

Letter No: GSCL/EHS/2021-22/20

Dated: 20.11.2021

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,

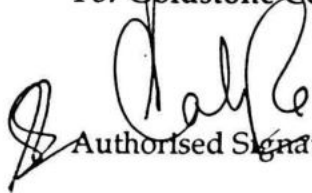
With the matter as cited in the subject, we would like to submit the Half Yearly EC  
Compliance report for the period 01.04.2021 to 30.09.2021 on Environmental  
Stipulations for our Cement Plant along with Captive Thermal Power Plant located at  
Vill: Musiang Lamare (old), Khliehriat, Dist :East Jaintia 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.  
2. Member Secretary, Meghalaya State pollution Control Board, "ARDEN"  
Lumpynggad, Shillong, Meghalaya-793014.



**Goldstone Cements Limited**  
CIN No. : U26940ML2007PLC008298

**COMPLIANCE REPORT (HALF YEARLY) FROM 1<sup>st</sup> APRIL 2021 TO 30<sup>th</sup> SEPTEMBER 2021 ON ENVIRONMENTAL STIPULATIONS FOR CEMENT PLANT [CLINKER-1.65 MTPA (INSTALLED – 0.56 MTPA)]; [CEMENT- 2.0 MTPA (INSTALLED - 0.88 MTPA)] ALONG WITH CAPTIVE THERMAL POWER PLANT [2 x 20 MW (INSTALLED - 10 MW)] AT VILL MUSIANG LAMARE (OLD), P.O.: KHLIEHRIAT, DIST. EAST JAINTIA HILLS, MEGHALAYA OF M/S. GOLDSTONE CEMENTS LTD – ENVIRONMENTAL CLEARANCE VIDE MOEF LETTER NO. J-11011/851/2008-IA II (I), DATED 30.09.2010.**

SL. NO	CONDITIONS	COMPLIANCE
<b>A. SPECIFIC CONDITIONS</b>		
i	Continuous stack monitoring facilities to monitor gaseous emissions from all the stacks shall be provided. After expansion, limit of SPM shall be controlled within 50 mg/Nm <sup>3</sup> by installing adequate air pollution Control system. Electrostatic precipitators (ESP) to clinker cooler, bag house raw mill/kiln and bag filters to coal mill and cement mill. Low NOx burners should be provided to control NOx emissions.	<ul style="list-style-type: none"> <li>●The Continuous Stack Monitor (Opacity Meters) is in working condition and online data is being transferred to CPCB &amp; MSPCB.</li> <li>●ESP (Electrostatic Precipitators) for Clinker cooler, Bag house/Bag filters for Raw Mill / Coal Mill &amp; other pollution control equipments were already installed in plant to keep PM below 30 mg/Nm<sup>3</sup> in Cement Plant stacks and 50 mg/Nm<sup>3</sup> in Captive Power Plant stack as per our consent guideline.</li> </ul>
ii	Possibilities shall be explored for the proper and full utilization of gases generated from the kiln in waste heat recovery boiler (WHRB). A feasibility report shall be prepared and submitted to the ministry and its Regional office at Shillong within 03 months from the date of issue of the letter.	<p>Hot gases generated from kiln are required for drying out moisture in Raw Mill and Fuel. Hence Kiln waste heat is being utilized partially in Raw Mill and partially in Coal Mill to meet our operational requirement. Some heat is lost in clinker cooler.</p> <p>Moreover, in our case the installed capacity of kiln is only 1700 TPD and after utilization of hot gases in Raw mill and Coal mill, the remaining quantum of waste heat is not sufficient for setting up WHRB.</p> <p>We have also explored the Cement plants in the near vicinity and none of them have installed Waste Heat Recovery Plant.</p>
iii	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November 2009 shall be followed.	<p>The same is being followed during operation of plant. Ambient air quality monitoring is being done as per standards.</p> <p>Ambient air quality parameters are found to be within the limit for all the parameters.</p> <p style="text-align: right;"><i>(Details attached in Annexure-1)</i></p>
iv	Secondary fugitive emission shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines / Code of practice issued by the CPCB in this regard should be followed.	<p>All material transfer points are provided with Bag filters to control fugitive emission. Construction of concrete roads is under progress in the plant.</p> <p style="text-align: right;"><i>(Photographs are enclosed in Annexure:2)</i></p> <p>Dust suppression is being done through water sprinklers installed in limestone crusher and plant roads.</p> <p style="text-align: right;"><i>(Photographs are enclosed in Annexure:2a,2b,2c)</i></p> <p>Full time water tanker has been deployed in the plant as shown in <u>Annexure:2d</u></p> <p>Guideline / Code of practice issued by the CPCB is being followed during operation of plant. Regular monitoring for control of secondary fugitive emission under prescribed limit is being done.</p> <p style="text-align: right;"><i>(Details attached in Annexure-1)</i></p>

v	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.	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. All the raw materials including fly ash is being transported in the closed containers within load capacity.  It is ensured that without valid PUC no vehicle is allowed in plant premises. Few certificates are enclosed for your reference. <b><i>(Details attached in Annexure-3)</i></b>
vi	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.	Total water requirement is much below the stipulated limit of 2,370 m <sup>3</sup> / day as our Plant has been designed as per close circuit arrangements for cooling water. Company has adopted "ZERO discharge" of waste water. All the treated wastewater is reused in the process some are used for dust suppression in roads.
vii	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.	We have constructed a reservoir of 1 lac liters capacity in the west side. <b><i>(Photograph are enclosed in Annexure:4)</i></b>  Another 3600 M3 water reservoir is under construction. After construction, the roof top rain water will be connected to that reservoir.
viii	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.	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. Regular monitoring is carried out of influent & effluent surface, sub-surface and treated waste water test results meet the norms prescribed by SPCB and same is submitted in SPCB & CPCB. <b><i>(Details attached in Annexure-1)</i></b>
ix	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.	All the dust collected through pollution control equipment is either raw material or cement dust. Those are collected and recycled in a closed loop. Spent oil is incinerated in our KILN sand batteries are sold to authorized recyclers.
x	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).	Fly ash generated in our captive power plant is completely used in manufacturing of Pozzolana Portland Cement (PPC)
xi	Effort shall be made to use low-grade lime, more fly ash and solid waste in the cement manufacturing.	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.

