

newthink! cement! sugar! refractories! power!

Date: 15th Nov,2022

DCBL/RGP/ENV/ ECHC/372/2022

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

Sub: - Submission of six-monthly compliance report (April 2022 to September 2022) of Environment Clearance letter F. No. J-11011/352/2005- 1A II (I) dated 5th April 2007.of M/s Dalmia Cement (Bharat) Limited, Rajgangpur, Tehsil-Rajgangpur, District – Sundargarh, Odisha.

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

Respected Sir,

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

Thanking you

For, Dalmia Cement (Bharat) Limited, Rajgangpur

Bijaya Ketan Dash

General Manager (Env. & Safety)

Encl: As above

Copy to:

1. The Chairman,
Central Pollution Control Board
Parivesh Bhavan
CBD – cum- Office Complex
East Arjun Nagar
NEW DELHI – 110032

A/3, Chandrasekharpur BHUBANESWAR – 751023

2. The Director (S)

Government of India

Eastern Regional Office

Ministry of Environment and Forest

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

3. The Chairman,

SIX MONTHLY COMPLIANCE REPORT

(APRIL, 2022 TO SEPTEMBER, 2022)

OF

ENVIRONMENT CLEARANCE LETTER NO.

J-11011/352/2005-1A II (I) dated 5th April 2007 BY

DALMIA CEMENT (BHARAT) LIMITED

RAJGANGPUR – 770017

DIST- SUNDARGARH

ODISHA

Six monthly compliance report (April, 2022 to September, 2022) of conditions stipulated in Environmental Clearance Letter No. F. No. J-11011/352/2005-1A II (I) dated 5th April 2007, by MoEF&CC for Dalmia Cement (Bharat) Limited, Rajgangpur.

A. SPECIAL CONDITION

| SI. No. | Description of Conditions | Compliance Status |
|---------|--|---|
| i | The gaseous and particulate matter | a. Complied. |
| | emissions from various units shall | b. The compliance status of Stack emission is given below. The |
| | confirm to the standards prescribed by | reading taken from different location are stipulated with |
| | the Orissa State Pollution Control Board | respect to the standard prescribed within the norms of |
| | (OSPCB). At no time the particulate | emission level. We have installed all the pollution control |
| | emissions shall exceed OSPCB. | equipment in order to meet new emission standards, as |
| | Interlocking facility shall be provided in | revised by Gazette Notification G.S.R. 497 (E) dtd. 10 th May, |
| | the pollution control equipment so that | 2016. |
| | in the event of the pollution control | Online CEMS (Continuous Emission Monitoring system) have |
| | equipment not working, the respective | been installed and facility for transmitting online data to |
| | unit is shut down automatically. | 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 |
| | 1 | 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 | Complied. Continuous stack monitoring system has already |
| " | to monitor gaseous emission shall be | been installed. On-line data through CEMS and CAAQMS are |
| | controlled with in 50 mg/Nm3 by | being transmitted to OSPCB/CPCB. Stack monitoring and |
| | installing adequate air pollution control | Ambient air quality monitoring reports are submitted to SPCE |
| | system. On-line monitoring data shall | in every month and half yearly basis to Regional office of |
| | be submitted to the OSPCB and CPCB | MoEF&CC, Bhubaneswar. |
| | regularly. | Widel &cc, bliddelleswal. |
| iii | Ambient Air Quality including ambient | Monitoring of ambient air quality is carried out regularly i |
| 111 | noise levels shall not exceed the | consultation with SPCB. The values are within the |
| | standards stipulated under EPA or by | prescribed limit as stipulated under EPA/SPCB. Similarly, |
| | the State authorities. Monitoring of | data on ambient noise level are within the stipulated |
| | ambient air quality and stack emission | norm, as furnished in Annexure-I |
| | shall be carried out regularly in | b. Monitoring of ambient air quality and stack emission is |
| | | |
| | consultation with OSPCB and report | carried out regularly in consultation with OSPCB and |

| | submitted to the OSPCB quarterly and to the ministry's Regional office at Bhubaneswar half -yearly. One ambient air quality monitoring station shall be installed in downwind direction. | report is being submitted to the OSPCB on monthly basis 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 store in closed roof sheds & clinker in silos. | Air pollution control measures & systems are adopted: 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. b. Coal handling, cement grinding units are equipped with bag filters to control fugitive dust emissions. c. Bag house installed for CVRM & Coal mill to maintain stack emission as per standard. 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. e. Belt conveyors are thoroughly hood covered. f. Clinker is stored in clinker silo & transported by hatch adopter system. g. Raw material handling & its storing is carried out by closed shed. h. Water sprinkling dust suppression systems are installed at raw material handling yards. |
| 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. | It is ensured that the water consumption shall not exceed the quantity mentioned and ground water source respectively. The treated water of ETP is reused. There is no effluent discharged outside the factory premises and "zero" discharge is adopted. Domestic sewerage is treated in STP. The treated water is used for green belt development. |
| vii | All the cement dust collected from pollution control devices shall be recycled and reutilized in the process. | a.) Dust collected from pollution control devices is recycled and reutilized in the process.b.) Char is used as raw material, as per availability. |

| viii | Char from sponge iron plant of M/s. OCL shall be used as raw material in manufacturing cement and mixed with feed. Hazardous waste viz. Used oil from gear boxes and automotive batteries, etc shall be properly stored in a designated area and sold to authorized recyclers/ re processors. 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. | Following rain va. Rain water harvade inside plate. Roof top rain water for colony a c. Rain water harvade. | water harvesting provesting by storm water ear CPP. ater-harvesting is lareas. | d at earmarked area and norized recyclers/ re rojects are existing ater drain have been being practices in some m the roof top of raw lso being carried out. |
|------|--|---|--|--|
| 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 plantation are bein data with cumulati | of saplings to near g carried out in reg ve figure is given h | gular basis. Statistical |
| | | YEAR Up to march,2007-08 2008-2009 2009-2010 | NO. TREES PLANTED 148655 155155 162401 | PLANTATION IN & AROUND OF INDUSTRY/ SAPLING DISTRIBUTED 2300 4800 |
| | #2 | 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 | 171757 177957 183957 190246 196660 203892 | 6964 9964 14164 19664 27664 92664 |
| | | 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 | 203892 209442 212431 214819 245077 255577 | 130364 138922 139922 139922 139922 |
| K | | 2021-2022 | 288478 291498 | 151922 182023 |
| X | The company shall undertake eco- development measures including community welfare measures in the project area. | Company has beer in the surrounding | | ng eco-development work |
| xi | All the recommendation mentioned in | It is being complied | d | |

| | the Charter on the Corporate | |
|------|---|---|
| | Responsibility for Environmental | £ |
| | Protection (CREP) shall be strictly | |
| | followed. | |
| xii | High calorific hazardous waste shall be | High calorific hazardous waste is being burnt in cement kiln. |
| | used as fuel in the cement kiln. | We have obtained Hazardous waste handling for co- |
| | Accordingly, provision to be made in the | processing authorization from SPCB, Odisha. Provision were |
| | kiln. | made to utilize the hazardous and non-hazardous waste, as |
| | | per the statute guideline. |
| xiii | Prior permission from the State Forest | The plant was constructed over non-forest land and an |
| | Department shall be obtained regarding | application to the Forest Deptt. Already submitted in this |
| | likely impact of proposed expansion on | regard. |
| | 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. | |

B. GENERAL CONDITION

| SI. No. | Description of conditions | | | Compliance Sta | atus | | |
|---------|---|--|----------------------------|---|--------------------------------------|--|--|
| i- | The project authority must adhere to the stipulation | All condition laid by Orissa state pollution | | | | | |
| | made by Orissa State Pollution Control Board and State | con ⁻ | trol bo | oard is strictly abidin | ng to all | | |
| | Government. | stip | ulation | ıs. | • | | |
| ii | No expansion or modification of the plant should be carried out without prior approval of this Ministry. | Beir | ng Foll | owed. | | | |
| 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. | b. | monito SPCB a Data o | umbers of ambient pring stations are in and CPCB guidelines on ambient air quali on is submitted to \$ &CC | stalled as per s. ty and stack | | |
| ÎV | Industrial wastewater shall be properly collected, treated so as to confirm to the standards prescribed under GSR 422 (E) dated 19 th May 1993 and 31 st December 1993 or as amended from time to time. The treated waste water shall be recycled in the plant as well as utilization for plantation purposes. | | being ' plant (| water generated in treated in the effluce ETP). The last analy [w.r.t GSR 422(E)] in parameter | ent treatment vsis report of ET | | |
| | | | 2 | Total suspended solids (mg/l) B.O.D (mg/l) | 23 | | |

