



CPP/SEIAA/028/2023-056 May 30, 2023.

To.

The State Environment Impact Assessment Authority, (SEIAA), Odisha
Qtr. No. 5RF-2/1, Unit – IX,
Bhubaneswar – 751022

Sub: Submission of Six-Monthly Compliance Report of the Environmental Clearance of (2x27MW) Captive Power Plant of M/s Dalmia Cement (Bharat) Limited, At- Rajgangpur, Dist.- Sundargarh, Odisha.

Ref: Environmental Clearance Letter No. SEIAA 619 / SEIAA – 128/10, dated 22.12.2010.

Dear Sir,

With reference to above captioned subject matter, we are submitting herewith the six-monthly compliance report of the conditions laid down in above Environmental clearance for the period October-2022 to March-2023.

Thanking you,

Your Sincerely,

For Dalmia Cement Bharat Limited,

(Ashok Kumar Mishra)

**General Manager - Environment** 

Encl: As above

**'a**.,

CC: 1. The Addl. PCCF (C), IRO, MoEF&CC, Eastern Zone, Bhubaneswar, Odisha,

2. The Member Secretary, OSPCB, Bhubaneswar, Odisha.

3. The Member Secretary, CPCB, New Delhi.

Six-monthly compliance report (Oct, 2022 to March, 2023) of condition stipulated in Environmental Clearance Letter No. SEIAA 619 / SEIAA-128/10 dated 22 December 2010 by SEIAA, Odisha for (2 x 27MW) Captive Power Plant Project of M/s Dalmia Cement Bharat Limited [Formerly, OCL India Limited], Rajgangpur.

SI.	Condition	Status of Compliance
No.		
i	The applicant (Project proponent) will take	Following Pollution control systems are
	necessary measures for prevention, control and	installed for prevention, control of pollution
	mitigation of Air Pollution, Water pollution, Noise	and mitigation of Air, Water, Noise, & Land
	pollution and Land pollution including solid waste	pollution including solid waste management.
	management as mentioned by him in form-1, Final	
	EIA reports and Environment Management Plant	Air Pollution Control, systems adopted
	(EMP) in compliance with the prescribed statutory	• Two nos. of Electrostatic Precipitator (ESP)
	norms and standards.	with six fields have been installed and
		operating efficiently.
		Pneumatic ash conveying system from Silo
		to Cement Plant.
		Ash storage silos with bag filters installed.
		• Closed Conveyor belt for material
		transportation.
		Bag filters (dust extraction) and dust
		suppression system in Coal handling transfer
		points and coal conveying circuits
		respectively.
		• Regular water sprinkling on the haulage
		roads and wind barrier of 30 mtrs Height for
		preventing fugitive dust generation.
		Water pollution Control, systems adopted
		• STP has been installed for treatment of
		domestic wastewater.
		Water generated from process are recycled
		and reused. Rain water harvesting pond
		made inside plant for holding about 30000
		m3 of water for reutilization in CPP.
		Noise Pollution Control, systems adopted