xii	An effort shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision should be made accordingly.	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.
xiii	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.	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. 31.8% area is already under greenbelt.  Balance and required plantation shall be done in phase manner. <i>(Greenbelt development Drawing is enclosed in Annexure :5)</i>
xiv	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the cement plants should be implemented.	All recommendations were considered during the design of plant and machineries and as such all the issues in this regard are complied with.
xv	All the commitments made to the public during the Public Hearing / Public consultation meeting held on 27 <sup>th</sup> 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 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.
xvi	At least 5% of the total cost of the project shall be earmarked towards the corporate social responsibility and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional office at Shillong. Implementation of such program shall be ensured accordingly in a time bound manner.	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.
xvi i	The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Phase-1 of Project has already been completed. During Phase-1 project, all such facilities were ensured. Whenever next phase of project will commence in future, same shall again be adhered to.
<b>B. GENERAL CONDITIONS</b>		
i	The project authorities must strictly adhere to the stipulations made by the Meghalaya State Pollution Control Board and the State Government.	Stipulations mandated in the CTO are being adhered to.

	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	There will be no expansion or modifications beyond permissions already granted without prior approval of MoEF.
iii	The gaseous emissions from various process units shall conform to the load / mass based standards notified by this Ministry on 19 <sup>th</sup> 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.	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.
iv	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.	Four numbers of Ambient Air Quality Monitoring Stations have been established with consultation of Meghalaya State Pollution Control Board. 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.  <i>(Details are attached in Annexure-1)</i>
v	Industrial waste water shall be properly collected, treated so as to conform 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.	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.
vi	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).	Care has been taken during project planning and ordering of equipment. Noise level is monitored and being found within the prescribed limit.  <i>(Details are attached in Annexure-1)</i>
vii	Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	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.  <i>(Health Checkup Reports are attached in Annexure-8)</i>
viii	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.	We have constructed a reservoir of 1 lac liters capacity in the west side.  <i>(Photograph are enclosed in Annexure:4)</i>  Another 3600 M3 water reservoir is under construction. After construction, the roof top rain water will be connected to that reservoir.

ix	<p>The project proponent shall also comply with all the environmental 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 water supply and health care etc.</p>	<p>We are working on the implementation of the conditions given in EIA/EMP.</p> <p>We are sponsoring for community development programmes. We are providing the drinking water facility in nearby village. Health camps &amp; eye check up camps are conducted in surrounding villages.</p> <p>We are providing free medicines, free ambulance services to local community.</p>
x	<p>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 &amp; 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.</p>	<p>Exhaustive environmental protection measures have been taken by installing following equipments approx 25.97 Cr as capital cost.</p> <ul style="list-style-type: none"> <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> </ul> <p>We have invested approx Rs. 1.9 Cr amount towards recurring cost (period: 1<sup>st</sup> April-30<sup>th</sup> September 2021) for environment pollution control measures <i>(Details are attached as per Annexure-6)</i></p>
xi	<p>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.</p>	<p>Has been implemented.</p> <p>Copy was already submitted to the MOEF &amp;CC.</p>
xii	<p>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>, NO<sub>x</sub> (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.</p>	<p>Environmental Parameters display board and LED Display board have been provided near company main gate.</p> <p style="text-align: right;"><i>(Photograph is enclosed in annexure-7 &amp; 7a)</i></p> <p>The EC and Six Monthly EC compliance reports are shown in our company website <a href="http://gscl.blacktigerso.com/">http://gscl.blacktigerso.com/</a></p>
xiii	<p>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</p>	<p>Being Complied</p>

	conditions.	
xiv	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 amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional office of the MOEF at Shillong by e-mail.	Being complied.  Form-V (2020-21) has been submitted in Meghalaya State Pollution Control Board & Regional Office of MOEF. Same is also shown in our company website <a href="http://gscl.blacktigerso.com/">http://gscl.blacktigerso.com/</a>
xv	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 <a href="http://envfor.nic.in">http://envfor.nic.in</a> . 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.	Same was implemented at the time of Phase-1 Project. Phase-1 project has since been completed.
xvi	Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Project Phase-1 has been completed complying with stipulated condition.

**Amendment in Environmental Clearance conditions related sourcing of coal for the Thermal Power Plants in the State of Meghalaya in pursuant to the proceeding of the Committee Constituted by Hon'ble NGT held on 25.03.2019 -reg. Office Order No: J-13015/ 17/2019-IA.I(T) Dated: 16.09.2019.**

SL. NO	CONDITIONS	COMPLIANCE
i	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 Minerals (Development and Regulation) Act, 1957 & its amendments and connected Regulations. In addition, the Coal Mine from the State of Meghalaya shall also have valid Environmental Clearance (leases with more than 5 ha under EIA	Being complied

	Notification, 1994; leases with more than equal to 5 ha under EIA Notification, 2006 up to 15.01.2016; all coal mining leases irrespective of lease area from 15.01.2016 onwards).	
ii	The Project Proponent shall submit the source of the coal mine, its location, along with boundary co-ordinates of lease, quantity of coal transported along with the mode of transportation, copies of valid mining lease, approved mine plan and Environmental Clearance to the Ministry and its Regional Office before sourcing the coal from Meghalaya State. Further, this information is to be updated and submitted along with the Six Monthly EC compliance report to the Ministry and its Regional Office.	No coal is being sourced from the state of Meghalaya.

