

Letter No: GSCL/EHS/2021-22/08

Dated: 31.05.2021

To,
The Ministry of Environment & Forests & Climate Change,
North Eastern Regional Office (NEZ),
Law-u-sib, Lumbatngen, Near MTC Workshop,
Near NTC Workshop, Shillong, Meghalaya-793021.

Sub: Six Monthly Compliance of Environment Clearance Letter of M/s. Goldstone Cements Ltd, Vill: Musiang Lamare (old), Khliehriat, East Jaintia Hills, Meghalaya-793200

Ref: Environment Clearance letter No:- J-11011/851/2008-IA II(I) dated 30.09.2010

Dear Sir.

With the matter as cited in the subject, we would like to submit the Half Yearly EC Compliance report for the period 01.10.2020 to 31.03.2021 on Environmental Stipulations for our Cement Plant along with Captive Thermal Power plant located at Vill: Musiang Lamare (old), Khliehriat, Dist: East Jaintia Hills, Meghalaya -793200.

All annexures are enclosed as mentioned in compliance report for your kind reference.

Thanking You,

Yours faithfully

For Goldstone Cements Ltd.

Authorised Signatory

Encl: As mentioned above:

CC: 1. Regional Director, Central Pollution Control Board, Regional Directorate-North East, Lower Motinagar, Shillong, Meghalaya-793014.

 Member Secretary, Meghalaya State pollution Control Board, "ARDEN" Lumpyngngad, Shillong, Meghalaya-793014.

Meghalaya - 793200

NO LETTER NO. J-11011/851/2008-IA II (I), DATED 30.09.2010. DIST. EAST JAINTIA HILLS, MEGHALAYA OF M/S. GOLDSTONE CEMENTS LTD - ENVIRONMENTAL CLEARENCE VIDE MOEF CAPTIVE THERMAL POWER PLANT [2 x 20 MW (INSTALLED - 10 MW)] AT VILL MUSIANG LAMARE (OLD), P.O.: KHLIEHRIAT, ¥. =: ≣ practice issued by the CPCB in this regard should be followed. Secondary fugitive emission shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines / Code of be followed Ministry vide G.S.R. No. 826(E) dated 16th November 2009 shall The National Ambient Air Quality Standards issued by the from the date of issue of the letter. Possibilities shall be explored for the proper and full utilization of control NOx emissions. coal mill and cement mill. Low NOx burners should be provided to (ESP) to clinker cooler, bag house raw mill/kiln and bag filters to adequate air pollution Control system. Electrostatic precipitators limit of SPM shall be controlled within 50 mg/Nm3 by installing emissions from all the stacks shall be provided. After expansion, Continuous stack monitoring facilities to monitor gaseous (WHRB). A feasibility report shall be prepared and submitted to gases generated from the kiln in waste heat recovery boiler the ministry and its Regional office at Shillong within 03 months A. SPECIFIC CONDITIONS CONDITIONS

data is being transferred to CPCB & MSPCB. The Continuous Stack Monitor (Opacity Meters) is in working condition and online COMPLIANCE CEMENT PLANT [CLINKER-1.65 MTPA (INSTALLED - 0.56 MTPA)]; [CEMENT- 2.0 MTPA (INSTALLED - 0.88 MTPA)] ALONG WITH COMPLIANCE REPORT (HALF YEARLY) FROM 1st OCTOBER 2020 to 31st MARCH 2021 ON ENVIRONMENTAL STIPULATIONS FOR

-Fuel. Hence Kiln waste heat is being utilized partially in Raw Mill and partially in to keep PM below 30 mg/Nm3 in Cement Plant stacks and 50 mg/Nm3 in Captive Mill / Coal Mill & other pollution control equipments were already installed in plant •ESP (Electrostatic Precipitators) for Clinker cooler, Bag house/Bag filters for Raw Hot gases generated from kiln are required for drying out moisture in Raw Mill and Power Plant stack as per our consent guideline.

Coal Mill to meet our operational requirement. Some heat is lost in clinker cooler.

utilization of hot gases in Raw mill and Coal mill, the remaining quantum of waste Moreover, in our case the installed capacity of kiln is only 1700 TPD and after heat is not sufficient for setting up WHRB.

We have also explored the Cement plants in the near vicinity and none of them have installed Waste Heat Recovery Plant.

monitoring is being done as per standards. The same is being followed during operation of plant. Ambient air quality

All material transfer points are provided with Bag filters to control fugitive emission. Ambient air quality parameters are found to be within the limit for all the parameters. Details attached in Annexure-I

Photographs are enclosed in Annexure:2)

crusher and plant roads. Dust suppression is being done through water sprinklers installed in limestone Construction of concrete roads is under progress in the plant.

(Photographs are enclosed in Annexure:2a,2b,2c)

Full time water tanker has been deployed in the plant as shown in Annexure:2d

of plant. Regular monitoring prescribed limit is being done. Guideline / Code of practice issued by the CPCB is being followed during operation for control of secondary fugitive emission under Details attached in Annexure-I)

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|--|---|--|---|---|--|--|---|
| An effort shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision should be made accordingly.  | Effort shall be made to use low-grade lime, more fly ash and solid waste in the cement manufacturing.   | All the fly ash shall be utilized as per fly ash Notification, 1999 subsequently amended in 2003. Effort shall be made to use fly ash maximum in making Pozzolana Portland Cement (PPC). | All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices shall be recycled and reused in the process and used for cement manufacturing. Spent oil and batteries shall be sold to authorized recyclers / re-processors only. | Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater should meet the norms prescribed by the State Pollution Control Board or described under the E(P) Act whichever are more stringent. Leachate study for the effluent generated and analysis shall also be regularly carried out and report submitted to the Ministry's Regional office at Shillong, SPCB and CPCB. | Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources. | Total water requirement for cement and captive power plant shall not exceed 2,370 m <sup>3</sup> / day. All the treated wastewater shall be recycled and reused in the process and / or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'Zero' discharge should be adopted. | Effort shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials including fly ash should be transported in the closed containers only and shall not be over loaded. The company shall have separate truck parking area. Vehicular emissions should be regularly monitored. |
| We do not have significant quantum of high calorific hazardous waste except very insignificant quantity of Lubricating Oil and the same is disposed off as per defined rules in this regard. | Low grade limestone / Dolomite Stones are blended with high quality grade limestone. Fly ash generated in CPP is used in manufacturing of Pozzolana Portland Cement (PPC). We are manufacturing more of PPC over OPC. | Fly ash generated in our captive power plant is completely used in manufacturing of Pozzolana Portland Cement (PPC)  | All the dust collected through pollution control equipment is either raw material or cement dust. Those are collected and recycled in a closed loop.  | We are not generating any process effluent as the process water required for the cooling of bearing in cement plant is given treatment of cooling and sedimentation and entirely recycled.  Effluent from DM plant is treated in a neutralization pit and treated water is reused entirely for dust suppression on haul roads.  | We have constructed a reservoir of 1 lac liters capacity in the west side.  (Photograph are enclosed in Annexure:4)  | stipul<br>circuit<br>f waste   | Raw Material and end products are transported keeping in consideration that surrounding environment and agriculture land is protected. There is separate designated parking space for truck parking.  It is ensured that without valid PUC no vehicle is allowed in plant premises. Few certificates are enclosed for your reference. (Details attached in Annexure-3)                    |

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|--|--|-----------------------|----------|--|--|---|--|---|
| No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. | The project authorities must strictly adhere to the stipulations made by the Meghalaya State Pollution Control Board and the State Government. | B. GENERAL CONDITIONS | project. | (1994)<br>(2004) - Marketter (1994)  |  | All the commitments made to the public during the Public Hearing / Public consultation meeting held on 27th November 2009 shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional office at Shillong.   | All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the cement plants should be implemented. | As proposed, green belt shall be developed in at least 33% area in around the cement plant as per the CPCB guidelines to mitigate the effects of air emissions in consultation with local DFO.  |
| There will be no expansion or modifications beyond permissions already granted without prior approval of MoEF.                             | Stipulations mandated in the CTE and CTO are being adhered to.   |                       |          | Phase-I of Project has already been completed. During Phase-I project, all such facilities were ensured. Whenever next phase of project will commence in future, same shall again be adhered to. | Company has conducted CSR activities in nearby vicinity areas as health facilities, ambulance facilities, water facilities, free and subsidized cements for constructing the roads, churches, schools, community halls, cultural programmes and etc. | All of the points of public hearing have been addressed and complied.  Company has given preference to local people for employment in company.  Company has conducted social development activities in nearby vicinity areas as health facilities, ambulance facilities, water facilities, free and subsidized cements for constructing the roads, churches, schools, community halls, cultural programmes and etc. | All recommendations were considered during the design of plant and machineries and as such all the issues in this regard are complied with.            | The green belt plan to achieve 33 % area coverage is already finalized. Coverage in major area has been in place. Plantation in balance area is under progress. Plantation of Native species is being done in consultation of DFO. Recently a mass plantation of around 5000 saplings was made on 14th August 2020.  31.8% area is already under greenbelt.  Balance and required plantation shall be done in phase manner.  (Greenbelt development Drawing is enclosed in America St.) |

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| water supply and health care etc.  | protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking | The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table. | Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.   | The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime). | Industrial waste water 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 utilized for plantation purpose. | At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, SO <sub>2</sub> and NO <sub>x</sub> are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional office at Shillong and the SPCB/CPCB once in six months. | The gaseous emissions from various process units shall confirm to the load / mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The State Pollution Control Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. |
| We are providing free medicines, free ambulance services to local community. | We are sponsoring for community development programmes. We are providing the drinking water facility in nearby village.   |   | Occupational health surveillance to our workers is conducted as per factory act. However, the health care center is already available in our Plant Campus. Trained staff and Doctor are available with essential medicines for health surveillance on regular basis. | Care has been taken during project planning and ordering of equipment. Noise level is monitored and being found within the prescribed limit.  (Details are attached as per Annexure-1)   | Treated wastewater from DM plant is used entirely in dust suppression measures. Process water requires for cooling of bearing in the cement plant are cooled, treated and recycled fully.   | Monthly monitoring of ambient air quality is being carried out in four locations. Online emission monitoring system is installed in all the major stacks. Data on ambient air quality and stack emission are submitted to MOEF&CC, CPCB and MSPCB once in six months.  (Details are attached as per Annexure-1)  | Our newly commissioned unit with more sophisticated technologies is able to meet with the new standards of emission for cement industries, including load-based standards.   |

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|---|--|--|---|--|
| The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as | The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional office of MOEF, the respective Zonal office of CPCB and the SPCB. The Regional office of this Ministry at Shillong / CPCB /SPCB shall monitor the stipulated conditions. | The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF at Shillong. The respective Zonal office of CPCB and the SPCB. The criteria pollutant levels namely; PM 10, SO <sub>2</sub> , NOx (ambient levels as well as stack emissions) or critical sectoral parameters. Indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.  | A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent. | As proposed, Rs 25 Crores and Rs 1.80 Crores shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of environment & Forests as well as the state government. An implementing all the conditions stipulated herein shall be submitted to the Regional office of the Ministry at Shillong. The Funds so provided shall not be diverted for any other purpose.   |
| Being complied  | Being Complied   | The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same repriodically. It shall simultaneously be sent to the Regional Office of the MOEF at Shillong. The respective Zonal office of CPCB and the SPCB. The criteria pollutant levels namely; PM 10, SO <sub>2</sub> , NOx (ambient levels as well as stack emissions) or critical sectoral parameters. Indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the displayed at a convenient location near the main gate of the company in the public domain.  The EC and Six Monthly EC compliance reports are shown in our company website http://gscl.blacktigerso.com/ | Has been implemented. Copy was already submitted to the MOEF &CC.   | <ul> <li>Exhaustive environmental protection measures have been taken by installing following equipments apprx 25.97 Cr as capital cost.</li> <li>ESP and bag houses are installed.</li> <li>Material transfer points bag filters installed to control fugitive dust.</li> <li>Sox &amp; NOx analyzer and opacity meters have been installed to monitor the emission and data transmission to CPCB server.</li> <li>We have invested approx Rs. 3.02 Cr amount towards recurring cost for environment pollution control measures.</li> </ul> |

| XVI.  | ×   |  |
|---|---|--|
|   |   | conditions and shall also be sent to the respective Regional office of the MOEF at Shillong by e-mail. |
| Project Phase-1 has been completed complying with stipulated condition. | The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at website of the Ministry of Environment and Forests at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local news papers 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 should be forwarded to the Regional office at Shillong. |  |

|     | of the MOEF at Shillong by e-mail.   |  |
|-----|--|--|
|     | The project proponent shall inform the public that the project has   |  |
|     | of the clearance letter are available with the SPCB and may also be  |  |
|     | 2000   | Same was implemented at the time of Phase-1 Project, Phase-1 project has since   |
| XV  | http:/envfor.nic.in. This shall be advertised within seven days from   | been completed.  |
|     | 43700  |  |
|     | papers 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 should be forwarded to the Regional office at Shillong.  | HAW I  |
| _   | Project authorities shall inform the Regional Office as well as the  |  |
| XV. | Ministry, the date of financial closure and final approval of the  | Project Phase-1 has been completed complying with stipulated condition.  |
| Т   | the land development work.   |  |
|     |  |  |
| An  | nendment in Environmental Clearance conditions related sourcing of   | Amendment in Environmental Clearance conditions related sourcing of coal for the Thermal Power Plants in the State of Meghalaya in pursuant to |
| S   | c processing of the Committee Constituted by Holl big NG1 held on  | SI.  |
| NO  | CONDITIONS   | COMPLIANCE   |
|     | Local coal source from Meghalaya State shall not be used for   |  |
|     | operation of power plant unless the Coal mine in Meghalaya has a valid mining lease and approved Mine Plan under Mines and |  |
|     | 1360   | Being complied   |
|     | Coal   |  |
|     | Mine from the State of Meghalaya shall also have valid   |  |
|     | Notification, 1994: leases with more than equal to 5 ha under FIA  |  |
|     | Notification, 2006 up to 15.01.2016; all coal mining leases  |  |
|     | irrespective of lease area from 15.01.2016 onwards).   |  |
| :   | The Project Proponent shall submit the source of the coal mine, its  |  |
| =   | location, along with boundary co-ordinates of lease, quantity of   |  |
| 7   | coal transported along with the mode of transportation, copies of  |  |

| report to the Ministry and its Regional Office. | updated and submitted along with the Six Monthly EC compliance | the coal from Meghalaya State. Further, this information is to be No coal is being sourced from the state of Meghalay | Clearance to the Ministry and its Regional Office before sourcing | valid mining lease, approved mine plan and Environmental |
|---|--|---|---|--|
|   |  | No coal is being sourced from the state of Meghalaya.   |   |  |

2012, OA No. 73/2014, OA No. 13/2014, OA No. 186/2014 and OA No. 287/2017 etc. -reg. F. Order No: J-11011/851/2008-IA.II(I) Dated: 16.10.2020. Committee in the matter of threat to life arising out of Coal Mining in South Garo Hills District vs State of Meghalaya & Ors in OA No. 110(THC)/ Amendment in Environmental Clearance conditions for prevention of Acid Mine Drainage (AMD) by virtue of the recommendation of NGT

For Goldstone Cements Ltd.

Authorized Signator

## Annexure – 1

# **Environmental Monitoring Reports**

BLACKTIGER

CIN: U26940ML2007PLC008298

### AMBIENT AIR QUALITY MONITORING RESULTS October - 2020

| vousimesemmenen               | Parameters Results |                   |                   |                  |  |  |
|-------------------------------|--------------------|-------------------|-------------------|------------------|--|--|
| Stations Name                 | PM10               | PM <sub>2.5</sub> | SO <sub>2</sub>   | NO <sub>2</sub>  |  |  |
|                               | Limit<br>100 µg/m³ | Limit<br>60 μg/m³ | Limit<br>80 μg/m³ | Limit<br>80µg/m³ |  |  |
| Near CPP Water Reservoir      | 52.3               | 23.4              | 9.4               | 18.4             |  |  |
| Near Guest House Yamuna Sadan | 34.6               | 20.6              | 8.1               | 16.9             |  |  |
| Near CCR Material Yard        | 51.9               | 21.2              | 8.3               | 15.3             |  |  |
| Residential Colony            | 32.4               | 18.6              | 7.1               | 14.8             |  |  |

ND : Not Detected

### PROCESS FUGITIVE EMISSION TEST RESULTS October -2020

| Locations               | Fugitive Emission<br>Results SPM (µg/m³) | Limits (µg/m3) |  |
|-------------------------|--|----------------|--|
| Fly Ash Storage Section | 1525                                     | 5000           |  |
| Coal Storage Section    | 948                                      | 2000           |  |
| Lime Storage Section    | 1629                                     | 5000           |  |
| Cement Packing Section  | 1943                                     | 5000           |  |

Analysed By

CIN: U26940ML2007PLC008298



#### October - 2020

#### STACK EMISSION MONITORING RESULTS

(Monthly Average Values)

| S.No. | Stack Attached To | PM<br>(30 mg/Nm3) | SO2<br>(1000 mg/Nm3) | NOx<br>(600 mg/m) |
|-------|-------------------|-------------------|----------------------|-------------------|
| 1     | Raw Mill & Kiln   | 22.4              | 406.7                | 261.8             |
| 2     | Coal Mill         | 21.4              |                      |                   |
| 3     | ESP               | 23.1              | 200.00               | *****             |
| 4     | Cement Mill       | 21.0              |                      |                   |
| 5     | СРР               | PM<br>(50 mg/Nm3) | SO2<br>(600 mg/Nm3)  | NOx<br>(300 mg/m) |
|       |                   | 31.0              | 306.8                | 229.7             |

Analysed By

CIN: U26940ML2007PLC008298

### October - 2020

### NOISE LEVEL MEASUREMENT RESULTS

| S.No. | Locations                      | Day Time<br>(6:00 AM - 9:00 PM) |                      |                       | Night Time<br>(9:00 PM - 6:00 AM) |  |  |
|-------|--------------------------------|---------------------------------|----------------------|-----------------------|-----------------------------------|--|--|
|       |                                | Result(s)<br>(dB - A)           | Limit(s)<br>(dB - A) | Result(s)<br>(dB - A) | Limit(s)<br>(dB - A)              |  |  |
| 1     | Near Coal Mill                 | 71                              | 75                   | 61                    | 70                                |  |  |
| 2     | Near CPP Area                  | 67                              | 75                   | 59                    | 70                                |  |  |
| 3     | Near Limestone Storage Yard    | 64                              | 75                   | 52                    | 70                                |  |  |
| 4     | Near Coal Storage Yard         | 63                              | 75                   | 51                    | 70                                |  |  |
| 5     | Near Raw Mill                  | 71                              | 75                   | 64                    | 70                                |  |  |
| 6     | Near Cement Mill               | 70                              | 75                   | 66                    | 70                                |  |  |
| 7     | Near Cement Plant CCR Building | 65                              | 75                   | 62                    | 70                                |  |  |
| 8     | Near CPP TG Building           | 70                              | 75                   | 65                    | 70                                |  |  |

Analysed By





HILA NA PAOGE Dated: 14.12.2020

No: GSCL/EHS/ 2020-21/22

To,
The Member Secretary,
Meghalaya State Pollution Control Board,
Arden, Lumpyngngad,
Shillong-793014.

Sub: Submission of Monthly Environmental Monitoring Reports - NOVEMBER -2020

Sir,

With reference to the subject as cited above, we are herewith submitting Monthly Environmental Monitoring Reports for the month of NOVEMBER - 2020.

The test reports are enclosed.

We request you to acknowledge the receipt.

Thanking You,

Yours faithfully

For Goldstone Cements Ltd.

Encl: Test Reports

Goldstone Cements Limited

smooth other



Digboi Stores Building, New Market Digboi, Assam - 786 171 Ph: 03751-264414, 9435008657, 8876028672 E-mail: envirocon@rediffmail.com Website: www.envirocon.net.in



Order No. : SOGM/00426/19-20

Date

: 09/03/2020

Report No.: ENV/GSCL/SE/NOV/20-21/01

Date

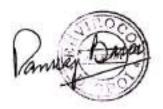
:09/12/2020

### **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old) P. O.:- Khliehriat Meghalaya- 793200

### STACK EMISSION TEST RESULTS

| 01     | Stack Emission Test Ref. No.             | GSCL                | GSCL/SE/NOV/20-21/01 |          |  |
|--------|--|---------------------|----------------------|----------|--|
| 02     | Date of Sampling                         |                     | 27.11.2020           |          |  |
| 03     | Material of Construction                 |                     | м. s.                |          |  |
| 04     | Stack Attached To                        |                     | Raw Mill             |          |  |
| 05     | Flue Gas Temperature (°C)                |                     | 178                  |          |  |
| 06     | Exit Velocity of Gas (m/sec)             |                     | 13.8                 |          |  |
| 07     | Type of Fuel Used                        | .7                  | Kiln Coal            |          |  |
| 08     | Analysis                                 | Results of Flue Gas |                      |          |  |
| SL No. | Parameter(s)                             | Result(s)           | Unit(s)              | Limit(s) |  |
| K/     | PM- Particulate Matter                   | 13.8                | mg/Nm³               | 30       |  |
| 16.    | Sulphur Dioxide (as SO <sub>2</sub> )    | 406.7               | mg/Nm³               | 1000     |  |
| 10.    | Oxides of Nitrogen (as NO <sub>x</sub> ) | 234.8               | mg/Nm³               | 600      |  |



Checked By: Mr. Pankaj Barol, ENVIROCON

NOTE:

1. Results reported are valid at the time of and under the prevailing conditions of measurement.

2. Results refer only to the particular parameters tasted.

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Digboi Stores Building, New Market Digboi, Assam - 786 171 Ph: 03751-264414, 9438008657, 8876028672 E-mail: envirocon@rediffmail.com Website: www.envirocon.net.in



Report No.: ENV/GSCL/SE/NOV/20-21/02

Date

: 09/12/2020

Order No. : SOGM/00426/19-20

Date

109/03/2020

#### **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old) P. O.:- Khliehriat

Meghalaya- 793200

### STACK EMISSION TEST RESULTS

| 01     | Stack Emission Test Ref. No.             | GSCL                  | GSCL/SE/NOV/20-21/02 |          |  |  |  |
|--------|--|-----------------------|----------------------|----------|--|--|--|
| 02     | Date of Sampling                         |                       | 27.11.2020           |          |  |  |  |
| 03     | Material of Construction                 | M. S.                 |                      |          |  |  |  |
| 04     | Stack Attached To                        | Coal Mill             |                      |          |  |  |  |
| 05     | Flue Gas Temperature (°C)                | 56                    |                      |          |  |  |  |
| 06     | Exit Velocity of Gas (m/sec)             |                       | 11.8                 |          |  |  |  |
| 07     | Type of Fuel Used                        |                       | NA*                  |          |  |  |  |
| 08     | Analysi                                  | s Results of Flue Gas |                      |          |  |  |  |
| SL No. | Parameter(s)                             | Result(s)             | Unit(s)              | Limit(s) |  |  |  |
| i.     | PM- Particulate Matter                   | 17.1                  | mg/Nm³               | 30       |  |  |  |
| ii.    | Sulphur Dioxide (as \$02)                | 478.2                 | mg/Nm <sup>3</sup>   | 1000     |  |  |  |
| 111.   | Oxides of Nitrogen (as NO <sub>x</sub> ) | 263.5                 | mg/Nm³               | 600      |  |  |  |

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/SE/NOV/20-21/03

Date

:09/12/2020

Order No. : SOGM/00426/19-20

Date

:09/03/2020

### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old)

P.O.- Khliehriat Meghalaya-793200

### STACK EMISSION TEST RESULTS

| 01     | Stack Emission Test Ref. No. | GSCL/                 | GSCL/SE/NOV/20-21/03 |          |  |  |  |
|--------|------------------------------|-----------------------|----------------------|----------|--|--|--|
| 02     | Date of Sampling             |                       | 27.11.2020           |          |  |  |  |
| 03     | Material of Construction     | M. S.                 |                      |          |  |  |  |
| 04     | Stack Attached To            | Cooler E. S. P.       |                      |          |  |  |  |
| 05     | Flue Gas Temperature (°C)    |                       | 217                  |          |  |  |  |
| 06     | Exit Velocity of Gas (m/sec) |                       | 17.1                 |          |  |  |  |
| 07     | Type of Puel Used            |                       | - NA*                |          |  |  |  |
| 08     | Analysi                      | s Results of Flue Gas |                      |          |  |  |  |
| SL No. | Parameter(s)                 | Result(s)             | Unit(s)              | Limit(s) |  |  |  |
| 11/    | PM- Particulate Matter       | 12.5                  | mg/Nm³               | 30       |  |  |  |

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Results refer only to the particular parameters tested.

