 29.09.2021

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	PM 2.5	22	µg/m <sup>3</sup>	IS : 5182 (PART – 24) 2019	50 (24 Hours)
2	PM 10	67	µg/m <sup>3</sup>	IS : 5182 (PART – 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	06	µg/m <sup>3</sup>	IS : 5182 (PART – 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	18	µg/m <sup>3</sup>	IS : 5182 (PART – 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	22	µg/m <sup>3</sup>	IS : 5182 (PART – 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	< 20	µg/m <sup>3</sup>	IS – 5182 (PART – 9) 1974, RA 2019	180 (1 Hour)

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*END OF TEST REPORT\*\*\*\*

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Consultant and Engineers in Environmental Pollution Control & Monitoring with Laboratory Facility.

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM57

REPORT NO: CPL/R/AAQ/OCT-21/2N

REPORT ISSUE DATE: 04.10.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA  
 Sampling Method : IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341

Environmental Conditions During Monitoring	: Min. Temp.: 22.4°C	Max. Temp.: 33.8°C	Min. RH: 65%	Max. RH: 95%
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Sample ID No	: CPL/AAQ/SEPT-21/219
Location of Sampling	: Near Stores Building (Line – 1)
Date of Sampling	: 27.09.2021 – 28.09.2021
Sampling Period	: 1110 – 1107 Hrs
Time of Sampling	: 23.53 Hrs
Sample Received on	: 28.09.2021
Date of Test	: 28.09.2021 – 29.09.2021

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	Lead (Pb)	< 0.4	µg/m <sup>3</sup>	IS : 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m <sup>3</sup>	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m <sup>3</sup>	IS : 5182 (PART – 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m <sup>3</sup>	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C <sub>6</sub> H <sub>6</sub> )	< 0.5	µg/m <sup>3</sup>	IS : 5182 (PART – 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate Phase only	< 0.1	ng/m <sup>3</sup>	IS : 5182 (PART – 12) 2004, RA 2014	1 (Annual)

*P. Sareni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM57

ULR - TC681621000001878F  
REPORT NO: CPL/IAAQ/OCT-21/6

REPORT ISSUE DATE: 04.10.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA  
Sampling Method : IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN 12341

Environmental Conditions During Monitoring : Min. Temp.: 22.4°C | Max. Temp.: 33.8°C | Min. RH: 65% | Max. RH: 95%

Sample ID No	:	CPL/AAQ/SEPT-21/223
Location of Sampling	:	Near Canteen Building (Line - 1)
Date of Sampling	:	29.09.2021 - 30.09.2021
Sampling Period	:	1850 - 1727 Hrs
Time of Sampling	:	22.23 Hrs
Sample Received on	:	30.09.2021
Date of Test	:	30.09.2021 - 01.10.2021

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2019 for Industrial, Residential, Rural & Other Area
1	PM 2.5	28	µg/m <sup>3</sup>	IS : 5182 (PART - 24) 2019	60 (24 Hours)
2	PM 10	78	µg/m <sup>3</sup>	IS : 5182 (PART - 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	05	µg/m <sup>3</sup>	IS : 5182 (PART - 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	20	µg/m <sup>3</sup>	IS : 5182 (PART - 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	43	µg/m <sup>3</sup>	IS : 5182 (PART - 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	< 20	µg/m <sup>3</sup>	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

*P. Sareni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*END OF TEST REPORT\*\*\*\*

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with Laboratory Facility.

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FMB7

REPORT NO: CPL/IAAQ/OCT-21/6N

REPORT ISSUE DATE: 04.10.2021

SAMPLE DRAWN BY CLEENVIROH PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA  
 Sampling Method : IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341

Environmental Conditions During Monitoring	Min. Temp.: 22.4°C	Max. Temp.: 33.8°C	Min. RH: 65%	Max. RH: 95%
--	--------------------	--------------------	--------------	--------------

Sample ID No	: CPL/AAQ/SEPT-21/223
Location of Sampling	: Near Canteen Building (Line – 1)
Date of Sampling	: 29.09.2021 – 30.09.2021
Sampling Period	: 1850 – 1727 Hrs
Time of Sampling	: 22.23 Hrs
Sample Received on	: 30.09.2021
Date of Test	: 30.09.2021 – 01.10.2021

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	Lead (Pb)	< 0.4	µg/m <sup>3</sup>	IS : 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m <sup>3</sup>	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m <sup>3</sup>	IS : 5182 (PART – 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m <sup>3</sup>	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C <sub>6</sub> H <sub>6</sub> )	< 0.5	µg/m <sup>3</sup>	IS : 5182 (PART – 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate Phase only	< 0.1	ng/m <sup>3</sup>	IS : 5182 (PART – 12) 2004, RA 2014	1 (Annual)

*P. Sareni*  
 Test Done By

*[Signature]*  
 Verified By



*[Signature]*  
 Authorized Signatory  
 Subhanga Praharaj  
 Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

Page 1 of 1

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FMS7

ULR - TC681621000001877F  
REPORT NO: CPL/R/AAQ/OCT-21/5

REPORT ISSUE DATE: 04.10.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA**  
Sampling Method : **IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN 12341**