**Amendment in Environmental Clearance conditions for prevention of Acid Mine Drainage (AMD) by virtue of the recommendation of NGT 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)/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.**

SL. NO	CONDITIONS	COMPLIANCE
i	Storage areas / stockpiles for coal in the unit shall be covered and shall have impervious flooring. Garland drains shall be provided around the storage area / Stockpiles to arrest the seepage water from coal yard. The seepage water thus collected shall be treated to meet industry specific / general discharge norms for water quality as applicable. "In this regard, the compliance status shall be furnished to the Regional Office periodically along with the six monthly compliance report.	Coal is stored inside covered shed. Construction of Impervious flooring, garland drains and treatment plant is under progress.

For Goldstone Cements Ltd.

  
Authorized Signatory





# **Annexure – 1**

## **Environmental Monitoring Reports**

No: GSCL/EHS/2021-22/06

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

**Sub: Submission of Monthly Environmental Monitoring Reports - APRIL -2021**

Sir,

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

The test reports are enclosed.

We request you to acknowledge the receipt.

Thanking You,

Yours faithfully  
For Goldstone Cements Ltd.

  
Authorised Signatory



Encl: Test Reports

**Goldstone Cements Limited**  
CIN No. : U26940ML2007PLC008298

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## AMBIENT AIR QUALITY MONITORING RESULTS

April - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	01.04.2021	No Sampling Due to Rain fall			
Near CCR Material Yard	02.04.2021	No Sampling Due to Rain fall			
Near Guest House (Yamuna Sadan)	03.04.2021	17.1	26.9	<5.0	<6.0
Residential Colony	05.04.2021	15.1	22.5	<5.0	<6.0


Analysed By


Verified By

### AMBIENT AIR QUALITY MONITORING RESULTS

April - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80µg/m <sup>3</sup>
Near CPP Water Reservoir	09.04.2021	30.8	35.8	7.8	7.7
Near CCR Material Yard	10.04.2021	35.8	40.8	8.9	8.4
Near Guest House (Yamuna Sadan)	13.04.2021	15.9	27.2	<5.0	<6.0
Residential Colony	14.04.2021	17.3	24.7	<5.0	<6.0

  
Analysed By

  
Verified By

### AMBIENT AIR QUALITY MONITORING RESULTS

April - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	20.04.2021	No Sampling Due to Rain fall			
Near CCR Material Yard	21.04.2021	No Sampling Due to Rain fall			
Near Guest House (Yamuna Sadan)	22.04.2021	16.2 <sup>2</sup>	31.4	<5.0	<6.0
Residential Colony	23.04.2021	17.8	29.2	<5.0	<6.0



Analysed By



Verified By

Report No.: ENV/GSCL/21-22/AA-04/01

Date : 08/05/2021

Order No.: SOGM/00343/20-21

Date : 15/03/2021

Report issued To: **GOLDSTONE CEMENTS LIMITED**  
Village- Musiang Lamare (Old), P. O.- Khliehriat, Meghalaya- 793200

### AMBIENT AIR QUALITY TEST RESULTS

Sl. No.	Location(s)	Date of Sampling	PM 2.5	PM 10	SO <sub>2</sub>	NO <sub>2</sub>
			( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )
	Limit(s)		60 (24 Hrs. Av.)	100 (24 Hrs. Av.)	80 (24 Hrs. Av.)	80 (24 Hrs. Av.)
1.	Near CPP (Water Reservoir)	29.04.2021	31.2	53.7	6.4	12.3
2.	Near CCR (Material Yard)	29.04.2021	33.8	58.7	6.9	14.2
3.	Near Guest House (Yamuna Sadan)	30.04.2021	12.8	31.1	<5.0	<6.0
4.	Residential Colony	30.04.2021	14.7	33.2	<5.0	<6.0

Analysis Protocol: IS 5182



Checked By: Mr. Panikaj Baroi, ENVIROCON

NOTE: 1. Results reported are valid at the time and under the prevailing conditions of measurement.  
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, I.O.C.L (AOD) New Market, Digboi - 786171, Assam.

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

## STACK EMISSION MONITORING REPORT

April - 2021

Name of Stack & Stack No.	:	Raw Mill & Kiln (1)		
Date of Monitoring	:	05.04.2021		
Stack Velocity of Flue gas	:	21.5 m/s		
Stack Temperature	:	451 °K		
Monitoring Period	:	37 m		
Flow Rate	:	26.9 LPM		
Parameters	Results	Standard Limits	Unit	
Particulate Matter	21.7	30	(mg/Nm <sup>3</sup> )	
Sulphur Dioxide(SO <sub>2</sub> )	508.7	1000	(mg/Nm <sup>3</sup> )	
Nitrogen Oxide (NOX)	321.0	600	(mg/Nm <sup>3</sup> )	



Analysed By




Verified By

Report No.: ENV/GSCL/21-22/SE-04/05  
Date : 08/05/2021

Order No.: SOGM/00343/20-21  
Date : 15/03/2021

Report Issued To: **GOLDSTONE CEMENTS LIMITED**  
Village- Musiang Lamare (Old), P. O.: -Khibriat, Meghalaya- 793200

### STACK EMISSION TEST RESULTS

01	Test Ref. No.	GSCL/21-22/SE-04/05		
02	Date of Sampling	30.04.2021		
03	Material of Construction	M. S.		
04	Stack Attached To	Raw Mill		
05	Flue Gas Temperature (°C)	185		
06	Exit Velocity of Gas (m/sec)	13.8		
07	Type of Fuel Used	NA*		
Analysis Results of Flue Gas				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
I.	Particulate Matter	20	mg/Nm <sup>3</sup>	30
II.	Sulphur Dioxide (as SO <sub>2</sub> )	441	mg/Nm <sup>3</sup>	1000
III.	Oxides of Nitrogen (as NO <sub>x</sub> )	232	mg/Nm <sup>3</sup>	600

