

### newthink! cement! sugar! refractories! power!

Date: 27.05.2021

Ref: Env/ECHC/L-II/ 215

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 (October, 2020 to March, 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 OCL India Limited (A unit of Dalmia Bharat Cement) at Village – Rajgangpur, Tehsil Rajgangpur, District – Sundargarh, Odisha.

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

Dear Sir,

With reference to above letter, we enclose herewith the six monthly compliance report (Ending March, 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:

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

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

# SIX MONTHLY COMPLIANCE REPORT (OCTOBER, 2020 TO MARCH, 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

OCL INDIA LIMITED (DALMIA BHARAT CEMENT)

RAJGANGPUR – 770017

DIST- SUNDARGARH

ODISHA

### OCL INDIA LTD (A UNIT OF DALMIA BHARAT CEMENT), RAJGANGPUR, ODISHA.

Six monthly compliance report (October, 2020 to March, 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 OCL India Limited (Dalmia Cement Bharat Ltd.), Rajgangpur.

#### A. SPECIAL CONDITION

SI, No.	Description of Conditions	Compliance Status
İ	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.	a. Complied. 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 Annexure-I Additional measures 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.
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	<ul> <li>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 Annexure-I</li> <li>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</li> </ul>

	Regional office at Bhubaneswar half- yearly. One ambient air quality monitoring station shall be installed in downwind direction.	and to the Ministry's Regional Office at Bhubaneswar on 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/ Nm3. 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.	<ul> <li>Air pollution control measures &amp; systems are adopted:</li> <li>a. 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>b. Coal handling, cement grinding units are equipped with bag filters to control fugitive dust emissions.</li> <li>c. Bag house installed for CVRM &amp; Coal mill to maintain stack emission as per standard.</li> <li>d. 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>e. Belt conveyors are thoroughly hood covered.</li> <li>f. Clinker is stored in clinker silo &amp; transported by hatch adopter system.</li> <li>g. Raw material handling &amp; its storing is carried out by closed shed.</li> <li>h. Water sprinkling dust suppression systems are installed at raw material handling yards.</li> </ul>
v	Asphalting/concerning 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 m3/d including 785 m3/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> <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	<ul> <li>a.) Dust collected from pollution control devices is recycled and reutilized in the process.</li> <li>b.) Char is used as raw material, as per availability.</li> <li>c.) Used oil &amp; batteries are stored at earmarked area and disposed off through the authorized recyclers/ reprocessors.</li> </ul>

	from gear boxes and automotive 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.	<ul> <li>a. Rain water harvesting by storm water drain have been made inside plant &amp; near CPP.</li> <li>b. Roof top rain water-harvesting is being practices in a part of colony areas.</li> <li>c. Rain water harvesting projects from the roof top of a material shed inside the plant is also being carried or</li> </ul>					
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.	plant. Distributing	of saplings to ne	egular basis. Statistical dat			
	The second device of the second of the secon	DETAILS OF YE. STATUS)	AR WISE PLANTA	ATION (CUMULATIVE			
		YEAR	NO. TREES PLANTED	PLANTATION IN & AROUND OF			
		Up to march,2007-08	148655	INDUSTRY/ SAPLING DISTRIBUTED			
		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			
Х	The company shall undertake eco- development measures including community welfare measures in the project area.	Company has beer in the surrounding	[설명시민] (10 P. 10 P.	ing eco-development work			
xi	All the recommendation mentioned in the Charter on the Corporate Responsibility for Environmental Protection (CREP) shall be strictly followed.	It is being complie	d				
xii	High calorific hazardous waste shall be used as fuel in the cement kiln.  Accordingly, provision to be made in the kiln.	We have obtained authorization from	Hazardous waste SPCB, Odisha, P	ing burnt in cement kiln. handling for co-processing rovision were made to lous waste, as per the			

xiii	Prior permission from the State Forest 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.	The plant was constructed over non-forest land and an application to the Forest Deptt. Already submitted in this regard.
------	---	--

### B. GENERAL CONDITION

SL No.	Description of conditions			Compliance S	tatus	
i	The project authority must adhere to the stipulation made by Orissa State Pollution Control Board and State Government.	co	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				
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 SO2 and NOX 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.	a. Four numbers of ambient air quality monitoring stations are installed as per SPCB guideline, which are shown in the Table A.iii.a     b. Data on ambient air quality and stack emission is submitted to SPCB/CPCB an MoEF&CC				
iv	Industrial wastewater shall be properly collected, treated so as to confirm 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	a.	(ETP) outlet under	*	atment plant report of ETP is given here	
	plantation purposes.		SI. No.	parameter	ETP outlet treated water	
			1	PH value	7.6	
			2	Total suspended solids (mg/l)	<2.5	
			3	B.O.D (mg/l)	28.0	
			4	C.O.D (mg/l)	91.4	
			5	Oil & Grease (mg/l)	<2.0	
		b. The treated water is utilised in the plant for machineries cooling, sprinkling on road & green belt development.				
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.	Complied. Regular disposal of Hazardous waste, as per Rule are maintained and Form-IV is being submitted to OSPCB with required information.				
	The overall noise levels in and around the plant area	Noise monitoring is being carried out regula				

	shall be kept well within the standards (85dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall confirm to the standards prescribed under EPA Rules, 1986 viz. 75 dBA (day time) and 70 dBA (night time).	at specified locations. Following data is given herewith for four locations. Detail report is enclosed in <b>Annexure-I</b>
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.
х	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 http://envfor.nic.in 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

# OCTOBER 2020 TO MARCH 2021

FOR

# DALMIA CEMENT (BHARAT) LIMITED

[Formerly, OCL India 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		Particul	ate matter e	mission in n	ng/Nm3	
	OCT,	NOV,	DEC.	JAN.	FEB,	MAR,
(	2020	2020	2020	2021	2021	2021
Cement VRM-1 B/F	9.8	18.6	13.9	23.6	16.5	13
Cement VRM-2 B/F	10.7	14.2	8.3	17.9	12.7	15.3
Cement VRM-3 B/F	20.2	12.9	11.9	8.6	11.1	11.8
Kiln & VRM BAG HOUSE(L-I)	5.6	5.9	6.8	8.5	7.9	8
Cooler ESP, L-1	15.7	14.1	16.4	11.4	16.9	9,3
Coal Mill B/F, L-I	9.7	10.8	11.4	13.3	10.3	13.3
Kiln & VRM BAG HOUSE (L-II)	7.8	8.6	10.2	10.4	13.2	9.1
Coal Mill B/F, L-II	10	11.8	13.7	12.9	9.8	1.5
Cooler ESP, L-II	13.6	16.3	18.2	17.5	18.6	12.4

# AMBIENT AIR AVG. DATA (FROM OCTOBER 2020 TO MARCH 2021)

Location of sampling station	SO2 (ug/m 3)	NOX (ug/m 3)	PM <sub>10</sub> (ug/ m3)	PM 25 (ug /m3)	Ozone (v3) (ug/ m3)	Lead (Pb) (ug/ m3)	CO (mg/ m3)	Ammoni a (nh3) (ug/m3)	Benzene (C6H6) (ug/m3)	Benzo (a) Pyrene (BaP) – (ug/ m3)	Arsenic (AS) (ug/ m3)	Nickel (Ni) (ug/ m3)
Workshop building	< 3	08	60	21	< 19.6	< 0.4	< 0.1	< 20	< 0.5	< 0.1	< 0.1	< 12.0
Engineerin g hostel building	16	52	83	29	<19.6	<0,4	<0.1	98	<0.5	<0.1	<0.1	<12.0
Project site (near colony)	< 3	10	45	16	< 19.6	< 0.4	< 0.1	22	< 0.5	< 0.1	< 0.1	< 12.0
Canteen building	< 03	0.7	85	29	< 19.6	< 0.4	< 0.1	20	< 0.5	< 0.1	< 0.1	< 12.0
Loco gate	03	11	60	21	< 19.6	< 0.4	< 0.1	25	< 0.5	< 0.1	< 0.1	< 12.0