Environmental Conditions During Monitoring : Min. Temp.: 22.4°C | Max. Temp.: 33.8°C | Min. RH: 65% | Max. RH: 95%

Sample ID No	:	CPL/AAQ/SEPT-21/218
Location of Sampling	:	Near Loco Gate (Line - 1)
Date of Sampling	:	27.09.2021 - 28.09.2021
Sampling Period	:	1030 - 1030 Hrs
Time of Sampling	:	24.00 Hrs
Sample Received on	:	28.09.2021
Date of Test	:	28.09.2021 - 29.09.2021

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	PM 2.5	27	µg/m <sup>3</sup>	IS : 5182 (PART - 24) 2019	60 (24 Hours)
2	PM 10	77	µg/m <sup>3</sup>	IS : 5182 (PART - 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	05	µg/m <sup>3</sup>	IS : 5182 (PART - 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	18	µg/m <sup>3</sup>	IS : 5182 (PART - 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	54	µg/m <sup>3</sup>	IS : 5182 (PART - 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	< 20	µg/m <sup>3</sup>	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

*P. Saseni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with Laboratory Facility.

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/PM57

REPORT NO: CPL/IAAQ/OCT-21/5N

REPORT ISSUE DATE: 04.10.2021

SAMPLE DRAWN BY CLEENVIRO PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA  
 Sampling Method : IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341

Environmental Conditions During Monitoring	: Min. Temp.: 22.4°C	Max. Temp.: 33.8°C	Min. RH: 65%	Max. RH: 95%
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Sample ID No	: CPL/AAQ/SEPT-21/218
Location of Sampling	: Near Loco Gate (Line – 1)
Date of Sampling	: 27.09.2021 – 28.09.2021
Sampling Period	: 1030 – 1030 Hrs
Time of Sampling	: 24.00 Hrs
Sample Received on	: 28.09.2021
Date of Test	: 28.09.2021 – 29.09.2021

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	Lead (Pb)	< 0.4	µg/m <sup>3</sup>	IS : 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m <sup>3</sup>	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m <sup>3</sup>	IS : 5182 (PART – 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m <sup>3</sup>	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C <sub>6</sub> H <sub>6</sub> )	< 0.5	µg/m <sup>3</sup>	IS : 5182 (PART – 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate Phase only	< 0.1	ng/m <sup>3</sup>	IS : 5182 (PART – 12) 2004, RA 2014	1 (Annual)

*P. Sarani*  
 Test Done By

*[Signature]*  
 Verified By



*[Signature]*  
 Authorized Signatory  
 Subhanga Praharaj  
 Managing Director/QM

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# Cleenviron Private Limited

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## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/MS7

ULR – TC681621000001873F  
REPORT NO: CPL/IAAQ/OCT-21/1

REPORT ISSUE DATE: 04.10.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA  
Sampling Method : IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN12341

Environmental Conditions During Monitoring : Min. Temp.: 22.4°C : Max. Temp.: 33.8°C Min. RH: 65% Max. RH: 95%

Sample ID No	:	CPL/AAQ/SEPT-21/220
Location of Sampling	:	Near Workshop Building (Line – 2)
Date of Sampling	:	28.09.2021 – 29.09.2021
Sampling Period	:	1745 – 1620 Hrs
Time of Sampling	:	22.35 Hrs
Sample Received on	:	29.09.2021
Date of Test	:	29.09.2021 – 30.09.2021

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial Residential, Rural & Other Area
1	PM 2.5	29	µg/m <sup>3</sup>	IS : 5182 (PART – 24) 2019	60 (24 Hours)
2	PM 10	80	µg/m <sup>3</sup>	IS : 5182 (PART – 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	05	µg/m <sup>3</sup>	IS : 5182 (PART – 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	19	µg/m <sup>3</sup>	IS : 5182 (PART – 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	39	µg/m <sup>3</sup>	IS : 5182 (PART – 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	< 20	µg/m <sup>3</sup>	IS – 5182 (PART – 9) 1974, RA 2019	180 (1 Hour)

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Prahara  
Managing Director/QM

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with Laboratory Facility.

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPLFM97

REPORT NO: CPL/R/AAQ/OCT-21/1N

REPORT ISSUE DATE: 04.10.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA**  
 Sampling Method : **IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN12341**

Environmental Conditions During Monitoring	Min. Temp.: 22.4°C	Max. Temp.: 33.8°C	Min. RH: 65%	Max. RH: 95%
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Sample ID No	: : CPL/AAQ/SEPT-21/220
Location of Sampling	: : Near Workshop Building (Line – 2)
Date of Sampling	: : 28.09.2021 – 29.09.2021
Sampling Period	: : 1745 – 1620 Hrs
Time of Sampling	: : 22.35 Hrs
Sample Received on	: : 29.09.2021
Date of Test	: : 29.09.2021 – 30.09.2021

