

newthink! cement! sugar! refractories! power!

Date:15th Nov,2022

DSP/RGP/ENV/ ECHC/373/2022

Tο

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

Sub: - Submission of six-monthly compliance status report (April 2022 to September 2022) of EC letter No. J-11011/232/2016-1A II (I) dated 16th February, 2018 by MoEF&CC of Dalmia Cement (Bharat) Limited (Dalmia DSP Unit), At. /P.O. Rajgangpur, Tehsil-Rajgangpur, Dist. Sundergarh, Odisha.

Ref: - Environment Clearance letter F. No. J-11011/232/2016- 1A II (I) dated 16th February, 2018.

Respected Sir,

With reference to above letter, we enclose herewith the six-monthly compliance report (Ending September, 2022) of conditions stipulated in the Environmental Clearance for the Dalmia DSP unit, Rajgangpur.

Thanking you

For, Dalmia DSP Unit, Rajgangpur

Bijaya Ketan Dash

General Manager (Env. & Safety)

Encl: As above

Copy to:

 The Chairman, Central Pollution Control Board Parivesh Bhavan CBD – cum- Office Complex East Arjun Nagar NEW DELHI – 110032 The Director (S)
 Government of India
 Ministry of Environment and Forest
 Eastern Regional Office
 A/3, Chandrasekharpur
 BHUBANESWAR – 751023

Registered Office: Dalmiapuram 621651 (Tamil Nadu)

3. The Chairman, State Pollution Control Board, Orissa Parivesh Bhavan, A/118, Nilakanthnagar, Unit – VIII BHUBANESWAR - 751012

SIX MONTHLY COMPLIANCE REPORT (APRIL, 2022 TO SEPTEMBER, 2022) OF ENVIRONMENT CLEARANCE LETTER NO.F.No.

J-11011/232/2016-1A II (I) dated 16th February 2018 By MoEF&CC

For Dalmia DSP Unit of
DALMIA CEMENT (BHARAT) LIMITED
RAJGANGPUR – 770017
DIST- SUNDARGARH
ODISHA

Date: 15th Nov, 2022

Sub: Submission of six-monthly compliance report (April, 2022 to September, 2022) of conditions stipulated in Environmental Clearance Letter No. F. No. J-11011/232/2016-1A II (I) dated 16th February, 2018 by MoEF&CC for Dalmia DSP Unit of Dalmia Cement (Bharat) Limited, At. Rajgangpur, Dist. Sundergarh, Odisha.

A. Specific Condition:

Conditions		Compliance
1. An amount of Rs 46.00 Crores proposed towards Enterprise Social Commitment (ESC) shall be utilized as capital expenditure in project mode. The project shall be completed in concurrence with the implementation of the expansion and estimated on the basis of Scheduled Rates.		Implementation of ESC are under progress towards Education, Health & Sanitation, Infrastructure development, Livelihood & Skill development, Social & Environmental development works.
2. Green belt shall be developed in 12.95 Ha equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant. The plantation shall be completed within one year form the date of issue of EC. In addition to this 1500 additional plants shall be planted within the premises.	:	Green belt development for 12.95 ha. is under development in phase wise manner. Periphery plantation undertaken. Additional more than 1500 nos. of trees planted within plant premises.
3. The Capital cost Rs. 95.00 Crores and annual recurring cost Rs. 5.00 Crores towards the environmental protection measures shall be earmarked separately. The funds so provided shall not be diverted for any other purpose.	*	Capital cost for Environmental protection measures, i.e. 95 crores as earmarked already spent for the project. Recurring cost 5 crores are being spent towards development of environmental management system.
4. Kitchen waste shall be composted or convened to biogas for further use.		Composting plant (Mechanical biodigester) is already been established for utilising kitchen wastes generated form households, canteens.
5. The project proponent shall adopt the slip power recovery system for energy conservation.	**	For energy conservation, Slip power recovery system is being adopted.
6. Detailed study of the fauna in the study area shall be carried out within one year. If Schedule-I species are found, then		Detailed study was carried out by JM Enviro and No Schedule-I species are found within project area. State forest

conservation plan for Schedule-I species be prepared and implemented in consultation with state forest department. The PP shall provide necessary financial resources for implementation of theplan.		department had given letter in this regard.
7. No ground water shall be used for plant & township	*	No ground water used for plant and township. Plant operation is being taken care by recycled water and harvested water.