# NOISE AVG. DATA (FROM OCTOBER 2020 TO MARCH 2021)

	Sampling locations								
Particular (Noise level)	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	64.5	70.8	67.8	58.7	57.1	61.6	72.5	73.2	
Noise level (L night) during night time	56.2	62.3	62.3	54.8	53.9	58.9	68	67,5	





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

### TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC681621000000580P REPORT NO: CPL/R/AAQ/MAR-21/32

REPORT ISSUE DATE: 27.03.2021

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

Sampling Method Location of Monitoring

STORE BUILDING A2

Monitoring Station Code: Sample Received on

25.03,2021

Test Carried out on

25.03.2021 - 26.03.2021

Environmental Conditions During Monitoring |: Min Temp.:16.2°C | Max Temp.:36.5°C | Min RH:13% | Max RH:91%

SI	Date of	Sample ID			Parameté	rs		
			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/m³	µg/m³	µg/m³	µg/m³	µg/m³	hã/w <sub>3</sub>	
	Metho	od of Analysis	CPL/SOP/6/1/PM2.5, Issue No: 02, did: 23.50.2017	ER 12341, 1998 Low Volume Sempler	SS:5162 (Part = 2) 2001, RA 2017	IS: 5182 (Part - 6) 2006, RA 2017	CPL/SOPI61/NH <sub>1</sub> , issue No: 62, dtd: 23.19.2917	(S:\$182 (Part - 9) 1974, PLA 2014
1.	23 03 2021 CPL/AAQ/MAR-21/495		22	64	03	08	29	< 19.6
Notif	National Ambient Air Quality Standards, CPCB Notification New Delhi, 18th 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)

SI No	Date of Sampling	Sample ID	Parameters						
				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/m³	ng/m³	ng/m³	µg/m³	mg/m³	ng/m³	
Method of Analysis		f Analysis	(Fart - 22); 2004, RA 2014	CPL/SOPI01/As: lasere No: 82, dtd: 28.16.3017	CPUSOPASINI, Israe No: 02, dtd: 23.10.2017	IS 8182 (Part - 13): 2000. RA 2017	Electro-chemical Sensor	IS 5182 (Part - 13)	
1. 23 03 2021 CPL/AAQ/MAR- - 21/495 24 03 2021			< 0.4	< 0.1	< 12.0	< 0.5	< 0.1	< 0.1	
National Ambient Air Quality Standards, CPCB Notification New Delhi, 19th 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)	

<sup>\*</sup>Parameters are not under NASL scope.

Test Done By

"END OF TEST REPORT" Page 1 of 1

Authorized Signatory Subhanga Praharaj Managing Director/QM

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

DOWN, NOFLWAGAR, ROURNELA - 769014, Dist: SUNDARGARH, ODISHA

ROURKELA

Brancis Office & Laboratory:

Branch Office & Laboratory: DH24, KOELNAGAR, ROURKELA - 769014, Dist: SUNDARGARH, ODISHA

Tele Fax: 8661 - 2475748, small: cleanviron@gmail.com





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

#### TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMATING: CPUFMIST

ULR - TC681621000000585P REPORT NO: CPL/R/AAQ/MAR-21/37

REPORT ISSUE DATE: 27.03.2021

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 :

23.03.2021

Test Carried out on

23.03.2021 - 24.03.2021

Environmental Conditions During Monitoring : Min Temp.:16.2°C | Max Temp.:36.5°C | Min RH:13% | Max RH:91%

SI No	Date of	Date of Sample ID Sampling	Parameters							
			PM <sub>2.5</sub>	PM <sub>10</sub>	\$O <sub>2</sub>	NO <sub>2</sub>	NHa	O <sub>3</sub>		
		Units	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³		
	Metho	od of Analysis	CPL/SOPI01/PMZ.5, losue No: 02, dtd: 23.10.2017	EN 12341, 1998 Low Volume Sampler	IS:5182 (Part - 2) 2001. RA 2017	15: 5182 (Fart - 6) 2806, RA 2017	CPL/SOP/P1/NHs, Issue No: 02, dtd: 23,10,2017	(5:3582 (Part - 9) 1974, RA 2014		
1.	22.03.2021	CPUAAQ/MAR-21/399	29	83	16	52	98	< 19.6		
Notit	fication New Delhi,	cality Standards, CPCB 18° November, 2009 for 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)		

SI	SI Date of Sample ID Vo Sampling		Parameters							
			Lead (Pb)	Arsenic (As)	Nickel (NI)	*Benzene (CsHs)	*Carbon Monoxide (CO)	*Benzo(a)pyrene (BaP) - Particulate Phase only		
Units		nits -	µg/m <sup>3</sup>	ng/m³	ng/m³	µg/m³	mg/m³	ng/m³		
	Method o	f Analysis	15 5182 (Part ~ 22): 2004, RA 2014	CPL/SOPI01/As, Issue No: 02, dtd: 23.16.2017	CPL/SOP/01/Mi., festile No: 02, chd: 23.10.2017	15 5182 (Part - 11); 2006, RA 2017	Electro-chemical Sensor	IS 5132 (Part = 12)		
1.	22.03.2021	CPL/AAQ/MAR- 21/399	< 0.4	< 0.1	< 12.0	< 0.5	< 0.1	< 0.1		
Notif	ication New Delhi,	uality Standards, CPCB 18° November, 2009 Ial, Rural & Other Area	1.0 (24 Hours Average)	06 (Annual Average)	20 (Annual Average)	05 (Annual Average)	4 (1 Hour Average)	01 (Annual Average)		

<sup>&</sup>quot;Parameters are not under NABL scope.

Test Done By ROURKELA THE

Verified By

Page 1 of 1

Authorized Signatory Subhanga Praharaj

Subhanga Praharaj Managing Director/QM

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:

DOMB, NOTELNAGAR, ROURKELA - 769014, Dist: SUNDARGARH, ODISHA

Branch Office & Laboratory:

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

Tele Fax: 8661 - 2475746, email: cleenviron@gmail.com





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

#### TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC681621000000584P REPORT NO: CPL/R/AAQ/MAR-21/36

REPORT ISSUE DATE: 27.03.2021

SAMPLE DRAWN BY CLEENWINON 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** A6

Monitoring Station Code: Sample Received on

25.03.2021

Test Carried out on

25.03.2021 - 26.03.2021

Environmental Conditions During Monitoring | : Min Temp.:9.5°C

Max Temp.:31.3°C | Min RH:19% | Max RH:79%

SI	Date of Sample ID Sampling		Parameters							
	Samping		PM <sub>2.0</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	NH <sub>3</sub>	Oz		
		Units	µg/m³	μg/m³	µg/m³	µg/m³	hg/m³	µg/m³		
	Metho	od of Analysis	CPL/SGP/REIPM2.5. Insign No. 92, dtd: 23,10,2017	EW 1234s, 1998 Low Volume Sampler	IS:5182 (Part - 2):2001. RA 2017	15: 5182 (Part - 6) 2006: RA 2017	CPUSOPIST/NHs. Issue No: 82, dtd: 23.10.2817	IS:5132 (Part 9 1974, RA 2014		
1.	23.03.2021	CPU/AAQ/MAR-21/497	29	85	< 3	07	20	< 19.6		
Notif	scation New Delhi,	safity Standards, CPCB 18" November, 2009 for Roral & 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)		