Sl No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	Lead (Pb)	< 0.4	µg/m <sup>3</sup>	IS : 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m <sup>3</sup>	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m <sup>3</sup>	IS : 5182 (PART – 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m <sup>3</sup>	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C <sub>6</sub> H <sub>6</sub> )	< 0.5	µg/m <sup>3</sup>	IS : 5182 (PART – 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate Phase only	< 0.1	ng/m <sup>3</sup>	IS : 5182 (PART – 12) 2004, RA 2014	1 (Annual)

*P. Saini*  
 Test Done By



*Subhanga Praharaj*  
 Authorized Signatory  
 Subhanga Praharaj  
 Managing Director/QM

\*\*\*\*END OF TEST REPORT\*\*\*\*

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



Certificate No: TC - 4818

## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/PSB

ULR - TC681621000001243F  
REPORT NO: CPL/R/SE/JUL-21/4

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
 Sample ID No : **CPL/SE/JUN-21/48**  
 Name of Stack Monitored : **KILN & VRM LINE - 1**  
 Stack Connected To : **KILN VRM**  
 Shape of Stack : **Circular**  
 Date of Sampling : **19.06.2021**  
 Time of Sampling : **10 : 30 Hrs**  
 Method of Sampling : **IS 11255 (Part - 1), (Part - 2) : 1985, RA 2014 & (Part - 7) : 2005, RA 2017**  
 Sample Received on : **21.06.2021**  
 Date of Test : **22.06.2021**

Ambient Temperature in °C : 31  
 Stack Temperature in °C : 135  
 Average Stack Gas Velocity in m/sec : 14.14  
 Iso-kinetic Flow Rate in LPM : 44  
 Duration of Sampling in minute : 24

	<u>Results Obtained</u>	<u>Permissible Limits</u>
Particulate Matter Concentration	: 07 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>
Sulphur Dioxide as SO <sub>2</sub>	: 18.04 mg/Nm <sup>3</sup>	100 mg/Nm <sup>3</sup>
Nitrogen Dioxide as NO <sub>2</sub>	: 463.9 mg/Nm <sup>3</sup>	800 mg/Nm <sup>3</sup>

*P. Saxe*  
Test Done By



*M. Nayak*  
Verified By

*S. Subhanga*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

Page 1 of 1

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



Certificate No: TC - 4314

## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/MS

ULR - TC6B1621000001242F  
REPORT NO: CPL/R/SE/JUL-21/3

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
 Sample ID No : **CPL/SE/JUN-21/50**  
 Name of Stack Monitored : Coal Mill B/F, Line - 1  
 Stack Connected To : Coal Mill Bag Filter  
 Shape of Stack : Circular  
 Date of Sampling : 19.06.2021  
 Time of Sampling : 11 : 25 Hrs  
 Method of Sampling : IS 11255 (Part - 1): 1985, RA 2014  
 Sample Received on : 21.06.2021  
 Date of Test : 22.06.2021

Ambient Temperature in °C : 31  
 Stack Temperature in °C : 76  
 Average Stack Gas Velocity in m/sec : 7.32  
 Iso-kinetic Flow Rate in LPM : 27  
 Duration of Sampling in minute : 37

	<u>Results Obtained</u>	<u>Permissible Limits</u>
<b>Particulate Matter Concentration</b>	: <b>18 mg/Nm<sup>3</sup></b>	<b>30 mg/Nm<sup>3</sup></b>

*p. Saseeni*  
Test Done By



*[Signature]*  
Verified By

*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*END OF TEST REPORT\*\*\*\*

Page 1 of 1

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# Cleenviron Private Limited

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Certificate No. TC - 6214

## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/PMIS

ULR - TC681621000001241F  
REPORT NO: CPL/R/SE/JUL-21/2

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
 Sample ID No : **CPL/SE/JUN-21/49**  
 Name of Stack Monitored : Cooler ESP, Line - 1  
 Stack Connected To : Cooler, Line - 1  
 Shape of Stack : Circular  
 Date of Sampling : 19.06.2021  
 Time of Sampling : 10 : 25 Hrs  
 Method of Sampling : IS 11255 (Part - 1) : 1985, RA 2014  
 Sample Received on : 21.06.2021  
 Date of Test : 22.06.2021

Ambient Temperature in °C : 32  
 Stack Temperature in °C : 206  
 Average Stack Gas Velocity in m/sec : 9.075  
 Iso-kinetic Flow Rate in LPM : 24  
 Duration of Sampling in minute : 42

	<u>Results Obtained</u>	<u>Permissible Limits</u>
<b>Particulate Matter Concentration</b>	: 11 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>

*P. Sasaki*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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Certificate No: TC - 6818

## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/MSR

ULR - TC681621000001244F  
REPORT NO: CPL/R/SE/JUL-21/5

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
 Sample ID No : **CPL/SE/JUN-21/51**  
 Name of Stack Monitored : CVRM - 1, Line - 1  
 Stack Connected To : CVRM - 1 Bag filter  
 Shape of Stack : Circular  
 Date of Sampling : 19.06.2021  
 Time of Sampling : 09 : 35 Hrs  
 Method of Sampling : IS 11255 (Part - 1): 1985, RA 2014  
 Sample Received on : 21.06.2021  
 Date of Test : 22.06.2021