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PCB, Assam & MSPCB, Meghalaya

Digboi Stores Building, New Market Digboi, Assam - 786 171 Ph: 03751-264414, 9435008657, 8876028672 E-mail: envirocon@rediffmail.com Website: www.envirocon.net.in



Report No.: ENV/GSCL/SE/NOV/20-21/04

Date

:09/12/2020

Order No. : SOGM/00426/19-20

Date

:09/03/2020

#### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old) P. O .:- Khliehriat

Meghalaya-793200

### STACK EMISSION TEST RESULTS

| 01      | Stack Emission Test Ref. No.             | GSCL/SE/NOV/20-21/04      |                    |          |  |  |
|---------|--|---------------------------|--------------------|----------|--|--|
| 02      | Date of Sampling                         |                           | 27.11.2020         |          |  |  |
| 03      | Material of Construction                 | Refractory Brick          |                    |          |  |  |
| 04      | Stack Attached To                        | Captive Power Plant (CPP) |                    |          |  |  |
| 05      | Flue Gas Temperature (°C)                | 18                        |                    |          |  |  |
| 06      | Exit Velocity of Gas (m/sec)             | 8.3                       |                    |          |  |  |
| 07      | Type of Fuel Used                        | Coal                      |                    |          |  |  |
| 08      | Analysis                                 | s Results of Flue Gas     |                    |          |  |  |
| SI. No. | Parameter(s)                             | Result(s)                 | Unit(s)            | Limit(s) |  |  |
| i,      | PM- Particulate Matter                   | 28.9                      | mg/Nm³             | 50       |  |  |
| u.      | Sulphur Dioxide (as SO <sub>2</sub> )    | 396.2                     | mg/Nm³             | 600      |  |  |
| 114.    | Oxides of Nitrogen (as NO <sub>4</sub> ) | 162.4                     | mg/Nm <sup>3</sup> | 300      |  |  |



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/SE/NOV/20-21/05

Date

:09/12/2020

Order No. : SOGM/00426/19-20

Date

: 09/03/2020

#### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old) P. O.:- Khliehriat Meghalava- 793200

#### STACK EMISSION TEST RESULTS

| i.      | PM- Particulate Matter       | 17.1                  | Unit(s)    | Limit(s |  |  |  |
|---------|------------------------------|-----------------------|------------|---------|--|--|--|
| SI. No. | Parameter(s)                 | Result(s)             | United     | *1-56   |  |  |  |
| 08      | Analysi                      | s Results of Flue Gas |            |         |  |  |  |
| 07      | Type of Fuel Used            |                       | NA*        |         |  |  |  |
| 06      | Exit Velocity of Gas (m/sec) | 12.2                  |            |         |  |  |  |
| 0.5     | Flue Gas Temperature (°C)    | 58                    |            |         |  |  |  |
| 04      | Stack Attached To            | Cement Mill           |            |         |  |  |  |
| 03      | Material of Construction     | M. S.                 |            |         |  |  |  |
| 02      | Date of Sampling             |                       | 28.11.2020 |         |  |  |  |
| 01      | Stack Emission Test Ref. No. | GSCL/SE/NOV/20-21/05  |            |         |  |  |  |

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

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CIN: U26940ML2007PLC008298

### STACK EMISSION MONITORING REPORT

#### NOVEMBER-2020

| Name of Stack & Stack No.  |          | :        | CPP (5)    |                 |
|----------------------------|----------|----------|------------|-----------------|
| Date of Monitoring         |          | 2        | 10.11.2020 |                 |
| Stack Velocity of Flue gas |          | :        | 9.3 m/s    |                 |
| Stack Temperature          |          | <u>:</u> | 359 °K     |                 |
| 'onitoring Period          |          | <u>:</u> | 30 m       |                 |
| Flow Rate                  |          | :        | 26.7 LPM   |                 |
| Parameters                 | Unit     |          | Results    | Standard Limits |
| Particulate Matter         | (mg/Nm³) |          | 27.4       | 50              |
| Sulphur Dioxide (SO2)      | (mg/Nm³) |          | 377.4      | 600             |
| Nitrogen Oxide (NOX)       | (mg/Nm³) |          | 174.2      | 300             |

Analysed By



CIN: U26940ML2007PLC008298

#### STCK EMISSION MONITORING REPORT

### NOVEMBER- 2020

| Name of Stack & Stack No.  |          | : | Cement   | Mill (4)        |
|----------------------------|----------|---|----------|-----------------|
| Date of Monitoring         |          | : | 09.11.20 | 20              |
| Stack Velocity of Flue gas |          | 1 | 8.5 m/s  |                 |
| Stack Temperature          |          | 1 | 336 °K   |                 |
| Monitoring Period          |          | i | 31 m     |                 |
| Flow Rate                  |          | 1 | 28 LPM   |                 |
| Parameters                 | Unit     |   | Results  | Standard Limits |
| Particulate Matter         | (mg/Nm³) | 1 | 18.6     | 30              |

Analysed By



CIN: U26940ML2007PLC008298

### AMBIENT AIR QUALITY MONITORING RESULTS

#### NOVEMBER - 2020

| 2-0209-240-277-0-0209-2-1-1-1-1    | Date of    | Parameters Results |                    |                   |                  |  |
|------------------------------------|------------|--------------------|--------------------|-------------------|------------------|--|
| Stations Name                      | Monitoring | PM <sub>2.5</sub>  | PMio               | SO <sub>2</sub>   | NO <sub>2</sub>  |  |
|                                    |            | Limit<br>60 µg/m³  | Limit<br>100 µg/m³ | Limit<br>80 µg/m³ | Limit<br>80µg/m³ |  |
| Near CPP Water Reservoir           | 02.11.2020 | 20.7               | 49.2               | 9.8               | 10.3             |  |
| Near CCR Material Yard             | 03.11.2020 | 25.3               | 54.8               | 7.5               | 15.9             |  |
| Near Guest House<br>(Yamuna Sadan) | 04.11.2020 | 16.4               | 38.6               | ND                | ND               |  |
| Residential Colony                 | 05.11.2020 | 17.9               | 34.0               | ND                | ND               |  |

ND: Not Detected

Analysed By



CIN: U26940ML2007PLC008298

### AMBIENT AIR QUALITY MONITORING RESULTS

### November - 2020

|                                    | Date of    | Parameters Results |  |                   |                  |  |
|------------------------------------|------------|--------------------|--|-------------------|------------------|--|
| Stations Name                      | Monitoring | PM <sub>2.5</sub>  | PM <sub>10</sub><br>Limit<br>100 µg/m³ | 502               | NOz              |  |
|                                    |            | Limit<br>60 µg/m³  |  | Limit<br>80 μg/m³ | Limit<br>80µg/m³ |  |
| Near CPP Water Reservoir           | 09.11.2020 | 21.9               | 51.6                                   | 8.6               | 12.8             |  |
| Near CCR Material Yard             | 10.11.2020 | 28.7               | 55.8                                   | 4.3               | 13.5             |  |
| Near Guest House<br>(Yamuna Sadan) | 11.11.2020 | 19.4               | 41.3                                   | ND                | ND               |  |
| Residential Colony                 | 12.11.2020 | 18.6               | 29.5                                   | ND                | ND               |  |

ND: Not Detected

Analysed By

Weaffed By



CIN: U26940ML2007PLC008298

### AMBIENT AIR QUALITY MONITORING RESULTS

### November - 2020

|                                    | Date of            |                   | Parameter          | s Results         |                  |
|------------------------------------|--------------------|-------------------|--------------------|-------------------|------------------|
| Stations Name                      | Date of Monitoring | PM <sub>2.5</sub> | PM10               | SOz               | NO <sub>2</sub>  |
|                                    | Monitoring         | Limit<br>60 µg/m³ | Limit<br>100 µg/m³ | Limit<br>80 µg/m³ | Limit<br>80µg/m³ |
| Near CPP Water Reservoir           | 16.11.2020         | 19.7              | 50.5               | 6.3               | 9.4              |
| Near CCR Material Yard             | 18.11.2020         | 23.8              | 52.9               | 5.8               | 7.3              |
| Near Guest House<br>(Yamuna Sadan) | 19.11.2020         | 16.1              | 38.2               | ND                | ND               |
| Residential Colony                 | 20.11.2020         | 14.6              | 28.3               | ND                | ND               |

ND: Not Detected

Analysed By



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Website: www.envirocon.net.in

Report No.: ENV/GSCL/AAQ/NOV/20-21/01

Date

: 09/12/2020

Date

Order No. : SOGM/00426/19-20 : 09/03/2020

GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old)

P. O .: Khliehriat Meghalaya-793200

#### AMBIENT AIR QUALITY TEST RESULTS

| SL.<br>No. | Location(s)                        | Date of    | PM 2.5<br>(μg/m³)   | PM 10<br>(µg/m³)     | SO <sub>2</sub><br>(μg/m <sup>3</sup> ) | NO <sub>2</sub><br>(μg/m²) |
|------------|------------------------------------|------------|---------------------|----------------------|---|----------------------------|
|            | Limit(s)                           | Sampling   | 60<br>(24 Hrs. Av.) | 100<br>(24 Hrs. Av.) | 90<br>(24 Hrs. Av.)                     | 80<br>(24 Hrs. Av.)        |
| 1.         | Near CPP (Water<br>Reservoir)      | 27,11,2020 | 22.7                | 53.9                 | 4.8                                     | 11.6                       |
| 2.         | Near CCR (Material Yard)           | 27.11.2020 | 27.6                | 57.2                 | 5.3                                     | 14.7                       |
| 3.         | Near Guest House<br>(Yamuna Sadan) | 28.11.2020 | 18.6                | 39.6                 | ND                                      | ND                         |
| 4.         | Residential Colony                 | 28.11.2020 | 16.2                | 31.4                 | ND                                      | ND                         |

ND: Not Detected

Analysis Protocol: IS 5182

Sampled & Analysed by: ENVIROCON, Digboi



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/NLM/NOV/20-21/01

:09/12/2020

Order No. : 50GM/00426/19-20

Date : 09/03/2020

#### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old) P. O.:- Khliehriat Meghalaya- 793200

#### NOISE LEVEL MEASUREMENT RESULTS

Measurement Date: 27.11.2020

|        | 24000 AND 104217            | Day                   | time                 | Night Time            |                      |
|--------|-----------------------------|-----------------------|----------------------|-----------------------|----------------------|
| SL No. | Location(s)                 | Result(s)<br>(dB - A) | Limit(s)<br>(dB - A) | Result(s)<br>(dB · A) | Limit(s)<br>(dB - A) |
| 1      | Near Coal Mill              | 69                    | 75                   | 64                    | 70                   |
| 2      | Near CPP Area               | 64                    | 75                   | 59                    | 70                   |
| 3      | Near Limestone Storage Yard | 61                    | 75                   | 54                    | 70                   |
| 4      | Near Coal Storage Yard      | 63                    | 75                   | 51                    | 70                   |
| 5      | Near Raw Mill               | 72                    | : 25                 | 66                    | 70                   |
| 6      | Near Cement Mill            | 72                    | 75                   | 67                    | 70                   |
| 7      | HR & Mine's Office          | 59                    | 75                   | 51                    | 70                   |
| 8      | CPP TG Building             | 67                    | 75                   | 62                    | 70                   |



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/FE/NOV/20-21/01

Date

:09/12/2020

Order No. : SOGM/00426/19-20

Date

:09/03/2020

#### **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old)

P. O .: Khliehriat Meghalaya-793200

#### PROCESS FUGITIVE EMISSION TEST RESULTS

| Date       | Locations                   | Fugitive Emission Results for SPM<br>(µg/m³) | Limits<br>(µg/m³) |  |
|------------|-----------------------------|--|-------------------|--|
| 27.11.2020 | Ply-ash Storage Section     | 833  | 5000              |  |
| 27.11.2020 | 20 Coal Storage Section 456 |  | 2000              |  |
| 28.11.2020 | Limestone Storage Section   | 1842   | 5000              |  |
| 28.11.2020 | Cement Packing Section      | 2103   | 5000              |  |

Sampled & Analysed by: ENVIROCON, Digboi



Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE

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Recognised By PCB, Assam & MSPCB, Meghalaya

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Order No. : SOGM/00426/19-20 Date : 09/03/2020

Report No. : ENV/GSCL/DW/NOV/20-21/01

ate : 09/12/2020

**GOLDSTONE CEMENTS LIMITED** 

Village: Musiang Lamare (Old) P. O.:- Khlichriat Meghalaya: 793200

#### DRINKING WATER ANALYSIS RESULTS

| Sample Type : Drinking Water                 | Sample Source | : Canteen    |
|--|---------------|--------------|
| Collected By - Jointly by Environme & Client | Collected On  | : 28.11.2020 |

| SI, No. | Parameters  | Results    | Destrable Limit<br>(IS: 10500) |
|---------|---|------------|--------------------------------|
| 1.      | Colour , Hazen Units, Max   | <1         | 5                              |
| 2       | Odour   | Odourless  | Agreeable                      |
| 3.      | Taste   | Acceptable | Agrecable                      |
| 4.      | Turbidity, NTU, Max   | 0.23       | 1.0                            |
| 5.      | рH  | 6.91       | 6.5 = 8.5                      |
| 6,      | Total Dissolved Solids, mg/L Max                                    | 92         | 500                            |
| 7.      | Aluminium (as Al), mg/l, Max  | ND         | 0.03                           |
| 8.      | Boron (as B), mg/l, Max   | ND         | 0.5                            |
| 9.      | Calcium (as Ca), mg/l, Max  | 29         | 75                             |
| 10.     | Chloride (as Cl), mg/l, Max   | . 8.3      | 250                            |
| 11.     | Copper (as Cu), mg/l, Max   | ND         | 0.05                           |
| 12.     | Fluorides (as F), mg/l, Max   | ND         | 1.0                            |
| 13.     | Free Residual Chlorine, mg/l, Min                                   | ND         | 0.2                            |
| 14.     | Iron (as Fe), mg/l, Max   | <0.01      | 0.3                            |
| 15.     | Magnesium (as Mg), mg/l, Max-                                       | 2.6        | 30                             |
| 16.     | Manganese (as Mn), mg/l, Max  | ND         | 0.1                            |
| 17.     | Zinc (as Zn), mg/l, Max   | , ND       | 5.0                            |
| 18.     | Nitrate (as NO <sub>2</sub> ), mg/L Max                             | <0.01      | 45                             |
| 19.     | Phenolic Compounds (as C <sub>4</sub> H <sub>5</sub> OH), mg/l, Max | ND         | 0.001                          |
| 20.     | Sulfate (as SO <sub>4</sub> ), mg/L Max                             | 41         | 200                            |
| 21.     | Total Alkalinity(as CsCO <sub>2</sub> ) , mg/l, Max                 | 72         | 200                            |
| 22.     | Total Hardness, (as CaCO <sub>3</sub> ), mg/l, Max                  | 16         | 2.00                           |
| 23.     | Cadmium (as Cd), mg/l, Max  | ND         | 0.003                          |
| 24.     | Cyanide (as CN), mg/l, Max  | ND         | 0.05                           |
| 25.     | Lead (as Ph), mg/L Max  | ND         | 0.01                           |
| 26.     | Mercury (as Hg), mg/L Max   | ND         | 0.001                          |
| 27.     | Scienium (as Se), mg/l, Max   | ND         | 0,01                           |
| 29.     | Total Arsenic (as As), mg/l, Max                                    | ND         | 0.01                           |
| 29.     | Total Chromium, (as Cr), mg/l, Max                                  | ND         | 0.05                           |
| 30.     | Anionic Detergents (as MBAS), mg/l                                  | ND         | 0.2                            |
| 31.     | Total Coliform, MPN/100 ml  | NIL        | 10 Max                         |
| 32.     | Faecal Coliforms/ 300 ml  | NIL        | Absent                         |
| 33.     | E. Colt / 100 ml  | NIL        | Absent                         |

Analysis Protocol: IS 3025/

ND: Not Detected

Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/ETP/NOV/20-21/01

: 09/12/2020 Date

Order No. : SOGM/00426/19-20

: 09/03/2020 Date

#### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old) P. O .:- Khliehriat Meghalaya- 793200

### ETP WATER ANALYSIS RESULTS

Sample Type : Treated ETP Water

Sample Source : ETP Outlet

Collected By: Jointly by Envirocon & Client

Collected On: 28.11.2020

| SL No. | Parameter(s)                                  | Unit(s) | Result(s) | Destrable Limits<br>(IS: 2490)                                   |
|--------|---|---------|-----------|--|
| 01     | pH  | -       | 7.21      | 5.5 - 9.0  |
| 02     | Temperature                                   | *c      | 22.1      | shall not exceed 5°C<br>above the receiving<br>water temperature |
| 03     | Total Suspended Solids                        | mg/l    | 13        | 100  |
| 04     | Biochemical Oxygen Demand<br>(3 Days @27*C)   | mg/l    | 21        | 30   |
| 05     | Chemical Oxygen Demand                        | mg/l    | 94        | 250  |
| 06     | Oil & Grease                                  | mg/l    | NI        | 10   |
| 07     | Total Residual Chlorine                       | mg/1    | <0.01     | 1.0  |
| 08     | Ammonical Nitrogen (as N)                     | mg/l    | 2.8       | 50   |
| 09     | Total Kjeldahl Nitrogen (as NH <sub>3</sub> ) | mg/1    | 8.3       | 100  |
| 10     | Free Ammonia (as NH <sub>2</sub> )            | mg/i    | <0.01     | 5.0  |

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, ENVIROCON

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HILA NA PAOGE Dated: 15.01.2021

No: GSCL/EHS/ 2020-21/23

To,
The Member Secretary,
Meghalaya State Pollution Control Board,
Arden, Lumpyngngad,
Shillong-793014.

Sub: Submission of Monthly Environmental Monitoring Reports - DECEMBER -2020

Sir.

With reference to the subject as cited above, we are herewith submitting Monthly Environmental Monitoring Reports for the month of DECEMBER - 2020.

The test reports are enclosed.

We request you to acknowledge the receipt.

Thanking You,

Yours faithfully For Goldstone Cements Ltd.

Encl: Test Reports

Authorised Signat

12/21

BLACKTIGER

CIN: U26940ML2007PLC008298

### AMBIENT AIR QUALITY MONITORING RESULTS

### December - 2020

|                                    | Date of    | Parameters Results |                    |                   |                  |  |  |
|------------------------------------|------------|--------------------|--------------------|-------------------|------------------|--|--|
| Stations Name                      | Monitoring | PM <sub>2.5</sub>  | PM <sub>10</sub>   | SO <sub>2</sub>   | NO <sub>2</sub>  |  |  |
|                                    |            | Limit<br>60 µg/m³  | Limit<br>100 µg/m³ | Limit<br>80 μg/m³ | Limit<br>80µg/m³ |  |  |
| Near CPP Water Reservoir           | 01.12.2020 | 19.6               | 51.8               | 8.4               | 7.6              |  |  |
| Near CCR Material Yard             | 02.12.2020 | 24.8               | 55.4               | 4.8               | 6.2              |  |  |
| Near Guest House<br>(Yamuna Sadan) | 03.12.2020 | 14.2               | 35.3               | ND                | ND               |  |  |
| Residential Colony                 | 04.12.2020 | 18.5               | 36.7               | ND                | ND               |  |  |

ND: Not Detected

Analysed By

Verified 67

CIN: U25940ML2007PLC008298



### AMBIENT AIR QUALITY MONITORING RESULTS

### December - 2020

|                                    |            | Parameters Results |                    |                   |                  |  |  |
|------------------------------------|------------|--------------------|--------------------|-------------------|------------------|--|--|
| Stations Name                      | Date of    | PM <sub>2.5</sub>  | PM10               | 502               | NO <sub>2</sub>  |  |  |
|                                    | Monitoring | Limit<br>60 µg/m³  | Limit<br>100 µg/m³ | Limit<br>80 μg/m³ | Limit<br>80µg/m³ |  |  |
| Near CPP Water Reservoir           | 10.12.2020 | 20.3               | 52.2               | 6.8               | 8.6              |  |  |
| Near CCR Material Yard             | 11.12.2020 | 29.5               | 54.7               | 5.1               | 11.2             |  |  |
| Near Guest House                   | 12.12.2020 | 18.9               | 40.4               | ND                | ND               |  |  |
| (Yamuna Sadan)  Residential Colony | 14.12.2020 | 18.1               | 29.8               | ND                | ND               |  |  |

ND: Not Detected

Analysed By



### Recognised By PCB, Assam & MSPCB, Meghalaya

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Order No. : SOGM/00426/19-20

Date

19/03/2020

Report No. : ENV/GSCL/AAQ/DEC/20-21/01

Date

: 05/01/2021

**GOLDSTONE CEMENTS LIMITED** 

Village: Mustang Lamare (Old); PO: Khliehriat

Meghalava- 793200

#### AMBIENT AIR QUALITY TEST RESULTS

| LOCATIONS                          | Date of<br>Sampling | PM 2.5<br>(µg/m²)          | PM 10<br>(µg/m³)            | 50 <sub>7</sub><br>(µg/m³) | NO <sub>2</sub><br>(pg/m <sup>2</sup> ) | NH <sub>3</sub><br>(µg/m³)  | CO<br>(mg/m³)             | Ο <sub>1</sub><br>(μg/m³) | B(a)P<br>(ng/m²)           | CaHa<br>(pg/m²)            | Ni<br>(ng/m²)             | As<br>(ng/m²)              | Pb (µg/m²)       |
|------------------------------------|---------------------|----------------------------|-----------------------------|----------------------------|---|-----------------------------|---------------------------|---------------------------|----------------------------|----------------------------|---------------------------|----------------------------|------------------|
| LIMITS -                           | -                   | 60<br>(24 hrs.<br>Average) | 100<br>(24 hrs.<br>Average) | 80<br>(24 hrs.<br>Average) | 80<br>(24 hrs.<br>Average)              | 400<br>(24 hrs.<br>Aygrage) | 4.0<br>(1 hr.<br>Average) | 180<br>(1 hr.<br>Average) | 1.0<br>(Annual<br>Average) | 5.0<br>(Aznual<br>Average) | 20<br>(Annual<br>Average) | 6.0<br>(Annual<br>Average) | 1.0<br>(24 lurs. |
| Near CPP (Water<br>Reservoir)      | 21.12.2020          | 25,6                       | 44.5                        | 3.8                        | 12.7                                    | 15.3                        | ND                        | 4.2                       | ND                         | ND                         | ND                        | ND ND                      | Average)         |
| Near CCR (Material<br>Yard)        | 21.12.2020          | 27,2                       | 47.3                        | 4.4                        | 13,4                                    | 14.0                        | ND                        | 4.5                       | ND                         | ND ND                      | ND                        | ND                         | 3000             |
| Near Guest House<br>(Yamuna Sadan) | 22.12.2020          | 19.5                       | 34.6                        | ND                         | ND                                      | ND                          | ND                        | ND                        | ND                         | ND                         | ND ND                     | ND ND                      | ND               |
| Residential Colony                 | 23.12.2020          | 17.2                       | 35.7                        | ND                         | ND                                      | ND                          | ND                        | ND                        | ND                         | ND                         | ND                        | ND                         | ND               |

Analysis Protocol: 15 5182 ND: Not Detected



Checked By: Mr. Pankaj Barol, ENVIROCON

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CIN: U26940ML2007PLC008298



### AMBIENT AIR QUALITY MONITORING RESULTS

#### December - 2020

| Stations Name                      | Date of    | Parameters Results |                    |                   |                  |  |
|------------------------------------|------------|--------------------|--------------------|-------------------|------------------|--|
|                                    | Monitoring | PM <sub>2.5</sub>  | PM <sub>10</sub>   | SO2               | NO <sub>2</sub>  |  |
|                                    |            | Limit<br>60 μg/m³  | Limit<br>100 µg/m³ | Limit<br>80 µg/m³ | Limit<br>80µg/m³ |  |
| Near CPP Water Reservoir           | 28.12.2020 | 20.8               | 51.6               | 7.2               | 8.6              |  |
| Near CCR Material Yard             | 29.12.2020 | 24.5               | 53.8               | 5.8               | 5.4              |  |
| Near Guest House<br>(Yamuna Sadan) | 30.12.2020 | 17.2               | 38.7               | ND                | ND               |  |
| Residential Colony                 | 31.12.2020 | 15.1               | 27.9               | ND                | ND               |  |