SI No		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
	Ur	nits	µg/m³	ng/m³	ng/m³	µg/m³	mg/m³	ng/m³
	Method o	f Analysis	(\$ 5182 (Part - 22): 2004. RA 2014	CPL/SOPIMUAs, Issue No: 92, dtd: 33.18.2017	CPL/SOPR1/Ni, Issue No: III, dbd: 23.15.2017	IS 5182 (Part = 11); 2008, RA 2817	Electro-chemical Sensor	15 5182 (Part - 12)
1.	23 03 2021	CPL/AAQ/MAR- 21/497	< 0.4	< 0.1	< 12.0	< 0.5	< 0.1	< 0.1
National Ambient Air Quality Standards, CPCB Notification New Delhi, 18th 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)	

<sup>&</sup>quot;Parameters are not under NABL scope

Test Done By

'END OF TEST REPORT"-Page 1 of 1

Authorized Signatory

Subhanga Praharaj Managing Director/QM

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 pennission of the Company.

Registered Office.

DISHB, KIDELMAGAR, ROURKELA - 769014, Dist: SUNDARGARH, ODISHA

ROURKELA

Branch Office & Laboratory:

Driza, KOELNAGAR, ROURKELA - 769014, Dist: SUNDARGARH, ODISHA

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





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

### TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC681621000000583P REPORT NO: CPL/R/AAQ/MAR-21/35

REPORT ISSUE DATE: 27.03.2021

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 LOCO GATE** 

Monitoring Station Code:

A5

Sample Received on

25.03.2021

Test Carried out on

25.03.2021 - 26.03.2021

Environmental Conditions During Monitoring | : Min Temp.:16.2°C | Max Temp.:36.5°C | Min RH:13% | Max RH:91%

8	Date of Sample ID Sampling		THE REAL PROPERTY.	Parameters							
			PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	NHa	O <sub>3</sub>			
		Units	µg/m³	µg/m³	h8/m3	µg/m³	µg/m³	µg/m³			
	Metho	od of Analysis	CPL/SOPI01/PWZ.5, Issue No: 02, dbd: 20.10.2017	EH 12341, 1998 Low Volume Sampler	15:5182 (Part - 2) 2001, RA 2017	IS: 5182 (Part - 6) 2006, RA 2017	CPL/9QR/6179H <sub>3</sub> , issue No: 02, dtd: 23,10,2017	15:5162 (Part - 8 1974, RA 2014			
1.	23 03 2021	CPL/AAQ/MAR-21/496	21	60	03	11	25	< 19.6			
Notif	fication New Delhi,	uzelby Standards, CPCB 18th November, 2009 for Roral & 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)			

			Lead (Pb)	Arsenic (As)	Nickel (Ni)	*Benzene	*Carbon	*Benzo(a)pyrene
						(C <sub>0</sub> H <sub>6</sub> )	Monoxide (CO)	(BaP) – Particulate Phase only
	Un	its	µg/m³	ng/m³	ng/m³	µg/m³	mg/m³	ng/m³
	Method of	Analysis	(\$ 5182 (Part - 22): 2004 RA 2014	CPUSOPINI/As, Issue No: 02, dtd: 22.10.2017	CPL/SOP/0186, loose No: 62, dld: 23.19.2017	85 5162 (Part - 11); 2006, RA 2017	Electro-chemical Sensor	(S 5182 (Part - 12)
1.	23.03.2021	CPL/AAQ/MAR- 21/496	< 0.4	< 0.1	< 12.0	< 0.5	< 0.1	< 0.1
<b>Votil</b>	Scation New Delbi, 1	sality Standards, CPCB 18" November, 2009 si, Rurel & Other Area	1.0 (24 Hours Average)	06 (Annual Average)	20 (Annual Average)	05 (Annual Average)	4 (1 Hour Average)	01 (Annual Average)

"Parameters are not under NABL scope.

Test Done By

"END OF TEST REPORT Page 1 of 1

Authorized Signatory Subhanga Praharaj Managing Director/QM

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:

DOUB, KOELMAGAR, ROURKELA - 789014, DWL: SUNDARGARH, DDISHA

Branch Office & Laboratory:

DH24, KOELNAGAR, ROURKELA - 769014, Diet: SUNDARGARH, ODISHA

Tela Fax: 9961 - 2475746, email: cleanviron@gmail.com





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

# TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC681621000000579P REPORT NO: CPL/R/AAQ/MAR-21/31

REPORT ISSUE DATE: 27.03.2021

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

23.03.2021

Test Carried out on

23.03.2021 - 24.03.2021

Environmental Conditions During Monitoring | : | Min Temp.:16.2°C | Max Temp.:36.5°C | Min RH:13%

Max RH:91%

SI No	Date of	Sample ID	Parameters							
			PM2.5	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	NH <sub>3</sub>	O <sub>3</sub>		
-		Units	μg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³		
	Metho	od of Analysis	CPU/SOPI01/PM2.5, Issue No: 02, dtd. 23.10.2817	EM 12341, 1998 Low Volume Sampler	IS:5182 (Part - 2) 2001, RA 2017	15: 5162 (Part - 6) 2006, RA 2017	CPL/SCP/61/NH <sub>3</sub> , lesse No: 62, dtd: 23.10.2017	15:5182 (PML - 5 1974, RA 2014		
1.	22.03.2021	CPUAAQ/MAR-21/397	21	60	< 3	08	< 20	< 19.6		
Notif	fication New Delhi,	uality Standards, CPCB 18th November, 2009 for 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)		

Si 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		hã\w <sub>2</sub> ui	ng/m³	ng/m³	hā/m <sub>3</sub>	mg/m <sup>3</sup>	ng/m³
		f Analysis	18 5152 (Pert - 22): 2004, RA 2014	CPLISOP/01/As, Issue No: 02, dbd 23,10,2017	CPL/SOP(01N), Insue No: 62, dtd: 23,16,2617	IS 5182 (Part = 11): 2006, RA 2017	Electro-chenical Sensor	15 3182 (Part ~ 12)
1 22 03 2021 CPL/AAQ/MAR- 21/397 23 03 2021		< 0.4	< 0.1	< 12.0	< 0.5	< 0.1	< 0.1	
National Ambient Air Quality Standards, CPCB Notification New Delhi, 18th 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)	

<sup>&</sup>quot;Parameters are not under NABL scope.