1		Compressor, TG area are acoustically sealed
		to prevent noise pollution.
		In stream vent line. silencers are provided.
		Seal blower silencers in Fans.
		Solid Waste Management, systems adopted
		Sludge from STP is utilized for green belt
		development / plantation.
		Ash generated from power plant is utilized
		as raw material for cement manufacturing
L		process in our own cement plant.
ii	The applicant will take necessary steps for Socio-	Necessary steps are being taken for socio-
	economic development of the people of the area on	economic development of the people in the
	need based assessment for providing employment	surrounding area as highlighted in the survey
	education, health care, drinking water and	report under CSR activities on regular basis.
	sanitation, road and communication facilities etc.,	
	after a detailed primary socio economic survey of	
	the core zone.	All the control of the control of the
iii	The applicant will comply with the points, concerns	All the concerns and issues raised during
	and issued raised by the people during public	public hearing have been addressed.
	hearing on 29 <sup>th</sup> May 2009 in accordance with the	
	comments made by him thereon.	
iv	The applicant will take statutory clearance / approval	Noted. All statutory clearances and approvals
iv	The applicant will take statutory clearance / approval / permission from the concerned authorities in	Noted. All statutory clearances and approvals from the concerned authorities are in place.
iv		
iv	/ permission from the concerned authorities in	
iv	/ permission from the concerned authorities in	
	/ permission from the concerned authorities in respect of his project as and when required.	from the concerned authorities are in place.
	/ permission from the concerned authorities in respect of his project as and when required.  For post environmental clearance monitoring, the	from the concerned authorities are in place.  Half yearly EC Compliance reports is
	/ permission from the concerned authorities in respect of his project as and when required.  For post environmental clearance monitoring, the applicant will submit half yearly compliance report in	from the concerned authorities are in place.  Half yearly EC Compliance reports is
	/ permission from the concerned authorities in respect of his project as and when required.  For post environmental clearance monitoring, the applicant will submit half yearly compliance report in respect of the stipulated terms and conditions of	from the concerned authorities are in place.  Half yearly EC Compliance reports is
	/ permission from the concerned authorities in respect of his project as and when required.  For post environmental clearance monitoring, the applicant will submit half yearly compliance report in respect of the stipulated terms and conditions of Environmental clearance to the State Environmental	from the concerned authorities are in place.  Half yearly EC Compliance reports is
	/ permission from the concerned authorities in respect of his project as and when required.  For post environmental clearance monitoring, the applicant will submit half yearly compliance report in respect of the stipulated terms and conditions of Environmental clearance to the State Environmental Impact Authority (SEIAA/), Orissa on 1st June and 1st	from the concerned authorities are in place.  Half yearly EC Compliance reports is
V	/ permission from the concerned authorities in respect of his project as and when required.  For post environmental clearance monitoring, the applicant will submit half yearly compliance report in respect of the stipulated terms and conditions of Environmental clearance to the State Environmental Impact Authority (SEIAA/), Orissa on 1st June and 1st December of each calendar year.	from the concerned authorities are in place.  Half yearly EC Compliance reports is submitted to SEIAA regularly.
V	/ permission from the concerned authorities in respect of his project as and when required.  For post environmental clearance monitoring, the applicant will submit half yearly compliance report in respect of the stipulated terms and conditions of Environmental clearance to the State Environmental Impact Authority (SEIAA/), Orissa on 1st June and 1st December of each calendar year.  High efficiency Electrostatic Precipitators (ESPs) shall	from the concerned authorities are in place.  Half yearly EC Compliance reports is submitted to SEIAA regularly.  High Efficiency ESPs have been installed and
V	/ permission from the concerned authorities in respect of his project as and when required.  For post environmental clearance monitoring, the applicant will submit half yearly compliance report in respect of the stipulated terms and conditions of Environmental clearance to the State Environmental Impact Authority (SEIAA/), Orissa on 1st June and 1st December of each calendar year.  High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate matter	from the concerned authorities are in place.  Half yearly EC Compliance reports is submitted to SEIAA regularly.  High Efficiency ESPs have been installed and
v	/ permission from the concerned authorities in respect of his project as and when required.  For post environmental clearance monitoring, the applicant will submit half yearly compliance report in respect of the stipulated terms and conditions of Environmental clearance to the State Environmental Impact Authority (SEIAA/), Orissa on 1st June and 1st December of each calendar year.  High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate matter emission does not exceed 50 mg/Nm3.	from the concerned authorities are in place.  Half yearly EC Compliance reports is submitted to SEIAA regularly.  High Efficiency ESPs have been installed and stack emissions are well within standard.
v	/ permission from the concerned authorities in respect of his project as and when required.  For post environmental clearance monitoring, the applicant will submit half yearly compliance report in respect of the stipulated terms and conditions of Environmental clearance to the State Environmental Impact Authority (SEIAA/), Orissa on 1st June and 1st December of each calendar year.  High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate matter emission does not exceed 50 mg/Nm3.  The proponent may use bottom ash as a supplement	from the concerned authorities are in place.  Half yearly EC Compliance reports is submitted to SEIAA regularly.  High Efficiency ESPs have been installed and stack emissions are well within standard.  Bottom Ash is used as raw material for
v	/ permission from the concerned authorities in respect of his project as and when required.  For post environmental clearance monitoring, the applicant will submit half yearly compliance report in respect of the stipulated terms and conditions of Environmental clearance to the State Environmental Impact Authority (SEIAA/), Orissa on 1st June and 1st December of each calendar year.  High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate matter emission does not exceed 50 mg/Nm3.  The proponent may use bottom ash as a supplement for the raw material for cement production with	from the concerned authorities are in place.  Half yearly EC Compliance reports is submitted to SEIAA regularly.  High Efficiency ESPs have been installed and stack emissions are well within standard.  Bottom Ash is used as raw material for
v	/ permission from the concerned authorities in respect of his project as and when required.  For post environmental clearance monitoring, the applicant will submit half yearly compliance report in respect of the stipulated terms and conditions of Environmental clearance to the State Environmental Impact Authority (SEIAA/), Orissa on 1st June and 1st December of each calendar year.  High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate matter emission does not exceed 50 mg/Nm3.  The proponent may use bottom ash as a supplement for the raw material for cement production with approved technology confirming to the relevant	from the concerned authorities are in place.  Half yearly EC Compliance reports is submitted to SEIAA regularly.  High Efficiency ESPs have been installed and stack emissions are well within standard.  Bottom Ash is used as raw material for
vi	/ permission from the concerned authorities in respect of his project as and when required.  For post environmental clearance monitoring, the applicant will submit half yearly compliance report in respect of the stipulated terms and conditions of Environmental clearance to the State Environmental Impact Authority (SEIAA/), Orissa on 1st June and 1st December of each calendar year.  High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate matter emission does not exceed 50 mg/Nm3.  The proponent may use bottom ash as a supplement for the raw material for cement production with approved technology confirming to the relevant standards specification.	from the concerned authorities are in place.  Half yearly EC Compliance reports is submitted to SEIAA regularly.  High Efficiency ESPs have been installed and stack emissions are well within standard.  Bottom Ash is used as raw material for cement production.
vi	/ permission from the concerned authorities in respect of his project as and when required.  For post environmental clearance monitoring, the applicant will submit half yearly compliance report in respect of the stipulated terms and conditions of Environmental clearance to the State Environmental Impact Authority (SEIAA/), Orissa on 1st June and 1st December of each calendar year.  High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate matter emission does not exceed 50 mg/Nm3.  The proponent may use bottom ash as a supplement for the raw material for cement production with approved technology confirming to the relevant standards specification.  The unit shall be allowed to use Washery rejects as	from the concerned authorities are in place.  Half yearly EC Compliance reports is submitted to SEIAA regularly.  High Efficiency ESPs have been installed and stack emissions are well within standard.  Bottom Ash is used as raw material for cement production.
vi vii	/ permission from the concerned authorities in respect of his project as and when required.  For post environmental clearance monitoring, the applicant will submit half yearly compliance report in respect of the stipulated terms and conditions of Environmental clearance to the State Environmental Impact Authority (SEIAA/), Orissa on 1st June and 1st December of each calendar year.  High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate matter emission does not exceed 50 mg/Nm3.  The proponent may use bottom ash as a supplement for the raw material for cement production with approved technology confirming to the relevant standards specification.  The unit shall be allowed to use Washery rejects as raw material having <60% ash content	from the concerned authorities are in place.  Half yearly EC Compliance reports is submitted to SEIAA regularly.  High Efficiency ESPs have been installed and stack emissions are well within standard.  Bottom Ash is used as raw material for cement production.  Noted.