ND: Not Detected

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CIN: U26940ML2007PL0008298



### STACK EMISSION MONITORING REPORT

Name of Stack & Stack No. : Raw Mill & Kiln (1)

Date of Monitoring : 07.12.2020

Stack Velocity of Flue gas : 17.46 m/s

Stack Temperature : 452 °K

Monitoring Period : 29 m

Class Pate

| Parameters           | Results | Standard Limits | Unit          |  |
|----------------------|---------|-----------------|---------------|--|
| - Parameters         |         | 30              | (mg/Nm³)      |  |
| Particulate Matter   | 18.3    | 30              |               |  |
| Sulphur Dioxide(SO2) | 402.1   | 1000            | (mg/Nm³)      |  |
| Sulphur Dioxide(302) |         |                 | (mg/Nm³)      |  |
| Nitrogen Oxide (NOX) | 254.0   | 600             | (IIIB) Mili ) |  |

Analysed By

yeriffed By



Digboi Stores Building, New Market
Digboi, Assam – 786 171
Ph: 03781-264414, 9435006657, 8876028672
E-mail: envirocon@rediffmail.com
Website: www.envirocon.net.in



Report No.: ENV/GSCL/SE/DEC/20-21/01

Date : 05/01/2021

Order No. : SOGM/00426/19-20

Date : 19/03/2020

#### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old) P. O.:- Khliehriat Meghalava- 793200

#### STACK EMISSION TEST RESULTS

| III.   | Oxides of Nitrogen (as NO <sub>4</sub> ) | 302.8                 | mg/Nm³  | 1000     |  |  |
|--------|--|-----------------------|---------|----------|--|--|
| ii.    | Sulphur Dioxide (as SO <sub>2</sub> )    | 536.7                 |         |          |  |  |
| L      | PM- Particulate Matter                   | 22.9                  | mg/Nm³  | 30       |  |  |
| SL No. | Parameter(s)                             | Result(s)             | Unit(s) | Limit(s) |  |  |
| 08     | Analysi                                  | s Results of Flue Gas |         |          |  |  |
| 07     | Type of Fuel Used                        | Kiln Coal             |         |          |  |  |
| 06     | Exit Velocity of Gas (m/sec)             | 12.4                  |         |          |  |  |
| 05     | Flue Gas Temperature (*C)                | 184                   |         |          |  |  |
| 04     | Stack Attached To                        | Raw Mill              |         |          |  |  |
| 03     | Material of Construction                 | M. S.                 |         |          |  |  |
| 02     | Date of Sampling                         | 21.12.2020            |         |          |  |  |
| 01     | Stack Emission Test Ref. No.             | GSCL/SE/DEC/20-21/01  |         |          |  |  |



Checked By: Mr. Pankaj Baroi, ENVIROCON

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ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals & Chemical Project Engineers. EIA & Disaster Management Study

Page 1 of 3

#### TEST REPORT STACE GAS

| 1 STACK CONNECT 2 MATERIAL OF CO. 3 SHAPE OF THE S 4 HEIGHT OF THE a) From Ground b) From Roof Le 5 DIAMETER OF T a) Top (M) b) Bottom (M) c) Sampling Pole  | DISTRUCTION : ME<br>NICT : CR<br>STACK :<br>Level (M) : 40<br>Vel (M) : —<br>HE STACK : | S LIMITED<br>w Mid Kim<br>S<br>cular | Report Date  Date of Sampling  Sample Received Date  Sample Received Date  Sample Id No.  Test Start Date  T | Cool & flow Mile<br>7 TPH<br>-<br>-<br>1700 TPO<br>1700 TPO |             |
|--|---|--------------------------------------|--|---|-------------|
| a) From Ground<br>b) From Lower<br>7 WHETHER STAG  | Level (M) : 26<br>Disturbing Zone (M) :   | 75.                                  | b) RUNAMA  | Lug Filter  |             |
| D: RESULT OF SAMP  | LING  |                                      | -  |   | Saudt .     |
| SI.  | Parameter   | Unik                                 | Method of Test (Reference  |   | 1 184       |
| No. 1 Temperature o  | f emission  | degC                                 | 5:11255 (Part 1):1965 (RA2014) & (I  | art 3/-2008   | : 749       |
| The second secon | asure ,   | mestig                               | 5-11255 (Part 1):1965 (AA2014) & (   | Part 30:3008  | : 12.4      |
| 1  | Flow  | m/sec                                | 5:11250 (Part 1):1343 (Printed of the Control  |   | : 223804.03 |
| 3. Velocity of Gas   | Quantity of Sas Flow Nm / M   |                                      | B: 11255 (First 2) 2345 (February)   |   | : 16.8      |
| 5 Concentration  | Consequences of Particulate Matter mg/mm  |                                      | B:11255 (Part 1) 1565 (PAZOTA) - (PAZOTA)  |   | 1-          |
| c Continuiste Ma   | Particulate Matter Hormalised to 12% CO <sub>3</sub> mg/fem                             |                                      | B:11255 (Part 1):1565 (PARTIE) (D. 2   | 014)  | 537         |
| 6 Particulate Ma   |   |                                      | 5:11255 (Part 2):1985 (RA 2014)  |   |             |
| 7 Concentration  | of Dubles of Mitrogen   | mg/Nm                                | APHA (AWARANISIS) (3" ERITOR) N  | ethyd-114   | 1 344       |
|  | of Occasion   | × 4/4                                | APRIX (AIV AND YSIS) [3 ERITOR) N  | uthod, 134  | 1:48        |
| 9 Concentration  | of Carbon Dioxide   | * 15 v/v                             | APHA (Air Analysis) (3" Edition) M<br>APHA (Air Analysis) (3" Edition) M   | albert 19   | : 40.2      |
|  | of Carbon Monoxide *  | K w/v                                | APHA (Air Analysid) (3 Cotton) N   | COLOR DA  |             |

The results relate only to the parameters tested.

Tanmoy Chakrabarty Quality Manager

LABORATORY FOR ANALYSIS OF AIR, WATER, SFFLUENT, SOIL, SLUDGE, SOLIDWASTE, COAL, ORE. ETC.

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# POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals & Chemical Project Engineers, EIA & Disaster Management Study

Page: 1 of 1

#### TEST REPORT STACK GAS

| usti       | mer Name                  | : M/s. Envirocon,           | No combination of | Report No.   | : 6/20(12)/28 |           |
|------------|---------------------------|-----------------------------|-------------------|--|---------------|-----------|
| de         | ***                       | : Digboi Stores Building, I | New Market,       | Report Date  | : 12.01.2021  |           |
|            |                           | Digbol - 786171, Assam      |                   | Date of Sampling   | : 24.12.2020  |           |
|            | ype of Sample : Stack Gas |                             |                   | Sample Received Date   | : 26,12,2020  |           |
| No.        |                           |                             |                   | Sample Id No.  | : 6/20(12)/28 |           |
|            | oling Location            | : Raw Mill Klin Stack,      |                   | Test Start Date  | : 26.12.2020  |           |
|            | GOLDSTONE CEMENTS UN      |                             | UMITED            | Yest End Date  | : 12.01.2021  |           |
| D+8        | BUT OF SAMPLE             | 46                          |                   |  |               |           |
| SI.<br>No. |                           | Parameter                   | Unit              | Method of Yest (Refere   | nos)          | -         |
| 12         | Hydrogen Chlorid          | ie (HCL)                    | (mg/Hm²)          | USEPA-9212   |               | : < 1.50  |
| 13         | Hydrogen Fluorid          | le (HF)                     | (mg/Hm²)          | U5EPA-9214   |               | : <0.50   |
| 14         | Mercury(as Hg)            |                             | (ug/Nm)           | USEPA-METHOD 25  |               | ; <0.50   |
| 15         | Cadmium(as Cd)            |                             | (pag/Nem*)        | USEPA-METHOD 25  |               | 1 <1.00   |
| 16         | Antimony(as Sh)           |                             | (mg/Hm²)          | USEPA-METHOD 25  |               | : <0.0001 |
| 17         | Arsenic(as As)            | -                           | (µg/tim)          | USEPA-METHOD 25  |               | : <0.50   |
| 18         | Lead(as Pb)               | € (**                       | (ug/Nes')         | USEPA-METHOD 25  |               | : <1.00   |
| 19         | Cobalt(as Co)             |                             | (pa/Nm²)          | USEPA-METHOD 25  |               | : <1.00   |
| 20         | Chromium(as Cr            |                             | (µg/Nm²)          | USEPA-METHOD 21  |               | : <1.00   |
| 21         | Copper(as Cu)             |                             | (µg/Nm²)          | USEPA-METHOD 25  |               | : <1.00   |
| 22         | Mangamesel as h           | An)                         | (ug/Nm¹)          | USEPA METHOD 2   |               | : <1.00   |
| 23         | Hickel(as Ni)             |                             | (mar/mar)         | F. USEPA-METHOD 2  |               | : <1.00   |
| 24         | Vanadium(as V)            |                             | (pag/Nem*)        | # USEPA-METHOD 2   |               | <1.00     |
| 25         | Thorium(Th)               |                             | (mg/Nm²)          | USEPA-METHOD 2   |               | : <0.0003 |
| 26         |                           | wbon (70C)                  | (mg/lèm²)         | <ul> <li>Approved method for the sampling polystens NGWIPA. 2</li> </ul> |               | : <05     |

The results relate only to the parameters tested

... and of report...

Tanmoy Chakrabarty Quality Manager Authorized Sportery

For Pollution And Project Consultants

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# POLLUTION AND PROJECT CONSULTANTS

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Page: 1 of 1

#### TEST REPORT STACK GAS

| Cunto      | omer Name   | ; M/s. Envirocon,           |            | Report No.             | : 6/20(12)/28   |                  |
|------------|---|-----------------------------|------------|------------------------|-----------------|------------------|
| Addr       | ***   | : Digboi Stores Building, I | New Market | Report Date            |                 |                  |
|            |   | Digboi - 786171, Assam      |            |                        | : 12.01.2021    |                  |
|            |   |                             |            | Date of Sampling       | ; 24.12.2020    |                  |
| Tuna       | of Cample   |                             |            | Sample Received Date   | : 26.12.2020    |                  |
| O.A.E.     | Type of Sample : Stack Gas  Sampling Location : Raw Mill Kiln Stack,  GOLDSTONE CEMENTS LIMITED  RESULT OF SAMPLING |                             |            | Sample Id No.          | : G/20(12)/28   |                  |
| Senio      |   |                             |            | <b>Test Start Date</b> | : 26.12.2020    |                  |
|            |   |                             | LIMITED    | Test End Date          | : 12.01.2021    |                  |
| _          | ESOLT OF SAMPL  | ING .                       |            |                        | To the state of |                  |
| SI.<br>No. |   | Parameter                   | Unit       | Method of Test (Ref    | branca)         | Result           |
| 1          |   | adviorodibenso-pdición      | ng TEC     | USIPA SEA/QA SE        | 4.73            | : <0.00024       |
| 2          |   | hiorodibenus-p-dioxin       | OFFICE     | USEPA ZBA/GA.16        | A.73            | : 40,0004        |
| 3          |   | Norodisenzo g-eloxia        | NE TEQ     | USIPA ZBA/GA.56        | 4.73            | : <b>⊲0.0024</b> |
| 4          | 12378-Pentach   | lorediberup-p-digwin        | 14.700     | USIPA 23A/QA 16.       | 4.73            | : <0.024         |
| 5          | 23.78-Yetrachion  | oditienzo-p-dioxin          | re-fig     | US0PA 23A/QA.16        | 4.73            | <0.005           |
| 6          | 12 16 7 B-House   | hiorodisens-p diadn .       | ne.780     | USEPA ZBA/GA.16        | 4.73            | <0.0024          |
| ,          | Octachiorodibena  | ti-p-dkizsin                | ne Tea     | USCPA 23A/GA.16        |                 | <0.00001         |
|            | 73478 Pontach   | koroditen zoturan           | ng.TBQ     | USEPA ZBA/GA 16        | 4.71            | <0.0072          |
| 9          | 17 146 78- Hep  | tachloredibensofuran        | OF TEO     | USEPA 23A/QA.16        | 4.73            | <0.0002          |
| 10         | 1234789 Hep   | rachiorodibenzofuran        | ne.760     | USEPA 23A/QA.16        | 4.73            | <0.00024         |
| -11        | 123478 Heuse  | hiprodibenzofuran           | DRas       | USEPA 23A/0A.16        | 4.73            | <0.0024          |
| 12         | 123678 Hexad  | hioroditensofulan           | OFFIG.     | USEPA IBA/QA.16        | 4.73            | <0.0024          |
| 13         | 123785 Hest   | Norodibonsoluran            | parted.    | USEPA ZBAYQA.16        | 4.73            | <0.0024          |
| 14         | 12378- Fentace  | Norodibenzofuran            | retta      | USEPA 38A/QA.16        | 471             | +0.00077         |
| 15         | 214578 Heuse  | thlorodibenzoluran          | ng.TEQ     | - USEPA 23A/QA.16      | 4.73            | <0.0024          |
| 16         | 2376 Tetrachio  | rodibenzofuran              | ne ma      | USEPA 13A/QA.16.       | 4.73            | <0.0005          |
| 17         | Octachiocodibeo   | onhuran.                    | or TiO     | USEFA 13A/CA 16        | 427             | ×0.00001         |

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CIN: U26940ML2007PLC008298



### STACK EMISSION MONITORING REPORT

Name of Stack & Stack No. :

20 12 2020

Date of Monitoring

08.12.2020

Coal Mill (2)

Stack Velocity of Flue gas

9.9 m/s

Stack Temperature

329 °K

Monitoring Period

58 m

Flow Rate

17.1 LPM

| Parameters           | Results | Standard Limits | Unit                  |
|----------------------|---------|-----------------|-----------------------|
| Particulate Matter   | 20.1    | 30              | (mg/Nm <sup>3</sup> ) |
| Sulphur Dioxide(5O2) | 443.1   | 1000            | (mg/Nm <sup>5</sup> ) |
| Nitrogen Oxide (NOX) | 279.2   | 600             | (mg/Nm³)              |

Analysed By

yer fied by

Regd. Office and Works: Village - Musiang Lamare Old , Khliehriat, Dist East Jaintia Hills, Meghalaya, Pin-793200, Marketing Office: 5A, 5th Floor, Shine - Tower, 57 Satilyamati Road, Arya Chowk, Rahaberi, Guwahati, Assam-781008



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Report No.: ENV/GSCL/SE/DEC/20-21/02

Date

:05/01/2021

Order No. : 50GM/00426/19-20

Date

: 19/03/2020

### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old)

P. O.:- Khliehriat Meghalaya- 793200

## STACK EMISSION TEST RESULTS

| i.      | Sulphur Dioxide (as 502)     | 312.7                 | mg/Nm³               | 1000     |  |  |
|---------|------------------------------|-----------------------|----------------------|----------|--|--|
| L       | PM- Particulate Matter       | 21.7                  | mg/Nm <sup>3</sup>   | 30       |  |  |
| 51. No. | Parameter(s)                 | Result(s)             | Unit(s)              | Limit(s) |  |  |
| 08      | Analysi                      | s Results of Flue Gas |                      |          |  |  |
| 07      | Type of Fuel Used            |                       | NA*                  |          |  |  |
| 06      | Exit Velocity of Gas (m/sec) |                       | 7.8                  |          |  |  |
| 05      | Flue Gas Temperature (°C)    |                       | 61                   |          |  |  |
| 04      | Stack Attached To            |                       | Coal Mill            |          |  |  |
| 03      | Material of Construction     |                       | M. S.                |          |  |  |
| 02      | Date of Sampling             |                       | 21.12.2020           |          |  |  |
| 01      | Stack Emission Test Ref. No. | GSC                   | GSCL/SE/DEC/20-21/02 |          |  |  |

\*NA: Not Applicable

NOTE:



Checked By: Mr. Pankaj Barot, ENVIROCON

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CIN: U26940ML2007PLC008298



## STACKEMISSION MONITORING REPORT

| Name of Stack & Stack No.  | 1017 137 | 1   | Cooler ESP(3) | - 11-5-3 N. |
|----------------------------|----------|-----|---------------|-------------|
| Date of Monitoring         |          |     | 09.12.2020    |             |
| Stack Velocity of Flue gas |          | 1   | 10.6 m/s      | - 7         |
| Stack Temperature          |          |     | 512 °K        |             |
| Monitoring Period          | 154.71   |     | 41 m          | 10.00       |
| Flow Rate                  |          |     | 24.4 LPM      | La Lieure   |
| Parameters                 | Results  | Sta | indard Limits | Unit        |
| Particulate Matter         | 19.7     |     | 30            | (mg/Nm³)    |

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Report No.: ENV/GSCL/SE/DEC/20-21/03

Date

:05/01/2021

Order No. : SOGM/00426/19-20

Date : 19/03/2020

#### **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old) P. O .: - Khliehriat Meghalaya-793200

#### STACK EMISSION TEST RESULTS

| SI. No. | Parameter(s)                 | Result(s)            | Unit(s) | Limit(s) |  |  |
|---------|------------------------------|----------------------|---------|----------|--|--|
| 08      | Analysis Results of Flue Gas |                      |         |          |  |  |
| 07      | Type of Fuel Used            | NA*                  |         |          |  |  |
| 06      | Exit Velocity of Gas (m/sec) | 15,3                 |         |          |  |  |
| 05      | Flue Gas Temperature (°C)    | 219                  |         |          |  |  |
| 04      | Stack Attached To            | Cooler E. S. P.      |         |          |  |  |
| 03      | Material of Construction     | M. S.                |         |          |  |  |
| 02      | Date of Sampling             | 22.12.2020           |         |          |  |  |
| 01      | Stack Emission Test Ref. No. | GSCL/SE/DEC/20-21/03 |         |          |  |  |

<sup>\*</sup>NA: Not Applicable



Checked By: Mr. Pankaj Barol, ENVIROCON

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CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

| 4 M. C. |           |
|---|-----------|
| Name of Stack & Stack No.                   | : CPP (5) |

Date of Monitoring : 11.12.2020

Stack Velocity of Flue gas : 9.0 m/s

Stack Temperature : 397 °K

Monitoring Period : 35 m

Flow Rate : 28.8 LPM

| Parameters            | Unit     | Results | Standard Limits |
|-----------------------|----------|---------|-----------------|
| Particulate Matter    | (mg/Nm³) | 28.3    | 50              |
| Sulphur Dioxide (SO2) | (mg/Nm³) | 361.0   | 600             |
| Nitrogen Oxide (NOX)  | (mg/Nm³) | 167.5   | 300             |

Analysed By

Verified By



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E-mail: envirocon@rediffmail.com Website: www.envirocon.net.in



Report No.: ENV/GSCL/SE/DEC/20-21/04

:05/01/2021 Date

Order No. : SOGM/00426/19-20

Date : 19/03/2020

#### **COLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old)

P. O.- Khliehriat Meghalaya- 793200

## STACK EMISSION TEST RESULTS

| 01     | Stack Emission Test Ref. No.              | GSCL/SE/DEC/20-21/04         |         |          |  |
|--------|---|------------------------------|---------|----------|--|
| 02     | Date of Sampling                          | 22.12.2020                   |         |          |  |
| 03     | Material of Construction                  | Refractory Brick             |         |          |  |
| 04     | Stack Attached To                         | Captive Power Plant (CPP)    |         |          |  |
| 05     | Flue Gas Temperature (°C)                 | 89                           |         |          |  |
| 06     | Exit Velocity of Gas (m/sec)              | 8.5                          |         |          |  |
| 07     | Type of Fuel Used                         | Coal                         |         |          |  |
| 08     | Analysi                                   | Analysis Results of Flue Gas |         |          |  |
| SL No. | Parameter(s)                              | Result(s)                    | Unit(s) | Limit(s) |  |
| K:     | PM- Particulate Matter                    | 33.3                         | mg/Nm³  | 50       |  |
| 11.    | Sulphur Dioxide (as 50a)                  | 438.6                        | mg/Nm³  | 600      |  |
| IIL    | (ixides of Nitrogen (as NO <sub>x</sub> ) | 202.8                        | mg/Nm³  | 300      |  |
| iv.    | Mercury (as Hg)                           | 0.018                        | mg/Nm³  | 0.05     |  |



Checked By: Mr. Pankaj Baroi, ENVIROCON

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CIN: U26940ML2D07PLCD08298



## STCK EMISSION MONITORING REPORT

|                            |                  | Cement will (4) |  |
|----------------------------|------------------|-----------------|--|
| Date of Monitoring         |                  | 10.12.2020      |  |
| Stack Velocity of Flue gas | :                | 8.7 m/s         |  |
| Stack Temperature          | :                | 342 °K          |  |
| Monitoring Period          | TOTAL CONTRACTOR | 69 m            |  |
| Z'ow Rate                  |                  | 1441014         |  |

| Parameters         | Unit     | Results | Standard Limits |
|--------------------|----------|---------|-----------------|
| Particulate Matter | (mg/Nm³) | 17.5    | 30              |

Analysed By

Name of Stack & Stack No.