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

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



## STACK EMISSION MONITORING REPORT

April - 2021

Name of Stack & Stack No.	:	Coal Mill (2)	
Date of Monitoring	:	06.04.2021	
Stack Velocity of Flue gas	:	14.2 m/s	
Stack Temperature	:	330 °K	
Monitoring Period	:	41 m	
Flow Rate	:	24.3 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	16.4	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	213.3	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NO <sub>x</sub> )	97.7	600	(mg/Nm <sup>3</sup> )



Analysed By




Verified By

Report No.: ENV/GSCL/21-22/SE-04/03  
Date : 08/05/2021

Order No.: SOCM/00343/20-21  
Date : 15/03/2021

Report issued To: **GOLDSTONE CEMENTS LIMITED**  
Village- Musiang Lamare (Old), P. O.- Khliehriat, Meghalaya- 793200

### STACK EMISSION TEST RESULTS

01	Test Ref. No.	GSCL/21-22/SE-04/03		
02	Date of Sampling	29/04/2021		
03	Material of Construction	M. S.		
04	Stack Attached To	Coal Mill		
05	Flue Gas Temperature (°C)	59		
06	Exit Velocity of Gas (m/sec)	10.7		
07	Type of Fuel Used	NA*		
<b>Analysis Results of Flue Gas</b>				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	Particulate Matter	17	mg/Nm <sup>3</sup>	30
ii.	Sulphur Dioxide (as SO <sub>2</sub> )	217	mg/Nm <sup>3</sup>	1000
iii.	Oxides of Nitrogen (as NO <sub>x</sub> )	109	mg/Nm <sup>3</sup>	600

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

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**Associate Services:** Certification by Competent Person (CIP), NDT, Hydraulic Testing, Chartered Engineer Services etc.

## STACK EMISSION MONITORING REPORT

April - 2021

Name of Stack & Stack No.	:	Cooler ESP(3)	
Date of Monitoring	:	07.04.2021	
Stack Velocity of Flue gas	:	11.2 m/s	
Stack Temperature	:	507 °K	
Monitoring Period	:	35 m	
Flow Rate	:	28.2 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	19.0	30	(mg/Nm <sup>3</sup> )



Analysed By



Verified By

Report No.: ENV/GSCL/21-22/58-04/02  
Date : 08/05/2021

Order No.: SOGM/00343/20-21  
Date : 15/03/2021

Report Issued To : **GOLDSTONE CEMENTS LIMITED**  
Village- Musiang Lamare (Old), P. O.- Khliehriat, Meghalaya- 793200

### STACK EMISSION TEST RESULTS

01	Test Ref. No.	GSCL/21-22/58-04/02		
02	Date of Sampling	29.04.2021		
03	Material of Construction	M.S.		
04	Stack Attached To	Cooler F. S. P.		
05	Flue Gas Temperature (°C)	214		
06	Exit Velocity of Gas (m/sec)	16.8		
07	Type of Fuel Used	NA*		
<b>Analysis Results of Flue Gas</b>				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
1	Particulate Matter	19	mg/Nm <sup>3</sup>	30

\*NA: Not Applicable



Checked By: Mr. Panisaj Baroi, ENVIROCON

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**Associate Services:** Certification by Competent Person (CIP), NDT, Hydraulic Testing, Chartered Engineer Services etc.

## STCK EMISSION MONITORING REPORT

April - 2021

Name of Stack & Stack No.	:	Cement Mill (4)	
Date of Monitoring	:	08.04.2021	
Stack Velocity of Flue gas	:	10.7 m/s	
Stack Temperature	:	338 °K	
Monitoring Period	:	56 m	
Flow Rate	:	17.9 LPM	
Parameters	Unit	Results	Standard Limits
Particulate Matter	{mg/Nm <sup>3</sup> }	18.8	30



Analysed By




Verified By

Report No.: ENV/GSCL/21-22/SE-04/01

Date: 08/05/2021

Order No.: SOGM/00343/20-21

Date: 15/03/2021

Report issued To: **GOLDSTONE CEMENTS LIMITED**

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

### STACK EMISSION TEST RESULTS

01	Test Ref. No.	GSCL/21-22/SE-04/01		
02	Date of Sampling	29.04.2021		
03	Material of Construction	M. S.		
04	Stack Attached To	Cement Mill		
05	Flue Gas Temperature (°C)	57		
06	Exit Velocity of Gas (m/sec)	13.8		
07	Type of Fuel Used	NA*		
<b>Analysis Results of Flue Gas</b>				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
1.	Particulate Matter	14	mg/Nm <sup>3</sup>	30

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

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# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

April - 2021

Name of Stack & Stack No.	:	CPP (5)	
Date of Monitoring	:	09.04.2021	
Stack Velocity of Flue gas	:	9.1 m/s	
Stack Temperature	:	382 °K	
Monitoring Period	:	33 m	
Flow Rate	:	30.3 LPM	
Parameters	Unit	Results	Standard Limits
Particulate Matter	(mg/Nm <sup>3</sup> ) <sub>1</sub>	31.0	50
Sulphur Dioxide (SO <sub>2</sub> )	(mg/Nm <sup>3</sup> )	492.3	600
Nitrogen Oxide (NO <sub>x</sub> )	(mg/Nm <sup>3</sup> )	237.3	300

Analysed By



Verified By

Report No.: ENV/GSCL/21-22/SE-04/04

Date : 08/05/2021

Order No.: SOGM/00343/20-21

Date : 15/03/2021

Report Issued To: **GOLDSTONE CEMENTS LIMITED**  
Village- Muniang Lamiare (Old), P. O.- Khliehriat, Meghalaya- 793200