| | | | 4 | C.O.D (mg/l) | 27.60 |
|------|---|----------------|--------|---|----------------------|
| | | | 5 | Oil & Grease | 2.2 |
| | | | | (mg/l) | |
| | | () | * | | |
| | | b. Th | e tre | ated water is utili | zed in the plant for |
| | | | | _ : | rinkling on road & |
| | | | | belt developmen | t |
| V | The project authorities must strictly comply with the | | plied | | |
| | rules and regulations with regard to handling and | _ | | • | ous waste, as per |
| | disposal of hazardous waste in accordance with the Hazardous Waste (Management and Handling) Rules, | l . | | naintained and F_0 I to OSPCB with r_0 | _ |
| | 2003. Authorization from the OSPCB must be obtained | | mati | | equired |
| | for collection, storage, treatment and disposal of | """ | mati | JII. | |
| | hazardous wastes. | | | | |
| vi | The overall noise levels in and around the plant area | Noise | e mo | nitoring is being c | arried out regularly |
| | shall be kept well within the standards (85dBA) by | at sp | ecifie | d locations. Follo | wing data is given |
| | providing noise control measures including acoustic | here | with | for four locations | . Detail report is |
| | hoods, silencers, enclosures etc. on all sources of noise | enclo | osed | in Annexure-I | |
| | generation. The ambient noise levels shall confirm to | | | | if. |
| | the standards prescribed under EPA Rules, 1986 viz. 75 | | | | |
| | dBA (day time) and 70 dBA (night time). | | | | |
| vii | The project proponent shall comply with all the | Com | plied | | |
| | environmental protection measures and safeguards | | | | |
| | recommended in the Environmental Impact Assessment | | | | |
| | / Environmental management Plan. | | | | |
| viii | As proposed in EIA / EMP, Rs.31.82 Crores and Rs.2.64 | Com | plied | | |
| | 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. | | | | 26 |
| ix | The Regional Office of this Ministry at Bhubaneswar / | Com | plied | . Six monthly repo | orts are being |
| | Central Pollution Control Board / OSPCB shall monitor | subn | nitted | l regularly. | |
| | the stipulated conditions. A six monthly compliance | | | | |
| | report and the monitored data along with statistical | | | | |
| | interpretation should be submitted to them regularly | | | | |
| Х | The project authorities should inform the public that | Com | plied | | |
| | 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. | |
| xi | The project Authorities shall inform the Regional Office | Complied |
| | 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 | |
| J | development work. | |
| xii | The Regional office of the Ministry at Bhubaneswar / | Six monthly compliance report along with |
| | Central Pollution Control Board / State Pollution Board | monitored data is being submitted regularly. |
| | will monitor the stipulated conditions. A six monthly | Also, as per the notification, it is being sent by |
| | compliance report and the monitored data along with | e-mail in soft copies. |
| | statistical interpretation should be submitted to them | |
| | regularly. | |

ENVIRONMENTAL MONITORING REPORT

BASED ON DATA GENERATED

FROM

APRIL 2022 TO SEPTEMBER 2022

FOR

DALMIA CEMENT (BHARAT) LIMITED

At/Po: RAJGANGPUR, District: SUNDARGARH, ODISHA

ΑT

CEMENT PLANT (LINE - 1 & LINE - 2)

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

Monthly Average Value for PM Emission from Stacks:

| C. 1 1 1. | Particulate matter emission in mg/Nm3 | | | | | | | | | |
|----------------------------|---------------------------------------|--------|------------------|------------------|------------------|------------------|--|--|--|--|
| Stack attached to | Apr-22 | May-22 | Jun-22 | July-22 | Aug-22 | Sep-22 | | | | |
| Cement VRM-1 B/F | 20.96 | 25.03 | 19.93 | 14.0 | 12.29 | 6.58 | | | | |
| Cement VRM-2 B/F | 12.59 | 16.74 | 16.77 | 24.09 | 21.72 | 6.93 | | | | |
| Cement VRM-3 B/F | 8.52 | 8.11 | 11.95 | 9.4 | 10.52 | 9.45 | | | | |
| Kiln & VRM BAG HOUSE, L-I | 11.09 | 13.79 | Kiln Shutdown | Kiln Shutdown | Kiln Shutdown | Kiln Shutdown | | | | |
| Coal Mill B/F, L-I | 10.32 | 8.7 | Shutdown | Shutdown | 9.06 | 3.2 | | | | |
| Cooler ESP, L-I | 19.65 | 12.64 | Kiln Shutdown | Kiln Shutdown | Kiln Shutdown | Kiln Shutdown | | | | |
| Kiln & VRM BAG HOUSE ,L-II | 13.39 | 14.8 | 9.44 | 8.13 | 9.26 | 8.21 | | | | |
| Coal Mill B/F, L-II | 10.15 | 10.99 | 5.34 | 6.29 | 11.93 | 5.18 | | | | |
| Cooler ESP, L-II | 11.52 | 17.85 | 17.82 | 21.63 | 18.03 | 17.26 | | | | |

Ambient air Monthly Average Data:

| | | V | | - | | | | | | | | |
|---|----------------|----------------|---|---|--------------------------|-----------------------------|-------------------|---------------------------|---------------------------------|---|----------------------------|---------------------------|
| Location of sampling station | SO2 (µg/m3) | NOX(μ g/m3) | Particulate matter (size less than 10µm) or PM10(µg/m3) | Particulate matter (size less than 2.5 µm) or PM2.5 (µg/ m3) | Ozone (O3) (µg/m3) | Lead (Pb) (μg/m3) | CO (mg/m 3) | Am moni a (NH 3) (µg/ m3) | Benzen e (C6H6) (µg/m3 | Benzo(a) Pyrene (BaP) – particulat e phase only (µg/m3) | Arsenic (AS) (µg/m3) | Nickel (Ni) (µg/m3) |
| Workshop building | 5 | 19 | 75 | 24 | < 20.0 | < 0.4 | < 0.1 | 93 | < 0.5 | < 0.1 | < 0.2 | < 12.0 |
| Engineering hostel building | 5 | 22 | 66 | 23 | 21 | < 0.4 | < 0.1 | 108 | < 0.5 | < 0.1 | < 0.2 | < 12.0 |
| Near water harvesting area of CPP | 5 | 23 | 60 | 18 | 24 | < 0.4 | < 0.1 | 93 | < 0.5 | < 0.1 | < 0.2 | < 12.0 |
| Store building | 7 | 13 | 73 | 24 | < 20.0 | < 0.4 | < 0.1 | 91 | < 0.5 | < 0.1 | < 0.2 | < 12.0 |
| Canteen building | 7 | 23 | 74 | 22 🗟 | < 20.0 | < 0.4 | < 0.1 | 67 | < 0.5 | < 0.1 | < 0.2 | < 12.0 |
| Loco gate | 9 | 21 | 67 | 23 | < 20.0 | < 0.4 | < 0.1 | 99 | < 0.5 | < 0.1 | < 0.2 | < 12.0 |

Ambient Noise Average Data:

| | Sampling locations | | | | | | | | | | |
|---|--------------------|-----------------------------|--------------|-----------------|----------------------------|----------------------|-----------------|---|--|--|--|
| Particular | Store building | Engineering hostel building | Loco gate | Near canteen | OCL township/ colony | Workshop building | CCR building | Near water harvesting area of CPP | | | |
| Noise level (L day) during day time | 62.8 | 64.4 | 65.4 | 58.4 | 60 | 64.2 | 71.9 | 68.7 | | | |
| Noise level (L night) during night time | 58 | 58.8 | 60.5 | 54 | 52.8 | 55.6 | 66.6 | 62.1 | | | |





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

TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681622000002446F REPORT NO: CPL/R/SE/OCT-22/7

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

REPORT ISSUE DATE: 06.10.2022

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/SEPT-22/68 |
|----------------------|---|-------------------------|
| Location of Sampling | | Line – 1 |
| Date of Sampling | | 26.09.2022 |
| Time of Sampling | | 15:20 Hrs |
| Duration of Sampling | | 32 min |
| Sample Received on | : | 28.09.2022 |
| Date of Test | 1 | 28.09.2022 - 29.09.2022 |

| A. | General Information About the Stack | | : | | | | | | |
|----|--|-------------|----------|---------------------|------------------|---------------------------------|--|--|--|
| 1. | Stack Connected to | 1 | : CVRM-1 | | | | | | |
| 2. | Emission Due to | | | Slag, Clinker, Gyps | um Grinding | | | | |
| 3. | Material of Construction of Stack/Duct | | : | Steel | * | | | | |
| 4. | Shape of Stack/Duct | | G | Circular | | | | | |
| 5. | Whether Stack is provide with Permanent Platfo | rm & Ladder | | Yes | | | | | |
| 6. | Capacity | | | 110 TPH | | | | | |
| 7. | Running Load | | 110 TPH | | | | | | |
| В. | Physical Characteristics of Stack | **_ | | | | | | | |
| 1. | Height of Stack from Ground Level | 70.00 | | 56 m | | | | | |
| 2. | Height of Sampling Port from Ground Level | | | NA | | | | | |
| 3. | Diameter/Dimension of Stack/ Duct at sampling | point | ٠ | 2.8 m | | | | | |
| C. | PARAMETERS ANALYSED | METHO | DS C | F ANALYSIS | RESULTS OBTAINED | PERMISSIBLE LIMIT AS PER CTO | | | |
| 1. | Ambient Temperature (°C) | IS 11255 Pa | rt – 3 | 3, 1985 (RA 2018) | 36 | | | | |
| 2. | Temperature of Gas Emission (°C) | IS 11255 Pa | rt – 3 | 3, 1985 (RA 2018) | 78 | J(#E | | | |
| 3, | Barometric Pressure (mm Hg) | IS 11255 Pa | rt - 3 | 3, 1985 (RA 2018) | 742 | (#) | | | |
| 4. | Velocity of Gas Emitted (m/sec) | IS 11255 Pa | rt – 3 | 3, 1985 (RA 2018) | 8.53 | (*) | | | |
| 5. | Quantity of Gas Emitted (Nm³/hr) | IS 11255 Pa | rt - 3 | 3, 1985 (RA 2018) | 1, 56, 291.26 | 3000 | | | |
| 6. | Particulate Matter Concentration (mg/Nm³) | IS 11255 Pa | rt – 1 | , 1985 (RA 2019) | 08 | 30 | | | |
| D. | Pollution Control Device Installed | Bag Filter | | | | | | | |

Authorized Signator Subhanga Praharai Managing Director

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

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:

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

D/318, KOELNAGAR, ROURKELA - 769014, Dist: SUNDARGARH, ODISHA Tele Fax: 0661 - 2475746, email: cleenviron@gmail.com