Verified By



Digboi Stores Building, New Market Digboi, Assam - 786 171 Ph: 03751-264414, 9435006667, 8879028672 E-mail: envirocon@rediffmail.com Website: www.envirocon.net.in



Report No.: ENV/GSCL/SE/DEC/20-21/05

Date

: 05/01/2021

Order No. : SOGM/00426/19-20

Date

:19/03/2020

#### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old)

P.O.s Khliehriat Meghalaya-793200

### STACK EMISSION TEST RESULTS

| SL NO. | PM- Particulate Matter       | 16.4                         | mg/Nm³  | 30      |  |  |
|--------|------------------------------|------------------------------|---------|---------|--|--|
| SL No. | Parameter(s)                 | Result(s)                    | Unit(s) | Limit(s |  |  |
| 08     | Analysi                      | Analysis Results of Flue Gas |         |         |  |  |
| 07     | Type of Fuel Used            | NA*                          |         |         |  |  |
| 06     | Exit Velocity of Gas (m/sec) | 12.3                         |         |         |  |  |
| 05     | Flue Gas Temperature (°C)    |                              | 58      |         |  |  |
| 04     | Stack Attached To            | Cement Mill                  |         |         |  |  |
| 03     | Material of Construction     | м. s.                        |         |         |  |  |
| 02     | Date of Sampling             | 23,12,2020                   |         |         |  |  |
| 01     | Stack Emission Test Ref. No. | GSCL/SE/DEC/20-21/05         |         |         |  |  |

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/NLM/DEC/20-21/01

Date

:05/01/2021

Order No. : SOGM/00426/19-20

Date : 19/03/2020

#### **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old)

P. O.:- Khliehriat Meghalaya- 793200

#### NOISE LEVEL MEASUREMENT RESULTS

Measurement Date: 23.12.2020

|         | 55700000000                  | Day                 | time               | Night Time            |                      |
|---------|------------------------------|---------------------|--------------------|-----------------------|----------------------|
| Sl. No. | Location(s)                  | Result(s)<br>(dB-A) | Limit(s)<br>(dB-A) | Result(s)<br>(dB - A) | Limit(s)<br>(dB - A) |
| 1       | Near Coal Mill               | 69                  | 75                 | 69                    | 70                   |
| 2       | Near CPP Area                | 58                  | 75                 | 53                    | 70                   |
| 3       | Near Limestone Storage Yard  | 56                  | 75                 | 50                    | 70                   |
| 4       | Near Coal Storage Yard       | 66                  | 75                 | 58                    | 70                   |
| 5       | Near Raw Mill                | 71                  | 75                 | 63                    | 70                   |
| 6       | Near Cement Mill             | 65                  | 75                 | 62                    | 70                   |
| 7       | Near Administrative Building | 63                  | 75                 | 54                    | 70                   |
| 8       | Power House                  | 71                  | 75                 | 66                    | 70                   |



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/FE/DEC/20-21/01

Date

:05/01/2021

Order No. : SOGM/00426/19-20

Date

:19/03/2020

#### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old) P. O.:- Khliehriat Meghalava- 793200

#### PROCESS FUGITIVE EMISSION TEST RESULTS

| Date       | Locations                 | Fugitive Emission Results for SPM<br>(µg/m³) | (µg/m³) |
|------------|---------------------------|--|---------|
| 21.12.2020 | Fly-ash Storage Section   | 888  | 5000    |
| 22.12.2020 | Coal Storage Section      | 449  | 2000    |
| 22.12.2020 | Limestone Storage Section | 1662   | 5000    |
| 23.12.2020 | Cement Packing Section    | 1619   | 5000    |

Sampled & Analysed by: ENVIROCON, Digboi



Checked By: Mr. Pankaj Baros, ENVIROCON

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Website: www.envirocon.net.in



Report No.: ENV/GSCL/ETP/DEC/20-21/01

Date :05/01/2021 Order No. : SOGM/80426/19-20

: 19/03/2020 Date

#### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old) P. O .: Khliehriat Meghalaya-793200

#### ETP WATER ANALYSIS RESULTS

Sample Type : Treated ETP Water Sample Source : ETP Outlet

Collected By: Jointly by Envirocon & Client

Collected On: 23.12,2020

| SI No.    | Parameter(s)                                | (Init(s) | Result(s) | Destrable Limits<br>(15: 2490)                                  |
|-----------|---|----------|-----------|---|
| 01        | pH  | -        | 6.7       | 5.5 - 9.0   |
| 02        | Temperature                                 | *        | 18.6      | shall not exceed 5%<br>above the receiving<br>water temperature |
| 03        | Total Suspended Solids                      | mg/l     | 11.5      | 100   |
| 04        | Biochemical Oxygen Demand<br>(3 Days @27°C) | mg/l     | 16        | 30  |
| 05        | Chemical Oxygen Demand                      | mg/l     | 63        | 250   |
| 06        | Oil & Greate                                | mg/l     | <0.1      | 10  |
| 07        | Total Residual Chlorine                     | mg/l     | +0.01     | 1.0   |
| <b>GB</b> | Ammonical Nitrogen (as N)                   | mg/l     | 3.6       | 50  |
| 09        | Total Kjeldahl Nitrogen (as NHs)            | mg/l     | 9.9       | 100   |
| 10        | Free Ammonia (as NHs)                       | mg/l     | <0.01     | 5.0   |

Analysis Protocol: 15 3025



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Website: www.envirocon.net.in



Report No.: ENV/GSCL/PW/DEC/20-21/01

Date

:05/01/2021

Order No. : SOGM/00426/19-20

Date

: 19/03/2020

#### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old)

P.O .: Khliehriat Meghalaya- 793200

# PROCESS WATER ANALYSIS RESULTS

Sample Type : Waste Water

Sample Source : Condenser Cooling Point

Collected By: Jointly by Envirocon & Client

Collected On: 23,12,2020

| SL No. | Parameters             | Analysis Results | Units | Limit  |
|--------|------------------------|------------------|-------|--|
| -      |                        | 6.6              | -     | 6.5 - 8.5                                      |
| 1,     | pH                     | -                |       | Not more than 5°C                              |
| 2      | Temperature            | 19.2             | *C    | higher than the<br>intake water<br>temperature |
| 3.     | Residual Free Chiorine | <0.01            | mg/1  | 0.5  |



Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE

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Report No.: ENV/GSCL/FW/DEC/20-21/02

Date

: 05/01/2021

Order No. : SOGM/00426/19-20

Date

: 19/03/2020

### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old)

P. O .:- Khliehriat Meghalaya- 793200

### WASTE WATER ANALYSIS RESULTS

Sample Type : Waste Water Sample Source : Boiler Blow Down Collected By: Jointly by Envirocon & Client

Collected On: 23.12.2020

| SI. No. | Parameters             | Analysis Results | Units | Limit |
|---------|------------------------|------------------|-------|-------|
| i.      | Total Suspended Solids | 18.9             | mg/l  | 100   |
| 2.      | Oil & Grease           | <0.1             | mg/l  | 20    |
| 3.      | Copper                 | -0.0L            | mg/t  | 1.0   |
| 4.      | Iron                   | +0.01            | mg/l  | 1.0   |



Checked By: Mr. Pankaj Barol, ENVIROCON

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Report No.: ENV/GSCL/PW/DEC/20-21/03

Date

: 05/01/2021

Order No. : SOGM/00426/19-20

Date

: 19/03/2020

#### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old)

P. O .:- Khliehriat Meghalaya-793200

## WASTE WATER ANALYSIS RESULTS

Sample Type : Waste Water

Sample Source : Cooling Tower Blow Down

Collected By: Jointly by Envirocon & Client

Collected On: 23.12.2020

| \$1, No. | Parameters             | Analysis Results | Units | Limit |
|----------|------------------------|------------------|-------|-------|
| 1.       | Residual Free Chlorina | <0.01            | mg/l  | 0.5   |
| 2.       | Zinc                   | <0.01            | mg/l  | 1.0   |
| 3.       | Total Chromium         | <0.01            | mg/l  | 0.2   |
| 4.       | Phosphate              | <0.01            | mg/I  | 5.0   |



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Order No. : 50GM/00426/19-20

: 19/03/2020

Date

Report No. : ENV/GSCL/DW/DEC/20-21/01

Date : 05/01/2021

GOLDSTONE CEMENT'S LIMITED Vilage: Musiang Lamare (Old) P. O.:- Khilehriat, Meghalaya- 793200

# DRINKING WATER ANALYSIS RESULTS

| 1000 1000 1000 1000                          |               |              |
|--|---------------|--------------|
| Sample Type : Drinking Water                 | Sample Source | Canteen      |
| Collected By - Jointly by Envirocon & Client | Collected On  | : 23.12.2020 |

| SL No. | : Jointly by Envirocon & Client<br>Parameters      | Results    | Desirable Limit<br>(IS: 10500) |
|--------|--|------------|--------------------------------|
| 1.     | Colour , Hazen Units, Max                          | <1         | 5                              |
| Z.     | Odour  | Odourless  | Agrecable                      |
| 3.     | Taste  | Acceptable | Agreeable                      |
| 4.     | Turbidity, NTU, Max                                | 0.16       | 1.0                            |
| 5.     | pH   | 6.8        | 6.5 - 8.5                      |
| 6.     | Total Dissolved Solids, mg/l, Max                  | 144        | 500                            |
| 7.     | Aluminium (as: AI), mg/L Max                       | ND         | 0.03                           |
| 8.     | Boron (as B), mg/l, Max                            | ND         | 0.5                            |
| 9.     | Calcium (as Ca), mg/L Max                          | 33         | 75                             |
| 10.    | Chloride (as Cl), mg/l, Max                        | 6.8        | 250                            |
| 11.    | Copper (as Cu), mg/l, Max                          | ND         | 0.05                           |
| 12.    | Pluorides (as F), mg/l, Max                        | ND ND      | 1.0                            |
| 13.    | Free Residual Chlorine, mg/l, Min                  | ND         | 0.2                            |
| 14.    | Iron (as Fe), mg/l, Max                            | <0.01      | 0.3                            |
| 15.    | Magnesium (as Mg), mg/L Max                        | 3.6        | 30                             |
| 16.    | Manganese (as Mn), mg/l, Max                       | ND         | 0,1                            |
| 17,    | Zinc (as Zn), mg/l, Max                            | ND         | 5.0                            |
| 18.    | Nitrate (as NO <sub>3</sub> ), mg/l, Max           | <0.01      | 45                             |
| 19.    | Phenolic Compounds (as CaHsOH), mg/l, Max          | ND         | 0.001                          |
| 20.    | Sulfate (as 504), mg/l, Max                        | 65         | 500                            |
| 21_    | Total Alkalisity(as CaCO <sub>1</sub> ), mg/l, Max | 82         | 200                            |
| 22     | Total Hardness, (as CaCO <sub>2</sub> ), mg/l, Max | 12         | 200                            |
| 23.    | Cadmium (as Cd), mg/l, Max                         | ND         | 0.003                          |
| 24.    | Cyanide (as CN), mg/l, Nax                         | ND         | 0.05                           |
| 25.    | Lead (as Pb), mg/l, Max                            | ND         | 0.01                           |
| 26.    | Mercury (as Hg), mg/l. Hax                         | ND         | 0.001                          |
| 27.    | Selenium (as Se), mg/l, Max                        | ND         | 0.01                           |
| 28,    | Total Arsenic (as As), mg/l, Max                   | ND         | 0.01                           |
| 29.    | Total Chromium, (as Cr), mg/l, Nax                 | ND         | 0,05                           |
| 30.    | Anionic Detergents (as MBAS), mg/l                 | ND         | 0.2                            |
| 31.    | Total Coliform, MPN/100 ml                         | NIL        | 10 Max                         |
| 32     | Faecal Coliforms/ 100 ml                           | NIL        | Absent                         |
| 33.    | E. Coli / 100 mi                                   | NIL        | Absent                         |

Analysis Protogoi-15 302

ND: Not Detected

Checked By: Mr. Pankaj Baroi, ENVIROCON

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Dated: 06.02.2021

No: GSCL/EHS/ 2020-21/24

To, The Member Secretary, Meghalaya State Pollution Control Board, Arden, Lumpyngngad, Shillong-793014.

Sub: Submission of Monthly Environmental Monitoring Reports - JANUARY -2021

Sir,

With reference to the subject as cited above, we are herewith submitting Monthly Environmental Monitoring Reports for the month of JANUARY-2021.

The test reports are enclosed.

We request you to acknowledge the receipt.

**VUSUAGLAS** 

Thanking You,

Yours faithfully

Authorised Sign

For Goldstone Cements Ltd.

**Encl:** Test Reports

Goldstone Cements Limited CIN No.: U26940ML2007PLC008298

CIN: U25940ML2007PLC008298



## AMBIENT AIR QUALITY MONITORING RESULTS

January - 2021

| Stations Name                      | Date of<br>Monitoring | Parameters Results |                                     |                   |                              |  |
|------------------------------------|-----------------------|--------------------|-------------------------------------|-------------------|------------------------------|--|
|                                    |                       | PM <sub>25</sub>   | PM <sub>25</sub> PM <sub>10</sub> 5 |                   | NO <sub>2</sub>              |  |
|                                    |                       | Limit<br>60 µg/m³  | Limit<br>100 µg/m³                  | Limit<br>80 µg/m³ | Limit<br>80µg/m <sup>3</sup> |  |
| Near CPP Water Reservoir           | 01.01.2021            | 33.9               | 53.7                                | 11.4              | 5.5                          |  |
| Near CCR Material Yard             | 02.01.2021            | 37.4               | 57.5                                | 8.3               | 4.7                          |  |
| Near Guest House<br>(Yamuna Sadan) | 04.01.2021            | 18.7               | 32.8                                | <1.0              | <1.0                         |  |
| Residential Colony                 | 05.01.2021            | 15.0               | 26.6                                | <1.0              | <1.0                         |  |

ND: Not Detected

Analysed By

erified By

BLACKTIGER

CIN: U26940ML2007PLC008298

# AMBIENT AIR QUALITY MONITORING RESULTS

January - 2021

| Stations Name                      | Date of<br>Monitoring | Parameters Results |                                  |                   |                  |  |
|------------------------------------|-----------------------|--------------------|----------------------------------|-------------------|------------------|--|
|                                    | Wionitoring           | PM <sub>2.5</sub>  | PM <sub>10</sub> SO <sub>2</sub> |                   | NO <sub>2</sub>  |  |
|                                    |                       | Limit<br>60 µg/m³  | Limit<br>100 µg/m³               | Limit<br>80 µg/m³ | Limit<br>80µg/m³ |  |
| Near CPP Water Reservoir           | 11.01.2021            | 34.6               | 57.5 <sup>-</sup>                | 11.4              | 6.2              |  |
| Near CCR Material Yard             | 12.01.2021            | 38.2               | 64.1                             | 8.1               | 4.8              |  |
| Near Guest House<br>(Yamuna Sadan) | 15.01.2021            | 17.9               | 34.9                             | <1.0              | <1.0             |  |
| Residential Colony                 | 16.01.2021            | 16.3               | 27.1                             | <1.0              | <1.0             |  |

ND: Not Detected

Analysed By

Verified By



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E-mail: envirocon@rediffmail.com Website: www.envirocon.net.in



Report No.: ENV/GSCL/AAQ/JAN/20-21/01

Date

:01/02/2021

Order No. : SOGM/00426/19-20

Date : 09/03/2020

#### GOLDSTONE CEMENTS LIMITED

Village-Musiang Lamare (Old)

P. O .- Khliehriat Meghalaya-793200

### AMBIENT AIR QUALITY TEST RESULTS

| SL.<br>No. | Location(s)                        | Date of    | (µg/m <sup>9</sup> ) (µg/ |                      |                     | NO <sub>2</sub><br>(µg/m <sup>3</sup> ) |
|------------|------------------------------------|------------|---------------------------|----------------------|---------------------|---|
|            | Limit(s)                           | Sampling   |                           | 100<br>(24 Hrs. Av.) | 80<br>(24 Hrs. Av.) | 80<br>(24 Hrs. Av.)                     |
| 1.         | Near CPP (Water<br>Reservoir)      | 22.01.2021 | 38.4                      | 67.8                 | 6.8                 | 15.2                                    |
| 2.         | Near CCR (Material Yard)           | 22.01.2021 | 41.3                      | 74.8                 | 5.1                 | 10.6                                    |
| 3.         | Near Guest House<br>(Yamuna Sadan) | 23,01,2021 | 16.1                      | 34.2                 | <1.0                | <1.0                                    |
| 4.         | Residential Colony                 | 23.01.2021 | 14.2                      | 29.3                 | <1.0                | <1.0                                    |

Analysis Protocol: IS 5182

Sampled & Analysed by: ENVIROCON, Digboi



Checked By: Mr. Pankaj Baroi, ENVIROCON

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CIN: U26940ML2007PLC008298



# AMBIENT AIR QUALITY MONITORING RESULTS

January - 2021

| Stations Name                      | Date of<br>Monitoring | Parameters Results |   |                   |                  |  |
|------------------------------------|-----------------------|--------------------|---|-------------------|------------------|--|
|                                    | Monitoring            | PM <sub>2.5</sub>  | M <sub>2.5</sub> PM <sub>10</sub> 5O <sub>2</sub> |                   | NOz              |  |
|                                    | A-Gigan               | Limit<br>60 µg/m³  | Limit<br>100 µg/m³                                | Limit<br>80 µg/m³ | Limit<br>80µg/m³ |  |
| Near CPP Water Reservoir           | 25.01.2021            | 35.9               | 66.7  | 12.5              | 7.1              |  |
| Near CCR Material Yard             | 27.01.2021            | 36.2               | 72.2  | 8.7               | 5.3              |  |
| Near Guest House<br>(Yamuna Sadan) | 28.01.2021            | 19.8               | 31.6  | <1.0              | <1.0             |  |
| Residential Colony                 | 29.01.2021            | 17.2               | 28.9  | <1.0              | <1.0             |  |

ND: Not Detected

Analysed By

Ventied By

CIN: U26940ML2007PLC008298



Raw Mill & Kiln (1)

## STACK EMISSION MONITORING REPORT

January - 2021

| 1                          |       |            |  |
|----------------------------|-------|------------|--|
| Date of Monitoring         | :     | 05.01.2021 |  |
| Stack Velocity of Flue gas | <br>: | 15.67 m/s  |  |
| Stack Temperature          | :     | 438 °K     |  |
| Monitoring Period          | :     | 49 m       |  |
| Flow Rate                  |       | 20.3 LPM   |  |

| Parameters           | Results | Standard Limits | Unit     |
|----------------------|---------|-----------------|----------|
| Particulate Matter   | 21.6    | 30              | (mg/Nm³) |
| Sulphur Dioxide(SO2) | 426.7   | 1000            | (mg/Nm³) |
| Nitrogen Oxide (NOX) | 237.3   | 600             | (mg/Nm³) |

Analysed By

Name of Stack & Stack No.

Perified By

CIN: U26940ML2007PLC008298



# STACK EMISSION MONITORING REPORT

January - 2021

| Name of Stack & Stack No.  | 1       | \$). | Coal Mill (2 | )        |
|----------------------------|---------|------|--------------|----------|
| Date of Monitoring         |         | :    | 06.01.2021   | COTT.    |
| Stack Velocity of Flue gas |         | :    | 9.9 m/s      |          |
| Stack Temperature          |         | -:   | 322 °K       |          |
| Monitoring Period          |         | :    | 57 m         |          |
| Flow Rate                  |         | :    | 17.4 LPM     |          |
| Parameters                 | Results | Star | ndard Limits | Unit     |
| Particulate Matter         | 18.4    |      | 30           | (mg/Nm³) |
| Sulphur Dioxide(SO2)       | 385.6   |      | 1000         | (mg/Nm³) |
| Nitrogen Oxide (NOX)       | 258,2   |      | 600          | (mg/Nm³) |

Analysed By

Verified By

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

January - 2021

| Name of Stack & Stack No.  |  | :   | Cooler ESP(3 | 3)       |
|----------------------------|--|-----|--------------|----------|
| Date of Monitoring         |  |     | 07.01.2021   |          |
| Stack Velocity of Flue gas |  | 1   | 11.1 m/s     |          |
| Stack Temperature          |  | :   | 498 °K       |          |
| Monitoring Period          |  | :   | 36 m         |          |
| Flow Rate                  |  | :   | 27.9 LPM     |          |
| Parameters                 | Results  | Sta | ndard Limits | Unit     |
| Particulate Matter         | 19.9   |     | 30           | (mg/Nm³) |
|                            | The state of the s |     |              |          |

Analysed By

Verified By

CIN: U26940ML2007PLC008298



# STCK EMISSION MONITORING REPORT

## January - 2021

|                            |          |    | Comment ! | ASH ZAN         |
|----------------------------|----------|----|-----------|-----------------|
| Name of Stack & Stack No.  |          |    | Cement N  | VIIII (4)       |
| Date of Monitoring         |          |    | 08.01.202 | 21              |
| Stack Velocity of Flue gas |          | :  | 8.9 m/s   |                 |
| Stack Temperature          |          | 10 | 339 °K    |                 |
| Monitoring Period          |          |    | 68 m      |                 |
| Flow Rate                  |          | 1  | 14.8 LPM  |                 |
| Parameters                 | Unit     |    | Results   | Standard Limits |
| Particulate Matter         | (mg/Nm³) |    | 17.6      | 30              |
| Particulate Matter         | (mg/Nm³) |    | 17.6      |                 |

Analysed By

yarified By

CIN: U26940ML2007PLC008298



### STACK EMISSION MONITORING REPORT

### January - 2021

Name of Stack & Stack No. : CPP (5)

Date of Monitoring : 09.01.2021

Stack Velocity of Flue gas : 9.5 m/s

Stack Temperature : 388 °K

Monitoring Period : 32 m

Flow Rate : 31.3 LPM

| Parameters            | Unit     | Results | Standard Limits |
|-----------------------|----------|---------|-----------------|
| Particulate Matter    | (mg/Nm³) | 29.7    | 50              |
| Sulphur Dioxide (SO2) | (mg/Nm³) | 443.1   | 600             |
| Nitrogen Oxide (NOX)  | (mg/Nm³) | 209.4   | 300             |

Analysed By

Verified By



Digboi Stores Building, New Market Digboi, Assam - 786 171 Ph: 03751-264414, 9435008657, 8878028672 E-mail: envirocon@rediffmail.com Website: www.envirocon.net.in



Report No.: ENV/GSCL/SE/JAN/20-21/01

101/02/2021 Date

Order No. : SOGM/00426/19-20

: 09/03/2020

#### **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old) P.O.:- Khliehriat Meghalaya-793200

## STACK EMISSION TEST RESULTS

|         | 1  |                       |                      | 10.5     |  |  |  |
|---------|--|-----------------------|----------------------|----------|--|--|--|
| 01      | Stack Emission Test Ref. No.             | GSCI                  | GSCL/SE/JAN/20-21/01 |          |  |  |  |
| 02      | Date of Sampling                         |                       | 22.01.2021           |          |  |  |  |
| 03      | Material of Construction                 |                       | M. S.                |          |  |  |  |
| 04      | Stack Attached To                        |                       | Raw Mill             |          |  |  |  |
| 05      | Flue Gas Temperature (°C)                |                       | 172                  |          |  |  |  |
| 06      | Exit Velocity of Gas (m/sec)             |                       | 12.9                 |          |  |  |  |
| 07      | Type of Fuel Used                        | Kiln Coal             |                      |          |  |  |  |
| 08      | Analysi                                  | s Results of Flue Gas |                      |          |  |  |  |
| SI. No. | Parameter(s)                             | Result(s)             | Unit(s)              | Limit(s) |  |  |  |
| L       | PM- Particulate Matter                   | 16.2                  | mg/Nm³               | 30       |  |  |  |
| 11.     | Sulphur Dioxide (as SO <sub>1</sub> )    | 525.8                 | mg/Nm³               | 1000     |  |  |  |
| ssi.    | Oxides of Nitrogen (as NO <sub>s</sub> ) | 251.7                 | mg/Nm³               | 600      |  |  |  |



Checked By: Mr. Pankaj Baroi, ENVIROCON

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PCB, Assam & MSPCB, Meghalaya

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Website: www.envirocon.net.in

Report No.: ENV/GSCL/SE/JAN/20-21/02

:01/02/2021

Order No. : SOGM/00426/19-20

: 09/03/2020 Date

#### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old) P.O .: Khliehriat Meghalaya-793200

## STACK EMISSION TEST RESULTS

| 08<br>SL No. | Parameter(s)                 | Result(s)           | Unit(s)              | Limit(s) |  |  |
|--------------|------------------------------|---------------------|----------------------|----------|--|--|
| 07           | Type of Fuel Used            | Results of Flue Gas |                      |          |  |  |
| 06           | Exit Velocity of Gas (m/sec) | 12.1<br>NA*         |                      |          |  |  |
| 05           | Flue Gas Temperature (°C)    | 51                  |                      |          |  |  |
| 04           | Stack Attached To            | Coal Mill           |                      |          |  |  |
| 03           | Material of Construction     | M. S.               |                      |          |  |  |
| 02           | Date of Sampling             |                     | 22.01.2021           |          |  |  |
| 01           | Stack Emission Test Ref. No. | GSC                 | GSCL/SE/JAN/20-21/02 |          |  |  |

\*NA: Not Applicable



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Report No.: ENV/GSCL/SE/JAN/20-21/03

Date : 01/02/2021

Order No. : SOGM/00426/19-20

Date : 09/03/2020

#### **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old) P. O.:- Khiliehriat Meghalaya- 793200

### STACK EMISSION TEST RESULTS

| Sl. No. | Parameter(s)                 | Result(s)             | Unit(s) | Limit(s |  |  |  |
|---------|------------------------------|-----------------------|---------|---------|--|--|--|
| 09      | Analysi                      | s Results of Flue Gas |         |         |  |  |  |
| 07      | Type of Fuel Used            | NA*                   |         |         |  |  |  |
| 96      | Exit Velocity of Gas (m/sec) |                       | 22.6    |         |  |  |  |
| 05      | Flue Gas Temperature (*C)    |                       | 234     |         |  |  |  |
| 04      | Stack Attached To            | Cooler E. S. P.       |         |         |  |  |  |
| 03      | Material of Construction     | м. s.                 |         |         |  |  |  |
| 02      | Date of Sampling             | 22,01,2021            |         |         |  |  |  |
| 01      | Stack Emission Test Ref. No. | GSCL/SE/JAN/20-21/03  |         |         |  |  |  |

\*NA: Not Applicable



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Report No.: ENV/GSCL/SE/JAN/20-21/04

Date

:01/02/2021

Order No. : SOGM/00426/19-20

Date

:09/03/2020

#### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old) P. O.:- Khliehriat Meghalava- 793200