### STACK EMISSION TEST RESULTS

01	Test Ref. No.	GSCL/21-22/SE-04/04		
02	Date of Sampling	30.04.2021		
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)	8.8		
07	Type of Fuel Used	Coal		
<b>Analysis Results of Flue Gas</b>				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	Particulate Matter	30	mg/Nm <sup>3</sup>	50
ii.	Sulphur Dioxide (as SO <sub>2</sub> )	488	mg/Nm <sup>3</sup>	600
iii.	Oxides of Nitrogen (as NO <sub>x</sub> )	220	mg/Nm <sup>3</sup>	300



Checked By: Mr. Panikaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/21-22/DW-04/01  
Date : 08/05/2021

Order No.: SOGM/00343/20-21  
Date : 15/03/2021

Report Issued To: **GOLDSTONE CEMENTS LIMITED**  
Village- Mustang Lamare (Old), P. O.- Khliehriat, Meghalaya- 793200

### DRINKING WATER ANALYSIS RESULTS

Sample Ref. No.: GSCL/21-22/DW-3004/01  
Collected On : 30-04-2021

Sample Source : Narmada Sadhan  
Received On : 03-05-2021

Sample Type : Drinking Water  
Collected By : Envirocon Representative

Sl. No.	Parameters	Results	Acceptable Limit*	Permissible Limit* In the Absence of Alternate Source
1.	Colour, Hazen Units, Max	1	5	15
2.	Odour	Odourless	Agreeable	Agreeable
3.	Taste	Acceptable	Agreeable	Agreeable
4.	Turbidity, NTU, Max	0.26	1	5
5.	pH	6.77	6.5 - 8.5	No Relaxation
6.	Total Dissolved Solids, mg/l, Max	89	500	2000
7.	Aluminium (as Al), 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	25	75	200
10.	Chloride (as Cl), mg/l, Max.	6.2	250	1000
11.	Copper (as Cu), mg/l, Max	ND	0.05	1.5
12.	Fluorides (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	0.015	0.3	No Relaxation
15.	Magnesium (as Mg), mg/l, Max	3.8	30	100
16.	Manganese (as Mn), mg/l, Max	ND	0.1	0.3
17.	Zinc (as Zn), mg/l, Max	ND	5.0	15
18.	Nitrate (as NO <sub>3</sub> ), mg/l, Max	0.59	45	No Relaxation
19.	Sulfate (as SO <sub>4</sub> ), mg/l, Max	ND	200	400
20.	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH), mg/l, Max.	ND	0.001	0.002
				-Continued-

\*Limits as per IS 10500:2012

Analysis Protocol IS 3025  
ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/21-22/BW-04/01  
Date : 08/05/2021

Order No.: SOGM/00343/20-21  
Date : 15/03/2021

Report issued To: **GOLDSTONE CEMENTS LIMITED**  
Village- Musiang Lamare (Old), P.O.- Khlichrist, Meghalaya- 793200

### DRINKING WATER ANALYSIS RESULTS

Sample Ref. No.: GSCL/21-22/DW-3004/01  
Collected On : 30-04-2021

Sample Source : Narmada Sadhan  
Received On : 03-05-2021

Sample Type : Drinking Water  
Collected By : Envirocon Representative

Sl. No.	Parameters	Results	Acceptable Limit*	Permissible Limit* In the Absence of Alternate Source
21.	Total Alkalinity(as CaCO <sub>3</sub> ) , mg/l, Max	73	200	600
22.	Total Hardness, (as CaCO <sub>3</sub> ), mg/l, Max	14	200	600
23.	Cadmium (as Cd), mg/l, Max.	ND	0.003	No Relaxation
24.	Cyanide (as CN), mg/L, Max.	ND	0.05	No Relaxation
25.	Lead (as Pb), mg/l, Max.	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 MRAS), 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. Coll / 100 ml	NIL	Absent	Absent
-End of Report-				

\*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 Baroi, ENVIROCON

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Report No.: ENV/GSCL/21-22/WW-04/01  
Date : 08/05/2021

Order No.: SOGM/00343/20-21  
Date : 15/03/2021

Report Issued To: **GOLDSTONE CEMENTS LIMITED**  
Village- Muslang Lamare (Old), P.O.- Khiechriat, Meghalaya- 793200

### WASTE WATER ANALYSIS RESULTS

Sample Ref. No. : GSCL/21-22/WW-3004/01  
Sample Type/Source : Waste Water (Treated)/ETP Outlet  
Sample Collected By : Representative of ENVIROCON  
Sample Collected On : 30.04.2021  
Sample Received On : 03.05.2021  
Analysis Protocol : IS 3025

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Limit (As Per CPCB Standards)
1.	pH	-	6.79	5.5 - 9.0
2.	Temperature	°C	25.9	shall not exceed 5°C above the receiving water temperature
3.	Total Suspended Solids	mg/l	23	100
4.	Biochemical Oxygen Demand	mg/l	25	30
5.	Chemical Oxygen Demand	mg/l	138	250
6.	Oil & Grease	mg/l	<4.0	10
7.	Total Residual Chlorine	mg/l	<0.01	1.0
8.	Ammonical Nitrogen (as N)	mg/l	3.8	50
9.	Total Kjeldahl Nitrogen (as NH <sub>4</sub> )	mg/l	9.5	100
10.	Free Ammonia (as NH <sub>3</sub> )	mg/l	<0.01	5.0



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/21-22/FE-04/01  
Date : 08/05/2021

Order No.: SOGM/00343/20-21  
Date : 15/03/2021

Report issued To : **GOLDSTONE CEMENTS LIMITED**  
Village- Musiang Lamare (Old), P. O.- Khliehriat, Meghalaya- 793200

### PROCESS FUGITIVE EMISSION TEST RESULTS

Sl. No.	Locations	Date of Sampling	Results for SPM ( $\mu\text{g}/\text{m}^3$ )	Limits ( $\mu\text{g}/\text{m}^3$ )
01	Fly-ash Storage Section	29.04.2021	801	5000
02	Coal Storage Section	29.04.2021	593	2000
03	Limestone Storage Section	30.04.2021	1721	5000
04	Cement Packing Section	30.04.2021	2052	3000