B. General Condition:

1. The project proponent shall (Air Quality Monitoring):

Conditions		Compliance
a. Install 24x7 continuous emission monitoring system at all the stacks to monitor stack emission with respect to parameters prescribed in G.S.R.No. 612 (E) dated 25 th August, 2014 and subsequent amendment dated 10th May, 2016 from time to time; S.O.3305 (E) dated 7 th December 2015 for thermal power plants as amended from time to time and connected to CPCB online;	2	Continuous Emission Monitoring System (CEMS) have been installed in all main stacks of our plant; as per parameter prescribed in G.S.R. No. 612 (E) dated 25 th August, 2014 and subsequent amendment dated 10 th May, 2016.
 b. Monitor fugitive emissions in the plant premises; 		Fugitive emission regularly being monitored inside plant.
c. Carryout Continuous Ambient Air Quality monitoring as per National Ambient Air Quality Standards issued by the Ministry vide G.S.R.No. 826(E) dated l6th November 2009 (as amended from time to time) within and outside the plant area at least at four locations covering upwind and downwind directions at an angle of 120 degree each; and	:	Continuous Ambient Air Quality Monitoring (CAAQM) system have been installed along with existing system to carry out air quality checking for upwind and downwind direction. Data transmission is done with SPCB/CPCB server, as per National Ambient Air Quality Standards issued by the Ministry vide G.S.R.No. 826(E) dated 16th November 2009.
d. Submit monitoring report to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of	(1)	Monitoring report are being furnished regularly at respective offices. Ambient air monitoring report is enclosed as

SPCB along	with	six-monthly	Annexure-I
monitoring repo	ort.		

2. The project proponent shall (Water Quality Monitoring):

Conditions	Compliance
a) Install 24x7 continuous effluents monitoring system at all the discharge points to monitor treated effluents with respect to parameters prescribed in G.S.R. No. 612 (E) dated 25th August. 2014 and subsequent amendment dated 9th May, 2016 and 10th May 2016 as amended from time to time; S.O.3305 (E) dated 7th December 2015 for thermal power plants as amended from time to time as amended from time to time; and	: As there is no such effluent is being generated from clinkerisation process (Cement manufacturing system), CEQMS is not applicable. We are recycling the machine cooling water, floor washing waters into required pit to neutralise it and reuse. For monitoring of treated effluent as per parameter prescribed in G.S.R. No. 612 (E) dated 25 th August, 2014 and subsequent amendment dated 10 th May, 2016 to be followed.
b) submit monitoring report to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.	: Monitoring report are being furnished regularly at respective offices.

3. The project proponent shall (Air Pollution Control):

Conditions		Compliance
 a) Provide appropriate Air Pollution Control (APC) system for all the dust generating points including fugitive dust from all vulnerable sources; 		Air pollution control (APC) devices at dust generating points, transfer points are being installed and operating efficiently.
b) Design suitable capacity of bag filters to handle gas/air shall be 150% of the normal flow from process/ from suction hoods to achieve particulate emission to less than 30 mg/N m ³ .	:	Bag filters with suitable capacity and adequate design has been installed for meeting the PM emission within 30 mg/N m3.
c) Provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags:	m	Leakage detection and arrest mechanism to be maintained during cleaning activities of bag filters.
d) Provide pollution control system in the cement plant as per the CREP		All pollution control system, required for Cement plant to be followed as per