Ambient Temperature in °C : 30  
 Stack Temperature in °C : 86  
 Average Stack Gas Velocity in m/sec : 8.39  
 Iso-kinetic Flow Rate in LPM : 30  
 Duration of Sampling in minute : 33

	<u>Results Obtained</u>	<u>Permissible Limits</u>
Particulate Matter Concentration	: 08 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>

*p. Sarseni*  
Test Done By

*M. Prasad*  
Verified By



*Subhanga Praharaj*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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# Cleenviron Private Limited

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Certificate No: TC - 8818

## TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681621000001245F  
REPORT NO: CPL/R/SE/JUL-21/6

FORMAT NO: CPL/PM35

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer	:	<b>DALMIA CEMENT (BHARAT) LIMITED</b>
Address of the Customer	:	RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha
Sample ID No	:	<b>CPL/SE/JUN-21/44</b>
Name of Stack Monitored	:	CVRM - 2, Line - 1
Stack Connected To	:	CVRM - 2 Bag filter
Shape of Stack	:	Circular
Date of Sampling	:	18.06.2021
Time of Sampling	:	13 : 03 Hrs
Method of Sampling	:	IS 11255 (Part - 1): 1985, RA 2014
Sample Received on	:	18.06.2021
Date of Test	:	19.06.2021

Ambient Temperature in °C	:	31
Stack Temperature in °C	:	96
Average Stack Gas Velocity in m/sec	:	6.80
Iso-kinetic Flow Rate in LPM	:	23
Duration of Sampling in minute	:	43

		<u>Results Obtained</u>	<u>Permissible Limits</u>
<b>Particulate Matter Concentration</b>	:	<b>10 mg/Nm<sup>3</sup></b>	<b>30 mg/Nm<sup>3</sup></b>

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By

*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM



\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

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Certificate No: TC - 0010

## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/MSR

ULR - TC681621000001246F

REPORT NO: CPL/R/SE/JUL-21/7

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
 Sample ID No : **CPL/SE/JUN-21/43**  
 Name of Stack Monitored : CVRM - 3, Line - 1  
 Stack Connected To : CVRM - 3 Bag filter  
 Shape of Stack : Circular  
 Date of Sampling : 18.06.2021  
 Time of Sampling : 11 : 57 Hrs  
 Method of Sampling : IS 11255 (Part - 1): 1985, RA 2014  
 Sample Received on : 18.06.2021  
 Date of Test : 19.06.2021

Ambient Temperature in °C : 30  
 Stack Temperature in °C : 90  
 Average Stack Gas Velocity in m/sec : 6.60  
 Iso-kinetic Flow Rate in LPM : 23  
 Duration of Sampling in minute : 43

	<u>Results Obtained</u>	<u>Permissible Limits</u>
<b>Particulate Matter Concentration</b>	: <b>15 mg/Nm<sup>3</sup></b>	<b>30 mg/Nm<sup>3</sup></b>

*P. Saha*  
Test Done By



*[Signature]*  
Verified By

*[Signature]*  
Authorized Signatory  
Subhanga Praharej  
Managing Director/QM

\*\*\*\*END OF TEST REPORT\*\*\*\*

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



Certificate No. TC - 6914

## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/MSR

ULR - TC681621000001249F  
REPORT NO: CPL/R/SE/JUL-21/10

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer : RGP Cement Factory, Rajgangpur -- 770017, Dist: Sundargarh, Odisha  
 Sample ID No : **CPL/SE/JUN-21/35**  
 Name of Stack Monitored : KILN & VRM RABH, LINE - 2  
 Stack Connected To : KILN VRM  
 Shape of Stack : Circular  
 Date of Sampling : 16.06.2021  
 Time of Sampling : 15 : 00 Hrs  
 Method of Sampling : IS 11255 (Part - 1), (Part - 2) : 1985, RA 2014 & (Part - 7) : 2005, RA 2017  
 Sample Received on : 17.06.2021  
 Date of Test : 18.06.2021

Ambient Temperature in °C : 28  
 Stack Temperature in °C : 150  
 Average Stack Gas Velocity in m/sec : 12.03  
 Iso-kinetic Flow Rate in LPM : 36  
 Duration of Sampling in minute : 27

	<u>Results Obtained</u>	<u>Permissible Limits</u>
Particulate Matter Concentration	: 11 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>
Sulphur Dioxide as SO <sub>2</sub>	: 32.19 mg/Nm <sup>3</sup>	100 mg/Nm <sup>3</sup>
Nitrogen Dioxide as NO <sub>2</sub>	: 435.2 mg/Nm <sup>3</sup>	800 mg/Nm <sup>3</sup>

*P. Saseni*  
Test Done By

*[Signature]*  
Verified By

*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM



\*\*\*END OF TEST REPORT\*\*\*

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Certificate No. TC - 8818

## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/MSR

ULR - TC681621000001248F  
REPORT NO: CPL/R/SE/JUL-21/9

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
 Sample ID No : **CPL/SE/JUN-21/36**  
 Name of Stack Monitored : Coal Mill B/F, Line - 2  
 Stack Connected To : Coal Mill Bag Filter  
 Shape of Stack : Circular  
 Date of Sampling : 16.06.2021  
 Time of Sampling : 16 : 06 Hrs  
 Method of Sampling : IS 11255 (Part - 1): 1985, RA 2014  
 Sample Received on : 17.06.2021  
 Date of Test : 18.06.2021