Test Done By

END OF TEST REPORT Page 1 of 1

Authorized Signatory

Subhanga Praharaj Managing Director/QM

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

Registered Office:

DOTE ROSEWAGAR, ROURKELA - 789014, Dist: SUNDARGARH, ODISHA

ROURKELA

Branch Office & Laboratory:

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

Tele Fax: 8681 - 2475746, email: cleenviron@gmail.com





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

#### TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO. CPLIFMIST

ULR - TC681621000000586P REPORT NO: CPL/R/AAQ/MAR-21/38

REPORT ISSUE DATE: 27.03.2021

SAMPLE DRAWN BY CLEENWRON 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

NEAR WATER TREATMENT PLANT

Location of Monitoring : Monitoring Station Code :

48

Sample Received on

23.03.2021

Test Carried out on

23.03.2021 - 24.03.2021

Environmental Conditions During Monitoring |: | Min Temp.:16.2°C | Max Temp.:36.5°C | Min RH:13% | Max RH:91%

SI No	Date of Sample ID Sampling		Parameters.							
			PM <sub>2.5</sub>	PM <sub>10</sub>	SOz	NO <sub>2</sub>	NH <sub>3</sub>	O <sub>3</sub>		
evillage.		Units	µg/m³	µg/m³	µg/m³	µg/m³	hā\u_3	µg/m³		
		od of Analysis	CPL/SOPI01IPM2.5, Issue No: 62, did: 23.19.2017	EN 12341, 1998 Low Volume Sempler	IS:5182 (Part - 2) 2801, RA 2017	75: 5182 [Part - 5] 2086, RA 2017	CPL/SOPI61/NHs, Indus No: 62, dtd. 23.10.2657	15:2562 (Part - 9) 1974, RA 2014		
1.	22 03 2021	CPL/AAQ/MAR-21/398	22	65	03	09	21	< 19.6		
Notif	lostion New Delhi,	uality Standards, CPCB 18th November, 2009 for 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)		

SI	Date of	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	
	Ur	nits >	µg/m³	ng/m <sup>1</sup>	ng/m³	µg/m³	mg/m <sup>3</sup>	ng/m³
	Method o	f Analysis	(5 5182 (Part – 22): 2084, RA 2014	CPUSOPVIIIAs, Justie No: 62, dui: 23,19,2017	CPL/SOPIM/NI, fesse No: 02, dtd: 23:10:2017	IS 8162 (Part - 11): 2006, RA 2017	Electro-chemical Sensor	18 5182 (Part - 12)
1. 22.03.2021 CPL/AAQ/MAR- - 21/398 23.03.2021		< 0.4	< 0.1	< 12.0	< 0.5	< 0.1	< 0.1	
National Ambient Air Duality Standards. CPCB Notification New Delhi, 18th Nevember, 2009 for Industrial, Residential, Rural & Other Area		1.0 (24 Hours Average)	(Annual Average)	20 (Annual Average)	05 (Annual Average)	4 (1 Hour Average)	01 (Annual Average)	

<sup>&</sup>quot;Parameters are not under NABL scope.

Test Done By

Verified By

Page 1 of 1

Authorized Signatory

Subhanga Praharaj Managing Director/QM

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:

DO18, KOELNAGAR, ROURKELA - 769014, Dist: SUNDARGARH, ODISHA

Branch Office & Laboratory:

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

Tele Fax: 0661 - 2475746, email: cleenviroe@gnall.com





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

### TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681621000000589F REPORT NO: CPL/R/SE/MAR-21/19

REPORT ISSUE DATE: 27.03.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer

Address of the Customer Sample ID No

Name of Stack Monitored Stack Connected To

Shape of Stack Date of Sampling Time of Sampling Method of Sampling

Sample Received on

Date of Test

DALMIA CEMENT (BHARAT) LIMITED

RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha CPL/SE/MAR-21/26

KILN & VRM LINE - 1 KILN VRM Circular

23.03.2021 12:30 Hrs

IS 11255 (Part - 1), (Part - 2): 1985, RA 2014 & (Part - 7): 2005, RA 2017

24.03.2021

25.03.2021

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

Results Obtained

32

150

18.6

25

40

30 mg/Nm<sup>3</sup> : 06 mg/Nm3 100 mg/Nm3 : 28.01 mg/Nm<sup>3</sup> 800 mg/Nm3 : 557.6 mg/Nm<sup>3</sup>

Particulate Matter Concentration Sulphur Dioxide as SO2

Nitrogen Dioxide as NO2

Test Done By

Authorized Signatory Subhanga Praharaj Managing Director/QM

Permissible Limits

\*\*\*\*\*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 Ham 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 NABL Accredited Laboratory.

### TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681521000000588F REPORT NO: CPL/R/SE/MAR-21/18

REPORT ISSUE DATE: 27.03.2021

SAMPLE GRAWN BY CLEENVIRON PROVATE LIMITED

Name of the Customer

DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer

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

Sample ID No Name of Stack Monitored Stack Connected To

CPL/SE/MAR-21/27 Coal Mill B/F, Line – 1 Coal Mill Bag Filter

Shape of Stack Date of Sampling Time of Sampling

Circular 23.03.2021 15 : 00 Hrs

Method of Sampling

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

Sample Received on Date of Test

24.03.2021 25.03.2021

Ambient Temperature in °C Stack Temperature in °C

42 95

Average Stack Gas Velocity in m/sec

6.49

Iso-kinetic Flow Rate in LPM Duration of Sampling in minute

45

Particulate Matter Concentration

Results Obtained

10 mg/Nm<sup>3</sup>

DRIVA

ROURKELA

Permissible Limits

30 mg/Nm<sup>3</sup>

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.





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

# TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681521000000587F REPORT NO: CPL/R/SE/MAR-21/17

REPORT ISSUE DATE: 27.03.2021

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/MAR-21/28

Name of Stack Monitored Stack Connected To

Cooler ESP, Line - 1 Cooler, Line - 1

Shape of Stack

Circular

Date of Sampling Time of Sampling

23.03.2021

Method of Sampling

16:07 Hrs IS 11255 (Part - 1): 1985, RA 2014

Sample Received on

24.03.2021

Date of Test

25.03.2021

Ambient Temperature in °C

Stack Temperature in °C

250

Average Stack Gas Velocity in m/sec

7.00 17

Iso-kinetic Flow Rate in LPM Duration of Sampling in minute

58

Particulate Matter Concentration

Results Obtained

25 mg/Nm<sup>3</sup>

Permissible Limits

30 mg/Nm3

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





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

### TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC6816210000000590F REPORT NO: CPL/R/SE/MAR-21/20

REPORT ISSUE DATE: 27.03.2021

SAMPLE ORAWN BY CLEEN VIRON PRIVATE LIMITED

Name of the Customer

Address of the Customer

Sample ID No.

Name of Stack Monitored Stack Connected To

Shape of Stack Date of Sampling Time of Sampling

Sample Received on

Method of Sampling

Date of Test

Stack Temperature in °C

Iso-kinetic Flow Rate in LPM Duration of Sampling in minute

Ambient Temperature in °C

Average Stack Gas Velocity in m/sec

Particulate Matter Concentration

DALMIA CEMENT (BHARAT) LIMITED

RGP Cement Factory, Rajgangpur - 770017, Dist: Sundargarh, Odisha CPL/SE/MAR-21/34

CVRM - 1. Line - 1 CVRM - 1 Bag filter

Circular 24.03.2021 12:10 Hrs

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

25.03.2021 26.03.2021

36

92 7.78

27

Results Obtained

10 mg/Nm<sup>3</sup>

Permissible Limits

30 mg/Nm3

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





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

### TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681621000000591F REPORT NO: CPL/R/SE/MAR-21/21

REPORT ISSUE DATE: 27.03.2021

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/MAR-21/29 CVRM - 2, Line - 1

Name of Stack Monitored Stack Connected To

CVRM - 2 Bag filter

Shape of Stack Date of Sampling Circular 24.03.2021 11:20 Hrs

Time of Sampling Method of Sampling

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

Sample Received on

25.03.2021

Date of Test

26.03.2021

Ambient Temperature in °C Stack Temperature in °C

35 89

Average Stack Gas Velocity in m/sec

7.05 25

Iso-kinetic Flow Rate in LPM Duration of Sampling in minute

40

Particulate Matter Concentration

Results Obtained

: 16 mg/Nm3

Permissible Limits

30 mg/Nm<sup>3</sup>

Authorized Signatory Subhanga Prahara Managing Director/QM

"END OF YEST REPORT"

Page 1 of 1

This raport 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 NABL Accredited Laboratory.

#### TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681621000000592F REPORT NO: CPL/R/SE/MAR-21/22

REPORT ISSUE DATE: 27.03.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer

Address of the Customer

Sample ID No.

Name of Stack Monitored

Stack Connected To Shape of Stack Date of Sampling Time of Sampling

Method of Sampling

Date of Test

Sample Received on

DALMIA CEMENT (BHARAT) LIMITED

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

CPL/SE/MAR-21/30 CVRM - 3, Line - 1 CVRM - 3 Bag filter Circular

24.03.2021 10:03 Hrs

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

25.03.2021

26.03.2021

Ambient Temperature in °C 32 Stack Temperature in °C 99 Average Stack Gas Velocity in m/sec 5.29 Iso-kinetic Flow Rate in LPM 18 Duration of Sampling in minute 56

Particulate Matter Concentration

Results Obtained

: 05 mg/Nm<sup>3</sup>

Permissible Limits

30 mg/Nm3

ROURKELA

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





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

### TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681621000000595F REPORT NO: CPL/R/SE/MAR-21/25

REPORT ISSUE DATE: 27.03.2021

BAMPLE DRAWN BY CLEENWRON PRIVATE LIMITED

Name of the Customer

Address of the Customer

Sample ID No Name of Stack Monitored

Stack Connected To

Shape of Stack Date of Sampling Time of Sampling

Method of Sampling

Date of Test

Sample Received on

DALMIA CEMENT (BHARAT) LIMITED

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

CPL/SE/MAR-21/25

KILN & VRM RABH, LINE - 2

KILN VRM Circular 22.03.2021

12:25 Hrs

IS 11255 (Part - 1), (Part - 2): 1985, RA 2014 & (Part - 7): 2005, RA 2017

23.03.2021

24.03.2021

Ambient Temperature in °C 32 Stack Temperature in °C 108 Average Stack Gas Velocity in m/sec 9.82 Iso-kinetic Flow Rate in LPM 33 Duration of Sampling in minute 30

Particulate Matter Concentration Sulphur Dioxide as SO2 Nitrogen Dioxide as NO2

: 06 mg/Nm3 : 34.59 mg/Nm3 : 420.5 mg/Nm3

Results Obtained

Permissible Limits 30 mg/Nm<sup>3</sup> 100 mg/Nm<sup>3</sup> 800 mg/Nm3

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





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

CPL/SE/MAR-21/22

Coal Mill Bag Filter

Circular

22.03.2021

15:14 Hrs

23.03.2021

24.03.2021

Coal Mill B/F, Line - 2

### TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681621000000594F REPORT NO: CPL/R/SE/MAR-21/24

REPORT ISSUE DATE: 27.03.2021

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 Shape of Stack

Date of Sampling Time of Sampling Method of Sampling

Sample Received on

Ambient Temperature in °C Stack Temperature in PC Average Stack Gas Velocity in m/sec

Iso-kinetic Flow Rate in LPM Duration of Sampling in minute

Particulate Matter Concentration

Date of Test

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

40 71 5.49

20 50

Results Obtained

: 11 mg/Nm<sup>3</sup>

Permissible Limits

30 mg/Nm<sup>3</sup>

Test Done By

Authorized Signatory Subhanga Praharai 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





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

### TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681621000000593F REPORT NO: CPL/R/SE/MAR-21/23 FORMAT NO: CPLIFMISH

REPORT ISSUE DATE: 27.03.2021

SAMPLE GRAWN BY CLEENARON PRIVATE LIMITED

Name of the Customer

Address of the Customer

Sample ID No Name of Stack Monitored

Stack Connected To Shape of Stack Date of Sampling

Date of Sampling Time of Sampling

Method of Sampling

Sample Received on Date of Test DALMIA CEMENT (BHARAT) LIMITED

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

CPL/SE/MAR-21/23 Cooler ESP, Line – 2

Cooler, Line – 2

Circular 22.03.2021 15:00 Hrs

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

23.03.2021

24.03.2021

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

42

135

8.79 27 37

Particulate Matter Concentration

Results Obtained

: 15 mg/Nm<sup>3</sup>

Permissible Limits

30 mg/Nm<sup>3</sup>

Test Done By

Verified By

Aythorized 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.





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

### TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681621000000596P REPORT NO: CPL/R/SE/MAR-21/26

REPORT ISSUE DATE: 27.03.2021

SAMPLE DRAWN BY GLEENWRON PRIVATE LIMITED

Name of the Customer

DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer

RGP Cement Factory, Rajgangpur – 770017, Dist: Sundargarh, Odisha CPL/SE/MAR-21/24

Name of Stack Monitored

Sample ID No.

Power Plant ESP Outlet Boiler – 1 & 2

Stack Connected To Shape of Stack Date of Sampling

Circular 22.03.2021 17:13 Hrs

Time of Sampling Method of Sampling Sample Received on

IS 11255 (Part - 1), (Part - 2): 1985, RA 2014 & (Part - 7): 2005, RA 2017

23.03.2021

Date of Test

24.03.2021

Ambient Temperature in °C : 38
Stack Temperature in °C : 128
Average Stack Gas Velocity in m/sec : 5.96
Iso-kinetic Flow Rate in LPM : 19
Duration of Sampling in minute : 53

Particulate Matter Concentration Sulphur Dioxide as SO<sub>2</sub> Nitrogen Dioxide as NO<sub>2</sub>

\*Mercury as Hg

Results Obtained

Permissible Limits 50 mg/Nm<sup>3</sup>

27 mg/Nm<sup>3</sup> 524.45 mg/Nm<sup>3</sup> 243 mg/Nm<sup>3</sup> < 0.02 mg/Nm<sup>3</sup>

600 mg/Nm<sup>3</sup> 300 mg/Nm<sup>3</sup> 0.03 mg/Nm<sup>3</sup>

"Parameter is not under NABL scope.

P. Salari Test Done By Ventiled By ROUPKELA ST

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.