	exceeds the prescribed norm	required.
Х	No ground water shall be extracted for the project	No Ground Water is extracted at any point of
	work at any stage.	time.
xi	Adequate dust extraction system such as cyclones/bag filters and water spray system in dust areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.	Adequate dust extraction systems are installed as mentioned below- i) 8 nos. of bag filters in coal handling transfer points to control fugitive dust ii) Pneumatic ash conveying system from Silo to Cement plants. iii) Covered conveyor belts provided for local transportation to eliminate fugitive dust. iv) Wind Barrier alongside of CPP boundary to control dust emission to nearby locality.
xii	Fly ash shall be collected in dry form and storage facility (silos) shall be provided. 100% fly ash utilized shall be ensured as per fly ash notification of MoEF & CC, Govt. of India. Unutilized fly ash and bottom ash shall be stored in the ash pond separately through high concentration slurry disposal method. Mercury levels along with other heavy metals (Pb, Cr, As, etc.) should be mentioned in the fly ash / bottom ash, leachates and effluents emanating from the ash pond.	100 % fly ash is utilized in our cement plant.  Bottom ash is stored in silo and being utilized as raw material in cement manufacturing.
xiii	The ash pond should be constructed with impervious lining and ash pond embankment should be stone pitched.	No Ash Pond has been constructed as 100% ash is utilized in cement manufacturing.
xiv	The treated effluents confirming to the prescribed standards shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary. Arrangements shall be made so that effluents and storm water do not get mixed.	The treated effluent conforms to the prescribed norms and is reused within the plant premises. Effluent is not allowed to mix with storm water.
xv	A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation.	Sewage treatment plant (STP) is in place for treatment of domestic wastewater and treated water is used for greenbelt development / plantation.
xvi	Rainwater harvesting should be adopted. Central Groundwater Authority / Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of clearance and details shall be furnished to the SEIAA, Orissa.	Rain water harvesting is done to the maximum extent possible. A rain water harvesting earthen pond has been constructed to collect the storm water.
xvii	Adequate safety measures shall be provided in the LDO and / HFO / LSHS shall be made in the plant area to check / minimize spontaneous fires in coal yard,	Adequate safety measures have been provided in the plant area to check fires in coal and liquid fuel storage area.

	especially during summer season. Details of these	
	measures to be taken along with location plant layout	
	shall be submitted to the SEIAA, Orissa.	
xviii	Storage facilities for auxiliary liquid fuel such as LDO	Storage facilities for liquid fuel has been
	and /HFO / LSHS shall be made in the plant area where	earmarked in the plant area. Onsite and Offsite
	risk is minimum. On site and off site Disaster	Disaster Management Plans are in place and
	Management plans shall be prepared to meet any	Mock drills are conducted to ensure
	eventuality in case of an accident taking place. Mock	effectiveness of these plans. Sulfur content in
	drills shall be conducted regularly and based on the	the liquid fuel does not exceed 0.5%.
	same, modification required if any, shall be	•
	incorporated in the Disaster Management plan (DMP).	
	Sulfur content in the liquid fuel will not exceed 0.5%.	
xix	Regular monitoring of ground water in and around the	Not applicable, as no ash ponds at site.
	ash pond shall be carried out, records maintained and	
	half yearly reports shall be furnished to the SEIAA	
	Orissa	
XX	A GREEN BELT of adequate width and density	Green cover has been developed with plantation
	preferably with local species along the periphery of the	of local native species as per CPCB guidelines
	plant & alongside roads, etc. shall be raised so as to	over 33% of the land area. Gap filling is also
	provide protection against particulates and noise. It	being carried out owing to 80% survival rate.
	must be ensured that at least 33% of the total land	However, efforts are being taken to increase the
	area shall be under permanent green belt throughout	survival rate beyond 90%.
	the year & for this purpose they may engage	
	professionals in this field for creation and maintenance	
	of the green belt. An action plan for this purpose shall	
	be prepared accordingly and submitted to the SEIAA,	
	Orissa.	
xxi	First aid and sanitation arrangements shall be made for	Necessary first aid and sanitation arrangements
	the drives and other contract workers during	were provided to drivers and contract workers
	construction phase.	during construction phase.
xxii	Noise levels emanating from turbines and air	Noise levels are monitored on a regular basis
	compressors shall be limited to 75 dB (A); for people	and the same is maintained within the
	working in the high noise area, requisite personal	permissible limit.
	protective equipment's like earplugs / ear muffs etc.	PPEs such as ear muff/ear plugs have been
	shall be provided. Workers engaged in noisy areas such	mandated for the people working in the noisy
	as turbine area, air compressors etc. shall be	area.
	periodically examined to maintain audiometric record	
	and for treatment for any hearing loss including shifting	
	to non-noisy / less noisy areas.	
xxiii	Regular monitoring of ground level concentrating of	The environment monitoring is being carried out
	SO2, NOX, RSPM (PM10 & PM 2.5) etc. shall be carried	regularly and reports are attached as Annexure I
	out in the impact zone and records maintained. If at	and the same is submitted to the authority. The
	any stage these levels are found to exceed the	location of monitoring stations has been decided
	prescribed limits, necessary control measures shall be	in consultation with SPCB, Odisha.
	provided immediately. The location of the monitoring	