Guidelines of CPCB;	CREP guideline.
e) Provide sufficient number of mobile or stationery vacuum cleaners to clean plant roads, shop floors, roofs regularly;	: Regular housekeeping facility already been developed with mechanised vacuum cleaner and manual road sweeper machines in plant site.
f) Recycle and reuse lime fines. coal fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after agglomeration;	: Recycle & re-use of fine materials handling is being practiced in regular basis. Materials collected and reused in process purpose.
g) Use leak proof trucks/dumpers for carrying coal and other raw materials and shall cover them with tarpaulin. Use closed bulkers for carrying fly ash;	: Adequate covering of trucks with tarpaulin and use of closed bulkers are been practiced.
h) Provide wind shelter fence and chemical spraying on the raw material stock piles:	: Covering shed for raw material handling are practices at site. Further development for stock pile is under progress.
 i) Provide Low NOx burners to control NOx emissions. Regular calibration of the instruments must be ensured. If needed. NOx will be controlled by using SCR/NSCR technologies: and 	: Low Nox burner have been installed and all effective steps are being taken for limiting the prescribed standard.
j) Have separate truck parking area and monitor vehicular emissions at regular interval.	: Truck transportation in proper way is carried out and separate truck parking area earmarked for effective operation. Vehicular emission to be maintained.

4. The project proponent shall (Water Pollution Control):

Conditions	Compliance
a) Adhere to "zero liquid discharge";	To be adhere with "Zero liquid discharge "as there is no effluents generated from clinkerisation process.
b) Provide Sewage Treatment Plant for domestic wastewater; and	Domestic waste water is being treated through bio digester systems. Further, treatment also to be made through existing STP.
c) Provide garland drains and collection pits for each stock pile to arrest the	: Proper garland drain facility has been made for the stock pile to arrest the

run-off in the event of heavy rains and	run-off water during rain. Further water
to check the water pollution due to	
	conserve runoff water for reusing in
	nlant

5. The project proponent shall (Water Conservation);

Conditions		Compliance
a) Practice rainwater harvesting to maximum possible extent;	:	To be complied
b) Provide water meters at the inlet to all unit processes in the cement plants: and		Water meters for quantification of water consumption is in place and regularly to be maintained
c) Make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.		Recycling of treated water to be utilised in maximum possible ways in the cement plant

6.The PP shall (Energy Conservation):

Conditions		Compliance
a) provide Waste heat recovery system for kiln and cooler;		Waste heat recovery system for kiln & cooler section already made. The units are under operation.
b) make efforts to achieve power consumption less than 65 units/tonne for Portland Pozzolona Cement (PPC) and 85 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker;		Efforts are under implementation to limit the power consumption as per the norms given for PPC, OPC and thermal energy consumption.
c) provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights. parking around project area and maintain the same regularly;	8	Solar power system have been provided at roof tops raw material shed and coal shed areas of project site.
d) provide the project proponent for LED lights in their offices and residential areas:		Use of LED lights in office & residential areas to be followed.
e) maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards; and	•	Utilization of fly ash, slag, etc. as per BIS specification have been carried out.

practice norms.		processing for the cement plant.
7. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport.		Impact of raw material transport with respect to surrounding environment to be taken care of by use of conveyor belts.
8. Used refractories shall be recycled as far as possible.	9.	Use of refractories to be recycled at maximum possible ways.
9. The PP shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.	•	GHG emission inventory in plant has been started and taken care of during operational process.
10. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	**	ERP and HIRA, DMP shall be implemented.
11. The PP shall Carry-out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	(844)	Heat Stress Analysis for workmen and use of PPE as per Factory Act to be complied.
12. The PP shall adhere to the corporate environmental policy and system of the reporting of any infringements/ noncompliance of EC conditions at least once in a year to the Board of Directors and the copy of the board resolution shall be submitted to the MoEF&CC as a part of six-monthly report.	**	As per CEP (Corporate Environment Policy), the system of implementation and reporting process shall be complied.
13. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the cement plants shall be implemented.	76	Shall be complied.