Ambient Temperature in °C : 38  
 Stack Temperature in °C : 76  
 Average Stack Gas Velocity in m/sec : 5.76  
 Iso-kinetic Flow Rate in LPM : 21  
 Duration of Sampling in minute : 47

	<u>Results Obtained</u>	<u>Permissible Limits</u>
<b>Particulate Matter Concentration</b>	<b>: 11 mg/Nm<sup>3</sup></b>	<b>30 mg/Nm<sup>3</sup></b>

*p. Sareni*  
Test Done By



*[Signature]*  
Verified By

*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*END OF TEST REPORT\*\*\*\*

Page 1 of 1

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Certificate No: TC - 0314

## TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FMSB

ULR - TC681621000001247F  
REPORT NO: CPL/R/SE/JUL-21/8

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer : RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha  
 Sample ID No : **CPL/SE/JUN-21/37**  
 Name of Stack Monitored : Cooler ESP, Line - 2  
 Stack Connected To : Cooler, Line - 2  
 Shape of Stack : Circular  
 Date of Sampling : 17.06.2021  
 Time of Sampling : 14 : 03 Hrs  
 Method of Sampling : IS 11255 (Part - 1): 1985, RA 2014  
 Sample Received on : 18.06.2021  
 Date of Test : 19.06.2021

Ambient Temperature in °C : 30  
 Stack Temperature in °C : 125  
 Average Stack Gas Velocity in m/sec : 6.76  
 Iso-kinetic Flow Rate in LPM : 22  
 Duration of Sampling in minute : 45

	<u>Results Obtained</u>	<u>Permissible Limits</u>
Particulate Matter Concentration	: 11 mg/Nm <sup>3</sup>	30 mg/Nm <sup>3</sup>

*p. Saseeni*  
Test Done By

*[Signature]*  
Verified By

*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM



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# Cleenviron Private Limited

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Certificate No. TC - 4818

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC681621000001227P

FORMAT NO: CPL/FWS7

REPORT NO: CPL/R/AAQ/JUL-21/21

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA**  
 Sampling Method : **IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN 12341**  
 Location of Monitoring : **STORE BUILDING**  
 Monitoring Station Code : **A2**  
 Sample Received on : **21.06.2021**  
 Test Carried out on : **21.06.2021 - 22.06.2021**

Environmental Conditions During Monitoring : Min Temp.:20.6°C Max Temp.:39.5°C Min RH:43% Max RH:96%

Sl No	Date of Sampling	Sample ID	Parameters					
			PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	NH <sub>3</sub>	O <sub>3</sub>
Units			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
Method of Analysis			CPL/SDP/1/PM2.5, Issue No: 02, dtd: 23.10.2017	EN 12341, 1991 Low Volume Sampler	IS:5182 (Part - 2) 2001, RA 2017	IS: 5182 (Part - 6) 2006, RA 2017	CPL/SDP/1/NH3, Issue No: 02, dtd: 23.10.2017	IS:5182 (Part - 9) 1974, RA 2014
1.	18.06.2021 - 19.06.2021	CPL/AAQ/JUN-21/338	13	37	05	20	27	20
National Ambient Air Quality Standards, CPCB Notification New Delhi, 18 <sup>th</sup> November, 2009 for Industrial, Residential, Rural & Other Area			60 (24 Hours Average)	100 (24 Hours Average)	80 (24 Hours Average)	80 (24 Hours Average)	400 (24 Hours Average)	180 (1 Hour Average)

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

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Consultant and Engineers in Environmental Pollution Control & Monitoring with Laboratory Facility.

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/PM57

REPORT NO: CPL/RIAQ/JUL-21/21

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA**  
 Sampling Method : **IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN 12341**  
 Location of Monitoring : **STORE BUILDING**  
 Monitoring Station Code : **A2**  
 Sample Received on : **21.06.2021**  
 Test Carried out on : **21.06.2021 - 22.06.2021**

Environmental Conditions During Monitoring : Min Temp.:20.6°C Max Temp.:39.5°C Min RH:43% Max RH:96%

Sl No	Date of Sampling	Sample ID	Parameters					
			Lead (Pb)	Arsenic (As)	Nickel (Ni)	Benzene (C <sub>6</sub> H <sub>6</sub> )	Carbon Monoxide (CO)	Benzo(a)pyrene (BaP) - Particulate Phase only
Units			µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ng/m <sup>3</sup>
Method of Analysis			IS 5182 (Part - 2): 2004, RA 2014	CPL/SOP/11(A), Item No: 02, Iss: 23.10.2017	CPL/SOP/11(B), Item No: 02, Iss: 23.10.2017	IS 5182 (Part - 11): 2004, RA 2017	Electro-chemical Sensor	IS 5182 (Part - 12)
1.	18.06.2021 - 19.06.2021	CPL/AAQ/JUN-21/338	< 0.4	< 0.1	< 12.0	< 0.5	< 0.1	< 0.1
National Ambient Air Quality Standards, CPCB Notification New Delhi, 19 <sup>th</sup> November, 2009 for Industrial, Residential, Rural & Other Area			1.0 (24 Hours Average)	06 (Annual Average)	20 (Annual Average)	05 (Annual Average)	4 (1 Hour Average)	01 (Annual Average)