	stations and frequently of monitoring shall be decided	
	in consultation with SPCB, Orissa	
xxiv	Provision shall be made for housing of constructing	Necessary basic infrastructure was provided to
	labours within the site with all necessary infrastructure	the labours during the project construction
	and facilities such as fuel for cooking, mobile toilets,	phase.
	mobile STP, safe drinking water, medical health care,	
	crèche etc. The housing may be in the form of	
	temporary structures to be removed after the	
	completion of the project.	
xxv	A separate environment management cell with	An Environment management cell is in place for
	qualified staff shall be set up for implementation of the	implementation of stipulated environmental
	stipulated environmental safeguards.	safeguards.
xxvi	Half yearly report on the status of implementation of	Half yearly report on the status of Compliance of
	the stipulated conditions and environmental	EC condition is submitted regularly to the
	safeguards shall be submitted to the appropriate	statutory body.
	authorities.	
xxvii	Separate fund shall be allocated for implementation of	Separate fund has been allocated for
	environmental protection measures along with item-	implementation of environmental protection
	wise break- up. These cost shall be included as part of	measures and has not been diverted for any
	the project cost. The funds earmarked for the	other purpose.
	environment protection measures shall not be diverted	
	for other purposes and year-wise expenditure should	
	be reported.	
xxviii	The need of the local people should be appropriately	Action plan addressing the need of the local
	addresses in the CSR activities to be undertaken by the	people has been prepared and submitted. The
	project proponent in the area. An action plan in this	implementation is being taken up in the CSR
	regard should be prepared and submitted to SEIAA	activities.
	Odisha.	
xxix	The above mentioned stipulated conditions shall be	Noted.
	complied in time bound manner. Failure to comply with	
	any of the conditions mentioned above may result in	
	withdrawal of this clearance and attract under the	
	provisions of Environmental Protection (EP) Act, 1986.	

### **ENVIRONMENTAL MONITORING REPORT**

**BASED ON DATA GENERATED** 

**FROM** 

### OCTOBER 2022 TO MARCH 2023

**FOR** 

### **DALMIA CEMENT (BHARAT) LIMITED**

[Formerly, OCL India Limited]

At/Po: RAJGANGPUR, District: SUNDARGARH, ODISHA

ΑT

CAPTIVE POWER PLANT (CPP)

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





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

### TEST REPORT FOR STACK EMISSION MONITORING

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

FORMAT NO: CPL/FM/58

ULR - TC681623000000735F

REPORT NO: CPL/R/SE/MAR-23/70

REPORT ISSUE DATE: 27.03.2023

a

M/s DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer

Name of the Customer

Sampling Method

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

IS 11255 (Part – 1): 1985, RA 2019

Sample ID No	1:	CPL/SE/MAR-23/57
Location of Sampling	3	Captive Power Plant (Line - 2)
Date of Sampling	-4	23.03.2023
Time of Sampling		10:40 Hrs
Duration of Sampling		47 min
nple Received on		23.03.2023
Date of Test		23.03.2023 - 24.03.2023