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

TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FM/58

ULR - TC681622000002447F REPORT NO: CPL/R/SE/OCT-22/8

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

REPORT ISSUE DATE: 06.10.2022

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/SEPT-22/69 |
|----------------------|----|-------------------------|
| Location of Sampling | * | Line – 1 |
| Date of Sampling | | 26.09.2022 |
| Time of Sampling | 1 | 14:32 Hrs |
| Duration of Sampling | 12 | 32 mín |
| Sample Received on | | 28.09.2022 |
| Date of Test | | 28.09.2022 - 29.09.2022 |

| A. | General Information About the Stack | | | 9, 9,0 | | (0.000,000,000,000) |
|----|--|-------------|--------|---------------------|------------------|---------------------------------|
| 1. | Stack Connected to | | | CVRM - 2 | | |
| 2. | Emission Due to | | | Slag, Clinker, Gyps | um Grinding | |
| 3. | Material of Construction of Stack/Duct | | 2 | Steel | | |
| 4. | Shape of Stack/Duct | | | Circular | | |
| 5. | Whether Stack is provide with Permanent Platfo | rm & Ladder | -2 | Yes | | |
| 6. | Capacity | | - 5 | 110 TPH | | |
| 7. | Running Load | | WAS . | 100 TPH | | |
| В. | Physical Characteristics of Stack | | | | | |
| 1. | Height of Stack from Ground Level | | | 65.5 m | | |
| 2. | Height of Sampling Port from Ground Level | | | NA | | |
| 3. | Diameter/Dimension of Stack/ Duct at sampling | point | | 2.8 m | | |
| C. | PARAMETERS ANALYSED | METHO | DS O | F ANALYSIS | RESULTS OBTAINED | PERMISSIBLE LIMIT AS PER CTO |
| 1. | Ambient Temperature (°C) | IS 11255 Pa | rt – 3 | , 1985 (RA 2018) | 35 | (₩ |
| 2. | Temperature of Gas Emission (°C) | IS 11255 Pa | rt - 3 | , 1985 (RA 2018) | 89 | 0.00 |
| 3. | Barometric Pressure (mm Hg) | IS 11255 Pa | rt - 3 | , 1985 (RA 2018) | 742 | j. |
| 4. | Velocity of Gas Emitted (m/sec) | IS 11255 Pa | rt – 3 | 1985 (RA 2018) | 8.84 | |
| 5. | Quantity of Gas Emitted (Nm³/hr) | IS 11255 Pa | rt - 3 | , 1985 (RA 2018) | 1, 57, 265.86 | (*) |
| 6. | Particulate Matter Concentration (mg/Nm³) | IS 11255 Pa | rt – 1 | , 1985 (RA 2019) | 05 | 30 |
| D. | Pollution Control Device Installed | Bag Filter | | | | |

Authorized Signatory Subhanga Praharaj **Managing Director**

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

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

TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681622000002448F REPORT NO: CPL/R/SE/OCT-22/9

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

REPORT ISSUE DATE: 06.10.2022

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/SEPT-22/70 |
|----------------------|---|-------------------------|
| Location of Sampling | | Line – 1 |
| Date of Sampling | | 26.09.2022 |
| Time of Sampling | | 13:50 Hrs |
| Duration of Sampling | : | 29 min |
| Sample Received on | | 28.09.2022 |
| Date of Test | | 28.09.2022 - 29.09.2022 |

| Α. | General Information About the Stack | | - 51 | 4 750 | | |
|----|--|---------------|------|--------------------|------------------|------------------------------|
| 1. | Stack Connected to | | : | CVRM - 3 | | |
| 2. | Emission Due to | | | Slag, Clinker, Gyp | sum Grinding | |
| 3. | Material of Construction of Stack/Duct | | | Steel | J . | |
| 4. | Shape of Stack/Duct | | 1 | Circular | | |
| 5. | Whether Stack is provide with Permanent Platfo | rm & Ladder | | Yes | | |
| 6. | Capacity | | : | 210 TPH | | |
| 7. | Running Load | | a; | 210 TPH | | |
| В. | Physical Characteristics of Stack | | | | | |
| 1. | Height of Stack from Ground Level | | | 82.2 m | | |
| 2. | Height of Sampling Port from Ground Level | | 100 | NA | | |
| 3. | Diameter/Dimension of Stack/ Duct at sampling | point | | 3.8 m | | |
| C. | PARAMETERS ANALYSED | METHOD | S O | F ANALYSIS | RESULTS OBTAINED | PERMISSIBLE LIMIT AS PER CTO |
| 1, | Ambient Temperature (°C) | IS 11255 Part | - 3 | , 1985 (RA 2018) | 33 | - |
| 2. | Temperature of Gas Emission (°C) | IS 11255 Part | -3 | , 1985 (RA 2018) | 92 | |
| 3. | Barometric Pressure (mm Hg) | IS 11255 Part | - 3 | , 1985 (RA 2018) | 742 | 4 |
| 4, | Velocity of Gas Emitted (m/sec) | IS 11255 Part | -3 | , 1985 (RA 2018) | 9.71 | |
| 5. | Quantity of Gas Emitted (Nm³/hr) | IS 11255 Part | З | , 1985 (RA 2018) | 3, 15, 481.94 | I#/ |
| 6. | Particulate Matter Concentration (mg/Nm³) | | 1 | , 1985 (RA 2019) | 09 | 30 |
| D. | Pollution Control Device Installed | Bag Filter | | | | |

Authorized Signator

*****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 STACK EMISSION MONITORING

ORMAT NO: CPLIFMISS

ULR - TC681622000002449F REPORT NO: CPL/R/SE/OCT-22/10

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

REPORT ISSUE DATE: 06.10.2022

Name of the Customer

M/s DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer

General Information About the Stack

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

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

| Sample ID No | 1: | CPL/SE/SEPT-22/71 |
|----------------------|----|-------------------------|
| Location of Sampling | | LINE – 2 |
| Date of Sampling | | 27.09.2022 |
| Time of Sampling | ţ. | 15:10 Hrs |
| Duration of Sampling | | 34 min |
| Sample Received on | \$ | 28.09.2022 |
| Date of Test | \$ | 28.09.2022 - 29.09.2022 |

| | | 17.1 | | |
|----------------------------|---|---|--|------------------|
| 1, | Stack Connected to | KILN & VRM RABH | | |
| 2. | Emission Due to | : Limestone Grinding | | |
| 3. | Material of Construction of Stack/Duct | : Steel | | |
| 4. | Shape of Stack/Duct | Circular | | |
| 5. | Whether Stack is provide with Permanent Platform & I | _adder : Yes | | |
| 6. | Capacity | : 450 TPH | | |
| 7. | Running Load | : 375 TPH | | |
| В. | Physical Characteristics of Stack | TE 2 | | |
| 1. | Height of Stack from Ground Level | : 135 m | | |
| 2. | Height of Sampling Port from Ground Level | : NA | | |
| 3. | Diameter/Dimension of Stack/ Duct at sampling point | : 4.9 m | | |
| C. | PARAMETERS ANALYSED | METHODS OF ANALYSIS | RESULTS | PERMISSIBLE |
| | and the second second | | OBTAINED | LIMIT AS PER CTC |
| 1. | Ambient Temperature (°C) | IS 11255 Part – 3, 1985 (RA 2018) | OBTAINED 34 | |
| | Ambient Temperature (°C) Temperature of Gas Emission (°C) | IS 11255 Part – 3, 1985 (RA 2018) IS 11255 Part – 3, 1985 (RA 2018) | | |
| 2. | Temperature of Gas Emission (°C) Barometric Pressure (mm Hg) | | 34 | |
| _ | Temperature of Gas Emission (℃) | IS 11255 Part – 3, 1985 (RA 2018) | 34 76 | |
| 2. 3. 4. | Temperature of Gas Emission (°C) Barometric Pressure (mm Hg) | IS 11255 Part – 3, 1985 (RA 2018) IS 11255 Part – 3, 1985 (RA 2018) | 34 76 742 | |
| 2. 3. 4. 5. | Temperature of Gas Emission (°C) Barometric Pressure (mm Hg) Velocity of Gas Emitted (m/sec) Quantity of Gas Emitted (Nm³/hr) Particulate Matter Concentration (mg/Nm³) | IS 11255 Part – 3, 1985 (RA 2018) IS 11255 Part – 3, 1985 (RA 2018) IS 11255 Part – 3, 1985 (RA 2018) | 34 76 742 8.05 | |
| 2. 3. 4. 5. 6. | Temperature of Gas Emission (°C) Barometric Pressure (mm Hg) Velocity of Gas Emitted (m/sec) Quantity of Gas Emitted (Nm³/hr) | IS 11255 Part – 3, 1985 (RA 2018) | 34 76 742 8.05 4, 54, 905.18 | LIMIT AS PER CTO |
| 2. 3. 4. 5. | Temperature of Gas Emission (°C) Barometric Pressure (mm Hg) Velocity of Gas Emitted (m/sec) Quantity of Gas Emitted (Nm³/hr) Particulate Matter Concentration (mg/Nm³) | IS 11255 Part – 3, 1985 (RA 2018) IS 11255 Part – 1, 1985 (RA 2019) | 34 76 742 8.05 4, 54, 905.18 | LIMIT AS PER CTO |

P. Sasent Test Done By Verified By

Authorized Signatory Subhanga Praharaj Managing Director

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

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

TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681622000002450F REPORT NO: CPL/R/SE/OCT-22/11