Analysis Protocol: IS 5182



Checked By: Mr. Pankaj Baroi, ENVIROCON

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**Associate Services:** Certification by Competent Person (CIP), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No.: ENV/GSCL/21-22/N-04/01

Date : 08/05/2021

Order No.: SOGM/00343/20-21

Date : 15/03/2021

Report issued To : **GOLDSTONE CEMENTS LIMITED**

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

### NOISE LEVEL MEASUREMENT RESULTS

Sl. No.	Location(s)	Date Of Measurement	Day time		Night Time	
			$L_{eq}$ (dB-A)	Limit (dB-A)	$L_{eq}$ (dB-A)	Limit (dB-A)
1	Near Coal Mill	29.04.2021	65.2	75	61.4	70
2	Near CPP Area	29.04.2021	61.9	75	54.2	70
3	Near Coal Storage Yard	29.04.2021	57.4	75	52.4	70
4	Near Raw Mill	30.04.2021	68.5	75	62.7	70
5	Near Cement Mill	30.04.2021	69.3	75	61.8	70
6	HR & Mine's Office	30.04.2021	60.6	75	54.3	70
7	CPP TG Building	30.04.2021	71.7	75	63.6	70



Checked By: Mr. Pankaj Barua, ENVIROCON

- NOTE:
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No: GSCL/EHS/2021-22/09

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

**Sub: Submission of Monthly Environmental Monitoring Reports - MAY -2021**

Sir,

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

The test reports are enclosed.

We request you to acknowledge the receipt.

Thanking You,

Yours faithfully  
For Goldstone Cements Ltd.

  
Authorised Signatory



Encl: Test Reports

**Goldstone Cements Limited**

CIN No. : U26940ML2007PLC008298

**Corporate Office**

510, 5th Floor, Diamond Heritage,  
16, Strand Road, Kolkata - 700001  
P +91-33-66079604

**Factory Office**

Village Musiang Lamare(Old),  
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5A, 5th Floor, Shine Towers, 57 Sati Jaymati Road  
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# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## AMBIENT AIR QUALITY MONITORING RESULTS

May – 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	03.05.2021	No Sampling due to Rain fall			
Near CCR Material Yard	04.05.2021	21.9	35.4	8.4	8.1
Near Guest House (Yamuna Sadan)	05.05.2021	No Sampling due to Rain fall			
Residential Colony	06.05.2021	13.9	23.8	<5.0	<6.0

  
Analysed By



  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## AMBIENT AIR QUALITY MONITORING RESULTS

May - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	10.05.2021	22.4	34.1	7.9	7.9
Near CCR Material Yard	11.05.2021	No Sampling due to Rain fall			
Near Guest House (Yamuna Sadan)	12.05.2021 <sup>f</sup>	14.7 <sup>f</sup>	25.5	<5.0	<6.0
Residential Colony	13.05.2021	No Sampling due to Rain fall			

  
Analysed By



  
Verified By



# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## AMBIENT AIR QUALITY MONITORING RESULTS

May - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	17.05.2021	20.4	29.2	5.2	6.4
Near CCR Material Yard	18.05.2021	No Sampling due to Rain fall			
Near Guest House (Yamuna Sadan)	19.05.2021	No Sampling due to Rain fall			
Residential Colony	20.05.2021	No Sampling due to Rain fall			

  
Analysed By



  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## AMBIENT AIR QUALITY MONITORING RESULTS

May - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	24.05.2021	No Sampling due to Rain fall			
Near CCR Material Yard	25.05.2021	24.0	32.1	6.1	7.1
Near Guest House (Yamuna Sadan)	26.05.2021	No Sampling due to Rain fall			
Residential Colony	27.05.2021	14.9	22.7	<5.0	<6.0

  
Analysed By



  
Verified By

## STACK EMISSION MONITORING REPORT

May - 2021

Name of Stack & Stack No.	:	Raw Mill & Kiln (1)	
Date of Monitoring	:	03.05.2021	
Stack Velocity of Flue gas	:	21.4 m/s	
Stack Temperature	:	446 °K	
Monitoring Period	:	37 m	
Flow Rate	:	27.1 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	18.6	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	475.9	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NOX)	293.1	600	(mg/Nm <sup>3</sup> )

  
 Analysed By



  
 Verified By

## STACK EMISSION MONITORING REPORT

May - 2021

Name of Stack & Stack No.	:	Coal Mill (2)	
Date of Monitoring	:	04.05.2021	
Stack Velocity of Flue gas	:	14.3 m/s	
Stack Temperature	:	322 °K	
Monitoring Period	:	40 m	
Flow Rate	:	25.1 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	14.6	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	221.5	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NO <sub>X</sub> )	125.6	600	(mg/Nm <sup>3</sup> )

  
Analysed By

  
Verified By

## STACK EMISSION MONITORING REPORT

May - 2021

Name of Stack & Stack No.	:	Cooler ESP(3)	
Date of Monitoring	:	05.05.2021	
Stack Velocity of Flue gas	:	12.1 m/s	
Stack Temperature	:	512 °K	
Monitoring Period	:	33 m	
Flow Rate	:	30.0 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	20.4	30	(mg/Nm <sup>3</sup> )

  
Analysed By



  
Verified By

## STCK EMISSION MONITORING REPORT

May - 2021

Name of Stack & Stack No.	:	Cement Mill (4)	
Date of Monitoring	:	05.05.2021	
Stack Velocity of Flue gas	:	11.5 m/s	
Stack Temperature	:	328 °K	
Monitoring Period	:	51 m	
Flow Rate	:	19.8 LPM	
Parameters	Unit	Results	Standard Limits
Particulate Matter	(mg/Nm <sup>3</sup> )	16.9	30