*P. Basani*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*END OF TEST REPORT\*\*\*

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



Certificate No: TC - 0210

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC681621000001231P  
REPORT NO: CPL/R/AAQ/JUL-21/25

FORMAT NO: CPL/FMS7

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA**  
 Sampling Method : **IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN 12341**  
 Location of Monitoring : **NEAR CANTEEN BUILDING**  
 Monitoring Station Code : **A6**  
 Sample Received on : **21.06.2021**  
 Test Carried out on : **21.06.2021 - 22.06.2021**

Environmental Conditions During Monitoring	: Min Temp.:20.6°C	Max Temp.:39.5°C	Min RH:43%	Max RH:96%
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Sl No	Date of Sampling	Sample ID	Parameters					
			PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	NH <sub>3</sub>	O <sub>3</sub>
Units			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
Method of Analysis			CPL/SOP/UPR/2.5, Issue No: 02, dtd: 23.10.2017	EN 12341, 1996 Low Volume Sampler	IS:5182 (Part - 2) 2001, RA 2017	IS: 5182 (Part - 1) 2006, RA 2017	CPL/SOP/100/1, Issue No: 02, dtd: 23.10.2017	IS:5182 (Part - 9) 1974, RA 2014
1.	18.06.2021 - 19.06.2021	CPL/AAQ/JUN-21/339	29	75	06	21	32	21
National Ambient Air Quality Standards, CPCB Notification New Delhi, 15 <sup>th</sup> November, 2009 for Industrial, Residential, Rural & Other Area			80 (24 Hours Average)	100 (24 Hours Average)	80 (24 Hours Average)	80 (24 Hours Average)	400 (24 Hours Average)	180 (1 Hour Average)

*P. Basani*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*END OF TEST REPORT\*\*\*

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with Laboratory Facility.

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FRST

REPORT NO: CPL/R/AAQ/JUL-21/25

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH – 770017, ODISHA**  
 Sampling Method : **IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341**  
 Location of Monitoring : **NEAR CANTEEN BUILDING**  
 Monitoring Station Code : **A6**  
 Sample Received on : **21.06.2021**  
 Test Carried out on : **21.06.2021 – 22.06.2021**

Environmental Conditions During Monitoring : Min Temp.:20.6°C Max Temp.:39.5°C Min RH:43% Max RH:96%

Sl No	Date of Sampling	Sample ID	Parameters					
			Lead (Pb)	Arsenic (As)	Nickel (Ni)	Benzerie (C <sub>6</sub> H <sub>6</sub> )	Carbon Monoxide (CO)	Benzo(a)pyrene (BaP) – Particulate Phase only
Units			µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ng/m <sup>3</sup>
Method of Analysis			IS 5182 (Part – 2), 2004, RA 2014	CPL/SOP/01/As, Issue No: 02, dt: 23.06.2017	CPL/SOP/01/Ni, Issue No: 02, dt: 23.06.2017	IS 5182 (Part – 11): 2004, RA 2017	Electro-chemical Sensor	IS 5182 (Part – 12)
1.	18.06.2021 – 19.06.2021	CPL/AAQ/JUN-21/339	< 0.4	< 0.1	< 12.0	< 0.5	< 0.1	< 0.1
National Ambient Air Quality Standards, CPCB Notification New Delhi, 18 <sup>th</sup> November, 2009 for Industrial, Residential, Rural & Other Area			1.0 (24 Hours Average)	96 (Annual Average)	20 (Annual Average)	05 (Annual Average)	4 (1 Hour Average)	01 (Annual Average)

*P. Sareni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*END OF TEST REPORT\*\*\*\*

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Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



Certificate No. TC - 6818

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC681621000001232P

FORMAT NO: CPL/FMS7

REPORT NO: CPL/R/AAQ/JUL-21/28

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA**  
 Sampling Method : **IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN 12341**  
 Location of Monitoring : **NEAR ENGINEERING HOSTEL**  
 Monitoring Station Code : **A7**  
 Sample Received on : **17.06.2021**  
 Test Carried out on : **17.06.2021 - 18.06.2021**

Environmental Conditions During Monitoring : Min Temp.:20.6°C Max Temp.:39.5°C Min RH:43% Max RH:96%

Sl No	Date of Sampling	Sample ID	Parameters				O <sub>3</sub>	
			PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>		
Units			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	
Method of Analysis			CPL/SOP/PM2.5, Issue No: 02, dt: 23.12.2017	EN 12341, 1000 Low Volume Sampler	IS:5182 (Part-2)2011, RA 2017	IS: 5182 (Part - 6) 2008, RA 2017	CPL/SOP/NO2, Issue No: 02, dt: 23.12.2017	IS:5182 (Part - 3) 1974, RA 2014
1.	16.06.2021 - 17.06.2021	CPL/AAQ/JUN-21/297	19	53	04	13	21	< 19.6
National Ambient Air Quality Standards, CPCB Notification New Delhi, 18 <sup>th</sup> November, 2009 for Industrial, Residential, Rural & Other Area			60 (24 Hours Average)	100 (24 Hours Average)	80 (24 Hours Average)	80 (24 Hours Average)	400 (24 Hours Average)	180 (1 Hour Average)

*P. Sareni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with Laboratory Facility.