Registered Office 142, IDA Phase II, Cheriapally Hyderabad-500 051, India T:+91 40 2726 4141 F:+91 40 2726 3657



#### ISSUED TO:

M/s. DALMIA CEMENT (BHARAT) LIMITED.,

RGP CEMENT WORKS PO. RAJGANGPUR DIST: SUNDARGARH ODISHA-770017

Report Number

VLL/VLS/20/08991/001

Issued Date P.O. Number

2020-12-07 : 4548008049/106

P.O. Date

23,10,2020

Page 1 of 3

SAMPLE PARTICULARS

SOURCE EMISSION MONITORING OF VRM BAG HOUSE STACK-1

Co Processing AFR Material

AFR + Pet coke

Sample Registration Date

2020-11-23

Sampling Date

Analysis Starting Date Sample Collected by Vimta Labs Ltd. 2020-11-23 Analysis Completion Date

2020-12-06

### TEST REPORT

Sr. No	Parameters	UoM	Method of Testing	Results	Limits as per MoEF & CC Notification GSR 497(E)
1	Dia of Stack	m		2.8	**
2	Temperature of Flue gas	°C	-	153	40
3	Velocity	nı/Sec	USEPA method -03	30.0	40
4	Sulphur Dioxide as SO <sub>2</sub>	mg/Nm³	USEPA method -06	11.2	<100
5	Oxides of Nitrogen NOx as NO2	mg/Nm³	USEPA method -07	524.3	<800
6	Carbon Monoxide as CO	mg/Nm <sup>3</sup>	Electro Chemical	87.3	<100
7	Particulate Matter as PM	mg/Nin <sup>3</sup>	USEPA method -5	16.8	<30.0
8	Hydrogen Fluoride as HF	mg/Nm³	USEPA method -13	0.41	<1,0
9	Hydrogen Chloride as HCI	mg/Nm³	USEPA method -26	3.1	<10
10	Total Organic Carbon	mg/Nm³	USEPA method -40 & MM5(10)	4.3	<10

All the Values are represented at 10% Oz

Dr. SubbaReddy Mallampati Group Leader-Environment

- John

Registered Office 142, IDA Phase II, Cherlapally Hyderabad-500 051, Telangana, India

T: +91 40 2726 4141 F: +91 40 2726 3657



ISSUED TO:

M/s. DALMIA CEMENT (BHARAT) LIMITED.,

RGP CEMENT WORKS PO. RAJGANGPUR DIST: SUNDARGARH ODISHA-770017

Report Number

: VLL/VLS/20/08991/001

Issued Date

2020-12-07

P.O. Number

: 4548008049/106

P.O. Date

: 23.10.2020

Page 2 of 3

SAMPLE PARTICULARS

SOURCE EMISSION MONITORING OF VRM BAG HOUSE STACK-1

Co Processing AFR Material

AFR + Pet coke

Sample Registration Date

2020-11-23

Sampling Date

2020-11-18

Analysis Starting Date

2020-11-23

Analysis Completion Date

2020-12-06

Test Required

Hg & its compounds, Cd + TI its compounds, Sb+ As+ Pb+ Co+ Cr+ Cu+ Mn+ Ni+ V+

Their compounds

Sample Collected by Vimta Labs Ltd.

#### TEST REPORT

Sr. No	Parameters	HoM	Method of Testing	Results	Limits as per MoEF & CC Notification GSR 497(E)
1	Mercury as Hg + their Compound			< 0.001	< 0.05
2	Cadmium + Thallium (Cd+TI)+ their Compound			0.011	< 0.05
	Chromium as Cr + their Compound			0.018	
	Manganese as Mn + their Compound			0.013	
	Arsenic as As + their Compound		USEPA method -29	0.009	
	Antimony as Sb + their Compound	mg/Nm³		0.011	(Sb+ As+ Pb+
3	Lead as Pb + their Compound	, C		0.015	Co+ Cr+ Cu+ Mn+ Ni+ V+
	Cobalt as Co + their Compound			810.0	Their
	Copper as Cu + their Compound			0.015	compounds)
	Nickel as Ni + their Compound			0.008	< 0.5
	Vanadium as V + their Compound			0.013	
	Sb+ As+ Pb+ Co+ Cr+ Cu+ Mn+ Ni+ V+ Their compounds			0.120	

Instruments used: GC-FID, ICP-MS, Cold Vapor AAS and GC-MS All the values are represented at 10% Oz

Dr. SubbaReddy Mallampati Group Leader-Environment

GIN: L24110TG1990PLC011977

Registered Office 142, IDA Phase II, Chertapally Hyderabad-500 051, Telangana, India

T: +91 40 2726 4141 F: +91 40 2726 3657



#### ISSUED TO:

M/s. DALMIA CEMENT (BHARAT) LIMITED.,

RGP CEMENT WORKS PO. RAJGANGPUR DIST: SUNDARGARH ODISHA-770017 Report Number : VLI\_/VLS/20/08991/001 Issued Date : 2020-12-07

Issued Date : 2020-12-07 P.O. Number : 4548008049/106 P.O. Date : 23,10,2020

Page 3 of 3

SAMPLE PARTICULARS : SOURCE EMISSION MONITORING OF VRM BAG HOUSE STACK-1

Co Processing AFR Material : AFR + Pet coke

Sample Registration Date : 2020-11-23 Sampling Date : 2020-11-18 Analysis Starting Date : 2020-11-23 Analysis Completion Date : 2020-12-06

Test Required : Dioxins and Furans (PCDD & PCDF)
Sample Collected by Vimta Labs Ltd,

#### TEST REPORT

Sr.No	Congeners of Dioxins & Furans	UoM	Results
1	2,3,7,8-TCDF		0.0018
2	1,2,3,7,8-PeCDF		0.0007
3	2,3,4,7,8-PeCDF		0.0032
4	1,2,3,4,7,8-HxCDF		0.0010
5	1,2,3,6,7,8-HxCDF		0.0006
6	2,3,4,6,7,8-HxCDF		0.0009
7	1,2,3,7,8,9-HxCDF	-	0.0018
8	1,2,3,4,6,7,8-HpCDF		0.0034
9	1,2,3,4.7,8,9-HpCDF	ng TEQ/Nm3	0.0027
10	OCDF		0.0000
11	2,3,7,8-TCDD	-	0.0029
12	1,2,3,7,8-PeCDD		0.0026
13	1,2,3,4,7,8-HxCDD		0.0004
14	1,2,3,6,7,8-HxCDD		0.0013
15	1,2,3,7,8,9-HxCDD		0.0004
16	1,2,3,4,6,7,8-HpCDD		0.0000
17	OCDD		0.0021
Total D	ioxin & Furans	ng TEQ/Nm <sup>3</sup>	0.0257
Total D	ioxin & Furans	ng TEQ /Nm3 Corrected to 10% O2	0.0262
Limits a	s per MoEF & CC Notification		<0.1

Method of Testing: As per USEPA 23 A & 8290

Remarks: All the values are corrected to 10% O<sub>2</sub> as per CPCB Guidelines. Instruments used: Auto spec Premier (HRGC/HRMS). Detection Limit: 0.01ng.

> Dr. SubbaReddy Mallampati Group Leader-Environment

Registered Office 142, IDA Phase II, Cherlapally Hyderabad-500 051, Telangana, India

T: +91 40 2726 4141 F: +91 40 2726 3657



#### SSUED TO:

M/s. DALMIA CEMENT (BHARAT) LIMITED., RGP CEMENT WORKS PO. RAJGANGPUR DIST: SUNDARGARH ODISHA-770017

Report Number Issued Date

P.O. Date

VLL/VLS/20/08991/002

2020-12-07 4548008049/106 P.O. Number

23.10.2020

Page 1 of 3

SAMPLE PARTICULARS

SOURCE EMISSION MONITORING FOR RABH STACK LINE-2

Co Processing AFR Material

AFR + Pet Coke

Sample Registration Date

Sampling Date

2020-11-19

Analysis Starting Date

2020-11-23

Analysis Completion Date

2020-12-06

Sample Collected by Vimta Labs Ltd.