  
Analysed By



  
Verified By

## STACK EMISSION MONITORING REPORT

May - 2021

Name of Stack & Stack No.	:	CPP (5)	
Date of Monitoring	:	06.05.2021	
Stack Velocity of Flue gas	:	9.8 m/s	
Stack Temperature	:	376 °K	
Monitoring Period	:	68 m	
Flow Rate	:	14.7 LPM	
Parameters	Unit	Results	Standard Limits
Particulate Matter	(mg/Nm <sup>3</sup> )	30.3	50
Sulphur Dioxide (SO <sub>2</sub> )	(mg/Nm <sup>3</sup> )	484.1	600
Nitrogen Oxide (NO <sub>X</sub> )	(mg/Nm <sup>3</sup> )	209.4	300

  
 Analysed By



  
 Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

May - 2021

Name of Stack & Stack No.	:	Raw Mill & Kiln (1)	
Date of Monitoring	:	27.05.2021	
Stack Velocity of Flue gas	:	21.7 m/s	
Stack Temperature	:	458 °K	
Monitoring Period	:	37 m	
Flow Rate	:	26.8 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	21.8	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	451.3	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NO <sub>x</sub> )	265.2	600	(mg/Nm <sup>3</sup> )

  
Analysed By



  
Verified By



# GOLDSTONE CEMENTS LIMITED


CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

May - 2021

Name of Stack & Stack No.	:	Coal Mill (2)	
Date of Monitoring	:	27.05.2021	
Stack Velocity of Flue gas	:	15.2 m/s	
Stack Temperature	:	331 °K	
Monitoring Period	:	38 m	
Flow Rate	:	26 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	18.7	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	205.1	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NOX)	97.7	600	(mg/Nm <sup>3</sup> )

  
Analysed By



  
Verified By

# GOLDSTONE CEMENTS LIMITED


CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

May - 2021

Name of Stack & Stack No.	:	Cooler ESP(3)	
Date of Monitoring	:	28.05.2021	
Stack Velocity of Flue gas	:	12.6 m/s	
Stack Temperature	:	502 °K	
Monitoring Period	:	70 m	
Flow Rate	:	14.2 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	21.2	30	(mg/Nm <sup>3</sup> )

  
Analysed By



  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

May - 2021

Name of Stack & Stack No.	:	Cement Mill (4)	
Date of Monitoring	:	28.05.2021	
Stack Velocity of Flue gas	:	11.0 m/s	
Stack Temperature	:	331 °K	
Monitoring Period	:	53 m	
Flow Rate	:	18.9 LPM	
Parameters	Unit	Results	Standard Limits
Particulate Matter	(mg/Nm <sup>3</sup> )	15.8	30

  
Analysed By



  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

May - 2021

Name of Stack & Stack No.	:	CPP (5)	
Date of Monitoring	:	29.05.2021	
Stack Velocity of Flue gas	:	7.9 m/s	
Stack Temperature	:	401 °K	
Monitoring Period	:	40 m	
Flow Rate	:	25 LPM	
Parameters	Unit	Results	Standard Limits
Particulate Matter	(mg/Nm <sup>3</sup> )	34.6	50
Sulphur Dioxide (SO <sub>2</sub> )	(mg/Nm <sup>3</sup> )	475.9	600
Nitrogen Oxide (NO <sub>x</sub> )	(mg/Nm <sup>3</sup> )	223.3	300

  
Analysed By




  
Verified By


## PROCESS FUGITIVE EMISSION TEST RESULTS

May -2021

Locations	Date of Monitoring	Fugitive Emission Results SPM ( $\mu\text{g}/\text{m}^3$ )	Limits ( $\mu\text{g}/\text{m}^3$ )
Fly Ash Storage Section	01.05.2021	704	5000
Coal Storage Section	07.05.2021	548	2000
Lime Storage Section	08.05.2021	1472	5000
Cement Packing Section	14.05.2021	1816	5000

  
Analysed By



  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



MAY -2021

## NOISE LEVEL MEASUREMENT RESULTS

Date : 28.05.2021

S.No.	Locations	Day time (6:00 AM - 9:00 PM)		Night Time (9:00 PM - 6:00 AM)	
		Result(s) (dB - A)	Limit(s) (dB - A)	Result(s) (dB - A)	Limit(s) (dB - A)
1	Near Coal Mill	68	75	62	70
2	Near CPP Area	63	75	56	70
3	Near Limestone Storage Yard	57	75	51	70
4	Near Coal Storage Yard	59	75	54	70
5	Near Raw Mill	70	75	64	70
6	Near Cement Mill	71	75	65	70
7	HR & Mine's Office	62	75	56	70
8	Near CPP TG Building	71	75	64	70

  
Analysed By



  
Verified By

No: GSCL/EHS/2021-22/11

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

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

Sir,

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

The test reports are enclosed.

We request you to acknowledge the receipt.

Thanking You,

Yours faithfully  
For Goldstone Cements Ltd.

Authorised Signatory  

End: Test Reports

**Goldstone Cements Limited**  
CIN No. : U26940ML2007PLC008298

**Corporate Office**

510, 5th Floor, Diamond Heritage,  
16, Strand Road, Kolkata - 700001  
P +91-33-66079604

**Factory Office**

Village Musiang Lamare(Old),  
Khiehrnat, East Jaintia Hills,  
Meghalaya - 793200

**Sales & Marketing Office**

5A, 5th Floor, Shine Towers, 57 Sati Jaymati Road  
Arya Chowk, Rehbari, Guwahati, Assam 781008  
P +91-361 2607071/72

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## AMBIENT AIR QUALITY MONITORING RESULTS

June - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	01.06.2021	No Sampling due to Rain fall			
Near CCR Material Yard	02.06.2021	No Sampling due to Rain fall			
Near Guest House (Yamuna Sadan)	03.06.2021	No Sampling due to Rain fall			
Residential Colony	04.06.2021	No Sampling due to Rain fall			