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

REPORT ISSUE DATE: 06.10.2022

Name of the Customer

M/s DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer

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

Sampling Method

General Information About the Stack

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

| Sample ID No | | CPL/SE/SEPT-22/72 |
|----------------------|-----|-------------------------|
| Location of Sampling | | Line – 2 |
| Date of Sampling | • | 27.09.2022 |
| Time of Sampling | | 16:01 Hrs |
| Duration of Sampling | | 25 min |
| Sample Received on | : 1 | 28.09.2022 |
| Date of Test | | 28.09.2022 - 29.09.2022 |

| 4 | Out of the state o | | 1 . | | | |
|-----|--|--------------|-------|------------------|------------------|------------------------------|
| 100 | Stack Connected to | | 8 | Coal Mill B/F | | |
| 2, | Emission Due to | | ä | Coal | | |
| 3. | Material of Construction of Stack/Duct | | | Steel | | |
| 4 | Shape of Stack/Duct | | 0 | Circular | | |
| 5, | Whether Stack is provide with Permanent Platfo | rm & Ladder | | Yes | | |
| 6. | Capacity | | 23 | 60 TPH | | |
| 7. | Running Load | | | 25 TPH | | |
| В. | Physical Characteristics of Stack | 10000 | : | | | |
| 1. | Height of Stack from Ground Level | | • | 68 m | | |
| 2. | Height of Sampling Port from Ground Level | | 9.0 | NA | | |
| 3. | Diameter/Dimension of Stack/ Duct at sampling | point | | 2.27 m | | |
| C. | PARAMETERS ANALYSED | METHOD | S O | F ANALYSIS | RESULTS OBTAINED | PERMISSIBLE LIMIT AS PER CTO |
| 1, | Ambient Temperature (°C) | IS 11255 Par | t – 3 | , 1985 (RA 2018) | 34 | |
| 2. | Temperature of Gas Emission (°C) | IS 11255 Par | t 3 | , 1985 (RA 2018) | 72 | - |
| 3. | Barometric Pressure (mm Hg) | IS 11255 Par | t 3 | , 1985 (RA 2018) | 742 | |
| 4, | Velocity of Gas Emitted (m/sec) | IS 11255 Par | t – 3 | , 1985 (RA 2018) | 11.05 | |
| 5. | Quantity of Gas Emitted (Nm ³ /hr) | IS 11255 Par | t – 3 | , 1985 (RA 2018) | 1, 35, 605.73 | |
| 6. | Particulate Matter Concentration (mg/Nm³) | IS 11255 Par | 11 | , 1985 (RA 2019) | 12 | 30 |
| D, | Pollution Control Device Installed | Bag Filter | | | | |

Authorized Signatory Subhanga Praharaj

*** 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 STACK EMISSION MONITORING

FORMAT NO: CPL/FM/58

ULR - TC681622000002452F REPORT NO: CPL/R/SE/OCT-22/13

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

REPORT ISSUE DATE: 06.10.2022

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/SEPT-22/74 |
|----------------------|----|-------------------------|
| Location of Sampling | 10 | Line – 2 |
| Date of Sampling | | 28.09.2022 |
| Time of Sampling | | 08:35 Hrs |
| Duration of Sampling | | 41 min |
| Sample Received on | | 28.09.2022 |
| Date of Test | | 28.09.2022 - 29.09.2022 |

| A. General Information About the Stack | | | | |
|---|--------------|-----------------------|------------------|---------------------------------|
| Stack Connected to | | : Cooler ESP | | |
| 2. Emission Due to | | : Limestone | | |
| Material of Construction of Stack/Duct | | Steel | | |
| 4. Shape of Stack/Duct | | Circular | | |
| 5. Whether Stack is provide with Permanent Platfo | rm & Ladder | Yes | | |
| 3. Capacity | | : NA | | |
| 7. Running Load | | : NA | | |
| 3. Physical Characteristics of Stack | | | | |
| L. Height of Stack from Ground Level | Tra Tu | ; 44 m | | |
| 2. Height of Sampling Port from Ground Level | | : NA | | |
| 3. Diameter/Dimension of Stack/ Duct at sampling | point | 4.0 m | | |
| C. PARAMETERS ANALYSED | METHO | S OF ANALYSIS | RESULTS OBTAINED | PERMISSIBLE LIMIT AS PER CTO |
| . Ambient Temperature (°C) | IS 11255 Par | t – 3, 1985 (RA 2018) | 30 | • |
| 2. Temperature of Gas Emission (°C) | IS 11255 Par | t - 3, 1985 (RA 2018) | 106 | |
| B. Barometric Pressure (mm Hg) | IS 11255 Par | t – 3, 1985 (RA 2018) | 742 | |
| l. Velocity of Gas Emitted (m/sec) | IS 11255 Par | t - 3, 1985 (RA 2018) | 7.33 | |
| 6. Quantity of Gas Emitted (Nm³/hr) | IS 11255 Par | t-3, 1985 (RA 2018) | 2, 54, 375.73 | |
| 5. Particulate Matter Concentration (mg/Nm³) | IS 11255 Par | t – 1, 1985 (RA 2019) | 03 | 30 |
| D. Pollution Control Device Installed | ESP | | | |

P. Caseni Test Done By Verified By ROURKELA ROURKELA

Authorized Signatory Subhanga Praharaj Managing Director

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

Page 1 of 1





Max. RH: 100%

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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC681622000002431F

REPORT NO: CPL/R/AAQ/OCT-22/11

Environmental Conditions During Monitoring

FORMAT NO: CPL/FM/57

Max. Temp.: 34.1°C Min. RH: 62%

REPORT ISSUE DATE: 06.10.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer:

M/s DALMIA CEMENT (BHARAT) LIMITED

Min. Temp.: 22.6°C

Address of the Customer:

At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA

Sampling Method

IS: 5182, EN 12341

| Sample ID No | • | CPL/AAQ/SEPT-22/347 | |
|----------------------|---|----------------------------------|--|
| Location of Sampling | | Roof of General Store (Line – 1) | |
| Date of Sampling | 8 | 26.09.2022 - 27.09.2022 | |
| Sampling Period | 8 | 1123 – 1006 Hrs | |
| Time of Sampling | 6 | 22.43 Hrs | |
| Sample Received on | 8 | 28.09.2022 | |

| Date o | of Test | 8 | | | | |
|--------|------------|---|---------|------|--------------------|----------|
| | | | | | We have | |
| SI | Parameters | | Results | Unit | Method of Analysis | National |

| 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 | 24 | µg/m³ | CPL/SOP/01/PM2.5, Issue No: 02, dtd: 23.10.2017 | 60 (24 Hours) | |
| 2 | PM 10 | 73 | µg/m³ | EN 12341, 1998 Low Volume Sampler | 100 (24 Hours) | |
| 3 | Sulphur Dioxide (SO ₂) | 07 | µg/m³ | IS: 5182 (PART – 2) 2001, RA 2017 | 80 (24 Hours) | |
| 4 | Nitrogen Dioxide (NO ₂) | 13 | µg/m³ | IS: 5182 (PART – 6) 2006, RA 2017 | 80 (24 Hours) | |
| 5 | Ammonia (NH ₃) | 91 | µg/m³ | CPL/SOP/01/NH ₃ , Issue No: 02, dtd: 23.10.2017 | 400 (24 Hours) | |
| 6 | Ozone (O ₃) | < 20 | µg/m³ | IS - 5182 (PART - 9) 1974, RA 2019 | 180 (1 Hour) | |

Authorized Signator Subhanga Praharaj

Managing Director

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



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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

Min. Temp.: 22.6°C | Max. Temp.: 34.1°C | Min. RH: 62% | Max. RH: 100%

REPORT NO: CPL/R/AAQ/OCT-22/11N

Environmental Conditions During Monitoring

REPORT ISSUE DATE: 06.10.2022

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/SEPT-22/347 |
|----------------------|----|----------------------------------|
| Location of Sampling | | Roof of General Store (Line – 1) |
| Date of Sampling | 10 | 26.09.2022 - 27.09.2022 |
| Sampling Period | V | 1123 – 1006 Hrs |
| Time of Sampling | | 22.43 Hrs |
| Sample Received on | : | 28.09.2022 |
| Date of Test | 8 | 28.09.2022 - 29.09.2022 |

| SI No | Parameters | Results Obtained | Unit | Method of Analysis | National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Ares |
|----------|--|------------------|-------|---|--|
| 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 ₆ H ₆) | < 0.5 | µg/m³ | IS: 5182 (PART – 11) 2006, RA 2017 | 5 (Annual) |
| 6 | Benzo(a)pyrene Particulate | < 0.1 | ng/m³ | IS: 5182 (PART – 12) 2004, RA 2014 | 1 (Annual) |
| | Phase only | The sales | | | |

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

Page 1 of 1





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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

| Min. Temp.:22.6°C | Max. Temp.: 34.1°C | Min. RH: 62% | Max. RH: 100%

ULR - TC681622000002432F

REPORT NO: CPL/R/AAQ/OCT-22/12

Environmental Conditions During Monitoring

REPORT ISSUE DATE: 06.10.2022

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/SEPT-22/371 |
|----------------------|----|--------------------------|
| Location of Sampling | · | Roof of Canteen Building |
| Date of Sampling | 1 | 29.09.2022 - 30.09.2022 |
| Sampling Period | | 1104 – 1001 Hrs |
| Time of Sampling | 11 | 23.57 Hrs |
| Sample Received on | * | 30.09.2022 |
| Date of Test | 8 | 30.09.2022 - 01.10.2022 |

| SI No | Parameters | Results Obtained | Unit | Method of Analysis | National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area | |
|----------|-------------------------------------|---------------------|-------|--|--|--|
| 1 | PM 2.5 | 22 | µg/m³ | CPL/SOP/01/PM2.5, Issue No: 02, dtd: 23.10.2017 | 60 (24 Hours) | |
| 2 | PM 10 | 74 | µg/m³ | IS: 5182 (PART – 23) 2006, RA 2017 | 100 (24 Hours) | |
| 3 | Sulphur Dioxide (SO ₂) | 07 | µg/m³ | IS: 5182 (PART – 2) 2001, RA 2017 | 80 (24 Hours) | |
| 4 | Nitrogen Dioxide (NO ₂) | 23 | µg/m³ | IS: 5182 (PART – 6) 2006, RA 2017 | 80 (24 Hours) | |
| 5 | Ammonia (NH ₃) | 67 | µg/m³ | CPL/SOP/01/NH ₃ , Issue No: 02, dtd: 23.10.2017 | 400 (24 Hours) | |
| 6 | Ozone (O ₃) | 20 | µg/m³ | IS - 5182 (PART - 9) 1974, RA 2019 | 180 (1 Hour) | |