# TEST REPORT

Sc. No.	Parameters	UoM	Method of Testing	Results	Limits as per MoEF & CC Notification GSR 497(E)
3	Dia of Stack	m	44	4.9	
2	Temperature of Flue gas	"C		135	
3	Velocity	m/Sec	USEPA method -03	9.6	***
4	Sulphur Dioxide as SO <sub>2</sub>	mg/Nm <sup>3</sup>	USEPA method -06	18	<100
5	Oxides of Nitrogen NOx as NO2	mg/Nm <sup>3</sup>	USEPA method -07	432	< 800
6	Carbon Monoxide as CO	mg/Nm <sup>3</sup>	Electro Chemical	63.8	<100
7	Particulate Matter as PM	mg/Nm <sup>3</sup>	USEPA method -5	19.5	<30.0
8	Hydrogen Fluoride as HF	mg/Nm <sup>3</sup>	USEPA method -13	0.49	<1.0
9	Hydrogen Chloride as HCI	mg/Nm <sup>3</sup>	USEPA method -26	4.1	<10
10	Total Organic Carbon	mg/Nm³	USEPA method -40 & MM5 (10)	5.3	<10

All the Values are represented at 10% O2

Dr. SubbaReddy Mallampati Group Leader-Environment

Registered Office 142, IDA Phase II, Cherlapally Hyderabad-500 051, Telangana, India

T:+91 40 2726 4141 F: +91 40 2726 3657



ISSUED TO:

M/s. DALMIA CEMENT (BHARAT) LIMITED.,

RGP CEMENT WORKS PO. RAJGANGPUR DIST: SUNDARGARH ODISHA-770017

Report Number

: VLL/VLS/20/08991/002

Issued Date P.O. Number

2020-12-07 4548008049/106

P.O. Date : 23.10.2020

SAMPLE PARTICULARS

SOURCE EMISSION MONITORING FOR AFR STACK ATTACHED TO KILN-2 SPENT SOLVENT AND DISTILLATION RESIDUE 2020-11-23 Sampling Date

Co Processing AFR Material Sample Registration Date

2020-11-19 2020-12-06

Analysis Starting Date Test Required

2020-11-23

Analysis Completion Date Hg & its compounds, Cd + TI its compounds, Sb+ As+ Pb+ Co+ Cr+ Cu+ Mn+ Ni+ V+

Their compounds

Sample Collected by Vimta Labs Ltd.

### TEST REPORT

Sr. No	Parameters	UoM	Method of Testing	Results	Limits as per MoEF & CC Notification GSR 497(E)
1	Mercury as Hg + their Compound	mg/Nm³		< 0.001	< 0.05
2	Cadmium + Thallium (Cd+TI)+ their Compound			<0.001	< 0.05
	Chromium as Cr + their Compound			0.014	(Sb+ As+ Pb+ Co+ Cr+ Cu+ Mn+ Ni+ V+ Their compounds) < 0.5
	Manganese as Mn + their Compound		USEPA method -29	0.026	
	Arsenic as As + their Compound			0.021	
	Antimony as Sb + their Compound			0.014	
3	Lead as Pb + their Compound			0.013	
1200	Cobalt as Co + their Compound			0.019	
	Copper as Cu + their Compound			0.008	
	Nickel as Ni + their Compound			0.011	
	Vanadium as V + their Compound			0.015	
	Sb+ As+ Pb+ Co+ Cr+ Cu+ Mn+ Ni+ V+ Their compounds			0.141	

Instruments used: GC-FID, ICP-MS, Cold Vapor AAS and GC-MS All the values are represented at 10% O2

> Dr. SubbaReddy Mallampati Group Leader-Environment

-Ary

CIN: L24110TG1990PLC011977

Registered Office 142, IDA Phase II, Cherlapally Hyderabad-500 051, Telangana, India

T: +91 40 2726 4141 F: +91 40 2726 3657



#### ISSUED TO:

M/s. DALMIA CEMENT (BHARAT) LIMITED., Report Number

RGP CEMENT WORKS PO. RAJGANGPUR DIST: SUNDARGARH ODISHA-770017

Issued Date

VLL/VLS/20/08991/002

P.O. Number P.O. Date

2020-12-07 4548008049/106

: 23.10.2020

Page 3 of 3

SAMPLE PARTICULARS

SOURCE EMISSION MONITORING FOR AFR STACK ATTACHED TO KILN-2 SPENT SOLVENT AND DISTILLATION RESIDUE

Co Processing AFR Material

2020-11-23

Sampling Date

2020-11-19

Sample Registration Date Analysis Starting Date Test Required

2020-11-23

Analysis Completion Date Dioxins and Furans (PCDD & PCDF)

2020-12-06

Sample Collected by Vimta Labs Ltd.

### TEST REPORT

Sr.No	Congeners of Dioxins & Furans	DoM	Results
1	2,3,7,8-TCDF		0.0030
2	1,2,3,7,8-PeCDF	0.00	0.0021
3	2,3,4,7,8-PeCDF		0.0009
4	1,2,3,4,7,8-HxCDF		0.0022
5	1,2,3,6,7,8-HxCDF		0.0019
6	2,3,4,6,7,8-HxCDF		0.0009
7	1,2,3,7,8,9-HxCDF		0.0008
8	1,2,3,4,6,7,8-HpCDF		0.0022
9	1,2,3,4,7,8,9-HpCDF	ng TEQ/Nm³	0.0018
10	OCDF		0.0008
11	2,3,7,8-TCDD		0.0025
12	1,2,3,7,8-PeCDD		0.0042
13	1,2,3,4,7,8-HxCDD		0.0006
14	1,2,3,6,7,8-HxCDD		0.0008
15	1,2,3,7,8,9-HxCDD		0.0006
16	1,2,3,4,6,7,8-HpCDD		0.0022
17	OCDD		0.0009
Total Dioxin & Furans		ng TEO/Nm³	0.0284
Total Dioxin & Furans		ng TEQ /Nm3 Corrected to 10% O2	0,0272
imits a	s per MoEF & CC Notificatio	n GSR 497(E)	<0.1

Method of Testing: As per USEPA 23 A & 8290

Remarks: All the values are corrected to 10% O2 as per CPCB Guidelines.

Instruments used: Auto spee Premier (HRGC/HRMS). Detection Limit: 0.01ng

Dr. SubbaReddy Mallampati Group Leader-Environment

CIN: L24110TG1990PLC011977





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

### TEST REPORT FOR EFFLUENT WATER QUALITY ANALYSIS

FORMAT NO: CPL/FMW1

ULR - TC681621000000523P REPORT NO: CPL/R/EW/MAR-21/12

- Hammer Content of the Content of t

REPORT ISSUE DATE: 11.03.2021

SAMPLE DRAWN BY CLEENWRON PRIVATE LIMITED

Name of the Customer

Address of the Customer :

Sample ID No Sample Description Date of Sampling

Location of Sampling Sampling Method

Sampling Deviation (if any)
Condition of Sample while receipt
Appearance of Sample while receipt

Type of Container used for sampling Sample Received on

Sample Receive

DALMIA CEMENT (BHARAT) LIMITED

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

CPL/EW/MAR-21/2 Effluent Water 04.03.2021

ETP Outlet (Garden In front of L1 CCR)

APHA 23rd Edition, 1060

Sealed Clear

Wide Mouth Glass & Narrow Mouth Plastic Bottles

05.03.2021

Date of Test : 05.03.2021 - 11.03.2021

SI No	Parameters	Method of Analysis	Results Obtained	Unit	Permissible Limit as per Schedule 5 of EPA 1986, (GSR – 422E, Rule 1998)
1	pH Value	APHA 23rd Edition, 4500 H+B	7.58	-	6.0 - 9.0
2	Turbidity	APHA 23rd Edition, 2130 B	2.2	NTU	-
3.	Total Suspended Solids	APHA 23rd Edition, 2540 D	< 2.5	mg/l	100
4.	Oil & Grease	IS 3025 (Part 39): 1991 (RA 2014)	< 2.0	mg/l	10
5.	BOD 5days at 20°C	APHA 23rd Edition, 5210 D	28	mg/l	100
6.	Chemical Oxygen Demand	APHA 23rd Edition, 5220 D	91.42	mg/l	250
7.	Total Chromium (as Cr)	APHA 23rd Edition, 3111 B	< 0.10	mg/l	-
8.	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	APHA 23rd Edition, 5530 D	< 0.10	mg/l	1.0
9.	*Cyanide (as CN)	MERCK	< 0.002	mg/l	-

<sup>\*</sup>Parameter is not under NABL scope

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.