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/RAQ/27

REPORT NO: CPL/RAAQ/JUL-21/28

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer: **At/PO: RAJGANGPUR, SUNDARGARH - 770017, ODISHA**  
 Sampling Method : **IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN 12341**  
 Location of Monitoring : **NEAR ENGINEERING HOSTEL**  
 Monitoring Station Code : **A7**  
 Sample Received on : **17.06.2021**  
 Test Carried out on : **17.06.2021 - 18.06.2021**

Environmental Conditions During Monitoring : Min Temp.:20.6°C | Max Temp.:39.5°C | Min RH:43% | Max RH:96%

Sl No	Date of Sampling	Sample ID	Parameters				Benzo(a)pyrene (BaP) - Particulate Phase only	
			Lead (Pb)	Arsenic (As)	Nickel (Ni)	Benzene (C <sub>6</sub> H <sub>6</sub> )		Carbon Monoxide (CO)
Units			µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ng/m <sup>3</sup>
Method of Analysis			IS 5182 (Part - 22): 2004, RA 2814	CPL/SOP/REA, Issue No: 02, dtd: 26.10.2017	CPL/SOP/NIK, Issue No: 02, dtd: 23.10.2017	IS 5182 (Part - 11): 2006, RA 2017	Electro-chemical Sensor	IS 5182 (Part - 12)
1.	16.06.2021 - 17.06.2021	CPL/AAQ/JUN-21/297	< 0.4	< 0.1	< 12.0	< 0.5	< 0.1	< 0.1
National Ambient Air Quality Standards, CPCB Notification New Delhi, 18 <sup>th</sup> November, 2009 for Industrial, Residential, Rural & Other Area			1.0 (24 Hours Average)	06 (Annual Average)	20 (Annual Average)	05 (Annual Average)	4 (1 Hour Average)	01 (Annual Average)

*p. Sarseni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



Certificate No: TC - 6018

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC681621000001230P

FORMAT NO: CPLFM07

REPORT NO: CPLR/AAQ/JUL-21/24

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer: **AI/PO: RAJGANGPUR, SUNDARGARH - 770017, ODISHA**  
 Sampling Method : **IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN 12341**  
 Location of Monitoring : **NEAR LOCO GATE**  
 Monitoring Station Code : **A5**  
 Sample Received on : **21.06.2021**  
 Test Carried out on : **21.06.2021 - 22.06.2021**

Environmental Conditions During Monitoring	:	Min Temp.:20.6°C	Max Temp.:39.5°C	Min RH:43%	Max RH:96%
--	---	------------------	------------------	------------	------------

Sl No	Date of Sampling	Sample ID	Parameters					
			PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	NH <sub>3</sub>	O <sub>3</sub>
Units			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
Method of Analysis			CPLSOP01/PM2.5 Issue No: 02, dt: 23.10.2017	EN-12341, 1996 Low Volume Sampler	IS:5182 (Part-2) 2001, RA 2017	IS: 5182 (Part - 6) 2006, RA 2017	CPLSOP01/NH <sub>3</sub> Issue No: 02, dt: 23.10.2017	IS:5182 (Part - 9) 1974, RA 2014
1.	18.06.2021 - 19.06.2021	CPL/AAQ/JUN-21/340	19	58	03	16	34	< 19.6
National Ambient Air Quality Standards, CPCB Notification New Delhi, 18 <sup>th</sup> November, 2009 for Industrial, Residential, Rural & Other Area			60 (24 Hours Average)	100 (24 Hours Average)	80 (24 Hours Average)	80 (24 Hours Average)	400 (24 Hours Average)	180 (1 Hour Average)

*P. Saseni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*END OF TEST REPORT\*\*\*\*

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with Laboratory Facility.

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/MS1

REPORT NO: CPLR/AAQ/JUL-21/24

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer: At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA  
 Sampling Method : IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN 12341  
 Location of Monitoring : **NEAR LOCO GATE**  
 Monitoring Station Code : A5  
 Sample Received on : 21.06.2021  
 Test Carried out on : 21.06.2021 - 22.06.2021

Environmental Conditions During Monitoring : Min Temp.:20.6°C Max Temp.:39.5°C Min RH:43% Max RH:96%