P. Saseni Test Done By Jariflad Elv

Authorized Signatory Subhanga Praharaj Managing Director

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

Page 1 of 1



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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

REPORT NO: CPL/R/AAQ/OCT-22/12N

Environmental Conditions During Monitoring

REPORT ISSUE DATE: 06.10.2022

Min. RH: 62%

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

| I • I | CPL/AAQ/SEPT-22/371 | 32.00.00.00.00 |
|-------|--------------------------|--|
| | Roof of Canteen Building | |
| | 29.09.2022 - 30.09.2022 | |
| | 1104 – 1001 Hrs | |
| | | Roof of Canteen Building 29.09.2022 – 30.09.2022 |

Min. Temp.:22.6°C | Max. Temp.: 34.1°C |

Time of Sampling 23.57 Hrs Sample Received on 30.09.2022 Date of Test 30.09.2022 - 01.10.2022

| 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/m³ | Electro-chemical Sensor Based Digital Monitor | 4 (1 Hour) |
| 5 | Benzene (C ₆ H ₆) | < 0.5 | µg/m³ | IS: 5182 (PART – 11) 2006, RA 2017 | 5 (Annual) |
| 6 | Benzo(a)pyrene Particulate Phase only | < 0.1 | ng/m³ | IS : 5182 (PART – 12) 2004, RA 2014 | 1 (Annual) |

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 - TC681622000002433F

REPORT NO: CPL/R/AAQ/OCT-22/13

REPORT ISSUE DATE: 06.10.2022

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

Environmental Conditions During Monitoring | Min. Temp.: 22.6°C | Max. Temp.: 34.1°C | Min. RH: 62% | Max. RH: 100%

Sampling Method

IS: 5182, EN 12341

| | 2 11 2 3 7 | |
|----------------------|------------|-------------------------|
| Sample ID No | * | CPL/AAQ/SEPT-22/370 |
| Location of Sampling | * | Near Atithi Niwas |
| Date of Sampling | 1 | 29.09.2022 - 30.09.2022 |
| Sampling Period | * | 1050 – 1025 Hrs |
| Time of Sampling | | 23.35 Hrs |
| Sample Received on | : | 30.09.2022 |
| Date of Test | 1 | 30.09.2022 - 01.10.2022 |

| SI No | Parameters | ters Results Unit Method of Analysis Obtained | | National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area | |
|----------|-------------------------------------|---|-------|--|----------------|
| 1 | PM 2.5 | 23 | µg/m³ | CPL/SOP/01/PM2.5, Issue No: 02, dtd: 23.10.2017 | 60 (24 Hours) |
| 2 | PM 10 | 66 | µg/m³ | EN 12341, 1998 Low Volume Sampler | 100 (24 Hours) |
| 3 | Sulphur Dioxide (SO ₂) | 05 | µg/m³ | IS: 5182 (PART – 2) 2001, RA 2017 | 80 (24 Hours) |
| 4 | Nitrogen Dioxide (NO ₂) | 22 | µg/m³ | IS: 5182 (PART - 6) 2006, RA 2017 | 80 (24 Hours) |
| 5 | Ammonia (NH ₃) | 108 | µg/m³ | CPL/SOP/01/NH ₃ , Issue No: 02, dtd: 23.10.2017 | 400 (24 Hours) |
| 6 | Ozone (O ₃) | 21 | µg/m³ | IS - 5182 (PART - 9) 1974, RA 2019 | 180 (1 Hour) |

p. Sasene Test Done By

A GON

Authorized Signatory Subhanga Praharaj Managing Director

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

Page 1 of 1



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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ORMAT NO: CPL/FM/57

REPORT NO: CPL/R/AAQ/OCT-22/13N

REPORT ISSUE DATE: 06.10.2022

SAMPLE DRAWN BY GLEENVIRON PRIVATE LIMITED

Name of the Customer:

M/s DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer:

At/Po: RAJGANGPUR, SUNDARGARH - 770017, ODISHA

Environmental Conditions During Monitoring | Min. Temp.: 22.6°C | Max. Temp.: 34.1°C | Min. RH: 62% | Max. RH: 100%

Sampling Method :

IS: 5182, EN 12341

| Sample ID No | | CPL/AAQ/SEPT-22/370 |
|----------------------|---|-------------------------|
| Location of Sampling | H | Near Atithi Niwas |
| Date of Sampling | 4 | 29.09.2022 - 30.09.2022 |
| Sampling Period | * | 1050 – 1025 Hrs |
| Time of Sampling | 2 | 23.35 Hrs |
| Sample Received on | 3 | 30.09.2022 |
| Date of Test | 1 | 30.09.2022 - 01.10.2022 |

| SI No | Parameters | Results Obtained | Unit | Method of Analysis | National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area |
|----------|--|---------------------|-------------------|---|--|
| 1 | Lead (Pb) | < 0.4 | µg/m³ | IS: 5182 (PART – 22) 2004, RA 2019 | 1 (24 Hours) |
| 2 | Arsenic (As) | < 0.2 | ng/m³ | CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017 | 6 (Annual) |
| 3 | Nickel (Ni) | < 12 | ng/m³ | IS: 5182 (PART – 26) 2020 | 20 (Annual) |
| 4 | Carbon Monoxide (CO) | < 0.1 | mg/m ³ | Electro-chemical Sensor Based Digital Monitor | 4 (1 Hour) |
| 5 | Benzene (C ₆ H ₆) | < 0.5 | µg/m³ | IS: 5182 (PART – 11) 2006, RA 2017 | 5 (Annual) |
| 6 | Benzo(a)pyrene Particulate Phase only | < 0.1 | ng/m³ | IS: 5182 (PART – 12) 2004, RA 2014 | 1 (Annual) |

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Authorized Signatory Subhanga Praharaj Managing Director

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

Page 1 of 1





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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC681622000002429F

REPORT NO: CPL/R/AAQ/OCT-22/9

FORMAT NO: CPL/FM/57

REPORT ISSUE DATE: 06.10.2022

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

| Environmental Conditions | Environmental Conditions During Monitoring | | | emp.: 22.6°C | Min. RH: 62% | Max. RH: 100% | | | |
|--|--|-------------------------|----------------------|--------------|------------------|---------------|--|--|--|
| Sample ID No | : | | | CPL | /AAQ/SEPT-22/348 | | | | |
| Location of Sampling | : | | Near Refractory Gate | | | | | | |
| Date of Sampling | : | 26.09.2022 - 27.09.2022 | | | | | | | |
| Sampling Period | 2 | 1135 – 0945 Hrs | | | | | | | |
| Time of Sampling | : | 22.10 Hrs | | | | | | | |
| Sample Received on | ÷ | 28.09.2022 | | | | | | | |
| Date of Test : 28.09.2022 - 29.09.2022 | | | | | | | | | |

| 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 | 23 | µg/m³ | CPL/SOP/01/PM2.5, Issue No: 02, dtd: 23.10.2017 | 60 (24 Hours) |
| 2 | PM 10 | 67 | µg/m³ | IS: 5182 (PART – 23) 2006, RA 2017 | 100 (24 Hours) |
| 3 | Sulphur Dioxide (SO ₂) | 09 | µg/m³ | IS: 5182 (PART - 2) 2001, RA 2017 | 80 (24 Hours) |
| 4 | Nitrogen Dioxide (NO ₂) | 21 | µg/m³ | IS: 5182 (PART - 6) 2006, RA 2017 | 80 (24 Hours) |
| 5 | Ammonia (NH ₃) | 99 | µg/m³ | CPL/SOP/01/NH ₃ , Issue No: 02, dtd: 23.10.2017 | 400 (24 Hours) |
| 6 | Ozone (O ₃) | < 20 | 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



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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

| Min. Temp.: 22.6°C | Max. Temp.: 34.1°C | Min. RH: 62% | Max. RH: 100%

REPORT NO: CPL/R/AAQ/OCT-22/9N

Environmental Conditions During Monitoring

REPORT ISSUE DATE: 06.10.2022

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/SEPT-22/348 |
|----------------------|----------|-------------------------|
| Location of Sampling | : | Near Refractory Gate |
| Date of Sampling | 1 | 26.09.2022 — 27.09.2022 |
| Sampling Period | 1 | 1135 – 0945 Hrs |
| Time of Sampling | ž. | 22.10 Hrs |
| Sample Received on | 3 | 28.09.2022 |
| Date of Test | | 28.09.2022 - 29.09.2022 |

| 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/m³ | Electro-chemical Sensor Based Digital Monitor | 4 (1 Hour) | |
| 5 | Benzene (C ₆ H ₆) | < 0.5 | µg/m³ | IS: 5182 (PART – 11) 2006, RA 2017 | 5 (Annual) | |
| 6 | Benzo(a)pyrene Particulate Phase only | < 0.1 | ng/m³ | IS: 5182 (PART – 12) 2004, RA 2014 | 1 (Annual) | |

Authorized Signatory 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.