p-			- A		
Α.	General Information About the Stack	1			
1.	Stack Connected to		Boiler – 1 & 2		
2.	Emission Due to		Coal		
3.	Material of Construction of Stack/Duct		Steel		
4.	Shape of Stack/Duct		: Circular		
5.	Whether Stack is provide with Permanent Platform & L	adder	Yes		
6.	Capacity		28 MW		
7	Running Load		-		
B.	Physical Characteristics of Stack	- N			
1.	Height of Stack from Ground Level	74	105 m		
2.	Height of Sampling Port from Ground Level		35 m		
3.	Diameter/Dimension of Stack/ Duct at sampling point		3.13 m		
C.	PARAMETERS ANALYSED	METH	ODS OF ANALYSIS	RESULTS	PERMISSIBLE LIMIT
	A STATE OF THE STA			OBTAINED	AS PER CTO
1.	Ambient Temperature (°C)	IS 11255	Part - 3, 1985 (RA 2018)	34	ž.
1	Temperature of Gas Emission (°C)	IS 11255	Part - 3, 1985 (RA 2018)	104	
3.	Barometric Pressure (mm Hg)	IS 11255	Part - 3, 1985 (RA 2018)	748	
4.	Velocity of Gas Emitted (m/sec)	IS 11255	Part - 3, 1985 (RA 2018)	6.23	
5.	Quantity of Gas Emitted (Nm3/hr)	IS 11255	Part - 3, 1985 (RA 2018)	1, 34, 083.95	•
6.	Particulate Matter Concentration (mg/Nm³)	IS 11255	Part - 1, 1985 (RA 2019)	13	50
7.	Sulphur Dioxide(SO <sub>2</sub> ) Concentration (mg/Nm <sup>3</sup> )		Part - 2, 1985 (RA 2014)		600
8.	Nitrogen Dioxide (NO <sub>2</sub> ) Concentration (mg/Nm <sup>3</sup> )		Part - 7, 2005 (RA 2017)	245.8	300
D.	Pollution Control Device Installed	ESP			





Verified By

Authorized Signatory Subhanga Praharaj

Subhanga Praharaj Managing Director

\*\*\*\*\*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.



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

#### TEST REPORT FOR STACK EMISSION MONITORING

REPORT NO: CPL/R/SE/MAR-23/70N

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

REPORT ISSUE DATE: 27.03.2023

Name of the Customer

M/s DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer

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

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

Sample ID No		CPL/SE/MAR-23/57
Location of Sampling	3	Captive Power Plant (Line - 2)
Date of Sampling	3	23.03.2023
Time of Sampling	3	10:40 Hrs
Duration of Sampling	8	47 min
nple Received on		23.03.2023
Date of Test	[A	23.03,2023 - 24.03.2023

A.	General Information About the Stack		3	The transfer of the same		
1.	Stack Connected to		: 1	Boiler – 1 & 2		
2.	Emission Due to		: (	Coal		
3.	Material of Construction of Stack/Duct		: :	Steel		
4.	Shape of Stack/Duct		. (	Circular		
5.	Whether Stack is provide with Permanent Platform & L	.adder	: 1	Yes		
6.	Capacity		1 2	28 MW		
7.	Running Load			2		
В.	Physical Characteristics of Stack		311			
1,	Height of Stack from Ground Level	74	3 1	105 M		
2.	Height of Sampling Port from Ground Level		3 (	35 M		
3.	Diameter/Dimension of Stack/ Duct at sampling point		g (	3.13 M		
C.	PARAMETERS ANALYSED	MET	HOD	S OF ANALYSIS	RESULTS	PERMISSIBLE LIMIT
	\$ 16 ME - 100				OBTAINED	AS PER CTO
1.	Ambient Temperature (°C)	IS 11255	5 Part	- 3, 1985 (RA 2018)	34	
1	Temperature of Gas Emission (°C)	IS 11255	5 Part	. – 3, 1985 (RA 2018)	104	
3.	Barometric Pressure (mm Hg)	IS 11255	5 Part	- 3, 1985 (RA 2018)	748	
4.	Velocity of Gas Emitted (m/sec)	IS 11255	5 Part	- 3, 1985 (RA 2018)	6.23	5 <b>€</b> 2
5.	Quantity of Gas Emitted (Nm³/hr)	IS 11255	5 Part	- 3, 1985 (RA 2018)	1, 34, 083.95	
6.	Particulate Matter Concentration (mg/Nm³)	IS 11255	5 Part	-1, 1985 (RA 2019)	13	50
7.	Mercury(Hg) Concentration (mg/Nm³)			€	< 0.02	0.03
D.	Pollution Control Device Installed	ESP				80





Authorized Signator Subhanga Praharaj **Managing Director** 

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

Page 1 of 1

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Registered Office:

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

Branch Office & Laboratory:

D/124, KOELNAGAR, ROURKELA - 769014, Dist: SUNDARGARH, ODISHA





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 - TC681623000000725F

REPORT NO: CPL/R/AAQ/MAR-23/42

REPORT ISSUE DATE: 27.03.2023

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

: [	CPL/AAQ/MAR-23/300
:	Near Atithi Niwas
\$	22.03.2023 - 23.03.2023
şi	14:05 – 08:25 Hrs
	18:20 Hrs
	23.03.2023
£	23.03.2023 – 24.03.2023

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	69	µg/m³	IS: 5182 (PART – 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	08	µg/m³	IS: 5182 (PART – 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	27	µg/m³	IS: 5182 (PART – 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	68	µg/m³	IS: 5182 (PART - 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	22	µg/m³	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

Test Done By



P. Salent Verified By

Authorized Signatory Subhanga Praharaj Managing Director

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

Page 1 of 1

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

#### TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

REPORT NO! CPL/R/AAQ/MAR-23/42N

REPORT ISSUE DATE: 27.03.2023

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

IS: 5182 Sampling Method

Sample ID No	:	CPL/AAQ/MAR-23/300
Location of Sampling	:	Near Atithi Niwas
Date of Sampling		22.03.2023 - 23.03.2023
Sampling Period	85 25	1405 – 0825 Hrs
Time of Sampling	7	18:20 Hrs
Inple Received on		23.03.2023
Date of Test	*	23.03.2023 - 24.03.2023