#### STACK EMISSION TEST RESULTS

| 01      | Stack Emission Test Ref. No.             | GSC                   | GSCL/SE/JAN/20-21/04      |          |  |  |
|---------|--|-----------------------|---------------------------|----------|--|--|
| 02      | Date of Sampling                         |                       | 23.91.2021                |          |  |  |
| 03      | Material of Construction                 |                       | Refractory Brick          |          |  |  |
| 04      | Stack Attached To                        | Capti                 | Captive Power Plant (CPP) |          |  |  |
| 05      | Flue Gas Temperature (°C)                |                       | 94                        |          |  |  |
| 06      | Exit Velocity of Gas (m/sec)             |                       | 8.1                       |          |  |  |
| 07      | Type of Fuel Used                        |                       | Coal                      |          |  |  |
| 08      | Analysi                                  | s Results of Flue Gas |                           |          |  |  |
| Sl. No. | Parameter(s)                             | Result(s)             | Unit(s)                   | Limit(s) |  |  |
| i.      | PM- Particulate Matter                   | 32.6                  | mg/Nm³                    | 50       |  |  |
| ii.     | Sulphur Dioxide (as SO <sub>2</sub> )    | 534.9                 | mg/Nm³                    | 600      |  |  |
| III.    | Oxides of Nitrogen (as NO <sub>s</sub> ) | 242.7                 | mg/Nm <sup>3</sup>        | 300      |  |  |



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/SE/JAN/20-21/05

:01/02/2021

Order No. : SOGM/00426/19-20

: 09/03/2020

#### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old) P.O .: Khliehriat Meghalava-793200

### STACK EMISSION TEST RESULTS

| SI. No. | Parameter(s)                 | Result(s)             | Unit(s) | Limit(s |  |  |  |
|---------|------------------------------|-----------------------|---------|---------|--|--|--|
| 08      | Analysi                      | s Results of Flue Gas |         |         |  |  |  |
| 07      | Type of Fuel Used            | NA*                   |         |         |  |  |  |
| 06      | Exit Velocity of Gas (m/sec) |                       | 15.6    |         |  |  |  |
| 05      | Flue Gas Temperature (°C)    |                       | 61      |         |  |  |  |
| 04      | Stack Attached To            | Cement Mill           |         |         |  |  |  |
| 03      | Material of Construction     | M. S.                 |         |         |  |  |  |
| 02      | Date of Sampling             | 23.01.2021            |         |         |  |  |  |
| 01      | Stack Emission Test Ref. No. | GSCL/SE/JAN/20-21/05  |         |         |  |  |  |

\*NA: Not Applicable

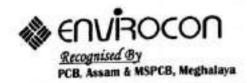


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E-mail: envirocon@rediffmail.com Website: www.envirocon.net.in

Report No.: ENV/GSCL/NLM/JAN/20-21/01

:01/02/2021 Date

Order No. : SOGM/00426/19-20

:09/03/2020 Date

### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old)

P. O.:- Khliebriat Meghalaya- 793200

# NOISE LEVEL MEASUREMENT RESULTS

|         |                         | Date              | Day           | Time            | Night         | Time            |
|---------|-------------------------|-------------------|---------------|-----------------|---------------|-----------------|
| SI, No. | Location(s)             | Of<br>Measurement | Leq<br>(dB-A) | Limit<br>(dE-A) | Leq<br>(dB-A) | Limit<br>(dB-A) |
| 1       | Near Guest House        | 22.01.2021        | 65.4          | 75              | 57.8          | 70              |
| -       | Near Residential Colony | 23.01.2021        | 63.2          | 75              | 56.1          | 70              |



Checked By: Mr. Pankaj Barot, ENVIROCON

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Report No.: ENV/GSCL/FE/JAN/20-21/01

Date

:01/02/2021

Order No. : 50GM/00426/19-20

: 09/03/2020

#### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old) P. O .: Khliehriat Meghalaya- 793200

## PROCESS FUGITIVE EMISSION TEST RESULTS

| Date       | Locations                       | Fugitive Emission Results for SPM<br>(µg/m³) | Limits<br>(µg/m³) |
|------------|---------------------------------|--|-------------------|
| 22.01.2021 | Fly-ash Storage Section         | 2058   | 5000              |
| 22,01,2021 | 1.2021 Coal Storage Section 623 |  | 2000              |
| 23.01.2021 | Limestone Storage Section       | 1782   | 5000              |
| 23.01.2021 | Cement Packing Section          | 2264   | 5000              |



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/ETP/JAN/20-21/01

Date

: 01/02/2021

Order No. : SOGM/00426/19-20

Date

:09/03/2020

### GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old) P. O.:- Khliehriat Meghalaya-793200

## ETP WATER ANALYSIS RESULTS

Sample Type : Treated ETP Water

Sample Source : ETP Outlet

Collected By: Jointly by Envirocon & Client

Collected On: 23.01.2021

| SI. No. | Parameter(s)                                | Unit(s) | Result(s) | Desirable Limits<br>(IS: 2490)                                   |
|---------|---|---------|-----------|--|
| 01      | pH  |         | 6.86      | 5,5 - 9,0  |
| 02      | Temperature                                 | 4C      | 18.2      | shall not exceed 5°C<br>above the receiving<br>water temperature |
| 03      | Total Suspended Solids                      | mg/l    | 16        | 100  |
| 04      | Biochemical Oxygen Demand<br>(3 Days @27°C) | mg/l    | 23        | 30   |
| 05      | Chemical Oxygen Demand                      | mg/l    | 107       | 250  |
| 04      | Oil & Greate                                | mg/l    | Nil       | 10   |
| 07      | Total Residual Chlorine                     | mg/l    | <0.01     | 1.0  |
| 08      | Ammonical Nitrogen (as N)                   | mg/l    | 2.3       | 50   |
| 09      | Total Kjeldahi Nitrogen (as NHa)            | mg/l    | 7.1       | 100  |
| 10      | Free Ammonia (as NHs)                       | mg/l    | <0.01     | 5.0  |

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE:

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Report No. : ENV/GSCL/DW/JAN/20-21/01

Date : 01/02/2021

Order No. : SOGM/00426/19-20 Date : 09/03/2020

**GOLDSTONE CEMENTS LIMITED** 

Village- Mustang Lamare (Old), P. 0,:- Khilehrist Heghalaya- 793200

#### DRINKING WATER ANALYSIS RESULTS

| Sample Type  | Drinking Water                  | Sample Source | : Cantoen    |
|--------------|---------------------------------|---------------|--------------|
| Collected By | : Jointly by Envirocon & Client | Collected On  | : 23.01.2021 |

| SI. No. | Parameters  | Results    | Destrable Limit<br>(IS: 10500) |
|---------|---|------------|--------------------------------|
| 1.      | Colour, Hagen Units, Max                            | <1         | 5                              |
| 2       | Odour   | Odourless  | Agrecable                      |
| 3.      | Taste   | Acceptable | Agreeable                      |
| 4       | Turbidity, NTU, Max                                 | 0.41       | 1.0                            |
| 5.      | pH  | 6.89       | 6.5 - 8.5                      |
| 6,      | Total Dissolved Solids, rig/l, Max                  | 122        | 500                            |
| 7,      | Aluminium (as Al), mg/i, Max                        | ND         | 0.03                           |
| €.      | Scron (as 8), mg/l, Max                             | ND         | 0.5                            |
| 9.      | Calcium (ss Cs), mg/l, Max                          | 31         | 75                             |
| 10.     | Chloride (ax Cl), mg/l, Max                         | 7.6        | 250                            |
| 11.     | Copper (as Co), mg/L Max                            | ND .       | 0.05                           |
| 12,     | Pluorides (as F), mg/l, Max                         | ND         | 1.0                            |
| 13,     | Free Residual Chlorine, mg/l, Min                   | ND         | 0.2                            |
| 14.     | Iron (as Fe), mg/l, Max                             | +0.01      | 0.3                            |
| 15.     | Magnesium (as Mg), mg/l, Nax                        | 1.8        | 30                             |
| 16.     | Manganese (as Mn), mg/l, Max                        | ND         | 0.1                            |
| 17,     | Zinc (as Zn), mg/l, Max                             | ND         | 5.0                            |
| 18.     | Nitrate (as NO <sub>1</sub> ), mg/L Max             | <0.01      | 45                             |
| 19,     | Phenolic Compounds (as CeHyOH), reg/l, Max          | ND         | 0.001                          |
| 20,     | Sulfate (as SO <sub>4</sub> ), mg/l, Max            | 52         | 200                            |
| 21,     | Total Alkalinity (as CaCO <sub>2</sub> ), mg/l, Max | 62         | 200                            |
| 22.     | Total Hardness, (as CaCO <sub>2</sub> ), mg/L Max   | 23         | 203                            |
| 23,     | Cadmium (as Cd), mg/l, Max                          | NO NO      | 0.003                          |
| 24.     | Cyanide (as CN), mg/L Max                           | ND         | 0.05                           |
| 25,     | Lead (as Pb), mg/l, Max                             | ND         | 0.01                           |
| 26.     | Mercury (as Hg), mg/L Max                           | ND         | 0.001                          |
| 27,     | Scientum (ar Se), mg/L Max                          | ND         | 0.01                           |
| 28.     | Total Arsenic (as As), mg/l, Max                    | ND .       | 0.01                           |
| 29.     | Total Chromium, (as Cr), mg/l, Max                  | ND         | 0.05                           |
| 30.     | Anionic Detergents (as MBAS), mg/l                  | ND         | 0.2                            |
| 31.     | Total Coliform, MPN/100 ml                          | NIL        | 10 Max                         |
| 32.     | Faecal Coliforms/ 100 ml                            | NIL        | Absent                         |
| 33.     | E Coll / 100 ml                                     | NIL        | Absent                         |

Analysis Protocol: IS 3025

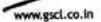
ND: Not Detected

Checked By: Mr. Pankaj Baroi, ENVIROCON

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Dated: 23.03.2021

No: GSCL/EHS/2020-21/26

To,
The Member Secretary,
Meghalaya State Pollution Control Board,
Arden, Lumpyngngad,
Shillong-793014.

Sub: Submission of Monthly Environmental Monitoring Reports - FEBRUARY -2021

Sir.

With reference to the subject as cited above, we are herewith submitting Monthly Environmental Monitoring Reports for the month of FEBRUARY-2021.

The test reports are enclosed.

We request you to acknowledge the receipt.

Thanking You,

Yours faithfully

For Goldstone Cements Ltd.

Encl: Test Reports



BLACKTIGER

CIN: U26940ML2007PLC008298

## AMBIENT AIR QUALITY MONITORING RESULTS

## February - 2021

| Stations Name                      | Date of<br>Monitoring                    | Parameters Results |                    |                   |                  |  |
|------------------------------------|--|--------------------|--------------------|-------------------|------------------|--|
|                                    | 10 10 10 10 10 10 10 10 10 10 10 10 10 1 | PM <sub>2.5</sub>  | PM <sub>10</sub>   | SO <sub>2</sub>   | NOz              |  |
|                                    |  | Limit<br>60 µg/m³  | Limit<br>100 µg/m³ | Limit<br>80 µg/m³ | Limit<br>80µg/m³ |  |
| Near CPP Water Reservoir           | 02.02.2021                               | 36.7               | 65.9               | 11.4              | 11.7             |  |
| Near CCR Material Yard             | 03.02.2021                               | 41.7               | 71.1               | 8.3               | 8.5              |  |
| Near Guest House<br>(Yamuna Sadan) | 04.02.2021                               | , 20.6             | 39.3               | <5.0              | <6.0             |  |
| Residential Colony                 | 05.02.2021                               | 18.6               | 30.1               | <5.0              | <6.0             |  |

Analysed By



CIN: U26940ML2007PLC008298

# AMBIENT AIR QUALITY MONITORING RESULTS

## February - 2021

| Stations Name                      | Date of    | Parameters Results |                    |                   |                  |
|------------------------------------|------------|--------------------|--------------------|-------------------|------------------|
|                                    | Monitoring | PM <sub>2.5</sub>  | PM10               | SO <sub>2</sub>   | NOz              |
|                                    |            | Limit<br>60 µg/m³  | Limit<br>100 µg/m³ | Limit<br>80 μg/m³ | Limit<br>80µg/m³ |
| Near CPP Water Reservoir           | 09.02.2021 | 38.3               | 60.3               | 11.9              | 7.0              |
| Near CCR Material Yard             | 10.02.2021 | 42.0               | 74.9               | 8.9               | 6.9              |
| Near Guest House<br>(Yamuna Sadan) | 11.02.2021 | 23.3               | 42.5               | <5.0              | <6.0             |
| Residential Colony                 | 12.02.2021 | 17.6               | 31.7               | <5.0              | <6.0             |

Analysed By



PCB, Assam & MSPCB, Moghalaya

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Report No.: ENV/GSCL/AAQ/FEB/20-21/01

:05/03/2021

Order No. : SOGM/00426/19-20

: 09/03/2020

#### **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old) P. O.: Khliehriat

Meghalaya- 793200

## AMBIENT AIR QUALITY TEST RESULTS

| SL  | Location(s)                        | Date of    | PM 2.5<br>(µg/m³)   | PM 10<br>(µg/m²)     | SO <sub>2</sub><br>(µg/m³) | NO <sub>2</sub><br>(µg/m²) |
|-----|------------------------------------|------------|---------------------|----------------------|----------------------------|----------------------------|
| No. | Limit(s)                           | Sampling   | 60<br>(24 Hrs. Av.) | 100<br>(24 Hrs. Av.) | 80<br>(24 Hrs. Av.)        | 80<br>(24 Hrs. Av.)        |
| 1.  | Near CPP<br>(Water Reservoir)      | 19.02.2021 | 35.2                | 58.7                 | 6.1                        | 11.8                       |
| 2.  | Near CCR (Material Yard)           | 19.02.2021 | 38.4                | 62.1                 | 5.8                        | 9.3                        |
| 3.  | Near Guest House<br>(Yamuna Sadan) | 20.02.2021 | 142                 | 35.3                 | <5.0                       | <6.0                       |
| 4.  | Residential Colony                 | 20.02.2021 | 13.6                | 31.7                 | <5.0                       | <6.0                       |

Analysis Protocol: IS 5182

Sampled & Analysed by: ENVIROCON, Digboi



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## AMBIENT AIR QUALITY MONITORING RESULTS

## February - 2021

| Stations Name                       | Date of<br>Monitoring | Parameters Results |                    |                   |                  |  |
|-------------------------------------|-----------------------|--------------------|--------------------|-------------------|------------------|--|
| alles II,                           | Montoring             | PM <sub>2.5</sub>  | PM10               | 502               | NO <sub>2</sub>  |  |
|                                     | 3,1465,1485           | Limit<br>60 µg/m³  | Limit<br>100 µg/m³ | Limit<br>80 µg/m³ | Limit<br>80µg/m³ |  |
| Near CPP Water Reservoir            | 24.02.2021            | 37.0               | 62.9               | 12.5              | 13.3             |  |
| Near CCR Material Yard              | 25.02.2021            | 41.3               | 69.4               | 8.7               | 8.5              |  |
| Near Guest House<br>(Yamuna Satlan) | 26.02.2021            | 26.1               | 41.0               | <5.0              | <6.0             |  |
| Residential Colony                  | 27.02.2021            | 18.5               | 32.2               | <5.0              | <6.0             |  |

Analysed By

rifled By

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

## February - 2021

| Parameters                 | Results | Stan |                     | nit |
|----------------------------|---------|------|---------------------|-----|
| ow Rate                    |         | ;    | 23.3 LPM            |     |
| Monitoring Period          |         | \$   | 43 m                |     |
| Stack Temperature          |         | 3    | 442 °K              |     |
| Stack Velocity of Flue gas |         | :    | 18.2 m/s            |     |
| Date of Monitoring         |         | :    | 10.02.2021          |     |
| Name of Stack & Stack No.  |         | 3    | Raw Mill & Kiln (1) |     |

| Parameters           | Results | Standard Limits | Unit                  |
|----------------------|---------|-----------------|-----------------------|
| Particulate Matter   | 21.2    | 30              | (mg/Nm <sup>3</sup> ) |
| Sulphur Dioxide(SO2) | 533.3   | 1000            | (mg/Nm³)              |
| Nitrogen Oxide (NOX) | 307.1   | 600             | (mg/Nm <sup>3</sup> ) |

Analysed By

CIN: U26940ML2007PLC008298



# STACK EMISSION MONITORING REPORT

February - 2021

|                           |   | 776 | Cool Mill (7) |
|---------------------------|---|-----|---------------|
| Name of Stack & Stack No. | 5 |     | Coal Mill (2) |

Date of Monitoring : 11.02.2021

Stack Velocity of Flue gas : 12.0 m/s

Stack Temperature : 328 °K

Monitoring Period : 48 m

ow Rate : 20.7 LPM

| Parameters           | Results | Standard Limits | Unit                  |
|----------------------|---------|-----------------|-----------------------|
| Particulate Matter   | 17.8    | 30              | (mg/Nm³)              |
| Sulphur Dioxide(SO2) | 352.8   | 1000            | (mg/Nm <sup>3</sup> ) |
| Nitrogen Oxide (NOX) | 125.6   | 600             | (mg/Nm <sup>3</sup> ) |

Analysed By



PCB, Assam & MSPCB, Meghalaya

Digbot Stores Building, New Market Digbot, Assam - 786 171

Ph: 03751-264414, 9435008657, 8876028672

E-mail: envirocon@rediffmail.com Website: www.envirocon.net.in



Report No.: ENV/GSCL/SE/FEB/20-21/01

Date

: 05/03/2021

Order No. : SOGM/00426/19-20

Date

: 09/03/2020

## **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old)

P. O .:- Khliehriat Meghalaya-793200

## STACK EMISSION TEST RESULTS

| 01     | Stack Emission Test Ref. No.          | GSCL/SE/FEB/20-21/01 |                    |          |  |
|--------|---------------------------------------|----------------------|--------------------|----------|--|
| 02     | Date of Sampling                      | 19.02.2021           |                    |          |  |
| 03     | Material of Construction              | M.S.                 |                    |          |  |
| 04     | Stack Attached To                     | Coal Mill            |                    |          |  |
| 05     | Flue Gas Temperature (°C)             | 54                   |                    |          |  |
| сħ     | Exit Velocity of Gas (m/sec)          | 10.6                 |                    |          |  |
| 07     | Type of Puel Used                     | NA*                  |                    |          |  |
| 08     | Analysis Result                       | s of Plue Gas        |                    |          |  |
| SL No. | Parameter(s)                          | Result(s)            | Unit(s)            | Limit(s) |  |
| L      | PM- Particulate Matter                | 17.3                 | mg/Nm³             | 30       |  |
| ik.    | Sulphur Dioxide (as SO <sub>2</sub> ) | 541.3                | mg/Nm <sup>3</sup> | 1000     |  |
| ar.    | Oxides of Nitrogen (as NO.)           | 314.5                | mg/Nm³             | 600      |  |

\*NA: Not Applicable

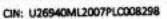


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## STACK EMISSION MONITORING REPORT

February - 2021

| Name of Stack & Stack No. | : | Cooler ESP(3) |
|---------------------------|---|---------------|

Date of Monitoring : 11.02.2021

Stack Velocity of Flue gas : 12.3 m/s

Stack Temperature : 495 °K

Monitoring Period : 31 m

Flow Rate : 31.8 LPM

| Parameters         | Results | Standard Limits | Unit                  |
|--------------------|---------|-----------------|-----------------------|
| Particulate Matter | 20.6    | 30              | (mg/Nm <sup>3</sup> ) |

Analysed By



Digbot Stores Building, New Market Digboi, Assam - 786 171

Ph: 03751-264414, 9435008657, 8876028672

E-mail: envirocon@rediffmail.com Website: www.envirocon.net.in



Report No.: ENV/GSCL/SE/FEB/20-21/02

: 05/03/2021 Date

Order No. : SOGM/00426/19-20

: 09/03/2020

## **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old)

P. O.: Khliehriat Meghalaya-793200

## STACK EMISSION TEST RESULTS

| 01      | Stack Emission Test Ref. No. | GSCL/SE/FEB/20-21/02 |                    |          |  |
|---------|------------------------------|----------------------|--------------------|----------|--|
| 02      | Date of Sampling             | 19.02.2021           |                    |          |  |
| 03      | Material of Construction     | M. S.                |                    |          |  |
| 04      | Stack Attached To            | Cooler E. S. P.      |                    |          |  |
| 05      | Flue Gas Temperature (°C)    | 229                  |                    |          |  |
| -06     | Exit Velocity of Gas (m/sec) | 18.1                 |                    |          |  |
| 07      | Type of Fuel Used #          | NA*                  |                    |          |  |
| 08      | Analysis Result              | ts of Flue Gas       |                    |          |  |
| SI. No. | Parameter(s)                 | Result(s)            | Unit(s)            | Limit(s) |  |
| 1       | PM- Particulate Matter       | 21.6                 | mg/Nm <sup>5</sup> | 30       |  |

\*NA: Not Applicable



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BLACKTIGE

CIN: U26940ML2007PLC008298

## STACK EMISSION MONITORING REPORT

## February - 2021

Name of Stack & Stack No.

CPP (5)

Date of Monitoring

12.02.2021

Stack Velocity of Flue gas

8.3 m/s

Stack Temperature

379 °K

Sonitoring Period

36 m

Flow Rate

28.0 LPM

| Parameters            | Unit       | Results | Standard Limits |
|-----------------------|------------|---------|-----------------|
| Particulate Matter    | (mg/Nm³)   | 34.2    | 50              |
| Sulphur Dioxide (SO2) | (mg/Nm³)   | 459.5   | 600             |
| Nitrogen Oxide (NOX)  | (mg/Nm³) # | 237.3   | 300             |

Analysed By



PCB, Assam & MSPCB, Meghalaya

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E-mail: envirocon@rediffmail.com Webalta: www.envirocon.net.in



Report No.: ENV/GSCL/SE/FEB/20-21/03

Date

: 05/03/2021

Order No. : SOGM/00426/19-20

: 09/03/2020

#### **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old)

P. O .: Khliehriat Meghalaya- 793200

## STACK EMISSION TEST RESULTS

| n          | Sulphur Dioxide (as SO <sub>2</sub> ) | 518.2          | mg/Nm <sup>3</sup> | 600      |  |
|------------|---------------------------------------|----------------|--------------------|----------|--|
| L          | PM- Particulate Matter                | 35.7           | mg/Nm³             | 50       |  |
| SI. No.    | Parameter(s)                          | Result(s)      | Unit(s)            | Limit(s) |  |
| 08         | Analysis Resul                        | ts of Flue Gas |                    |          |  |
| 07         | Type of Fuel Used                     | Cost           |                    |          |  |
| <b>9</b> 6 | Exit Velocity of Gas (m/sec)          |                | 8.4                |          |  |
| 05         | Flue Gas Temperature (°C)             |                | 90                 |          |  |
| 04         | Stack Attached To                     | Capti          | ve Power Plant     | (CPP)    |  |
| 03         | Material of Construction              | 2              | Refractory Brick   |          |  |
| 02         | Date of Sampling                      |                | 20.02.2021         | 9        |  |
| 01         | Stack Emission Test Ref. No.          | GSC            | L/SE/FEB/20-21     | 1/03     |  |



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CIN: U26940ML2007PLC008298



## STCK EMISSION MONITORING REPORT

## February - 2021

| Name of Stack & Stack No.  |          | 1 | Cement   | Mill (4)        |
|----------------------------|----------|---|----------|-----------------|
| Date of Monitoring         |          |   | 12.02.20 | 21              |
| Stack Velocity of Flue gas |          | ; | 12.3 m/s | s               |
| Stack Temperature          |          | : | 339 °K   |                 |
| ≤ionitoring Period         |          | 3 | 49 m     |                 |
| Flow Rate                  |          | : | 20.6 LPM | 1               |
| Parameters                 | Unit     |   | Results  | Standard Limits |
| Particulate Matter         | (mg/Nm³) |   | 16.2     | 30              |

Analysed By



PCB, Assam & MSPCB, Meghalaya

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E-mail: envirocon@rediffmail.com Website: www.envirocon.net.in



Report No.: ENV/GSCL/SE/FEB/20-21/04

Date

: 05/03/2021

Order No. : SOGM/00426/19-20

Date

: 09/03/2020

## **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old)

P. O .: - Khliehriat Meghalaya- 793200

## STACK EMISSION TEST RESULTS

| 08         | Analysis I                   | Results of Flue Gas | Unit(s)       | Limit(s) |  |  |
|------------|------------------------------|---------------------|---------------|----------|--|--|
| 07         | Type of Fuel Used            | t See See           | 1             |          |  |  |
| 950<br>Val |                              |                     | NA*           |          |  |  |
| 06         | Exit Velocity of Gas (m/sec) |                     | 15.1          |          |  |  |
| 05         | Flue Gas Temperature (°C)    |                     | 58            |          |  |  |
| 04         | Stack Attached To            |                     | Cement Mill   |          |  |  |
| 03         | Material of Construction     |                     | M. S.         |          |  |  |
| 02         | Date of Sampling             |                     | 20.02.2021    |          |  |  |
| 01         | Stack Emission Test Ref. No. | GSCL                | /SE/FEB/20-21 | /04      |  |  |