f) maximize utilization of alternate fuels

and Co-processing to achieve best

All possible means of use of

alternate fuel are adopted for co-

14. A dedicated environmental cell with qualified personnel shall be established. The head of the environment cell shall report directly to the head of theorganization.	1000	To look after Environmental management work, Environment cell has been established.
15. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking. mobile toilets, mobile STP, Safe drinking water. medical health care. creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.		Provisions have been made for the housing of labour during project construction stage. This shall be dismantled after full-fledged operation of plant.
16. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	30000	Conditions are being complied with SPCB given norm.
17. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment. Forests and Climate Change (MoEF&CC).	**	To be complied with the given condition.
18. The waste oil, grease and other hazardous shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.		Shall be complied as per Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
19. The storage of NH3 and other hazardous chemicals at the site shall be as per the provisions of Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 as amended from time to time.	2	To be complied.
20. The ambient noise levels should conform to the standards prescribed under EPA Rules. 1989 viz. 75 dB(A) during day time and 70 dB(A) during night time.	:	All possible noise control measures have taken as per given standard. Regular monitoring is also being conducted for measure noise level.
21. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	2	Occupational health surveillance of worker to be carried out in

		regular basis.
22. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.	:	Environmental protection measures to be complied with, as recommended in EIA/EMP report.
23. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants.	2	To be complied.
24. Sufficient number of colour coded waste collection bins shall be constructed at shop floors in each hop to systematically segregate and store waste materials generated at the shop floors (other than Process waste) in designated coloured bins for value addition by promoting reuse of such wastes and for good housekeeping.		Shall be followed for proper waste management system.

25. The project proponent shall comply (Post ECMonitoring):

Conditions		Compliance
a) send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government:	:	Copies of EC were submitted to local bodies and relevant offices.
b) put on the clearance letter on the web site of the company for access to the Public.	ŧ	To be complied.
c) inform the public through advertisement 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 that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment. Forests and Climate		Accordance of Environmental clearance was informed to public through advertisement in two local newspapers; namely Odisha today and Manthan, dated 22.2.2018.

Change (MoEF&CC) at http://erwfor.nic.in.	OCLINDIA LIMITED Regarges Trait Foliate PERLIC NOTICE The set of the set o
d) upload the status of compliance of the stipulated environment clearance conditions. including results of monitored data on their website and update the same periodically	: To be complied with status of compliance as stipulated in EC in website.
e) monitor the criteria pollutants Level namely PM10, S02, NOx (ambient levels as well as stack emissions) or critical sectoral parameters indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company;	Environmental monitoring parameters are displayed at convenient location with regular AAQ, stack emission data.
f) submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by email) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB:	: Six monthly reports on status of the compliance of EC are being submitted in regular basis.
g) submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules. 1986, as amended subsequently and put on the website of the company;	: Being Complied.
h) 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.	: Project executed in October, 2018: We have obtained consent to establish (CTE) & consent to operate (CTO) from State Pollution Control Board, Odisha for the commencement of operation since December 2019.

26. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	1	Conditions are being complied with above for implementation.
27. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.		Agreed to comply
28. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report and that during their presentation to the EAC. The commitment made by the project proponent to the issue raised during Public Hearing shall be implemented by the proponent.		To be complied, as per the recommendation given in EIA/EMP report.
29. The above conditions shall be enforced. inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act. 1974, the Air (Prevention & Control of Pollution) Act,1981. the Environment (Protection) Act. 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.		Comply with the stipulated provisions, as per applicable Acts & Rules.
30. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act. 2010.		Agreed to comply.

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ENVIRONMENTAL MONITORING REPORT

BASED ON DATA GENERATED

FROM

APRIL 2022 TO SEPTEMBER 2022

FOR

DALMIA DSP UNIT

OF

DALMIA CEMENT (BHARAT) LIMITED At/PO: RAJGANGPUR, District: SUNDERGARH, ODISHA

AT

CEMENT PLANT (LINE - 3), DDSP UNIT

Environment Management Department Dalmia Cement (Bharat) Limited, Rajgangpur, Odisha

MONTHLY AVERAGE VALUE FOR PM EMISSION FROM STACKS:

G. 1 1 1	Particulate matter emission in mg/Nm3								
Stack attached to	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22			
Cyclone +Bag House of Kiln & HRP-3	11.3	11.0	8.3	7.6	4.9	9.3			
Bag Filter of Coal Mill-3	7.4	10.5	7	8.3	7.6	5.9			
ESP of Cooler-3	12.4	7:9	6.7	10.6	8.1	7.9			

AMBIENT AIR AVG.DATA (FROM APRIL 2022 TO SEPTEMBER 2022):

Location of sampling station	SO2 (µg/m3)	NOX(μ g/m3)	Particulate matter (size less than 10µm) or PM10(µg/ m3)	Particulate matter (size less than 2.5 \(\mu \) or PM2.5(\(\mu \) g /m3)	Ozone (O3) (µg/m 3)	Lead (Pb) (µg/m 3)	CO (mg/m 3)	Amm onia (NH3) (µg/m 3)	Benze ne (C6H6) (µg/m 3)	Benzo(a) Pyrene (BaP) particulate phase only (µg/m3)	Arsenic (AS) (μg/m3)	Nickel (Ni) (µg/m 3)
STP	4	13	73	24	22.0	< 0.4	< 0.1	69	< 0.5	< 0.1	< 0.2	< 12.0
Material Gate	8	18	80	28	22	< 0.4	< 0.1	126	< 0.5	< 0.1	< 0.2	< 12.0

NOISE AVG DATA (FROM APRIL 2022 TO SEPTEMBER 2022):

	Sampling locations				
Particular	STP	Material Gate			
Noise level(L day) during day time	63.7	63.0			
Noise level (L night) during night time	59.3	57.0			





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

TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681621000002543F REPORT NO: CPL/R/SE/DEC-21/77

REPORT ISSUE DATE: 30.12.2021

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/DEC-21/64

Name of Stack Monitored

KILN VRM RABH, LINE - 3

Stack Connected To Shape of Stack

KILN VRM Circular

Date of Sampling Time of Sampling 22.12.2021 12:36 Hrs

Method of Sampling

IS 11255 (Part - 1): 1985, RA 2014

Sample Received on

23.12.2021

Date of Test

24.12.2021

Ambient Temperature in °C Stack Temperature in °C

30 148

Average Stack Gas Velocity in m/sec

7.78

Iso-kinetic Flow Rate in LPM

23

Duration of Sampling in minute

43

Particulate Matter Concentration

Sulphur Dioxide as SO₂ Nitrogen Dioxide as NO₂ Results Obtained

06 ma/Nm³

22.23 mg/Nm³ 274.3 mg/Nm³ **Permissible Limits**

30 mg/Nm³ 100 mg/Nm³

600 mg/Nm³

Authorized Signatory Subhanga Praharai Managing Director/QM

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

Page 1 of 1





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

TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FM/5

ULR - TC681621000002542F REPORT NO: CPL/R/SE/DEC-21/76

REPORT ISSUE DATE: 30.12.2021

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/DEC-21/65

Name of Stack Monitored : Coal Mill B/F, Line – 3

Stack Connected To : Coal Mill Bag Filter

Shape of Stack : Circular
Date of Sampling : 22.12.2021
The of Sampling : 13 : 40 Hrs

Method of Sampling : IS 11255 (Part – 1): 1985, RA 2014

Sample Received on : 23.12.2021 Date of Test : 24.12.2021

Ambient Temperature in °C : 29
Stack Temperature in °C : 77
Average Stack Gas Velocity in m/sec : 5.03
Iso-kinetic Flow Rate in LPM : 18
Duration of Sampling in minute : 55

Particulate Matter Concentration

Results Obtained

12 mg/Nm³

Permissible Limits

30 mg/Nm³

Test Done By

Verified By

Authorized Signatory Subhanga Praharaj Managing Director/QM

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

Page 1 of 1

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.