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/SQP/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 <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/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)

Verified By

**Authorized Signatory** Subhanga Praharaj

**Managing Director** 

"""END OF TEST REPORT

Page 1 of 1

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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 - TC681623000000727F

REPORT NO: CPL/R/AAQ/MAR-23/44

REPORT ISSUE DATE: 27.03.2023

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, EN 12341

Sample ID No	:	CPL/AAQ/MAR-23/321
Location of Sampling	1	Roof Of Workshop (Line – 2)
Date of Sampling	10 10	23.03.2023 - 24.03.2023
Sampling Period	18	09:10 - 09:24 Hrs
Time of Sampling	<u>#</u>	24.14 Hrs
Jample Received on	*(	24.03.2023
Date of Test		24.03.2023 - 25.03.2023

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	27	µg/m³	CPL/SOP/01/PM2.5, Issue No: 02, dtd: 23.10.2017	60 (24 Hours)
2	PM 10	76	µg/m³	EN12341	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	05	µg/m³	IS: 5182 (PART – 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	28	µg/m³	IS: 5182 (PART - 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	75	µg/m³	IS: 5182 (PART – 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	24	µg/m³	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

Test Done By



Verified By

Authorized Signatory Subhanga Praharaj Managing Director

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

Page 1 of 1

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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/FM/57

REPORT NO: CPL/R/AAQ/MAR-23/44N

REPORT ISSUE DATE: 27.03.2023

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, EN 12341

	CPL/AAQ/MAR-23/321	
	Roof Of Workshop (Line – 2)	
	23.03.2023 – 24.03.2023	
W/	09:10 - 09:24 Hrs	
	24.14 Hrs	
78	24.03.2023	
	24.03.2023 - 25.03.2023	

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/m <sup>3</sup>	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 <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/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



P. Saseni Verified By

Authorized Signatory Subhanga Praharaj Managing Director

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

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D/318, KOELNAGAR, ROURKELA -- 769014, Dist: SUNDARGARH, ODISHA D/1





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

### **TEST REPORT FOR AMBIENT AIR QUALITY MONITORING**

ULR - TC681623000000728F

REPORT NO: CPL/R/AAQ/MAR-23/45

ORMAT NO: CPL/FM/57

REPORT ISSUE DATE: 27.03.2023

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

Sample ID No	1	CPL/AAQ/MAR-23/322	
Location of Sampling	1	Near Captive Power Plant (Line – 2)	
Date of Sampling	:	23.03.2023 – 24.03.2023	
Sampling Period	:	09:22 – 09:15 Hrs	
me of Sampling	1	23.53 Hrs	
Sample Received on	*	24.03.2023	
Date of Test	:	24.03.2023 - 25.03.2023	

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	26	µg/m³	IS: 5182 (PART – 24) 2019	60 (24 Hours)
2	PM 10	74	µg/m³	IS: 5182 (PART - 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	08	µg/m³	IS: 5182 (PART – 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	24	µg/m³	IS: 5182 (PART – 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	62	µg/m³	IS: 5182 (PART – 25) 2018	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	26	µg/m³	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

Test Done By

Verified By

URKELA MI

Authorized Signatory Subhanga Praharaj Managing Director

\*\*\*\*\*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**

REPORT NO: CPL/R/AAQ/MAR-23/45N

REPORT ISSUE DATE: 27.03.2023

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

Sample ID No		CPL/AAQ/MAR-23/322
Location of Sampling	:	Near Captive Power Plant (Line – 2)
Date of Sampling	E	23.03.2023 - 24.03.2023
Sampling Period	*	09:22 – 09:15 Hrs
me of Sampling		23.53 Hrs
Sample Received on	1	24.03.2023
Date of Test	:	24.03.2023 - 25.03.2023

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/m³	Electro-chemical Sensor Based Digital Monitor	4 (1 Hour)
5	Benzene (C <sub>6</sub> H <sub>6</sub> )	< 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)

**Authorized Signatory** Subhanga Praharaj **Managing Director** 

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

Page 1 of 1

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

### TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FM/58

REPORT NO: CPL/R/SE/DEC-22/84N

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

REPORT ISSUE DATE: 20.12.2022

Name of the Customer

M/s DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer

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

Sampling Method

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

Sample ID No		CPL/SE/DEC-22/54
Location of Sampling	6	Captive Power Plant
Date of Sampling		16.12.2022
Time of Sampling	:	12:20 Hrs
Duration of Sampling		45 min
mple Received on	:	16.12.2022
Date of Test	:	16.12.2022 – 17.12.2022