\*NA: Not Applicable



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E-mail: envirocon@rediffmail.com Website: www.envirocon.net.in



Report No.: ENV/GSCL/FE/FEB/20-21/01

Date

: 05/03/2021

Order No. : SOGM/00426/19-20

Date

: 09/03/2020

## **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old)

P. O.:- Khliehriat Meghalaya- 793200

## PROCESS FUGITIVE EMISSION TEST RESULTS

| Date       | Locations                 | Fugitive Emission Results for SPM<br>(µg/m³) | Limits<br>(µg/m²) |
|------------|---------------------------|--|-------------------|
| 19.02.2021 | Fly-ash Storage Section   | 2112   | 5000              |
| 19.02,2021 | Coal Storage Section      | 962  | 2000              |
| 26.02.2021 | Limestone Storage Section | 1907   | 5000              |
| 20.02.2021 | Cement Packing Section    | 2513   | 5000              |



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Order No. : SOGM/00426/19-20

: 09/03/2020

Report No.: ENV/GSCL/ETP/FEB/20-21/01

: 05/03/2021 Date

## **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old)

P. O .:- Khliehriat Meghalaya- 793200

#### **ETP WATER ANALYSIS RESULTS**

Sample Type : Treated ETP Water

Sample Source : ETP Outlet

Collected By: jointly by Envirocon & Client

Collected On: 20.02.2021

| SI. No. | Parameter(*)                                | Unit(s) | Result(x) | Desirable Limits<br>(15: 2490)                                   |
|---------|---|---------|-----------|--|
| 01      | ри  | -       | 6.81      | 5.5 - 9.0  |
| 02      | Temperature                                 | •       | 21.6      | shall not exceed 5°C<br>above the receiving<br>water temperature |
| 03 *    | Total Suspended Solids                      | mg/l    | 19        | 100  |
| 04      | Biochemical Oxygen Demand<br>(3 Days @27°C) | 4 mg/1  | 21        | 30   |
| 05      | Chemical Oxygen Demand                      | mg/l    | 96        | 250  |
| 06      | Oil & Gresse                                | mg/l    | <4.0      | 10   |
| 07      | Total Residual Chlorine                     | mg/l    | <0.01     | 1.0  |
| 08      | Ammonical Nitrogen (as N)                   | mg/t    | 1.81      | 50   |
| 09      | Total Keldahi Mitrogen (as NHs)             | mg/l    | 8.3       | 100  |
| 10      | Free Ammonia (es MH <sub>2</sub> )          | mg/l    | <0.01     | 5.0  |

Analysis Protocol: 15 3025



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Report No. : ENV/GSCL/DW/FEB/20-21/01

:05/03/2021 Date

Date

Order No. : SOGM/00426/19-20

:09/03/2020

#### **GOLDSTONE CEMENTS LIMITED**

Village-Musiang Lamare (Old), P. O.:- Khliehrist Meghalaya: 793200

## DRINKING WATER ANALYSIS RESULTS

| teo by  | jointly by Envirocon & Client                      |            | Desirable Limit |
|---------|--|------------|-----------------|
| SI. No. | Parameters   | Results    | (85: 10500)     |
| L.      | Colour , Hazen Units, Max                          | 1          | 5               |
| 2.      | Odour  | Odourless  | Agreeable       |
| 1.      | Taste  | Acceptable | Agrenable       |
|         | Turbidity, NTU, Max                                | 0.31       | 1.0             |
| 5.      | pH   | 6.91       | 65 85           |
| 6.      | Total Dissolved Solids, mg/l, Max                  | 115        | 500             |
| 7.      | Aluminium (as Al), mg/l, Max                       | ND         | 0.03            |
| 8.      | Boron (as B), mg/l, Max                            | ND         | 0.5             |
| 9.      | Calcium (as Ca), mg/l, Max                         | 26         | 75              |
| 10.     | Chloride (as Cl), mg/l, Max                        | 9.2        | 250             |
| 11.     | Copper (as Cu), mg/l, Max                          | ND         | 0.05            |
| 12.     | Fluorides (as F), mg/l, Max                        | ND         | 1.0             |
| 13.     | Free Residual Chlorine, mg/l, Min                  | ND         | 0.2             |
| 14.     | Iron (as Fe), mg/l, Max                            | <0.01      | 0.3             |
| 15.     | Magnesium (as Mg), mg/l, Max                       | 2.2        | 30              |
| 16.     | Manganese (as Mn), mg/L Max                        | ND         | 0.1             |
| 17.     | Zinc (as Zn), mg/l, Max                            | F ND       | 5.0             |
| 18.     | Nitrate (as NO <sub>1</sub> ), mg/l, Max           | <0.01      | 45              |
| 19.     | Phonoise Compounds (as C.M.OH), mg/l, Max          | ND         | 0.601           |
| 20.     | Sulfate (as SO <sub>4</sub> ), mg/l, Max           | 48         | 200             |
| 21.     | Total Alkalinity(28 CaCOs), mg/L Max               | 58         | 200             |
| 22.     | Total Hardness. (as CaCO <sub>3</sub> ), mg/l, Max | 18         | 200             |
| 23.     | Cadmium (as Cd), mg/l, Max                         | ND         | 0.003           |
| 24.     | Cyanide (as CN), mg/l, Nax                         | ND         | 0.05            |
| 25      | Lead (as Pb), mg/l, Max                            | ND         | 0.01            |
| 26.     | Mercury (as Hg), mg/L Max                          | ND         | 0.001           |
| Z7.     | Selensum (as Sc), mg/l, Max                        | ND         | 0.01            |
| 28.     | Total Arsenic (as As), mg/l, Max                   | ND         | 0.01            |
| 29.     | Total Chromium. (as Cr), mg/l, Max                 | ND         | 0.05            |
| 30.     | Anionic Detergents (as MBAS), mg/l                 | ND         | 0.2             |
| 31.     | Total Coliform, MPN/100 ml                         | NIL        | 10 Max          |
| 32      | Psecal Coliforms/ 100 mi                           | MIL        | Absent          |
| 33.     | E. Coli / 100 ml                                   | NIL        | Absent          |

Analysis Protocol: IS 302

ND: Not Detected

Checked By: Mr. Pankaj Bard

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Report No.: ENV/GSCL/NLM/FEB/20-21/01

Date

: 05/03/2021

Order No. : SDGM/00426/19-20

Date

: 09/03/2020

#### **GOLDSTONE CEMENTS LIMITED**

Village- Musiang Lamare (Old)

P. O.:- Khliehriat Meghalaya- 793200

## NOISE LEVEL MEASUREMENT RESULTS

| SI. Na.  | Tour Months             | Date              | Day    | Time            | Night         | Time            |
|----------|-------------------------|-------------------|--------|-----------------|---------------|-----------------|
| 31. 110. | Location(s)             | Of<br>Measurement | (dB-A) | Limit<br>(dB-A) | Laq<br>(dB-A) | Limit<br>(dB-A) |
| 1        | Near Guest House        | 19.02.2021        | 62.8   | 75              | 55.3          | 70              |
| 2        | Near Residential Colony | 20.02.2021        | 59.6   | 75              | 52.3          | 70              |



NOTE

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2 Results reser only to the portugiar parameters tested.

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No: GSCL/EHS/2021-22/02

Shillong-793014.

To,
The Member Secretary,
Meghalaya State Pollution Control Board,
Arden, Lumpyngngad,

Sub: Submission of Monthly Environmental Monitoring Reports - MARCH -2021

Sir,

With reference to the subject as cited above, we are herewith submitting Monthly Environmental Monitoring Reports for the month of MARCH-2021.

The test reports are enclosed.

We request you to acknowledge the receipt.

Thanking You,

Yours faithfully

For Goldstone Cements Ltd.

End: Test Reports

CIN: U25940ML2007PLC008298



## AMBIENT AIR QUALITY MONITORING RESULTS

## March - 2021

| Stations Name                      | Date of<br>Monitoring | Р                 | 'arameter          | s Results         | 3                            |
|------------------------------------|-----------------------|-------------------|--------------------|-------------------|------------------------------|
|                                    | 450                   | PM <sub>2.5</sub> | PM10               | SOz               | NO <sub>2</sub>              |
|                                    |                       | Limit<br>60 μg/m³ | Limit<br>100 µg/m³ | Limit<br>80 µg/m³ | Limit<br>80µg/m <sup>1</sup> |
| Near CPP Water Reservoir           | 01.03.2021            | 29.9              | 49.3               | 14.7              | 9.9                          |
| Near CCR Material Yard             | 02.03.2021            | 33.5              | 52.1               | 10.7              | 8.3                          |
| Near Guest House<br>(Yamuna Sadan) | 03.03.2021            | 22.3              | 36.6               | <5.0              | <6.0                         |
| Residential Colony                 | 04.03.2021            | 15.6              | 33.8               | <5.0              | <6.0                         |

Analysed By

COTOS CALLES

CIN: U26940ML2007PLC008298



## AMBIENT AIR QUALITY MONITORING RESULTS

## March - 2021

| Stations Name                      | Date of<br>Monitoring |                   | Paramete           | rs Results        |                  |
|------------------------------------|-----------------------|-------------------|--------------------|-------------------|------------------|
|                                    | Williams              | PM <sub>2.5</sub> | PM <sub>10</sub>   | SO <sub>2</sub>   | NO <sub>2</sub>  |
|                                    |                       | Limit<br>60 μg/m³ | Limit<br>100 µg/m³ | Limit<br>80 µg/m³ | Limit<br>80µg/m³ |
| Near CPP Water Reservoir           | 08.03.2021            | 31.1              | 47.8               | 9.2               | 7.4              |
| Near CCR Material Yard             | 11.03.2021            | 36.5              | 55.9               | 10.6              | 8.6              |
| Near Guest House<br>(Yamuna Sadan) | 12.03.2021            | 18.1 :            | 38.5               | <5.0              | <6.0             |
| Residential Colony                 | 13.03.2021            | 14.3              | 34.8               | <5.0              | <6.0             |

Analysed By

TURNING OF THE TOTAL OF THE TOT



Environce Building, LO.C.L.(AOD) New Market P.O.: Digbot, Distr. Tinsukia, Assam.—788 171 Ph. 03751-284414, 9439008657, 8876028672 E-mail: environom@rediffmail.com

ISO 9001:2015 Certified ISO 45001:2018 Certified

Report No.: ENV/GSCL/20-21/AA-03/01

Date : 06/04/2021

Report Issued To: GOLDSTONE CEMENTS LIMITED

Village: Musiang Lamare (Old); PO: Khitehriat, Meghalaya-793200

Order No.: 50GM/00426/19:20 Date: :09/03/2020

# AMBIENT AIR QUALITY TEST RESULTS

| TOCATIONS                          | Date of<br>Sampling | PN 2.5<br>(Hg/m²)          | PN 10<br>(µg/m²)            | 50;<br>(Hg/m <sup>2</sup> ) | NO <sub>2</sub><br>(µg/m²) | NH <sub>5</sub><br>(µg/m²)  | (m/Jm)                    | O <sub>3</sub><br>(Mg /m³) | B[a]P<br>(ng/m²)         | C.H.<br>(P4 /m <sup>3</sup> ) | NI<br>(ng/m²)             | As<br>(ng/m²)       | Pb (Fm/m²)      |
|------------------------------------|---------------------|----------------------------|-----------------------------|-----------------------------|----------------------------|-----------------------------|---------------------------|----------------------------|--------------------------|-------------------------------|---------------------------|---------------------|-----------------|
| LIMITS 📥                           | ŧ                   | 60<br>(24 hrs.<br>Average) | 100<br>(24 hrs.<br>Awerage) | 80<br>(24 hrs.<br>Average)  | 80<br>(24 hrs.<br>Average) | 400<br>(24 hrs.<br>Average) | 4.0<br>(1 hr.<br>Average) | 180<br>(1 hr.<br>Average)  | L0<br>(Amusi<br>Average) | S.D<br>(Annual<br>Average)    | 20<br>(Annual<br>Average) | (Annual<br>Average) | 1.0<br>(34 hrs. |
| Near CPP (Water<br>Reservoir)      | 22.03.2021          | 31.4                       | 55.9                        | 6.4                         | 10.5                       | 90                          | <0.01                     | 4,0                        | <0,1                     | 1000                          | 10.00                     | -0.01               | 10.0>           |
| Near CCR (Material<br>Yard)        | 22.03.2021          | 36.9                       | 179                         | 8.5                         | 83                         | 45.0                        | <0.01                     | 4.0                        | <0.1                     | 10,0>                         | 10.0>                     | 10.0>               | 1000            |
| Near Guest House<br>(Yamuna Sadan) | 23,03,2021          | 12.8                       | 33.2                        | 45.0                        | <£.0                       | -S.D                        | . 0023                    | 410                        | <0.1                     | 40.01                         | <0.00                     | *0.01               | 10.0>           |
| Residential Colony                 | 23.03.2021          | 14.9                       | 36.8                        | 45.0                        | 6.0                        | -S.0                        | 0.051                     | d D                        | -0.1                     | +0.01                         | <0.01                     | -0.01               | 10.0>           |



Checked By: Pankaj Baroi, ENVIROCON

It Results reported are valid at the time of and under the preveiting conditions of measurement.

2. Results refer only to the particular peramoters tested.

3. This test report shall not be reproduced except in full without the written permission of EWTROCON, LOCA (ACD) New Market, Eights - 706171, Assam.

Core Services: Environmental Monitoring & Data Generation, EIA & EMP, Environmental Audit & Allied Environmental Management jobs Associate Services: Certification by Competent Person (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.

CIN: U26940ML2007PLC008298



## AMBIENT AIR QUALITY MONITORING RESULTS

## March - 2021

| Stations Name                      | Date of<br>Monitoring | )                 | Paramete           | rs Results        |                  |
|------------------------------------|-----------------------|-------------------|--------------------|-------------------|------------------|
|                                    |                       | PM <sub>2.5</sub> | PM <sub>10</sub>   | SOz               | NO <sub>2</sub>  |
|                                    |                       | Limit<br>60 µg/m³ | Limit<br>100 µg/m³ | Limit<br>80 µg/m³ | Limit<br>80µg/m³ |
| Near CPP Water Reservoir           | 26.03.2021            | 35.5              | 42.2               | 8.6               | 7.1              |
| Near CCR Material Yard             | 27.03.2021            | 38.1              | 49.8               | 9.8               | 8.0              |
| Near Guest House<br>(Yamuna Sadan) | 29.03.2021            | N                 | lo Sampling D      | ue to Rain fa     | H                |
| Residential Colony                 | 30.03.2021            | . * * N           | lo Sampling D      | ue to Rain fa     | 11               |

Analysed By

E Canacia



# POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals & Chemical Project Engineers, EIA & Disaster Management Study

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#### TEST REPORT STACK GAS

|  |  |  | tarket,   | Report No.<br>Report Date<br>Date of Sampling<br>Sample Received Date  | G/21(02)/18<br>: 15.03.2021<br>: 21.02.2021<br>: 28.02.2021 |  |
|--|--|--|---|--|---|--|
|  | ; Stack Gas  | an .   |   | The Definition Council   | : 6/21(02)/18   |  |
| ling Location  | A Contract of the Contract of  | and the second s | ED  | 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2  | : 15.03.2021  |  |
|  |  | MENTS LIMIT  | EU  |  | PULL  |  |
|  |  | - The MILE   | ln.   | Production of the state of the  | Process activity  |  |
|  |  | 4 254 25 1000000   |   |  | : Coal & Raw Ma   | terial   |
|  |  | -  |   |  | ± 7 TPH   |  |
|  |  | Circular   | - 10  |  | 3.4   |  |
|  |  | 444  | - 1   |  | 144   |  |
|  |  | and the same   |   |  |   |  |
|  |  | 575  |   |  | 1.00  |  |
| 7,000  | IE STACK :   |  |   | T 35503 507-3  |   |  |
| CALL CONTRACT  |  |  |   |  | : 1700 TPD  |  |
|  |  |  |   | MAINTENANCE  | 1700 TPD  |  |
|  |  | = 8.15   |   | Part Commence  | 252 HT 15450  |  |
|  |  | 68   |   | THE RESERVE OF THE PARTY OF THE |   |  |
|  | POLITICATION CONTRACTOR CONTRACTO |  |   |  |   |  |
| Committee of the Commit |  |  | 2000  | B) HUNNING   | The Landson   |  |
|  |  | Permanen   | t & Wet   | E: POLLUTION CONTROL DEVICE  | ; Bag Filter  |  |
| SULT OF SAMPLE   | ING  |  |   |  |   |  |
|  | Parameter  |  | Unit  | The state of the s |   | Result   |
| Temperature of   | emission   |  | degC  |  |   | : 183  |
| Section and the second section in the section in the second section in the section |  |  | mmilig  |  |   | 1 748  |
|  |  |  | m/Sec   |  |   | : 16.4   |
|  |  |  | Nes <sup>3</sup> /er.   |  |   | : 796147.82  |
|  |  |  | mg/Nm <sup>1</sup>  |  |   | 21   |
|  |  | co,  |   |  |   | 1-   |
| and the selection of the second of the secon | The second secon |  |   |  |   | : 425  |
|  |  |  |   |  |   | 283  |
|  | Annual Control of the Parket State of the Park |  | 16 v/v  | APHA (Air Analysis) (3" Edition  | n) Method- 134  | : 14.6   |
|  | Carbon Dioxide   |  | % v/v   | APHA (Air Analysis) (3" Editio   | r) Method-134   | 1.6  |
| Concentration of   | # Carbon Director  |  |   | APHA (Air Analysis) (3" Editio   |   |  |
|  | STACK CONNECT MATERIAL OF CO SHAPE OF THE D HEIGHT OF THE S a) From Ground I b) From Ground I b) From Roof Lev DIAMETER OF THE d) TOE (M) b) Bottom (M) c) Sampling Point HEIGHT OF THE ! a) From Ground b) From Ground b) From Ground b) From Lower D WHETHER STACO PRIMANENT PLI SULT OF SAMPLI Temperature of Barometric Pres Velocity of Gas I Quantity of Gas I Quantity of Gas I Concentration of Concentration of Concentration of Concentration of Concentration of  | of Sample : Stack Gas ling Location : Raw Mill Kiln Sta GOLDSTONE CEI NERAL INFORMATION ABOUT STACK STACK CONNECTED TO MATERIAL OF CONSTRUCTION SHAPE OF THE DUCT HEIGHT OF THE STACK : a) From Ground Level (M) b) From Roof Level (M) DIAMETER OF THE STACK : a) Top (M) b) Bottom (M) HEIGHT OF THE SAMPLING PORT ; a) From Ground Level (M) WHETHER STACK IS PROVIDED WITH PERMANENT PLATFORM /LADDER SULT OF SAMPLING Parameter Temperature of emission Barometric Pressure Velocity of Gas Flow Concentration of Particulate Matter Particulate Matter Normalised to 12% Concentration of Oxides of Nitrogen   | Digboi - 786171, Assem  of Sample : Stack Gas ling Location : Raw Mill Kiln Stack, GOLDSTONE CEMENTS LIMIT  NERAL INFORMATION ABOUT STACK  STACK CONNECTED TO : Raw Mill Kiln  MATERIAL OF CORSTRUCTION : M.S  SHAPE OF THE DUCT : Circular  HEIGHT OF THE STACK : a) From Ground Level (M) : 40  b) From Roof Level (M) : 40  DIAMETER OF THE STACK : a) Top (M) : 3.15  HEIGHT OF THE SAMPLINS PORT : a) From Ground Level (M) : 20  b) From Lower Disturbing Zone (M) :  WHETHER STACK IS PROVIDED WITH : Permanent  PERMANENT PLATFORM /LADDER  SULT OF SAMPLING  Parameter  Temperature of emission  Barometric Pressure  Velocity of Gas Flow  Quantity of Gas Flow  Quantity of Gas Flow  Quantity of Gas Flow  Concentration of Darisculate Matter  Particulate Matter Normalised to 12% CO, Concentration of Oxides of Nitrogen  Concentration of Oxides of Nitrogen  Concentration of Oxides of Nitrogen  Concentration of Oxygen | Digboi - 786171, Assem  of Sample : Stack Gas ling Location : Raw Mill Kiln Stack, GOLDSTONE CEMENTS LIMITED  NERAL INFORMATION ABOUT STACK STACK CONNECTED TO : Raw Mill Kiln MATERIAL OF CONSTRUCTION : M.S SHAPE OF THE DUCT : Circular HEIGHT OF THE STACK : a) From Ground Level (M) : 40 b) From Roof Level (M) : DIAMETER OF THE STACK : a) Top (M) : b) Bottom (M) : c) Sampling Point (M) : 20 b) From Lower Disturbing Zone (M) : WHETHER STACK IS PROVIDED WITH Permanent & Well PERMANENT PLATFORM / LADDER  SULT OF SAMPLING  Parameter Unit  Temperature of emission deg C Baroinotric Pressure months Velocity of Gas Flow MySec Concentration of Particulate Matter Particulate Matter Normalised to 12% CO, mg/Nm² Concentration of Oxides of Nitrogen mg/Nm²  | ### Bodd  | ### State   Find Stores Building, New Market, Digbol - 786171, Assam   Sample   15.03.2021   ### State   Stack Gas   Sample Received Date   28.02.2021   ### Sample   Stack Gas   Sample Received Date   28.02.2021   ### Sample   Stack Gas   Sample Id No.   G/21(02)/18   ### Sample   Stack Gas   Sample Id No.   G/21(02)/18   ### Stack Gostone CEMENTS LIMITED   Test End Date   28.02.2021   ### STACK CONNECTED   Raw Mill Kin Stack   Test Start Date   28.02.2021   ### STACK CONNECTED   Raw Mill Kin Stack   Test Start Date   28.02.2021   ### STACK CONNECTED   Raw Mill Kin Stack   Test Start Date   28.02.2021   ### STACK CONNECTED   Raw Mill Kin Stack   Test End Date   15.03.2021   ### STACK CONNECTED   Raw Mill Kin Stack   Test Start Date   15.03.2021   ### STACK CONNECTED   Raw Mill Kin Stack   Test End Date   15.03.2021   ### STACK CONNECTED   Raw Mill Kin Stack   Test End Date   15.03.2021   ### STACK CONNECTED   Raw Mill Kin Stack   Test End Date   15.03.2021   ### STACK CONNECTED   Raw Mill Kin Stack   Test End Date   15.03.2021   ### STACK CONNECTED   Raw Mill Kin Stack   Test End Date   15.03.2021   ### STACK CONNECTED   Raw Mill Kin Stack   Test End Date   15.03.2021   ### STACK CONNECTED   Raw Mill Kin Stack   Test End Date   15.03.2021   ### STACK CONNECTED   Raw Mill Kin Stack   Test End Date   15.03.2021   ### STACK CONNECTED   Raw Mill Kin Stack   Test End Date   15.03.2021   ### STACK CONNECTED   Raw Mill Kin Stack   Test End Date   15.00 TPD   ### STACK CONNECTED WITH   Permanent & Well   Rate D   1700 TPD   ### STACK CONNECTED WITH   Permanent & Well   Rate D   1700 TPD   ### STACK CONNECTED WITH   Permanent & Well   Rate D   1700 TPD   ### STACK CONNECTED WITH   Permanent & Well   Rate D   1700 TPD   ### STACK CONNECTED WITH   Permanent & Well   Rate D   1700 TPD   ### STACK CONNECTED WITH   Permanent & Well   Rate D   1700 TPD   ### STACK CONNECTED WITH   Permanent & Well   15.11255 (Part 1):1985 (RA2014) & (Part 3):2008   ### STACK CONNECTED WITH   Permanent & Well   Rate D   1710 TPD   ### STACK CO |

The results relate only to the parameters tested.

....end of report...