Tele Fax: 0661 – 2475746, email: cleenviron@gmail.com





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

TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FM/58

ULR - TC681621000002541F REPORT NO: CPL/R/SE/DEC-21/75

REPORT ISSUE DATE: 30,12,2021

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/DEC-21/66
Name of Stack Monitored : Cooler ESP, Line – 3
Stack Connected To : Cooler, Line – 3

Shape of Stack : Circular
Date of Sampling : 22.12.2021
Time of Sampling : 16 : 45 Hrs

N._. and of Sampling : IS 11255 (Part – 1): 1985, RA 2014

Sample Received on : 23.12.2021 Date of Test : 24.12.2021

Ambient Temperature in °C : 27
Stack Temperature in °C : 83
Average Stack Gas Velocity in m/sec : 3.71
Iso-kinetic Flow Rate in LPM : 13
Duration of Sampling in minute : 76

Particulate Matter Concentration

Results Obtained

: 09 mg/Nm³

Permissible Limits

30 mg/Nm³

Test Done By

Verified By

Authorized Signatory Subhanga Praharaj

Managing Director/QM

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

Page 1 of 1





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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

ULR - TC681621000002526F REPORT NO: CPL/R/AAQ/DEC-21/35

REPORT ISSUE DATE: 30.12.2021

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.: 8.1°C	Max. Temp.: 28.5°C	Min. RH: 31%	Max. RH: 99%
				_ No	

Sample ID No	*	CPL/AAQ/DEC-21/287	
Location of Sampling	:	Near Project Gate (Line – 3)	
te of Sampling	W.	22.12.2021	
Sampling Period	3	1115 – 1725 Hrs	
Time of Sampling	¥	06.10 Hrs	
Sample Received on	7	23.12.2021	
Date of Test		23.12.2021 - 24.12.2021	

SI No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	PM 2.5	18	µg/m³	IS: 5182 (PART - 24) 2019	60 (24 Hours)
2	PM 10	52	µg/m³	IS: 5182 (PART - 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO ₂)	07	µg/m³	IS: 5182 (PART - 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO ₂)	26	µg/m³	IS: 5182 (PART - 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH ₃)	41	µg/m³	IS: 5182 (PART - 25) 2018	400 (24 Hours)
6	Ozone (O ₃)	20	µg/m³	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

Test Done By

Verified By

Authorized Signatory
Subhanga Praharaj

Managing Director/QM

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



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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

REPORT NO: CPL/R/AAQ/DEC-21/35N

REPORT ISSUE DATE: 30.12.2021

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. Te	: 8.1°C Max. Temp.: 28.5°C	Min. RH: 31%	Max. RH: 99%
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Sample ID No	:	CPL/AAQ/DEC-21/287	
Location of Sampling		Near Project Gate (Line – 3)	
te of Sampling	•	22.12.2021	
Sampling Period	*11	1115 – 1725 Hrs	
Time of Sampling	20	06.10 Hrs	
Sample Received on	10	23.12.2021	
Date of Test		23.12.2021 - 24.12.2021	

SI 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/m³	IS: 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m³	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m³	IS: 5182 (PART - 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m ³	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C ₆ H ₆)	< 0.5	µg/m³	IS: 5182 (PART 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate Phase only	< 0.1	ng/m³	IS : 5182 (PART – 12) 2004, RA 2014	1 (Annual)

Test Done By

Verified By

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.

TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FM/58

ULR - TC681622000000684F REPORT NO: CPL/R/SE/MAR-22/90

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

DALMIA CEMENT (BHARAT) LIMITED

RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha

Name of the Customer

Address of the Customer

Sample ID No Name of Stack Monitored

Stack Connected To

Date of Sampling Time of Sampling

Monod of Sampling

Sample Received on

Date of Test

Shape of Stack

14:51 Hrs

Circular 22.03.2022

KILN VRM

IS 11255 (Part - 1), (Part - 2): 1985, RA 2019 & (Part - 7): 2005, RA 2017

22.03.2022

CPL/SE/MAR-22/77

KILN VRM RABH. LINE - 3

23.03.2022

Ambient Temperature in °C

Stack Temperature in °C

Average Stack Gas Velocity in m/sec

Iso-kinetic Flow Rate in LPM

Duration of Sampling in minute

37

126

12.00

38 26

Particulate Matter Concentration

Sulphur Dioxide as SO₂ Nitrogen Dioxide as NO₂ **Results Obtained**

08 mg/Nm³

17.17 mg/Nm³ 258.7 mg/Nm³ Permissible Limits

30 ma/Nm³ 100 mg/Nm³

600 mg/Nm³

Test Done By

Authorized Signatory Subhanga Praharaj Managing Director/QM

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

Page 1 of 1





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

TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FM/58

ULR - TC681622000000683F REPORT NO: CPL/R/SE/MAR-22/89

REPORT ISSUE DATE: 26.03.2022

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/MAR-22/75
Name of Stack Monitored : Coal Mill B/F, Line – 3
Stack Connected To : Coal Mill Bag Filter

Shape of Stack : Circular
Date of Sampling : 22.03.2022
Time of Sampling : 15 : 40 Hrs

Monod of Sampling : IS 11255 (Part – 1): 1985, RA 2019

Sample Received on : 22.03.2022 Date of Test : 23.03.2022

Ambient Temperature in °C : 36
Stack Temperature in °C : 73
Average Stack Gas Velocity in m/sec : 16.01
Iso-kinetic Flow Rate in LPM : 26
Duration of Sampling in minute : 38

Particulate Matter Concentration

Results Obtained

10 mg/Nm³

Permissible Limits

30 mg/Nm³

Test Done By

rified By

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

FORMATINO: CPL/EM/5

ULR - TC681622000000682F REPORT NO: CPL/R/SE/MAR-22/88 ORMAT NO: CPL/FM/58

REPORT ISSUE DATE: 26.03.2022

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/MAR-22/76

Name of Stack Monitored

Cooler ESP, Line - 3

Stack Connected To

Cooler, Line - 3

Shape of Stack Date of Sampling Circular

Time of Sampling

22.03.2022 11:00 Hrs

N od of Sampling

IS 11255 (Part - 1): 1985, RA 2019

Sample Received on Date of Test 22.03.2022 23.03.2022

Ambient Temperature in °C

36

Stack Temperature in °C

115

Average Stack Gas Velocity in m/sec

3.89

Iso-kinetic Flow Rate in LPM

13

Duration of Sampling in minute

76

Particulate Matter Concentration

Results Obtained

11 mg/Nm³

Permissible Limits

30 mg/Nm³

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

Page 1 of 1





Max. RH: 88%

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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

Max. Temp.: 35.1°C

ULR - TC681622000000667F REPORT NO: CPL/R/AAQ/MAR-22/36

REPORT ISSUE DATE: 26.03.2022

Min. RH: 25%

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 :

Environmental Conditions During Monitoring

IS: 5182 (Part - 2), (Part - 6) & (Part - 11), EN 12341

Min. Temp.: 17.3°C

Sample ID No		CPL/AAQ/MAR-22/355	
Location of Sampling		Near STP (Line – 3)	
Pate of Sampling	:	22.03.2022 - 23.03.2022	
Jampling Period	:	0938 – 0935 Hrs	
Time of Sampling	5	23.57 Hrs	

 Sample Received on
 :
 23.03.2022

 Date of Test
 :
 23.03.2022 - 24.03.2022

SI 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/m³	IS: 5182 (PART – 24) 2019	60 (24 Hours)
2	PM 10	63	µg/m³	IS: 5182 (PART – 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO ₂)	05	µg/m³	IS: 5182 (PART – 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO ₂)	11	µg/m³	IS: 5182 (PART - 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH ₃)	66	µg/m³	IS: 5182 (PART – 25) 2018	400 (24 Hours)
6	Ozone (O ₃)	< 20	µg/m³	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

Test Done By

erified By

Authorized Signatory Subhanga Praharaj

Managing Director/QM

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

Page 1 of 1



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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