Α.	General Information About the Stack		
1.	Stack/Duct Connected to	: Boiler 1 & 2 ESP Inlet	
2.	Emission Due to	Coal	
3.	Material of Construction of Stack/Duct	: Steel	
4.	Shape of Stack/Duct	: Rectangular	
5.	Whether Stack is provide with Permanent Platform & L	adder : Yes	
6.	Capacity	: 28 MW	
7.	Running Load	: 22 MW	
В.	Physical Characteristics of Stack		
1.	Height of Stack from Ground Level	: 105 m	
2.	Height of Sampling Port from Ground Level	: NA	
3.	Diameter/Dimension of Stack/ Duct at sampling point	3.13 m	
C.	PARAMETERS ANALYSED	METHODS OF ANALYSIS	RESULTS OBTAINED
1.	Ambient Temperature (°C)	IS 11255 Part – 3, 1985 (RA 2018)	31
2	Temperature of Gas Emission (°C)	IS 11255 Part – 3, 1985 (RA 2018)	157
	Barometric Pressure (mm Hg)	IS 11255 Part – 3, 1985 (RA 2018)	748
4.	Velocity of Gas Emitted (m/sec)	IS 11255 Part – 3, 1985 (RA 2018)	16.42
5.	Particulate Matter Concentration (mg/Nm³)	IS 11255 Part – 1, 1985 (RA 2019)	438
D.	Pollution Control Device Installed	ESP	

Verified By

**Authorized Signatory** Subhanga Praharaj **Managing Director** 

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

Page 1 of 1

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

### TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FM/58

REPORT NO: CPL/R/SE/DEC-22/85N

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

REPORT ISSUE DATE: 20.12.2022

Name of the Customer

M/s DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer

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

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

Sample ID No		CPL/SE/DEC-22/53
Location of Sampling		Captive Power Plant
Date of Sampling		16.12.2022
Time of Sampling		10:30 Hrs
Duration of Sampling	:	62 min
mple Received on		16.12.2022
Date of Test		16.12.2022 – 17.12.2022

-					N	
Α.	General Information About the Stack		:	7. 9. 47%		
1.	Stack/ Duct Connected to			Boiler – 1 & 2 ESP Or	utlet	
2.	Emission Due to			Coal		
3.	Material of Construction of Stack/Duct			Steel		
4.	Shape of Stack/Duct		9	Rectangular		
5.	Whether Stack is provide with Permanent Platform & L	.adder	41	Yes		
6.	Capacity			28 MW		
7.	Running Load		0.0	22 MW		
В.	Physical Characteristics of Stack		:			
1.	Height of Stack from Ground Level	700	:	105 m		
2.	Height of Sampling Port from Ground Level			35 m		
3.	Diameter/Dimension of Stack/ Duct at sampling point		3	3.13 m		
C.	PARAMETERS ANALYSED	MET	ГНО	DS OF ANALYSIS	RESULTS OBTAINED	PERMISSIBLE LIMIT AS PER CTO
1	Ambient Temperature (°C)	IS 1125	5 Pa	rt – 3, 1985 (RA 2018)	30	74.1
1 7	Temperature of Gas Emission (°C)	IS 1125	5 Pa	rt - 3, 1985 (RA 2018)	140	<b>1</b>
3.	Barometric Pressure (mm Hg)	IS 1125	5 Pa	irt – 3, 1985 (RA 2018)	748	-
4.	Velocity of Gas Emitted (m/sec)	IS 1125	5 Pa	irt – 3, 1985 (RA 2018)	11.52	•
5.	Quantity of Gas Emitted (Nm³/hr) IS 112			irt – 3, 1985 (RA 2018)	2, 25, 632.14	•
6.	Particulate Matter Concentration (mg/Nm³)	5 Pa	irt – 1, 1985 (RA 2019)	40	50	
7.	Sulphur Dioxide(SO <sub>2</sub> ) Concentration (mg/Nm <sup>3</sup> )		rt – 2, 1985 (RA 2014)	409.45	600	
8.	Nitrogen Dioxide (NO <sub>2</sub> ) Concentration (mg/Nm <sup>3</sup> )	5 Pa	rt – 7, 2005 (RA 2017)	236.1	300	
9.	Mercury (Hg) Concentration (mg/Nm³)	CPL/SOP/	01, Is	sue No: 03, dtd.: 01.08.2022	< 0.02	0.03
D.	Pollution Control Device Installed	ESP				

**Test Done By** 

**Authorized Signatory** Subhanga Praharai **Managing Director** 

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

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Registered Office:

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

Branch Office & Laboratory:

D/124, KOELNAGAR, ROURKELA - 769014, Dist: SUNDARGARH, ODISHA



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-22/58N

REPORT ISSUE DATE: 26.12.2022

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

IS: 5182, EN 12341 Sampling Method

	. X	H 10 Wi Tex
Sample ID No	:	CPL/AAQ/DEC-22/169
Location of Sampling	ı.	Near Atithi Niwas
Date of Sampling	:	16.12.2022 – 17.12.2022
Sampling Period	17	1615 – 0840 Hrs
Time of Sampling	1	16:25 Hrs
cample Received on	1	17.12.2022
Date of Test	:	17.12.2022 — 19.12.2022

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	28	µg/m³	CPL/SOP/01/PM2.5, Issue No: 02, dtd: 23.10.2017	60 (24 Hours)
2	PM 10	81	µg/m³	EN 12341, 1998 Low Volume Sampler	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	10	µg/m³	IS: 5182 (PART – 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	23	µg/m³	IS: 5182 (PART – 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	47	µg/m³	CPL/SOP/01/NH <sub>3</sub> , Issue No: 02, dtd: 23.10.2017	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	25	µg/m³	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