Tannay Chairmbarty
Quality Manager

Authorized Signatury
For Pollution And Project Consultants

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# POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals & Chemical Project Engineers. EIA & Disaster Management Study

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TEST REPORT STACK GAS

| Customer Nar<br>Address<br>Type of Samp<br>Sampling Loca<br>D: RESULT OFS  | : Digbol Stores Build<br>Digbol – 786171, A<br>de : Stack Gas<br>tion : Raw Mill Kiln Stack<br>GOLDSTONE CEME  | 55am                    | Report No.   G/21/02//<br>  Report Date   15.03.202<br>  Date of Sampling   21.02.202<br>  Sample Received Date   28.02.202<br>  Sample Id No.   G/21/02//<br>  Test Start Date   28.02.2021<br>  Test End Date   15.03.2021   | 1<br>1<br>1<br>18 |
|--|--|-------------------------|--|-------------------|
| SI.<br>No.   | Parameter  | Unit                    | Method of Test (Reference)   | Result            |
|  | Chloride (HCL)   | (mg/Nm²)                | USEPA-9212   | : < 1.50          |
|  | Fluoride (HF)  | (mg/Nm <sup>4</sup> )   | USEP4-9214   |                   |
| and the second s |  | (µg/Nm²)                | USEPA-METHOD 29  | : <0.50           |
| And the second second  |  | (µg/firm <sup>3</sup> ) | USEPA-METHOD 29  | <9.50             |
| 16 Antimony)   |  | (mg/Nm²)                | USEPA-METHOD 29  | = +1.00           |
| 17 Arsenic(as  |  | (ug/Nm²)                | USEPA-METHOD 29  | 1 <0.0003         |
| la Lengtas Pol   | the state of the s | [µg/Nm²]                | USEPA-METHOD 29  | 1 <0.50           |
| 9 Cobalitas C  |  | (µg/Nm³)                | USEPA-METHOD 29  | <1.00             |
| 0 Chromium   |  | (sig/Nos*)              | USEPA-METHOD 29  | : <1.00           |
| 1 Copper(as C  | the same of the sa | (µg/Nm <sup>3</sup> )   | USEPA-METHOD 29  | : <1/00           |
| 2 Manganese  |  | (µg/Nm <sup>3</sup> )   | USEPA-METHOD 29  | : <1.00           |
| 3 Nickeljas Ni   | 1  | (µg/Nm²)                | THE CONTRACT OF THE CONTRACT O | 1 <1.00           |
| 4 Vanadiumia   | a V)   | (µg/Nm²)                | USEPA-METHOD 29  | : <1.00           |
| 5 Thorium(Th)  |  | (mg/Nm²)                | USEPA-METHOD 29  | 1 <1.00           |
| 5 Total Organi   | c Carbon (TOC)   | graph 1                 | USEPA-METHOD 29  | <0.0003           |
| _  | only to the parameters tosted  | (mg/Nm <sup>2</sup> )   | Approved method for the sampling, analysis of air<br>pollutants NSWEPA, 2007   | : 40.5            |

....end of report...



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## POLLUTION AND PROJECT CONSULTANTS

ENVIRONMENTAL POLLUTION CONTROL - Air, Effluent, Pharmaceuticals & Chemical Project Engineers, EIA & Disaster Management Study

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#### TEST REPORT STACK GAS

| Pesticides   | Nvirocon, Stores Building, New Market, - 786171, Assam Date of Sampling Sample Received Date Sample Id No. Test Start Date Tone CEMENTS LIMITED Report No. Report Date   | G/21(02)/18<br>: 28.02.2021 |
|--|--|-----------------------------|
| Pesticides  1 Total Furan  |  | : 15.03.2021                |
| Total Furan  | Unit Method of Test  | (Reference) Result          |
| Didwin   |  | 11325                       |
| 1 2 3 4 5 7 8 Hexachlorodibenzo-polician ng FEQNen* USEPA 23A/QA 16 4.73 : 2 1 2 3 4 7 8 Hexachlorodibenzo-polician ng FEQNen* USEPA 23A/QA 16 4.73 : 3 1 2 3 7 8 9 Hexachlorodibenzo-polician ng FEQNen* USEPA 23A/QA 16 4.73 : 4 1 2 3 7 8 Pentachlorodibenzo-polician ng FEQNen* USEPA 23A/QA 16 4.73 : 5 2 3 7 8 Fetrachlorodibenzo-polician ng FEQNen* USEPA 23A/QA 16 4.73 : 6 1 2 3 6 1 8 Hexachlorodibenzo-polician ng FEQNen* USEPA 23A/QA 16 4.73 : 7 Octoblorodibenzo-polician ng FEQNen* USEPA 23A/QA 16 4.73 : 8 FOILI Discon ng FEQNen* USEPA 23A/QA 16 4.73 : 9 2 3 4 7 8 Pentachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 10 1 2 3 6 7 8 Hexachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 11 2 3 4 7 8 9 Heptachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 12 1 2 3 4 7 8 Hexachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 13 1 2 3 6 7 8 Hexachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 14 1 2 3 7 8 9 Hexachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 15 1 2 3 7 8 Pentachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 16 2 3 7 8 Pentachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 17 1 7 8 Pentachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 18 1 2 3 7 8 Pentachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 19 1 7 8 Pentachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 19 2 3 7 8 Tetrachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 19 2 3 7 8 Tetrachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 19 2 3 7 8 Tetrachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 19 2 3 7 8 Tetrachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 19 2 3 7 8 Tetrachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 19 2 3 7 8 Tetrachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 19 2 3 7 8 Tetrachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 19 2 3 7 8 Tetrachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 19 2 3 7 8 Tetrachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 19 2 3 7 8 Tetrachlorodibenzo-buran ng FEQNen* USEPA 23A/QA 16 4.73 : 19 | rg Fig./sm² (1950) 205 /m /m   |                             |
| 2 123478- Hesschlorodibenso-p-diosin ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 3 12378-9- Hesschlorodibenso-p-diosin ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 4 12378-9- Persachlorodibenso-p-diosin ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 5 2378-Tetrachlorodibenso-p-diosin ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 6 123618- Hesschlorodibenso-p-diosin ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 7 Octachlorodibenso-p-diosin ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 8 Fibrat Diosin ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 9 23478- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 10 123678- Hesschlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 11 123478-9- Hesschlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 12 12473- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 13 123678- Hesschlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 14 1378- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 12378- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 12378- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 12378- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 12378- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 12378- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 12378- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 12378- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 12378- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 12378- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 12378- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 1258- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 1258- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 1258- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 1258- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 1258- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 1258- Persachlorodibensoriuran ng FIQ/Ner* USEPA 23A/QA 16.4.73 : 15 1258- Persachlorodibensoriuran ng | 5,6 11,0   | 10.01                       |
| 1 23 7 8 9 Heasthorodibenso-pidosin   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 7 8 Pertachlorodibenso-pidosin   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 7 8 Pertachlorodibenso-pidosin   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 6 7 8 Heasthorodibenso-pidosin   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 6 7 8 Heasthorodibenso-pidosin   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 6 7 8 Heasthorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 6 7 8 Heasthorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 4 7 8 9 Heasthorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 4 7 8 9 Heasthorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 4 7 8 9 Heasthorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 6 7 8 Heasthorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 6 7 8 Heasthorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 6 7 8 Heasthorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 6 7 8 Heasthorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 7 8 Pensachlorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 7 8 Pensachlorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 7 8 Pensachlorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 7 8 Pensachlorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 7 8 Pensachlorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 7 8 Pensachlorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 7 8 Pensachlorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 7 8 Pensachlorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 7 8 Pensachlorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 7 8 Pensachlorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 7 8 Pensachlorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 7 8 Pensachlorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 7 8 Pensachlorodibenso-bursa   ng TEQ/Nev*   USEPA 23A/QA 16.4.73   1 23 7 8 Pensachlorodibenso-bursa   ng TEQ/Nev*   USEPA 2   | polition relied/him* USERA 236 AND   | 14433                       |
| ### 123.7.8 Pertachlorodiberto-p-dioxin ####################################   | eroun as ITO Assay   | 15 4 22                     |
| 2.37.8 - Resachlorodibensoluran   1.529m   1.5   | diown professional control of the co |                             |
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| 123783- Hesachlorodibenzoluran   ng TEQ/Nor   USEPA 25A/QA 16.473   12378- Peniachlorodibenzoluran   ng TEQ/Nor   USEPA 25A/QA 16.473   12378- Hesachlorodibenzoluran   ng TEQ/Nor   USEPA 25A/QA 16.473   12378- Peniachlorodibenzoluran   ng TEQ/Nor   Peniachlorodibenzoluran      | USE H ZAVIDA   |                             |
| 2.3 f 8 Pentischlorodibenzofuran   16 TEQNam*   USEPA 23A/QA 36.4 73   1   | Section 2 policies 1   |                             |
| 23 15 Tetrachtorodibenzoluran ng.T60/km² USEPA 23A/QA.56.4.73 ng.T60/km² USEPA 23A/QA.56.4.73  | Otto in 2 Styche I   |                             |
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|  | Company of the Compan |                             |
| results relate only to the parameters tested.  At TEQNAN USEPA 23A/QA 16.4.71 - 40   | OSCINIZAÇIA I  | 1                           |

Tanmoy Chakrabarty
Quality Manager
Authorized Signatory
For Pollution And Project Consultants

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## STACK EMISSION MONITORING REPORT

## March - 2021

| Name of Stack & Stack No. | : Raw Mill & Kiln (1) |
|---------------------------|-----------------------|
|---------------------------|-----------------------|

Date of Monitoring : 02.03.2021

Stack Velocity of Flue gas : 20.7 m/s

Stack Temperature : 448 °K

Monitoring Period : 38 m

Flow Rate : 26.1 LPM

| Parameters           | Results | Standard Limits | Unit                  |
|----------------------|---------|-----------------|-----------------------|
| Particulate Matter   | 18.8    | 30              | (mg/Nm³)              |
| Sulphur Dioxide(SO2) | 484.1   | 1000            | (mg/Nm³)              |
| Nitrogen Oxide (NOX) | 279.2   | 600             | (mg/Nm <sup>3</sup> ) |

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Date 106

106/04/2021

Order No.: SOGM/00426/19-20

Date

: 19/09/2020

Report Issued To:

GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old), P. O.:- Khliehriat, Meghalaya- 793200

## STACK EMISSION TEST RESULTS

| 01     | Test Ref. No.                         | GSCL/20-21/SE-03/05      |            |          |  |  |
|--------|---------------------------------------|--------------------------|------------|----------|--|--|
| 02     | Date of Sampling                      |                          | 23.03.2021 |          |  |  |
| 03     | Material of Construction              |                          | M. S.      |          |  |  |
| 04     | Stack Attacked To                     |                          | Raw Mill   |          |  |  |
| 05     | Flue Gas Temperature (°C)             | 179                      |            |          |  |  |
| 06     | Exit Velocity of Gas (m/sec)          | 13.2                     |            |          |  |  |
| 07     | Type of Fuel Used                     | NA*                      |            |          |  |  |
|        | Analy                                 | nis Results of Flue Gas  |            |          |  |  |
| SL No. | Parameter(s)                          | Result(s)                | Unit(s)    | Limit(s) |  |  |
| ı      | Particulate Matter                    | 19 mg/Nm <sup>3</sup> 30 |            |          |  |  |
| i.     | Sulphur Dioxide (as SO <sub>2</sub> ) | 512 mg/Nm³ 1000          |            |          |  |  |
| ш.     | Oxides of Nitrogen (as NO.)           | 278                      | mg/Nm³     | 600      |  |  |

\*NA: Not Applicable



Checked By: Mr. Pankaj Barot, ENVIROCON

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## STACK EMISSION MONITORING REPORT

March - 2021

Name of Stack & Stack No. : Coal Mill (2)

Date of Monitoring : 02.03.2021

Stack Velocity of Flue gas : 14.3 m/s

Stack Temperature : 331 °K

Monitoring Period : 41 m

Flow Rate : 24.4 LPM

| Parameters           | Results | Standard Limits | Unit                  |
|----------------------|---------|-----------------|-----------------------|
| Particulate Matter   | 16.5    | 30              | [mg/Nm <sup>3</sup> ) |
| Sulphur Dioxide(SO2) | 237.9   | 1000            | (mg/Nm³)              |
| Nitrogen Oxide (NOK) | 125.6   | 600             | (mg/Nm <sup>3</sup> ) |

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Report No.: ENV/GSCL/21-22/5E-03/03

Date : 06/04/2021

Order No.: SOGM/00426/19-20

Date : 19/09/2020

Report Issued To: GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old), P. O .:- Khliehriat, Meghalaya- 793200

#### STACK EMISSION TEST RESULTS

| 01     | Test Ref. No.                            |                         | GSCL/20-21/SE-03/03        |          |  |  |
|--------|--|-------------------------|----------------------------|----------|--|--|
| 02     | Date of Sampling                         |                         | 23.03.2021                 |          |  |  |
| 03     | Material of Construction                 |                         | M.S.                       |          |  |  |
| 04     | Stack Attached To                        |                         | Coal Mill                  |          |  |  |
| 05     | Flue Gas Temperature (°C)                | 57                      |                            |          |  |  |
| 06     | Exit Velocity of Gas (m/sec)             |                         | 11.2                       |          |  |  |
| • 07   | Type of Fuel Used                        |                         | NA*                        |          |  |  |
|        | Analy                                    | sis Results of Flue Cas |                            | 0        |  |  |
| SL No. | Parameter(s)                             | Result(s)               | Unit(s)                    | Limit(s) |  |  |
| L      | Particulate Matter                       | 16                      | 16 mg/Nm <sup>3</sup> 30   |          |  |  |
| ı.     | Sulphur Dioxide (as SO <sub>2</sub> )    | 210                     | 210 mg/Nm <sup>1</sup> 100 |          |  |  |
| m.     | Oxides of Nitrogen (as NO <sub>4</sub> ) | 95                      | mg/Nm³                     | 600      |  |  |

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

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## STACK EMISSION MONITORING REPORT

## March - 2021

| Name of Stack & Stack No.  |         | :   | Cooler ESP(  | 3)       |
|----------------------------|---------|-----|--------------|----------|
| Date of Monitoring         |         | :   | 03.03.2021   |          |
| Stack Velocity of Flue gas |         | :   | 10.4 m/s     |          |
| Stack Temperature          |         | :   | 502 °K       |          |
| Monitoring Period          |         |     | 38 m         |          |
| Flow Rate                  |         | :   | 26.5 LPM     |          |
| Parameters                 | Results | Sta | ndard Limits | Unit     |
| Particulate Matter         | 15.4    | 1   | 30           | (mg/Nm³) |
|                            |         |     |              |          |

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Report No.: ENV/GSCL/21-22/SE-03/02

:06/04/2021

Order No.: \$0GM/80426/19-20

:19/09/2020

Report Issued To: GOLDSTONE CEMENTS LIMITED

Village- Mustang Lamare (Old), P. O.:- Khliebriat, Meghalaya- 793200

#### STACK EMISSION TEST RESULTS

| 10      | Test Ref. No.                | GSCL/20-21/SE-03/02     |  |  |  |  |  |
|---------|------------------------------|-------------------------|--|--|--|--|--|
| 02      | Date of Sampling             | 22.03.2021              |  |  |  |  |  |
| 03      | Material of Construction     | и. s.                   |  |  |  |  |  |
| 04      | Stack Attached To            | Cooler E. S. P.         |  |  |  |  |  |
| 05      | Flue Gas Temperature (PC)    | 218                     |  |  |  |  |  |
| 06      | Exit Velocity of Gas (m/sec) | 17.6                    |  |  |  |  |  |
| 07      | Type of Fuel Used            | NA*                     |  |  |  |  |  |
|         | Analy                        | sis Results of Flue Gas |  |  |  |  |  |
| SI. No. | Parameter(s)                 | Result(s) Unit(s) Limit |  |  |  |  |  |
| L       | Particulate Matter           | £ 18 mg/Nm³ 3           |  |  |  |  |  |

\*NA: Not Applicable



Checked By: Mr. Pankaj Barol, ENVIROCON

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## STCK EMISSION MONITORING REPORT

## March - 2021

| Particulate Matter         | (mg/Nm³) |   | 17.0     | 30              |
|----------------------------|----------|---|----------|-----------------|
| Parameters                 | Unit     |   | Results  | Standard Limits |
| Flow Rate                  |          | : | 18.9 LPM | 1               |
| Monitoring Period          |          | ; | 53 m     |                 |
| Stack Temperature          |          | : | 334 °K   |                 |
| Stack Velocity of Flue gas |          | : | 11.1 m/s | S               |
| Date of Monitoring         |          |   | 04.03.20 | 21              |
| Name of Stack & Stack No.  |          | 1 | Cement   | Mill (4)        |

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Order No.: SOGM/00426/19-20

Date

119/09/2020

Report Issued To:

GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old), P. O.:- Khilehriat, Meghalaya- 793200

#### STACK EMISSION TEST RESULTS

| 01     | Test Ref. No.                | GSCL/20-21/SE-03/01     |         |          |  |  |  |
|--------|------------------------------|-------------------------|---------|----------|--|--|--|
| 02     | Date of Sampling             | 22.03.2021              |         |          |  |  |  |
| 03     | Material of Construction     |                         | M. S.   |          |  |  |  |
| 04     | Stack Attached To            | Cement Mill             |         |          |  |  |  |
| 05     | Flue Gas Temperature (°C)    | 56                      |         |          |  |  |  |
| 06     | Exit Velocity of Gas (m/sec) | 14.3                    |         |          |  |  |  |
| 07     | Type of Fuel Used            | NA*                     |         |          |  |  |  |
|        | Analy                        | sis Results of Flue Gas |         |          |  |  |  |
| SL No. | Parameter(s)                 | Result(s)               | Unit(s) | Limit(s) |  |  |  |
| £      | Particulate Matter           | 12                      | mg/Nm²  | 30       |  |  |  |

"NA: Not Applicable



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## STACK EMISSION MONITORING REPORT

## March - 2021

Name of Stack & Stack No.

CPP (5)

Date of Monitoring

05.03.2021

Stack Velocity of Flue gas

8.7 m/s

Stack Temperature

378 °K

Monitoring Period

34 m

Flow Rate

29.5 LPM

| Parameters            | Unit       | Results | Standard Limits |  |
|-----------------------|------------|---------|-----------------|--|
| Particulate Matter    | (mg/Nm³)   | 32.5    | 50              |  |
| Sulphur Dioxide (SO2) | (mg/Nm³),  | 508.7   | 600             |  |
| Nitrogen Oxide (NOX)  | (mg/Nm³) ; | 223.3   | 300             |  |

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Village- Musiang Lamare (Old), P. O.:- Khliehriat, Meghalaya- 793200

## STACK EMISSION TEST RESULTS

| 01     | Test Ref. No.                            | GSCL/20-21/SE-03/04       |                     |          |  |
|--------|--|---------------------------|---------------------|----------|--|
| ez     | Date of Sampling                         | 23.03.2021                |                     |          |  |
| 03     | Material of Construction                 | Refractory Brick          |                     |          |  |
| 04     | Stack Attached To                        | Captive Power Plant (CFP) |                     |          |  |
| 05     | Flue Gas Temperature (*C)                | 85                        |                     |          |  |
| 06     | Exit Velocity of Gas (m/sec)             | 8.1                       |                     |          |  |
| 07     | Type of Fuel Used                        | Coal                      |                     |          |  |
|        | Analy                                    | sis Results of Plue Gas   |                     |          |  |
| SL No. | Parameter(s)                             | Result(s)                 | Unit(s)             | Limit(s) |  |
| i.     | Particulate Matter                       | 32                        | mg/Nm³              | 50       |  |
|        | Sulphur Dioxide (as SO <sub>2</sub> )    | 478                       | mg/Nm²              | 600      |  |
| ш,     | Oxides of Nitrogen (as NO <sub>4</sub> ) | 231                       | mg/Nim <sup>a</sup> | 300      |  |
| by.    | Mercury (as Hg)                          | 0.022                     | mg/Nm*              | 0.03     |  |



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Pollution Control Board, Assam

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Report No.: ENV/GSCL/21-22/DW-03/01

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Order No.: SOGM/00426/19-20

Date : 19/09/2020

Report Issued To:

**GOLDSTONE CEMENTS LIMITED** 

Village- Musiang Lamare (Old), P. O.:- Khliehriat, Meghalaya- 793200

#### DRINKING WATER ANALYSIS RESULTS

Sample Ref. No.: 05CL/20-21/DW-2303/01

Sample Source: Narmada Sadhan

Sample Type : Drinking Water

Collected On : 23-03-2021

Received On :25-03-2021

Collected By : Envirocon Representative

| SL No. | Parameters                                | Results    | Acceptable Limit* | Permissible Limit<br>in the Absence of<br>Alternate Source |
|--------|---|------------|-------------------|--|
| 1.     | Colour , Hazen Units, Max                 | 1          | 5                 | 15   |
| 2.     | Odour                                     | Odourless  | Agreeable         | Agreeable  |
| 3.     | Taste                                     | Acceptable | Agreeable         | Agrecable  |
| 4.     | Turbidity, NTU, Max                       | 0.22       | 1                 | 5  |
| 5.     | pH  | 6.88       | 65 - 85           | No Relaxation  |
| 6.     | Total Dissolved Solids, mg/l, Max         | 98         | 500               | 2000   |
| 7.     | Aluminium (as AI), mg/l, Max.             | ND         | 0.03              | 0.2  |
| 8.     | Boron (as B), mg/l, Max.                  | ND         | 0.5               | 1.0  |
| 9.     | Calcium (as Ca), mg/l, Max                | 24         | 75                | 200  |
| 10.    | Chloride (as CI), mg/l, Max               | 6,6        | 250               | 1000   |
| 11.    | Copper (as Cu), mg/L Max                  | ND         | 0.05              | 1.5  |
| 12.    | Phuorides (as F), mg/L, Max               | ND         | 1.0               | 1.5  |
| 13,    | Free Residual Chlorine, mg/l, Min         | ND         | 0.2               | 1  |
| 14.    | Iron (as Fe), mg/l, Max                   | 0.013      | 0.3               | No Relaxation  |
| 15.    | Magnesium (as Mg), mg/l, Max              | 2.1        | 30                | 100  |
| 16.    | Manganese (as Mn), mg/l, Max              | ND         | 0.1               | 0.3  |
| 17,    | Zinc (as In), mg/l, Max                   | ND         | 5.0               | 15   |
| 18.    | Nitrate (as NO <sub>1</sub> ), mg/1, Max  | 0.62       | 45                | No Relaxation  |
| 19.    | Sulface (as SO <sub>4</sub> ), mg/l, Max  | ND         | 200               | 400  |
| 20.    | Phenolic Compunds (as CaHaOH), mg/l, Max. | ND         | 0.001             | 0.002  |
|        |   |            |                   | Continued  |

\*Limits as per IS 10500:2012

Analysis Protocol: 15 3025 ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/21-22/DW-03/01

Date

: 06/04/2021

Order No.: SOGM/00426/19-20

Date

19/09/2620

Report Issued To: GOLDSTONE CEMENTS LIMITED

Village- Muslang Lamare (Old), P. O.:- Khliehriat, Meghalaya- 793200

#### DRINKING WATER ANALYSIS RESULTS

Sample Ref. No.: CSCL/20-21/DW-2303/01

Sample Source : Narmada Sadhan

Sample Type: Drinking Water

Collected On : 23-03-2021

Received On : 25-03-2021

Collected By : Envirocon Representative

| SL No. | Parameters  | Results | Acceptable Limit* | In the Absence of<br>Alternate Source |
|--------|---|---------|-------------------|---------------------------------------|
| 21.    | Total Alkalinity(as CaCO <sub>5</sub> ) , mg/l, Max | 62      | 200               | 600                                   |
| 22.    | Total Hardness, (as CaCOs), mg/l, Max               | 11      | 200               | 600                                   |
| 23.    | Cadmium (as Cd), mg/l, Max.                         | ND      | 0.003             | No Relaxation                         |
| 24.    | Cyanitle (as CN), mg/l, Max.                        | ND      | 0.05              | No Relaxation                         |
| 25.    | Lead (as Pb), mg/l, Nax.                            | ND      | 0.01              | No Relaxation                         |
| 26.    | Mercury (as Hg), mg/l, Max.                         | ND      | 0.001             | No Relaxation                         |
| 27.    | Selenium (as Se), mg/l, Max.                        | ND      | 0.01              | No Relaxation                         |
| 28.    | Total Chromium, (as Cr.), mg/l, Max                 | ND      | 0.05              | No Relaxation                         |
| 29.    | Anionic Detergents (as MBAS), mg/l                  | ND      | 0.2               | 1.0                                   |
| 30.    | Total Arsenic (as As), mg/l, Max                    | ND      | 0.01              | 0.05                                  |
| 31.    | Total Chromium, (as Cr), mg/l, Max                  | ND      | 0.05              | No Relaxation                         |
| 32,    | Faecal Coliforms/ 100 ml                            | NIL     | Absent            | Absent                                |
| 33.    | E. Coli / 100 ml                                    | NIL     | Absent            | Absent                                |
|        | 100000000000000000000000000000000000000             |         |                   | End of Report                         |

<sup>\*</sup>Limits as per IS 10500:2012

Analysis Protocol: IS 3025

ND: Not Detected

Remarks: Drinking water from the above source is fit for drinking.