Registered Office:

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

| Min. Temp.: 22.6°C | Max. Temp.: 34.1°C | Min. RH: 62% | Max. RH: 100%

ULR - TC681622000002428F

REPORT NO: CPL/R/AAQ/OCT-22/8

Environmental Conditions During Monitoring

REPORT ISSUE DATE: 06.10.2022

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/SEPT-22/354 |
|----------------------|---|-------------------------------|
| Location of Sampling | | Near Workshop Area (Line – 2) |
| Date of Sampling | 2 | 27.09.2022 - 28.09.2022 |
| Sampling Period | 1 | 1103 – 0900 Hrs |
| Time of Sampling | | 21.57 Hrs |
| Sample Received on | | 28.09.2022 |
| Date of Test | 2 | 28.09.2022 - 29.09.2022 |

| SI No | Parameters | Results Obtained | Unit | Method of Analysis | National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rurul & Other Area |
|----------|------------------------------------|---------------------|-------|--|--|
| 1 | PM 2.5 | 24 | µg/m³ | CPL/SOP/01/PM2.5, Issue No: 02, dtd: 23.10.2017 | 60 (24 Hours) |
| 2 | PM 10 | 75 | µg/m³ | EN 12341, 1998 Low Volume Sampler | 100 (24 Hours) |
| 3 | Sulphur Dioxide (SO ₂) | 05 | µg/m³ | IS: 5182 (PART – 2) 2001, RA 2017 | 80 (24 Hours) |
| 4 | Nitrogen Dioxide (NO2) | 19 | µg/m³ | IS: 5182 (PART – 6) 2006, RA 2017 | 80 (24 Hours) |
| 5 | Ammonia (NH ₃) | 93 | μg/m³ | CPL/SOP/01/NH ₃ , Issue No: 02, dtd: 23.10.2017 | 400 (24 Hours) |
| 6 | Ozone (O ₃) | < 20 | µg/m³ | IS - 5182 (PART - 9) 1974, RA 2019 | 180 (1 Hour) |

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Authorized Signatory Subhanga Praharaj Managing Director

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



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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

| Min. Temp.: 22.6°C | Max. Temp.: 34.1°C | Min. RH: 62% | Max. RH: 100%

REPORT NO: CPL/R/AAQ/OCT-22/8N

Environmental Conditions During Monitoring

REPORT ISSUE DATE: 06.10.2022

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 | 1 | CPL/AAQ/SEPT-22/354 |
|----------------------|------------|-------------------------------|
| Location of Sampling | * | Near Workshop Area (Line – 2) |
| Date of Sampling | · · | 27.09.2022 - 28.09.2022 |
| Sampling Period | 0 | 1103 – 0900 Hrs |
| Time of Sampling | (A) (b) | 21.57 Hrs |
| Sample Received on | (i) | 28.09.2022 |
| Date of Test | | 28.09.2022 - 29.09.2022 |

| SI No | Parameters | Results Obtained | Unit | Method of Analysis | National Ambient Air Quality Standards, 2009 for industrial, Residential, Rural & Other Area |
|----------|--|---------------------|-------------------|---|--|
| 1 | Lead (Pb) | < 0.4 | µg/m³ | IS: 5182 (PART – 22) 2004, RA 2019 | 1 (24 Hours) |
| 2 | Arsenic (As) | < 0.2 | ng/m³ | CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017 | 6 (Annual) |
| 3 | Nickel (Ni) | < 12 | ng/m³ | IS: 5182 (PART – 26) 2020 | 20 (Annual) |
| 4 | Carbon Monoxide (CO) | < 0.1 | mg/m ³ | Electro-chemical Sensor Based Digital Monitor | 4 (1 Hour) |
| 5 | Benzene (C ₆ H ₆) | < 0.5 | µg/m³ | IS: 5182 (PART – 11) 2006, RA 2017 | 5 (Annual) |
| 6 | Benzo(a)pyrene Particulate Phase only | < 0.1 | ng/m³ | IS : 5182 (PART – 12) 2004, RA 2014 | 1 (Annual) |

Authorized Signatory Sùbhanga 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.

Registered Office:

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 STACK EMISSION MONITORING

ULR - TC681622000001572F REPORT NO: CPL/R/SE/JUN-22/76

REPORT ISSUE DATE: 28.06.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer

M/s DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer

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

Sample ID No

CPL/SE/JUN-22/64

Name of Stack Monitored Stack Connected To

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

Shape of Stack

Circular

Date of Sampling

22.06.2022

Time of Sampling

14:32 Hrs

Method of Sampling

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

Sample Received on

22.06.2022

Date of Test

23.06.2022

Ambient Temperature in °C

38

Stack Temperature in °C

86

Average Stack Gas Velocity in m/sec Iso-kinetic Flow Rate in LPM

7.35

26

Duration of Sampling in minute

38

Particulate Matter Concentration

Results Obtained

14 mg/Nm³

Permissible Limits

30 mg/Nm³

Authorized Signatory Subhanga Praharaj Managing Director/QM

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

Page 1 of 1





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

TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FM/58

ULR - TC681622000001573F REPORT NO: CPL/R/SE/JUN-22/77

REPORT ISSUE DATE: 28.06.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer

M/s DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer

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

Sample ID No

CPL/SE/JUN-22/65

Name of Stack Monitored Stack Connected To CVRM - 2, Line - 1 CVRM - 2 Bag filter

Shape of Stack

Circular

Date of Sampling

22.06.2022

Time of Sampling

11 : 55 Hrs

Method of Sampling

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

Sample Received on

22.06.2022

Date of Test

23.06.2022

Ambient Temperature in °C

36

Stack Temperature in °C

94

Average Stack Gas Velocity in m/sec

6.03

Iso-kinetic Flow Rate in LPM

21

Duration of Sampling in minute

47

Particulate Matter Concentration

Results Obtained

26 mg/Nm³

Permissible Limits

30 mg/Nm³

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Managing Director/QM

*****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 STACK EMISSION MONITORING

ULR -- TC681622000001574F REPORT NO: CPL/R/SE/JUN-22/78 FORMAT NO: CPL/FM/58

REPORT ISSUE DATE: 28.06.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer

M/s DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer

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

Sample ID No

CPL/SE/JUN-22/66

Name of Stack Monitored Stack Connected To CVRM – 3, Line – 1 CVRM – 3 Bag filter

Shape of Stack

Circular

Date of Sampling

22.06.2022

Time of Sampling Method of Sampling

11 : 05 Hrs IS 11255 (Part – 1): 1985, RA 2019

Sample Received on

22.06.2022

Date of Test

23.06.2022

Ambient Temperature in °C

38

Stack Temperature in °C

95

Average Stack Gas Velocity in m/sec

7.72

Iso-kinetic Flow Rate in LPM

27

Duration of Sampling in minute

37

Particulate Matter Concentration

Results Obtained

11 mg/Nm³

Permissible Limits

30 mg/Nm³

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Authorized Signatory Subhanga Praharaj

Managing Director/QM

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

Page 1 of 1





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

TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681622000001578F

REPORT NO: CPL/R/SE/JUN-22/82

FORMAT NO: CPL/FM/58

REPORT ISSUE DATE: 28.06.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer

M/s DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer

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

Sample ID No

CPL/SE/JUN-22/72

Name of Stack Monitored

KILN & VRM RABH, LINE - 2

Stack Connected To Shape of Stack

KILN VRM Circular

Date of Sampling

23.06.2022

Time of Sampling

16:45 Hrs

Method of Sampling

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

Sample Received on

23.06.2022

Date of Test

24.06.2022

Ambient Temperature in °C

38 116

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

8.41

Iso-kinetic Flow Rate in LPM

27

Duration of Sampling in minute

37

Particulate Matter Concentration

Sulphur Dioxide as SO₂ Nitrogen Dioxide as NO₂

Results Obtained 11 mg/Nm³

Permissible Limits 30 mg/Nm³

33.53 mg/Nm³

100 mg/Nm³

415.4 mg/Nm³

800 mg/Nm³

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

Page 1 of 1





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

TEST REPORT FOR STACK EMISSION MONITORING

FORMAT NO: CPL/FM/58

ULR - TC681622000001575F REPORT NO: CPL/R/SE/JUN-22/79

REPORT ISSUE DATE: 28.06.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer M/s DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer RGP Cement Factory, Rajgangpur – 770017, Dist: Sundargarh, Odisha

Sample ID No CPL/SE/JUN-22/70

Name of Stack Monitored Cooler ESP, Line – 2

Stack Connected To Cooler, Line – 2

Shape of Stack : Circular
Date of Sampling : 23.06.2022
Time of Sampling : 14 : 40 Hrs

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

Sample Received on 23.06.2022 Date of Test 24.06.2022

Ambient Temperature in °C : 39
Stack Temperature in °C : 85
Average Stack Gas Velocity in m/sec : 5.74
Iso-kinetic Flow Rate in LPM : 20
Duration of Sampling in minute : 50

Particulate Matter Concentration

Results Obtained

08 mg/Nm³

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Permissible Limits

30 mg/Nm³

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Authorized Signatory Subhanga Praharaj

Managing Director/QM

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

Page 1 of 1





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

TEST REPORT FOR STACK EMISSION MONITORING

ULR - TC681622000001576F REPORT NO: CPL/R/SE/JUN-22/80 FORMAT NO: CPL/FM/58

REPORT ISSUE DATE: 28.06.2022

SAMPLE DRAWN BY CLEENVIRON PRIVATE LIMITED

Name of the Customer

M/s DALMIA CEMENT (BHARAT) LIMITED

Address of the Customer

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

Sample ID No

CPL/SE/JUN-22/69

Name of Stack Monitored Stack Connected To

Coal Mill B/F. Line - 2 Coal Mill Bag Filter

Shape of Stack

Circular

Date of Sampling

23.06.2022

Time of Sampling

15:55 Hrs

Method of Sampling

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

Sample Received on

23.06.2022

Date of Test

24.06.2022

Ambient Temperature in °C

Stack Temperature in °C

75

Average Stack Gas Velocity in m/sec

8.41

Iso-kinetic Flow Rate in LPM

31

Duration of Sampling in minute

Particulate Matter Concentration

Results Obtained

14 mg/Nm³

Permissible Limits

30 mg/Nm³

Authorized Signatory Subhanga Praharaj

Managing Director/QM

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

Page 1 of 1





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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