Sl No	Date of Sampling	Sample ID	Parameters				Benzo(a)pyrene (BaP) - Particulate Phase only	
			Lead (Pb)	Arsenic (As)	Nickel (Ni)	Benzene (C <sub>6</sub> H <sub>6</sub> )		Carbon Monoxide (CO)
Units			µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ng/m <sup>3</sup>
Method of Analysis			IS 5182 (Part - 2): 2004, RA 2014	CPL/SOPR 106a, Issue No: 02, dt: 23.10.2017	CPL/SOPR 106, Issue No: 02, dt: 23.10.2017	IS 5182 (Part - 11): 2004, RA 2017	Electro-chemical Sensor	IS 5182 (Part - 12)
1.	18.06.2021 - 19.06.2021	CPL/AAQ/JUN-21/340	< 0.4	< 0.1	< 12.0	< 0.5	< 0.1	< 0.1
National Ambient Air Quality Standards, CPCB Notification New Delhi, 18 <sup>th</sup> November, 2009 for Industrial, Residential, Rural & Other Area			1.0 (24 Hours Average)	06 (Annual Average)	20 (Annual Average)	05 (Annual Average)	4 (1 Hour Average)	01 (Annual Average)

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM

\*\*\*\*END OF TEST REPORT\*\*\*\*

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with NABL Accredited Laboratory.



Certificate No. 10 - 8918

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC681621000001226P

REPORT NO: CPL/R/AAQ/JUL-21/20

FORMAT NO: CPL/RMST

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA**  
 Sampling Method : **IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN12341**  
 Location of Monitoring : **WORKSHOP BUILDING LINE - 2**  
 Monitoring Station Code : **A1**  
 Sample Received on : **17.06.2021**  
 Test Carried out on : **17.06.2021 - 18.06.2021**

Environmental Conditions During Monitoring : Min Temp.:20.6°C Max Temp.:39.5°C Min RH:43% Max RH:96%

Sl No	Date of Sampling	Sample ID	Parameters					
			PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	NH <sub>3</sub>	O <sub>3</sub>
Units			µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
Method of Analysis			CPL/ROPR1/PM2.5, Issue No: 02, dt: 23.10.2017	EN 12341, 1898 Low Volume Sampler	IS:5182 (Part-2) 2091, RA 2917	IS: 5182 (Part - 6) 2096, RA 2017	CPL/ROPR/0NH <sub>3</sub> , Issue No: 02, dt: 23.10.2017	IS:5182 (Part - 9) 1974, RA 2014
1.	16.06.2021 - 17.06.2021	CPL/AAQ/JUN-21/295	24	71	04	14	30	< 19.6
National Ambient Air Quality Standards, CPCB Notification New Delhi, 12 <sup>th</sup> November, 2009 for Industrial, Residential, Rural & Other Area			80 (24 Hours Average)	100 (24 Hours Average)	80 (24 Hours Average)	80 (24 Hours Average)	400 (24 Hours Average)	180 (1 Hour Average)

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By

*[Signature]*  
Authorized Signatory  
Subhanga Praharaj  
Managing Director/QM



\*\*\*\*\*END OF TEST REPORT\*\*\*\*\*

Page 1 of 1

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Registered Office: D/318, KOELNAGAR, ROURKELA - 769014, Dist: SUNDARGARH, ODISHA

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# Cleenviron Private Limited

Consultant and Engineers in Environmental Pollution Control & Monitoring with Laboratory Facility.

## TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FR07

REPORT NO: CPL/R/AAQ/JUL-21/20

REPORT ISSUE DATE: 03.07.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer : **M/s DALMIA CEMENT (BHARAT) LIMITED**  
 Address of the Customer: **At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA**  
 Sampling Method : **IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN12341**  
 Location of Monitoring : **WORKSHOP BUILDING LINE - 2**  
 Monitoring Station Code : **A1**  
 Sample Received on : **17.06.2021**  
 Test Carried out on : **17.06.2021 - 18.06.2021**

Environmental Conditions During Monitoring : Min Temp.:20.6°C Max Temp.:39.5 °C Min RH:43% Max RH:96%

Sl No	Date of Sampling	Sample ID	Parameters				Benzo(a)pyrene (BaP) - Particulate Phase only	
			Lead (Pb)	Arsenic (As)	Nickel (Ni)	Benzene (C <sub>6</sub> H <sub>6</sub> )		Carbon Monoxide (CO)
Units			µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	ng/m <sup>3</sup>
Method of Analysis			IS 5182 (Part - 2): 2004, RA 2014	CPL/SOP/AAQ, Issue No: 02, dtd: 23.03.2017	CPL/SOP/Ni, Issue No: 02, dtd: 23.03.2017	IS 5182 (Part - 11): 2004, RA 2017	Electro-chemical Sensor	IS 5182 (Part - 12)
1.	16.06.2021 - 17.06.2021	CPL/AAQ/JUN-21/295	< 0.4	< 0.1	< 12.0	< 0.5	< 0.1	< 0.1
National Ambient Air Quality Standards, CPCB Notification New Delhi, 18 <sup>th</sup> November, 2009 for Industrial, Residential, Rural & Other Area			1.0 (24 Hours Average)	06 (Annual Average)	20 (Annual Average)	05 (Annual Average)	4 (1 Hour Average)	01 (Annual Average)

*P. Saseeni*  
Test Done By

*[Signature]*  
Verified By



*[Signature]*  
Authorized Signatory  
Subhanga Prabhara  
Managing Director/QM

\*\*\*\*END OF TEST REPORT\*\*\*\*

Page 1 of 1

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