Checked By: Mr. Pankaj Barol, ENVIROCON

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- 2. Results refer only to the particular parameters tested.
- 3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, LO.C.L (ACD) New Market, Digbot 786171, Assum.



<u>Recognised By</u> Pollution Control Board, Assam Envirocon Building, I.O.C.L (AOD) New Market P.O.: Digbot, Dist.: Tinsukia, Assam – 786 171 Ph: 03781-264414, 9435008687, 8878028672 E-mail: envirocon@rediffmail.com

ISO 9001:2015 Certified ISO 45001:2018 Certified

Report No.: ENV/GSCL/21-22/WW-03/01

Date : 06/04/2021

Order No.: S0GM/00426/19-20

Date : 19/09/2020

Report Issued To: GOLDSTONE CEMENTS LIMITED

Village- Mustang Lamare (Old), P. O .:- Khliehriat, Meghalaya- 793200

#### WASTE WATER ANALYSIS RESULTS

Sample Ref. No.

: GSCL/20-21/WW-Z303/01

Sample Type/Source

: Waste Water (Treated)/ETP Outlet

Sample Collected By

: Representative of ENVIROCON

Sample Collected On Sample Received On : 23.03.2021

Analysis Protocol

: 15 3025

| Sl. No. | Parameter(s)                                  | Unit(s)    | Result(s) | Limit<br>(As Per CPCE Standards)                              |
|---------|---|------------|-----------|---|
| 1.      | pH  |            | 6.86      | 5.5 - 9.0   |
| 2.      | Temperature                                   | <b>*</b> C | 25.9      | shall not exceed 5°C above the<br>receiving water temperature |
| 3.      | Total Suspended Solids                        | mg/i       | 21        | 100   |
| 4.      | Riochemical Oxygen Demand                     | mg/l       | 28        | 30  |
| * S.    | Chemical Oxygen Demand                        | mg/I       | 103       | 250   |
| 6.      | Of & Grease                                   | mg/l       | <4.0      | 10  |
| 7.      | Total Residual Chlorine                       | mg/l       | <0.01     | 1.0   |
| 8.      | Ammonical Nitrogen (as N)                     | mg/l       | 2.2       | 50  |
| 9.      | Total Kjeldahl Nitrogen (as NH <sub>3</sub> ) | mg/l       | 8.6       | 100   |
| 10.     | Free Ammonia (as NH <sub>3</sub> )            | mg/l       | <0.01     | 5.0   |
|         |   |            |           |   |



Checked By: Nr. Pankaj Barol, ENVIROCON

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Recognised By
Pollution Control Board, Assam

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ISO 9001:2015 Certified ISO 45001:2018 Certified

Report No.: ENV/GSCL/21-22/WW-03/03

Date

106/04/2021

Order No.: SOGM/00426/19-20

Date : 19

: 19/09/2020

Report Issued To: GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old), P. O .:- Khilehriat, Meghalaya- 793200

#### WASTE WATER ANALYSIS RESULTS

Sample Ref. No.

: GSCL/20-21/WW-2303/03

Sample Type/Source

: Waste Water/Boiler Blow Down

Sample Collected By

: Representative of ENVIROCON

Sample Collected On

23.03.2021

Sample Received On

25.03.2021

Analysis Protomi

:15 3025

| SL No. | Parameter(s)           | Unit(s) | Result(s) | Limit<br>(As Per CPCB Standards) |
|--------|------------------------|---------|-----------|----------------------------------|
| 1.     | Total Suspended Solids | mg/l    | 14        | 100                              |
| 2.     | Otl & Grease           | mg/l    | <4.0      | 20                               |
| 3.     | Copper (as Ca)         | mg/l    | <0.01     | 1.0                              |
| 4.     | Iron (as Fe)           | mg/l    | <0.01     | 1.0                              |



Checked By: Mr. Pankaj Baroi, ENVIROCON

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ISO 9001:2015 Certified ISO 45001:2018 Certified

Report No.: ENV/GSCL/21-22/N-03/01

Da/te

: 06/04/2021

Order No.: 50GM/00426/19-20

Date

:19/09/2020

Report Issued To :

**GOLDSTONE CEMENTS LIMITED** 

Village- Musiang Lamare (Old), P. O.:- Khliehriat, Meghalaya- 793200

#### NOISE LEVEL MEASUREMENT RESULTS

| SL No.  | V-1-10-1-10            | Date              | Day time |                 | Night Time                |                 |
|---------|------------------------|-------------------|----------|-----------------|---------------------------|-----------------|
| 36. MO. | Location(s)            | Of<br>Measurement | (dB-A)   | Limit<br>(dB-A) | L <sub>eq</sub><br>(dB-A) | Limit<br>(dB-A) |
| 1       | Near Coal Mill         | 22.03.2021        | 67.6     | 75              | 62.4                      | 70              |
| 2       | Near CPP Area          | 22.03.2021        | 62.0     | 75              | 56.9                      | 79              |
| 3       | Near Coal Storage Yard | 22.03.2021        | 59.2     | 75              | 55.3                      | 70              |
| 4       | Near Raw Mill          | 22.93.2021        | 69.4     | 75              | 64.3                      | 70              |
| 5       | Near Gement Mill       | 23,03,2021        | 68.4     | 75              | 62,5                      | 70              |
| 6       | HR & Mine's Office     | 23.03.2021        | 61.5     | 75              | 55.9                      | 70              |
| 7       | CPP TG Building        | 23.03.2021        | 70.4     | 75              | 63.4                      | 70              |

ě.



Checked By: Mr. Pankaj Baroi, ENVIROCON

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ISO 9001:2015 Certified ISO 45001:2018 Certified

Report No.: ENV/GSCL/21-22/FE-03/01

Date : 06/04/2021

Order No.: SOGM/00426/19-20 Date : 19/09/2020

Report Issued To:

**GOLDSTONE CEMENTS LIMITED** 

Village- Musiang Lamare (Old), P. O.:- Khlishriat, Meghalays- 793200

#### PROCESS FUGITIVE EMISSION TEST RESULTS

| SL Na. | Locations                 | Date of<br>Sampling | Results for SPM<br>(µg/m²) | Limits<br>(µg/m³) |
|--------|---------------------------|---------------------|----------------------------|-------------------|
| 01     | Fly-esh Storage Section   | 22.03.2021          | 791                        | 5000              |
| 02     | Coal Storage Section      | 22.03.2021          | 652                        | 2000              |
| 03     | Limestone Storage Section | 23.03.2021          | 1806                       | 5000              |
| 94     | Cement Parking Section    | 23.03.2021          | 2115                       | 5000              |

Analysis Protocol: IS 5182



Checked By: Mr. Pankaj Baroi, ENVIROCON

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ISO 9001:2015 Certified ISO 45001:2018 Certified

Report No.: ENV/GSCL/21-22/WW-03/04

Date : 06/04/2021

Order No.: SOGM/00426/19-20

Date : 19/09/2020

Report Issued To

**GOLDSTONE CEMENTS LIMITED** 

Village- Musiang Lamare (Old), P. O.:- Khliehriat, Meghalaya- 793200

#### WASTE WATER ANALYSIS RESULTS

Sample Ref. No.

: GSCL/20-21/WW-2303/03

Sample Type/Source

: Waste Water/Cooling Tower Blow Down

Sample Collected By

: Representative of ENVIROCON

Sample Collected On

: 23.03.2021 : 25.03.2021

Sample Received On Analysis Protocol

: IS 3025

| \$2. No. | Parameter(s)           | Unit(s) | Result(s) | Limit<br>(As Per CPCB Standards) |
|----------|------------------------|---------|-----------|----------------------------------|
| 1.       | Residual Free Chlorine | mg/l    | <0.01     | 6.5                              |
| 2.       | Zinc                   | mg/l    | <0.01     | 1.0                              |
| 3.       | Total Chromium         | mg/l    | <0.01     | 0.2                              |
| 4.       | Phosphate              | mg/l    | <0.01     | 5.0                              |



Checked By: Mr. Pankaj Baroi, ENVIROCON

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ISO 9001:2015 Certified ISO 45001:2018 Certified

Report No.: ENV/GSCL/21-22/WW-03/02

Date : 06/04/2021

Order No.: SOGM/00426/19-20

ate :19/09/2020

Report Issued To :

**GOLDSTONE CEMENTS LIMITED** 

Village- Muslang Lamare (Old), P. O .:- Khliehriat, Meghalaya- 793200

#### WASTE WATER ANALYSIS RESULTS

Sample Ref. No.

: GSCL/20-21/WW-2303/02

Sample Type/Source

: Waste Water (Service Water)/Condenser Cooling Point

Sample Collected By

: Representative of ENVIROCON

Sample Collected On Sample Received On : 23.03.2021 : 25.03.2021

Analysis Protocol

: 15 3025

| Sl. No. | Parameter(s)           | Unit(s) | Result(s) | Limit<br>(As Per CPCB Standards)                              |
|---------|------------------------|---------|-----------|---|
| 1.      | pH                     | -       | 6.36      | 5.5 - 9.0   |
| 2.      | Temperature PC 26      |         | 26.2      | shall not exceed 5°C above the<br>receiving water temperature |
| 3.      | Residual Free Chlorine | mg/l    | <0.D1     | 0.5   |



Checked By: Mr. Pankaj Barol, ENVIROCON

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# Construction of Concrete Roads





### <u>Annexure – 2a,2b,2c,2d</u>

# Water Sprinkling









# **PUC Certificates**

Approved by Transport Deptt. Govt. of Jammu

> & Kashmir

KEEP THE PIECE OF HEAVEN FREE FROM POLLUTION

POLLUTION UNDER CONTROL CERTIFICATE

#### ROYAL POLLUTION CHECKING CENTRE

NANAK BHAWAN ROAD, NEAR SHERWANI HALL, BARAMULLA KASHMIR

AUTHORIZATION CODE = 101

Advice :- Recheck after every three months

Phone: 9419937370.9906759399

530

63

61

Certified that this Vehicle's emission level conforms to the standards prescribed under rule 115 (2) of CMV Rules, 1989

10100002348 I.D. No.: JK05F 5334

Vehicle No. 9-10-2015

Date of Reg. :

TRUCK Vehicle Type:

TATA Make:

2518 Model:

Fuel:

Date:

Validity

DIESEL

30-12-2020 Time :

04 18 PM

Authorized Sig.

29-6-2021

Pre Bharat Stabe

1111511 CYCLE Ava RPM Mir RPM Ma Termo 1820 60 F31\*M Mor 131\*M Mor HISLIN K Value O Lerry 5.30 1810 32 18 00.90

1//0

1820

32.88

30 80

FM3 4473

98 00

4440

540

MEAN PASS 00 90

Photo of Vehicle



ROYAL POLLUTION CHECKING CENTRE

NANAK BHAWAN ROAD, NEAR SHERWANI HALL, BARAMULLA

#### POLLUTION UNDER CONTROL CERTIFICATE

Authorised By: Uttar Dinajpur RTO Transport Commissionerate, West Bengal



TEST RESULT : PASS VALID TILL: 19/Jun/2021

Certificate SI. No.:

WB05900370005489

Registration No.

WB25D9157

Chassis No.:

MAT466383B2B04296

Engine No.:

11862996721

Class of Vehicle:

Goods Carrier

Make:

TATA MOTORS LTD

Model:

LPT3118TCE III HEAVY GOODS

Vehicle Category:

VEHICLE

Date of Registration:

11/Apr/2011

Emission Norms:

EURO 3

DIESEL

Date of Testing:

20/Dec/2020

Time of Testing:

07:09:52

Fee Charged:

Rs.100.0

Fee Charged:

(one hundred rupees

In case of any complain Please write to Transport Commissioner, West Bengal / email to:

transportdeptt.wb@gmail.com

Auto Emission Testing Centre Code:

WB0590037

Testing Centre Name: M/S RAIGAN) **AUTO EMISSION TESTING & SERVICING** 

Centre Address: PURBA ASHOK PALLY,

RAIGANI, UTTAR DINAJPUR, 733134

Test Conducted By: RAKESH

CHAKRABORTY

DIESEL DRIVEN VEHICLES

Certified that the vehicle conforms to the standards prescribed

under rule 115(2) of CMV Rules 1989

| FUEL.  | Light Absorption Coefficient (Permissible<br>Limit) | Measured<br>Value |
|--------|---|-------------------|
| DIESEL | 2.45  | 0.12867           |



TEST DESULT FOR DIESEL VEHICLE

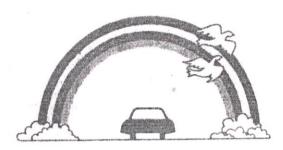
| TEST RESOLT TON DIESER TELL |           |            |         |          |  |
|-----------------------------|-----------|------------|---------|----------|--|
|                             | IDLE RPM  | MAX RPM    | K_VALUE | OIL TEMP |  |
| TEST 1                      | 530.0     | 1720.0     | 0.135   | 27.0     |  |
| TEST 2                      | 550.0     | 1970.0     | 0.135   | 27.0     |  |
| TEST 3                      | 520.0     | 2060.0     | 0.116   | 27.0     |  |
| AVG                         | 533.33334 | 1916.66667 | 0.12867 | 27.0     |  |

This is a computer generated certificate and does not require signature

### M/S RAIGANJ AUTO EMISSION TESTING & SERVICING CENTRE

NH-34, PURBA ASHOKPALLY, UTTAR DINAJPUR, W.B. MOB NO.-9434120560

REDUCE **POLLUTION** AND SAVE NATION



#### POLLUTION UNDER CONTROL CERTIFICATE

Authorised By: KAMRUP(RURAL) Transport Commissionerate, Assam

FUEL

DIESEL



Measured

Value

0.54334

TEST RESULT : PASS VALID TILL: 27/Aug/2021

DIESEL DRIVEN VEHICLES

Certified that the vehicle conforms to the standards prescribed

under rule 115(2) of CMV Rules 1989

Light Absorption Coefficient

(Permissible Limit)

1.62

Certificate SI, No.:

AS02500370000165

Registration No.:

JK21C6326

Owner Name

KULDEEP GUPTA

Chassis No.:

MAT466429GHF09805

Engine No.:

S03082461F84316200

Class of Vehicle:

Goods Carrier

Make:

TATA MOTORS LTD

Model:

28469456000R

Vehicle Category:

**HEAVY GOODS** 

VEHICLE

Date of Registration:

**Emission Norms:** 

Fuel:

DIESEL

Date of Testing:

28/Aug/2020

Time of Testing:

10:36:37

Govt Fees

40.0

Center Fees

90.0

Fee Charged:

Rs.130.0

Fee Charged:

(one hundred thirty

rupees only)

In case of any complain Please write to Transport

Commissioner Assam

09/Sep/2016

**BHARAT STAGE IV** 

Auto Emission Testing Centre Code:

AS0250037

Testing Centre Name: TRINAYAN AUTO

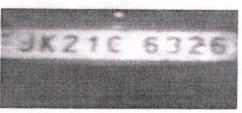
**EMISSION TESTING STATION** 

Centre Address: BIJOYNAGAR, DIST.

KAMRUP(RURAL), ASSAM, BIJOYNAGAR,

KAMRUP(RURAL), ASSAM, 781122 Test Conducted By: MR, JAGADISH

DEKA



TEST RESULT FOR DIESEL VEHICLE

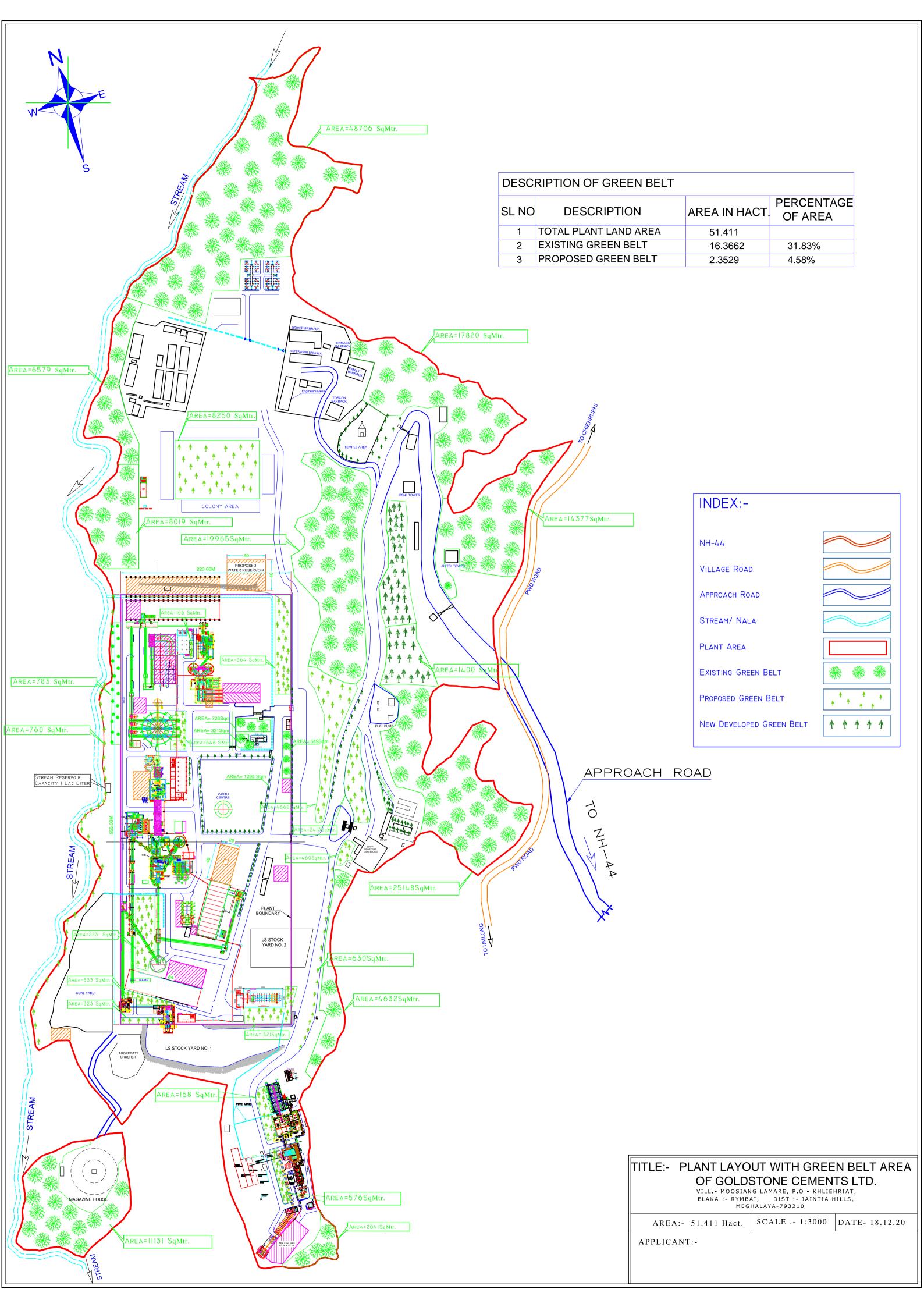
|        | IDLE RPM | MAX RPM | K_VALUE | OIL TEMP |
|--------|----------|---------|---------|----------|
| TEST-1 | 770.0    | 2290.0  | 0.5     | 0.0      |
| TEST 2 | 770.0    | 2370.0  | 0.55    | 2.0      |
| TEST 3 | 800.0    | 2150.0  | 0.58    | 0.0      |
| AVG    | 780.0    | 2270.0  | 0.54334 | 0.66667  |

This is a computer generated certificate and does not require signature

# Water Reservoir



# Greenbelt Development



# Environmental Parameters Display

## ENVIRONMENTAL DATA INFORMATION RELATED TO AIR, WATER AND HW GENERATION



Name of the Industry/facility with contact details: GOLDSTONE CEMENTS LIMITED, VIII. Musiang Lamare (Old) Khilehriat , East Jaintia Rills, Vighalaya-793210 (as per the Corsent to Establish/Operate) Mr. Vishail Jain, (MD) 0361-2607071/72

- there of update of display
- Consent to Operate and Authorization
- Macardous waste Authorization
- Operational status

- No. MPCB/CON-13-2011/Pe-1/2020-2021/88, Validity-30:06:2021 No.MPCB/ATH-45-2017/Pt-1/2018-2019/3, Validity-31.07.2023
- Operational / Non-Operational

Production Details

| S. Ma.           | Product Manufactured<br>(including Recyling<br>/Utilization) | Used Hazardous<br>Chemicals with<br>quantity and purpose | Type of HW generated (MT/KL) with category<br>as per HW Rules-2016<br>Near- (2019-2020)           | generated storage                 | Disposed Utilized     | Mode of treatment and<br>disposal (Co-processing,<br>/Unitaring/recepholization etc.) |
|------------------|--|--|---|-----------------------------------|-----------------------|---|
| 1<br>2<br>3<br>4 | Cement, Clinker &<br>Power                                   | NA   | Uped Oil Dell III Ply Ash Tarbine Oil 0:00 II Sed Ash Gear Oil 50:007 II Chemical Container 6:100 | 2.314 -<br>4.624 -<br>5.205 22461 | 0.518 -<br>1.65 27/es | Co-processing<br>increase<br>Utilizing  |

#### Z Air Emission

| Bourse | Source of Air Pollution | Air Pollution Control System (APCS) |                            |                   |                          |               |  |  |  |
|--------|-------------------------|-------------------------------------|----------------------------|-------------------|--------------------------|---------------|--|--|--|
| S. No. |                         |                                     | Stack Reight<br>(in meter) | PM (mg/Nm²)       | SO <sub>2</sub> (mg/Hm²) | MOx (reg/Nor) | Limits/Standard prescribed by<br>SPCBs/CPCB (mg/km²) |  |  |
| 1      | Row Mill & Kill N       | Baghouse                            | 400                        | 19                | 512                      | 278           | PM-30,   |  |  |
| 2      | Coal Mill               | <b>Baghouse</b>                     | 58.1                       | 16                | 632                      | 324           |  |  |  |
| 3      | Cooler ESP              | ESP                                 | 45.0                       | 10                | 2000                     |               | SO <sub>2</sub> - 1000                               |  |  |
| 4      | Cement Mill             | Baghouse                            | 42.0                       | 12                | 4475                     | 0.000         | NOx-600  |  |  |
| 5      | CPP                     | ESP                                 | 76.1                       | 32                | 478                      | m Filmoni     | PM-50, 50, 600, No300                                |  |  |
| A CEN  | E Comportuate data      | ic Those of installation            | n'ita'nalant               | Zand Congretional | Status Operation         | Ass - Has     | Descriptional  |  |  |

| S.No.  | Source of Effluent<br>discharge with Qty | Treatment method           | Mode of Bissessi of treatment |                | Effluents discharge monitoring parameters |            |        |      |       |       |                 |
|--------|--|----------------------------|-------------------------------|----------------|---|------------|--------|------|-------|-------|-----------------|
|        |  |                            | (Orany se                     | ewer/land etc) | pN  | TSS        | 800    | COD  | BN 4  | TKN   | NH <sub>1</sub> |
| 100 to | Domestic effluent                        | 20 M <sup>3</sup> /day EPT | Dust                          | Out let(mg/l)  | 634                                       | Sal Player | 25     | 1035 | 100   | 2.5   | 10.01           |
| 200    | DM Plant N Pit                           | 36 m 3/day                 | suppression<br>a gardening    | Out let/ing/0  | PH  | TSS        | RFC    | Temp | OLG   | Cu    | iron            |
| - CE   | Dan Later H Lit                          | 50 1112 0117               |                               |                | 0.65                                      | OF TAXABLE | (0.01) | 1000 | 144.0 | C0.01 | 40.5            |

"OCEMS Connectivity details (Date of installation and operational status): N