Min. Temp.: 17.3°C | Max. Temp.: 35.1°C | Min. RH: 25% | Max. RH: 88%

REPORT NO: CPL/R/AAQ/MAR-22/36N

Environmental Conditions During Monitoring

REPORT ISSUE DATE: 26.03.2022

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

Sample ID No	1	CPL/AAQ/MAR-22/355	
Location of Sampling	:	Near STP (Line – 3)	
Pate of Sampling	*	22.03.2022 - 23.03.2022	
Jampling Period	1	0938 – 0935 Hrs	
Time of Sampling	1	23.57 Hrs	
Sample Received on	:	23.03.2022	
Date of Test		23.03.2022 - 24.03.2022	

SI 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/m³	IS: 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m³	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m³	IS: 5182 (PART – 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m ³	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C ₆ H ₆)	< 0.5	µg/m³	IS: 5182 (PART - 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate	< 0.1	ng/m³	IS : 5182 (PART 12) 2004, RA 2014	1 (Annual)
	Phase only	The same			

Test Done By

erified By

/ j

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.

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC681622000000666F

REPORT NO: CPL/R/AAQ/MAR-22/35

FORMAT NO: CPL/FM/57

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer:

M/s DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer:

Sampling Method

At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA

IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341

Environmental Conditions During Monitoring	:	Min. Temp.: 17.3°C	Max. Temp.: 35.1°C	Min. RH: 25%	Max. RH: 88%
			-11-	76 76 71	;==

Sample ID No		CPL/AAQ/MAR-22/354	
Location of Sampling	•	Near Material Gate (Line – 3)	
nte of Sampling	5	22.03.2022 - 23.03.2022	
Sampling Period	2	0920 - 0920 Hrs	
Time of Sampling	6	24.00 Hrs	
Sample Received on	:	23.03.2022	
Date of Test		23.03.2022 - 24.03.2022	

SI No	Parameters	Results Obtained	Unit	Method of Analysis	National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area
1	PM 2.5	21	µg/m³	IS: 5182 (PART – 24) 2019	60 (24 Hours)
2	PM 10	56	µg/m³	IS: 5182 (PART – 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO ₂)	04	µg/m³	IS: 5182 (PART – 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO ₂)	08	µg/m³	IS: 5182 (PART – 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH ₃)	55	µg/m³	IS: 5182 (PART – 25) 2018	400 (24 Hours)
6	Ozone (O ₃)	< 20	µg/m³	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

Test Done By

Varified B

Authorized Signatory Subhanga Praharai

Subhanga Praharaj Managing Director/QM

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



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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

REPORT NO: CPL/R/AAQ/MAR-22/35N

REPORT ISSUE DATE: 26.03.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer:

M/s DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer: Sampling Method :

At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA

: IS: 5182 (Part – 2), (Part – 6) & (Part – 11), EN 12341

Environmental Conditions During Monitoring | Min. Temp.: 17.3°C | Max. Temp.: 35.1°C | Min. RH: 25% | Max. RH: 88%

Sample ID No		CPL/AAQ/MAR-22/354
Location of Sampling	:	Near Material Gate (Line – 3)
nte of Sampling	. \$	22.03.2022 - 23.03.2022
Sampling Period	1	0920 – 0920 Hrs
Time of Sampling	1	24.00 Hrs
Sample Received on		23.03.2022
Date of Test	2	23.03.2022 - 24.03.2022

SI 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/m³	IS: 5182 (PART – 22) 2004, RA 2019	1 (24 Hours)
2	Arsenic (As)	< 0.2	ng/m³	CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017	6 (Annual)
3	Nickel (Ni)	< 12	ng/m³	IS: 5182 (PART – 26) 2020	20 (Annual)
4	Carbon Monoxide (CO)	< 0.1	mg/m ³	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C ₆ H ₆)	< 0.5	µg/m³	IS: 5182 (PART – 11) 2006, RA 2017	5 (Annual)
6	Benzo(a)pyrene Particulate Phase only	< 0.1	ng/m³	IS : 5182 (PART – 12) 2004, RA 2014	1 (Annual)

Test Done By

Verified By

Authorized Signatory Subhanga Praharaj

Managing Director/QM

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