ULR - TC681622000001569F

REPORT NO: CPL/R/AAQ/JUN-22/50

REPORT ISSUE DATE: 28.06.2022

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

| Environmental Conditions During Monitoring | 100 | Min. Temp.: 22.9°C | Max. Temp.: 37.3°C | Min. RH: 54% | Max. RH: 99% |
|--|-----|--------------------|--------------------|--------------|--------------|
|--|-----|--------------------|--------------------|--------------|--------------|

| Sample ID No | (8) | CPL/AAQ/JUN-22/322 | |
|-----------------------------|-------------|---------------------------------|--|
| Location of Sampling | (4) | Near Stores Building (Line – 1) | |
| Date of Sampling | | 23.06.2022 - 24.06.2022 | |
| Sampling Period | | 1050 – 0900 Hrs | |
| Time of Sampling | S. | 22.10 Hrs | |
| Sample Received on | | 24.06.2022 | |
| Date of Test | 174 1 10 | 24.06.2022 - 25.06.2022 | |

| 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 | 26 | µg/m³ | CPL/SOP/01/PM2.5, Issue No: 02, dtd: 23.10.2017 | 60 (24 Hours) |
| 2 | PM 10 | 83 | µg/m³ | EN 12341, 1998 Low Volume Sampler | 100 (24 Hours) |
| 3 | Sulphur Dioxide (SO ₂) | 06 | µg/m³ | IS: 5182 (PART – 2) 2001, RA 2017 | 80 (24 Hours) |
| 4 | Nitrogen Dioxide (NO ₂) | 21 | µg/m³ | IS: 5182 (PART – 6) 2006, RA 2017 | 80 (24 Hours) |
| 5 | Ammonia (NH ₃) | 109 | µg/m³ | CPL/SOP/01/NH ₃ , Issue No: 02, dtd: 23.10.2017 | 400 (24 Hours) |
| 6 | Ozone (O ₃) | < 20 | µg/m³ | IS - 5182 (PART - 9) 1974, RA 2019 | 180 (1 Hour) |

Authorized Signatory Subhanga Praharaj Managing Director/QM

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



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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

REPORT NO: CPL/R/AAQ/JUN-22/50N

REPORT ISSUE DATE: 28.06.2022

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

| Environmental Conditions | Duri | ng Monitoring | # N | Min. Temp.: 22.9°C Max. Temp.: 37.3°C Min. RH: 54% M | | | | | Max. RH: 999 | | | |
|--------------------------|------------|---------------|---------------------------------|--|-----|-------|-----------|------|--------------|--|--|--|
| Sample ID No | | | | | CPI | ./AA(| 2/JUN-22 | /322 | - | | | |
| Location of Sampling | • | | Near Stores Building (Line – 1) | | | | | | | | | |
| Date of Sampling | 9 | | 23,06,2022 – 24,06,2022 | | | | | | | | | |
| Sampling Period | 25 | | | | • | 050 - | – 0900 Hr | S | | | | |
| Time of Sampling | 3 | | | | | 22 | .10 Hrs | | | | | |
| Sample Received on | 24.06.2022 | | | | | | | | | | | |
| Date of Test : | | | | 24.06.2022 - 25.06.2022 | | | | | | | | |

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

Test Done By

Authorized Signatory Subhanga Praharaj Managing Director/QM

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

Page 1 of 1





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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

ULR - TC681622000001571F

REPORT NO: CPL/R/AAQ/JUN-22/52

ORMAT NO: CPL/FM/57

REPORT ISSUE DATE: 28,06,2022

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

| Environmental Conditions | Durin | g Monitoring | : Mir | n. Temp.: | 22.9°C | Max | Temp.: 37.3°C | Min. F | RH: 54% | Max. RH: 99% |
|---------------------------------|-------|--------------|-------------------------|-----------|--------|------|---------------|--------|---------|--------------|
| Sample ID No | : | | | | CPL | /AAQ | /JUN-22/399 | - | | |
| Location of Sampling | : | | Near Atithi Niwas | | | | | | | |
| Date of Sampling | 1 | | 24.06.2022 - 25.06.2022 | | | | | | | |
| Sampling Period | : | | 1134 – 0939 Hrs | | | | | | | |
| Time of Sampling | : | | 22.05 Hrs | | | | | | | |
| Sample Received on | : | 25.06.2022 | | | | | | | | |
| Date of Test | | | 25.06.2022 - 27.06.2022 | | | | | | | |

| SI No | Parameters | Results Obtained | Unit | Method of Analysis | National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area |
|----------|-------------------------------------|---------------------|-------|--|--|
| 1 | PM 2.5 | 22 | µg/m³ | CPL/SOP/01/PM2.5, Issue No: 02, dtd: 23.10.2017 | 60 (24 Hours) |
| 2 | PM 10 | 75 | µg/m³ | EN 12341, 1998 Low Volume Sampler | 100 (24 Hours) |
| 3 | Sulphur Dioxide (SO ₂) | 07 | µg/m³ | IS: 5182 (PART – 2) 2001, RA 2017 | 80 (24 Hours) |
| 4 | Nitrogen Dioxide (NO ₂) | 19 | µg/m³ | IS: 5182 (PART – 6) 2006, RA 2017 | 80 (24 Hours) |
| 5 | Ammonia (NH ₃) | 73 | µg/m³ | CPL/SOP/01/NH ₃ , Issue No: 02, dtd: 23.10.2017 | 400 (24 Hours) |
| 6 | Ozone (O ₃) | 20 | µg/m³ | IS - 5182 (PART - 9) 1974, RA 2019 | 180 (1 Hour) |

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Verified By

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

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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

REPORT NO: CPL/R/AAQ/JUN-22/52N

REPORT ISSUE DATE: 28.06.2022

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

| Environmental Conditions | During Monitori | ng : Min. Temp.: 22.9°C | Max. Temp.: 37.3°C | Min. RH: 54% | Max. RH: 99% | | | |
|--------------------------|-----------------|-------------------------|--------------------|--------------|--------------|--|--|--|
| Sample ID No | : | CPI | ./AAQ/JUN-22/399 | | | | | |
| Location of Sampling | : | Near Atithi Niwas | | | | | | |
| Date of Sampling | | 24.06.2022 – 25.06.2022 | | | | | | |
| Sampling Period | | 1134 – 0939 Hrs | | | | | | |
| Time of Sampling | | 22.05 Hrs | | | | | | |
| Sample Received on | * | 25.06.2022 | | | | | | |
| Date of Test | * | 25.06.2022 - 27.06.2022 | | | | | | |

| SI No | Parameters | Results Obtained | Unit | Method of Analysis | National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area |
|----------|--|---------------------|-------------------|---|--|
| 1 | Lead (Pb) | < 0.4 | µg/m³ | IS: 5182 (PART – 22) 2004, RA 2019 | 1 (24 Hours) |
| 2 | Arsenic (As) | < 0.2 | ng/m³ | CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017 | 6 (Annual) |
| 3 | Nickel (Ni) | < 12 | ng/m³ | IS: 5182 (PART – 26) 2020 | 20 (Annual) |
| 4 | Carbon Monoxide (CO) | < 0.1 | mg/m ³ | Electro-chemical Sensor Based Digital Monitor | 4 (1 Hour) |
| 5 | Benzene (C ₆ H ₆) | < 0.5 | µg/m³ | IS: 5182 (PART – 11) 2006, RA 2017 | 5 (Annual) |
| 6 | Benzo(a)pyrene Particulate | < 0.1 | ng/m³ | IS: 5182 (PART – 12) 2004, RA 2014 | 1 (Annual) |
| | Phase only | | | | |

Test Done By

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*****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

| Min. Temp.: 22.9°C | Max. Temp.: 37.3°C | Min. RH: 54% | Max. RH: 99%

ULR - TC681622000001566F

REPORT NO: CPL/R/AAQ/JUN-22/47

Environmental Conditions During Monitoring

REPORT ISSUE DATE: 28.06.2022

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/JUN-22/311 |
|-----------------------------|----|----------------------------------|
| Location of Sampling | : | Near Canteen Building (Line – 1) |
| Date of Sampling | : | 22.06.2022 - 23.06.2022 |
| Sampling Period | * | 0935 – 0934 Hrs |
| Time of Sampling | 1 | 23.59 Hrs |
| Sample Received on | 2 | 23.06.2022 |
| Date of Test | \$ | 23.06.2022 - 24.06.2022 |

| SI No | Parameters | Results Obtained | Unit | Method of Analysis | National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area |
|----------|-------------------------------------|---------------------|-------|--|--|
| 1 | PM 2.5 | 22 | µg/m³ | CPL/SOP/01/PM2.5, Issue No: 02, dtd: 23.10.2017 | 60 (24 Hours) |
| 2 | PM 10 | 70 | µg/m³ | EN 12341, 1998 Low Volume Sampler | 100 (24 Hours) |
| 3 | Sulphur Dioxide (SO ₂) | 05 | µg/m³ | IS: 5182 (PART – 2) 2001, RA 2017 | 80 (24 Hours) |
| 4 | Nitrogen Dioxide (NO ₂) | 18 | µg/m³ | IS: 5182 (PART – 6) 2006, RA 2017 | 80 (24 Hours) |
| 5 | Ammonia (NH ₃) | 69 | µg/m³ | CPL/SOP/01/NH ₃ , Issue No: 02, dtd: 23.10.2017 | 400 (24 Hours) |
| 6 | Ozone (O ₃) | < 20 | µg/m³ | IS - 5182 (PART - 9) 1974, RA 2019 | 180 (1 Hour) |

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*****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