Verified By

**Authorized Signatory** Subhanga Praharaj **Managing Director** 

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

Page 1 of 1

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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/FM/57

REPORT NO: CPL/R/AAQ/DEC-22/58N

REPORT ISSUE DATE: 26.12.2022

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, EN 12341

Sample ID No	:	CPL/AAQ/DEC-22/169
Location of Sampling	:	Near Atithi Niwas
Date of Sampling	š	16.12.2022 17.12.2022
Sampling Period	8	1615 – 0840 Hrs
Time of Sampling	1	16:25 Hrs
Jample Received on	:	17.12.2022
Date of Test	*	17.12.2022 – 19.12.2022

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 <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/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)

Verified Bv

**Authorized Signatory** Subhanga Praharaj Managing Director

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

Page 1 of 1

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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/FM/57

REPORT NO: CPL/R/AAQ/DEC-22/53N

REPORT ISSUE DATE: 26.12.2022

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, EN 12341

Sample ID No	:	CPL/AAQ/DEC-22/155
Location of Sampling	*	Near Workshop Area (Line – 2)
Date of Sampling	*	14.12.2022 – 15.12.2022
Sampling Period	:	1140 – 1117 Hrs
Time of Sampling	*	23:37 Hrs
Jample Received on	10.	15.12.2022
Date of Test	25	15.12.2022 — 16.12.2022

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	28	µg/m³	CPL/SOP/01/PM2.5, Issue No: 02, dtd: 23.10.2017	60 (24 Hours)
2	PM 10	81	µg/m³	EN 12341, 1998 Low Volume Sampler	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	05	µg/m³	IS: 5182 (PART – 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	16	µg/m³	IS: 5182 (PART – 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	95	µg/m³	CPL/SOP/01/NH <sub>3</sub> , Issue No: 02, dtd: 23.10.2017	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	27	µg/m³	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

**Authorized Signatory** Subhanga Praharaj **Managing Director** 

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

Page 1 of 1

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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/FM/57

REPORT NO: CPL/R/AAQ/DEC-22/53N

REPORT ISSUE DATE: 26.12.2022

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, EN 12341

Sample ID No	*	CPL/AAQ/DEC-22/155
Location of Sampling	1	Near Workshop, Area (Line – 2)
Date of Sampling	300	14.12.2022 — 15.12.2022
Sampling Period	ıķ-	1140 – 1117 Hrs
Time of Sampling	÷	23:37 Hrs
Jample Received on	•	15.12.2022
Date of Test	8	15.12.2022 16.12.2022

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 <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/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

Varified By

Authorized Signatory Subhanga Praharai

Managing Director

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

Page 1 of 1

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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/FM/57

REPORT NO: CPL/R/AAQ/DEC-22/55N

REPORT ISSUE DATE: 26.12.2022

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

Sample ID No	•	CPL/AAQ/DEC-22/156
Location of Sampling		Near CPP WTP Area
Date of Sampling	1.	14.12.2022 – 15.12.2022
Sampling Period	1	1150 – 1115 Hrs
Time of Sampling	4	23:35 Hrs
Jample Received on	:	15.12.2022
Date of Test	:	15.12.2022 – 16.12.2022

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	27	µg/m³	CPL/SOP/01/PM2.5, Issue No: 02, dtd: 23.10.2017	60 (24 Hours)
2	PM 10	79	µg/m³	IS: 5182 (PART – 23) 2006, RA 2017	100 (24 Hours)
3	Sulphur Dioxide (SO <sub>2</sub> )	07	µg/m³	IS: 5182 (PART – 2) 2001, RA 2017	80 (24 Hours)
4	Nitrogen Dioxide (NO <sub>2</sub> )	17	µg/m³	IS: 5182 (PART – 6) 2006, RA 2017	80 (24 Hours)
5	Ammonia (NH <sub>3</sub> )	90	µg/m³	CPL/SOP/01/NH <sub>3</sub> , Issue No: 02, dtd: 23.10.2017	400 (24 Hours)
6	Ozone (O <sub>3</sub> )	27	µg/m³	IS - 5182 (PART - 9) 1974, RA 2019	180 (1 Hour)

Test Done By

Arified By

Authorized Signatory Subhanga Praharaj Managing Director

\*\*\*\*\*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

REPORT NO: CPL/R/AAQ/DEC-22/55N

REPORT ISSUE DATE: 26.12.2022

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

IS: 5182 Sampling Method

Sample ID No		CPL/AAQ/DEC-22/156
Location of Sampling	i.	Near CPP WTP Area
Date of Sampling	:	14.12.2022 - 15.12.2022
Sampling Period	100	1150 – 1115 Hrs
Time of Sampling	:	23.35 Hrs
Jample Received on	÷	15.12.2022
Date of Test	2	15.12.2022 – 16.12.2022

SI No	Parameters	Results Obtained	Unit	Method of Analysis	National Amblent 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 <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/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)

Authorized Signatory Subhanga Praharaj **Managing Director** 



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

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