Registered Office

DISTR, KOELNAGAR, ROURKELA - 789814, Dist: SUNDARGARH, ODISHA

Branch Office & Laboratory:

DH24, KOELNAGAR, ROURKELA - 768014, Dist; SUNDARGARH, ODISHA

Tele Fax: 0661 - 2475746, email: cleanviron@gmail.com





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

### TEST REPORT FOR EFFLUENT WATER QUALITY ANALYSIS

FORMAT NO: CPL/FN/61

ULR-TC681621000000525P REPORT NO: CPL/R/EW/MAR-21/14

REPORT ISSUE DATE: 11.03.2021

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 CPL/EW/MAR-21/4

Sample ID No Sample Description

Effluent Water

Date of Sampling Location of Sampling 04.03.2021 STP Outlet

Sampling Method

APHA 23rd Edition, 1060

Sampling Deviation (if any) Condition of Sample while receipt Appearance of Sample while receipt

Sealed Clear

Type of Container used for sampling

Narrow Mouth Plastic Bottles

Sample Received on

05.03.2021

Date of Test

05.03.2021 - 11.03.2021

SI No	Parameters	Method of Analysis	Results Obtained	Unit	Permissible Limit as per EPA 1986	
1	pH Value	APHA 23rd Edition, 4500 H+B	7.55	-	6.5 - 9.0	
2.	Turbidity	APHA 23rd Edition, 2130 B	6.4	NTU	-	
3.	Total Suspended Solids	APHA 23rd Edition, 2540 D	70.3	mg/l	100	
4.	BOD 5days at 20°C	APHA 23rd Edition, 5210 D	22	mg/l	30	
5.	Chemical Oxygen Demand	APHA 23rd Edition, 5220 D	72.66	mg/l	-	
6.	Total Kjeldahl Nitrogen	APHA 23rd Edition, 4500 Norg C	< 10	mg/l		
7.	*Fecal Coliform	RAKIRO	100	Nos/100ml	1000	

<sup>\*</sup>Parameter is not under NABL scope

PRIL

ROURKE

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 tasting and results related to the item tasted. This report may not be reproduced in part or full without written permission of the Company.

DI318, KOELNAGAR, ROURKELA - 769014, Diet SUNDARGARH, ODISHA

DM24, KOELNAGAR, ROURKELA - 769014, Dist. SUNDARGARH, ODISHA

Tele Fex: 0661 - 2475748, email: cleenviron@gmail.com





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

### TEST REPORT FOR DRINKING WATER QUALITY ANALYSIS

PORMATING CPL/FM/60

ULR - TC681621000000527P REPORT NO: CPL/R/W/MAR-21/22

REPORT ISSUE DATE: 11.03.2021

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer

Address of the Customer

Sample ID No Sample Description Date of Sampling

Location of Sampling Sampling Method

Sampling Deviation (if any) Condition of Sample while receipt Appearance of Sample while receipt

Type of Container used for sampling

Sample Received on

Date of Test

DALMIA CEMENT (BHARAT) LIMITED

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

CPL/W/MAR-21/2 **Drinking Water** 04.03.2021 New Colony Gate

APHA 23rd Edition, 1060

Nil Sealed Clear

Narrow Mouth Plastic & Wide Mouth Glass Bottles

05.03.2021

05.03.2021 - 11.03.2021

		ries, Astrino. Politica			j.
pH Value	APHA 23rd Edition, 4500 H+B	7.83	-	6.5 - 8.5	6.5 - 8.5
Turbidity	APHA 23rd Edition, 2130 B	0.8	NTU	1	5
Total Suspended Solids	APHA 23rd Edition, 2540 D	< 2.5	mg/l	-	- V
Total Dissolved Solids	APHA 23rd Edition, 2540 B	318	mg/l	500	2000
*Oil & Grease	IS 3025 (Part 39): 1991 (RA 2014)	< 0.10	mg/l	-	5.
Fluoride (as F)	APHA 23rd Edition, 4500 F D	0.30	mg/l	1.0	1.5
*Residual Free Chlorine (as Cl <sub>2</sub> )	MERCK	0.11	mg/l	0.2 min	1.0 min
Phenotic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	APHA 23rd Edition, 5530 D	ND	mg/l	0.001	0.002
Total Arsenic (as As)	APHA 23rd Edition, 3114 B	< 0.002	mg/l	0.01	0.05
Total Hardness (as CaCO <sub>3</sub> )	APHA 23rd Edition, 2340 C	197.56	mg/l	200	600
*Cyanide (as CN)	MERCK	ND	mg/l	0.05	0.05
*Total Coliform Bacteria	RAKIRO	Absent	Nos/100ml	Absent	Absent
*E. coli	RAKIRO	Absent	Nos/100ml	Absent	Absent

\*Parameters are not under NABL Scope.

ND: Non- Detectable

Remarks: The water is suitable for drinking with respect to the parameters analyzed and on comparison with Max. Limit mentioned above.

Test Done By



**Authorized Signatory** Subhanga Praharaj.

Managing Director/QM

PEND OF THE PREPORTS 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.

Registered Office:

| Branch Office & Laboratory:
| DISTA, KOELNAGAR, ROURKELA - 789014, DISC SUNDARGARH, ODISHA | DIC24, KOELNAGAR, ROURKELA - 789014, DISC SUNDARGARH, ODISHA | DIC24, KOELNAGAR, ROURKELA - 789014, DISC SUNDARGARH, ODISHA | DIC24, KOELNAGAR, ROURKELA - 789014, DISC SUNDARGARH, ODISHA | DIC24, KOELNAGAR, ROURKELA - 789014, DISC SUNDARGARH, ODISHA | DIC24, KOELNAGAR, ROURKELA - 789014, DISC SUNDARGARH, ODISHA | DIC24, KOELNAGAR, ROURKELA - 789014, DISC SUNDARGARH, ODISHA | DIC24, KOELNAGAR, ROURKELA - 789014, DISC SUNDARGARH, ODISHA | DIC24, KOELNAGAR, ROURKELA - 789014, DISC SUNDARGARH, ODISHA | DIC24, KOELNAGAR, ROURKELA - 789014, DISC SUNDARGARH, ODISHA | DIC24, KOELNAGAR, ROURKELA - 789014, DISC SUNDARGARH, ODISHA | DIC24, KOELNAGAR, ROURKELA - 789014, DISC SUNDARGARH, ODISHA | DIC24, KOELNAGAR, ROURKELA - 789014, DIC24, DI

Tale Fax: 0661 - 2675746, amail: cleenviron@gasell.com