Min. Temp.: 22.9°C | Max. Temp.: 37.3°C | Min. RH: 54% | Max. RH: 99%

REPORT NO: CPL/R/AAQ/JUN-22/47N

Environmental Conditions During Monitoring

REPORT ISSUE DATE: 28.06.2022

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/JUN-22/311 | |
|----------------------|---|----------------------------------|--|
| Location of Sampling | ; | Near Canteen Building (Line – 1) | |
| Date of Sampling | * | 22.06.2022 - 23.06.2022 | |
| Sampling Period | 2 | 0935 – 0934 Hrs | |
| Times of Committee | | 22 50 11 | |

| Camping renod 1. | 0000 0004 1113 |
|----------------------|-------------------------|
| Time of Sampling | 23.59 Hrs |
| Sample Received on : | 23.06.2022 |
| Data of Tool | 00.00.00.00.00.00.00.00 |

| Date of Test | 1: | 23.06.2022 – 24.06.202 |
|--------------|----|------------------------|
| | | |

| SI No | Parameters | Results Obtained | Unit | Method of Analysis | National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area |
|----------|--|---------------------|-------------------|---|--|
| 1 | Lead (Pb) | < 0.4 | µg/m³ | IS : 5182 (PART – 22) 2004, RA 2019 | 1 (24 Hours) |
| 2 | Arsenic (As) | < 0.2 | ng/m³ | CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017 | 6 (Annual) |
| 3 | Nickel (Ni) | < 12 | ng/m³ | IS: 5182 (PART – 26) 2020 | 20 (Annual) |
| 4 | Carbon Monoxide (CO) | < 0.1 | mg/m ³ | Electro-chemical Sensor Based Digital Monitor | 4 (1 Hour) |
| 5 | Benzene (C ₆ H ₆) | < 0.5 | µg/m³ | IS : 5182 (PART – 11) 2006, RA 2017 | 5 (Annual) |
| 6 | Benzo(a)pyrene Particulate Phase only | < 0.1 | ng/m³ | IS : 5182 (PART – 12) 2004, RA 2014 | 1 (Annual) |

Authorized Signatory Subhanga Praharaj

Managing Director/QM

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

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

TEST REPORT FOR AMBIENT AIR QUALITY MONITORING

FORMAT NO: CPL/FM/57

ULR - TC681622000001567F

REPORT NO: CPL/R/AAQ/JUN-22/48

REPORT ISSUE DATE: 28.06.2022

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

| Environmental Conditions During Monitoring | | | Max. Temp.: 37.3°C | Min. RH: 54% | Max. RH: 99% |
|--|--|-----|--------------------|--------------|--------------|
| | | | | | `` |
| Sample ID No | | CPL | /AAQ/JUN-22/312 | | |

| Sample ID No | : | CPL/AAQ/JUN-22/312 |
|----------------------|----|-------------------------|
| Location of Sampling | 1 | Near Refractory Gate |
| Date of Sampling | S. | 22.06.2022 - 23.06.2022 |
| Sampling Period | 9 | 0956 - 0906 Hrs |
| Time of Sampling | | 23.10 Hrs |
| Sample Received on | 1 | 23.06.2022 |
| Date of Test | 1 | 23.06.2022 - 24.06.2022 |

| 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 | 79 | µg/m³ | IS: 5182 (PART – 23) 2006, RA 2017 | 100 (24 Hours) |
| 3 | Sulphur Dioxide (SO ₂) | 07 | µg/m³ | IS: 5182 (PART – 2) 2001, RA 2017 | 80 (24 Hours) |
| 4 | Nitrogen Dioxide (NO ₂) | 20 | µg/m³ | IS: 5182 (PART – 6) 2006, RA 2017 | 80 (24 Hours) |
| 5 | Ammonia (NH ₃) | 115 | µg/m³ | CPL/SOP/01/NH ₃ , Issue No: 02, dtd: 23.10.2017 | 400 (24 Hours) |
| 6 | Ozone (O ₃) | < 20 | µg/m³ | IS - 5182 (PART - 9) 1974, RA 2019 | 180 (1 Hour) |

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*****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/JUN-22/48N

REPORT ISSUE DATE: 28.06.2022

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

| Environmental Conditions During Monitoring | | | : Min. T | emp.: 22.9°C | Max. | Temp.: 37.3°C | Min. RH: 54% | Max. RH: 99% | | |
|--|-----------|--|-------------------------|--------------|------|---------------|--------------|--------------|--|--|
| Sample ID No | • | | CPL/AAQ/JUN-22/312 | | | | | | | |
| Location of Sampling : | | | Near Refractory Gate | | | | | | | |
| Date of Sampling : | | | 22.06.2022 - 23.06.2022 | | | | | | | |
| Sampling Period : | | | 0956 – 0906 Hrs | | | | | | | |
| Time of Sampling | 23.10 Hrs | | | | | | | | | |
| Sample Received on : | | | 23.06.2022 | | | | | | | |
| Date of Test : | | | 23.06.2022 - 24.06.2022 | | | | | | | |

| SI No | Parameters | Results Obtained | Unit | Method of Analysis | National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area |
|----------|--|---------------------|-------------------|---|--|
| 1 | Lead (Pb) | < 0.4 | µg/m³ | IS: 5182 (PART – 22) 2004, RA 2019 | 1 (24 Hours) |
| 2 | Arsenic (As) | < 0.2 | ng/m³ | CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017 | 6 (Annual) |
| 3 | Nickel (Ni) | < 12 | ng/m³ | IS: 5182 (PART – 26) 2020 | 20 (Annual) |
| 4 | Carbon Monoxide (CO) | < 0.1 | mg/m ³ | Electro-chemical Sensor Based Digital Monitor | 4 (1 Hour) |
| 5 | Benzene (C ₆ H ₆) | < 0.5 | µg/m³ | IS: 5182 (PART – 11) 2006, RA 2017 | 5 (Annual) |
| 6 | Benzo(a)pyrene Particulate Phase only | < 0.1 | ng/m³ | IS : 5182 (PART – 12) 2004, RA 2014 | 1 (Annual) |

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





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 - TC681622000001570F REPORT NO: CPL/R/AAQ/JUN-22/51

REPORT ISSUE DATE: 28.06.2022

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

| Environmental Conditions During Monitoring | ** | Min. Temp.:22.9°C | Max. Temp.: 37.3°C | Min. RH: 54% | Max. RH: 99% |
|--|----|-------------------|--------------------|--------------|--------------|
| | | | | | |

| Sample ID No | * | CPL/AAQ/JUN-22/323 | |
|----------------------|---|-----------------------------------|--|
| Location of Sampling | : | Near Workshop Building (Line – 2) | |
| Date of Sampling | 1 | 23.06.2022 - 24.06.2022 | |
| Sampling Period | 2 | 0950 – 0932 Hrs | |
| Time of Sampling | 1 | 23.42 Hrs | |
| Sample Received on | | 24.06.2022 | |
| Date of Test | | 24.06.2022 - 25.06.2022 | |

| 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 | 23 | µg/m³ | CPL/SOP/01/PM2.5, Issue No: 02, dtd: 23.10.2017 | 60 (24 Hours) |
| 2 | PM 10 | 78 | µg/m³ | IS: 5182 (PART – 23) 2006, RA 2017 | 100 (24 Hours) |
| 3 | Sulphur Dioxide (SO ₂) | 06 | µg/m³ | IS: 5182 (PART – 2) 2001, RA 2017 | 80 (24 Hours) |
| 4 | Nitrogen Dioxide (NO ₂) | 20 | µg/m³ | IS: 5182 (PART – 6) 2006, RA 2017 | 80 (24 Hours) |
| 5 | Ammonia (NH ₃) | 74 | µg/m³ | CPL/SOP/01/NH ₃ , Issue No: 02, dtd: 23.10.2017 | 400 (24 Hours) |
| 6 | Ozone (O ₃) | 22 | µg/m³ | IS - 5182 (PART - 9) 1974, RA 2019 | 180 (1 Hour) |

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*****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/JUN-22/51N

REPORT ISSUE DATE: 28.06.2022

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

| Environmental Conditions During Monitoring | | | □ Min. ⁻ | Гетр.:22.9°С | Max. | Temp.: 37.3°C | Min. RH: 54% | Max. RH: 99% | | | |
|--|---|-------------------------|-----------------------------------|--------------|------|---------------|--------------|--------------|--|--|--|
| Sample ID No | | | | CPI | /AAQ | JUN-22/323 | | | | | |
| Location of Sampling : | | | Near Workshop Building (Line – 2) | | | | | | | | |
| Date of Sampling | | 23.06.2022 – 24.06.2022 | | | | | | | | | |
| Sampling Period : | | | 0950 – 0932 Hrs | | | | | | | | |
| Time of Sampling | : | | | | 23.4 | 2 Hrs | | | | | |
| Sample Received on | | | 24.06.2022 | | | | | | | | |
| Date of Test : | | | 24.06.2022 - 25.06.2022 | | | | | | | | |

| SI No | Parameters | Results Obtained | Unit | Method of Analysis | National Ambient Air Quality Standards, 2009 for Industrial, Residential, Rural & Other Area |
|----------|--|---------------------|-------------------|---|--|
| 1 | Lead (Pb) | < 0.4 | µg/m³ | IS: 5182 (PART – 22) 2004, RA 2019 | 1 (24 Hours) |
| 2 | Arsenic (As) | < 0.2 | ng/m³ | CPL/SOP/01/As, Issue No: 02, dtd.: 23.10.2017 | 6 (Annual) |
| 3 | Nickel (Ni) | < 12 | ng/m³ | IS : 5182 (PART – 26) 2020 | 20 (Annual) |
| 4 | Carbon Monoxide (CO) | < 0.1 | mg/m ³ | Electro-chemical Sensor Based Digital Monitor | 4 (1 Hour) |
| 5 | Benzene (C ₆ H ₆) | < 0.5 | µg/m³ | IS: 5182 (PART – 11) 2006, RA 2017 | 5 (Annual) |
| 6 | Benzo(a)pyrene Particulate Phase only | < 0.1 | ng/m³ | IS : 5182 (PART – 12) 2004, RA 2014 | 1 (Annual) |

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

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