  
Analysed By

  
Verified By



# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298




## AMBIENT AIR QUALITY MONITORING RESULTS

June - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	07.06.2021	No Sampling due to Rain fall			
Near CCR Material Yard	08.06.2021	No Sampling due to Rain fall			
Near Guest House (Yamuna Sadan)	09.06.2021	13.7	19.3	<5.0	<6.0
Residential Colony	10.06.2021	No Sampling due to Rain fall			

  
Analysed By

  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## AMBIENT AIR QUALITY MONITORING RESULTS

June - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	14.06.2021	No Sampling due to Rain fall			
Near CCR Material Yard	15.06.2021	No Sampling due to Rain fall			
Near Guest House (Yamuna Sadan)	16.06.2021	13.3	20.1	<5.0	<6.0
Residential Colony	17.06.2021	14.1	18.4	<5.0	<6.0

  
Analysed By

  
Verified By

## AMBIENT AIR QUALITY MONITORING RESULTS

June - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	21.06.2021	17.2	26.0	7.4	7.2
Near CCR Material Yard	22.06.2021	No Sampling due to Rain fall			
Near Guest House (Yamuna Sadan)	23.06.2021	No Sampling due to Rain fall			
Residential Colony	24.06.2021	No Sampling due to Rain fall			

  
Analysed By

  
Verified By

# GOLDSTONE CEMENTS LIMITED

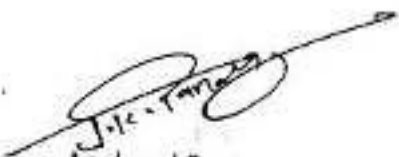
CIN: U26940ML2007PLC008298




## STACK EMISSION MONITORING REPORT

June - 2021

Name of Stack & Stack No.	:	Raw Mill & Kiln (1)	
Date of Monitoring	:	08.06.2021	
Stack Velocity of Flue gas	:	22.9 m/s	
Stack Temperature	:	451 °K	
Monitoring Period	:	38 m	
Flow Rate	:	26.2 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	20.2	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	443.1	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NOX)	237.3	600	(mg/Nm <sup>3</sup> )

  
Analysed By

  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298




## STACK EMISSION MONITORING REPORT

June - 2021

Name of Stack & Stack No.	:	Raw Mill & Kiln (1)	
Date of Monitoring	:	22.06.2021	
Stack Velocity of Flue gas	:	22.3 m/s	
Stack Temperature	:	458 °K	
Monitoring Period	:	36 m	
Flow Rate	:	27.6 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	19.6	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	459.5	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NO <sub>X</sub> )	279.2	600	(mg/Nm <sup>3</sup> )

  
Analysed By

  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

June - 2021

Name of Stack & Stack No.	:	Coal Mill (2)	
Date of Monitoring	:	09.06.2021	
Stack Velocity of Flue gas	:	12.1 m/s	
Stack Temperature	:	329 °K	
Monitoring Period	:	34 m	
Flow Rate	:	29.8 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	22.0	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	213.3	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NOX)	111.7	600	(mg/Nm <sup>3</sup> )

  
Analysed By

  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

June - 2021

Name of Stack & Stack No.	:	Coal Mill (2)	
Date of Monitoring	:	23.06.2021	
Stack Velocity of Flue gas	:	15.1 m/s	
Stack Temperature	:	331 °K	
Monitoring Period	:	39 m	
Flow Rate	:	25.8 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	20.2	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	221.5	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NO <sub>X</sub> )	83.8	600	(mg/Nm <sup>3</sup> )

Analysed By

Verified By

# GOLDSTONE CEMENTS LIMITED


CIN: U26940ML2007PLC008298




## STACK EMISSION MONITORING REPORT

June - 2021

Name of Stack & Stack No.	:	Cooler ESP(3)	
Date of Monitoring	:	10.06.2021	
Stack Velocity of Flue gas	:	13.1 m/s	
Stack Temperature	:	507 °K	
Monitoring Period	:	68 m	
Flow Rate	:	14.6 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	19.4	30	(mg/Nm <sup>3</sup> )

  
Analysed By

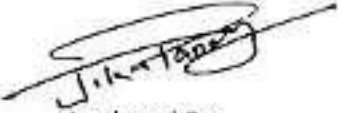

  
Verified By



**STACK EMISSION MONITORING REPORT**

June - 2021

Name of Stack & Stack No.	:	Cooler ESP(3)	
Date of Monitoring	:	24.06.2021	
Stack Velocity of Flue gas	:	12.1 m/s	
Stack Temperature	:	504 °K	
Monitoring Period	:	74 m	
Flow Rate	:	13.6 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	20.9	30	(mg/Nm <sup>3</sup> )

  
Analysed By  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298

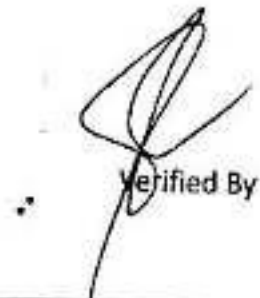


## STCK EMISSION MONITORING REPORT

June - 2021

Name of Stack & Stack No.	:	Cement Mill (4)	
Date of Monitoring	:	11.06.2021	
Stack Velocity of Flue gas	:	11.2 m/s	
Stack Temperature	:	329 °K	
Monitoring Period	:	52 m	
Flow Rate	:	19.3 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	16.5	30	(mg/Nm <sup>3</sup> )

  
Analysed By

  
Verified By

# GOLDSTONE CEMENTS LIMITED

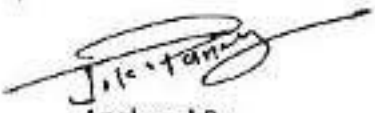
CIN: U26940ML2007PLC008298




## STCK EMISSION MONITORING REPORT

June - 2021

Name of Stack & Stack No.	:	Cement Mill (4)	
Date of Monitoring	:	25.06.2021	
Stack Velocity of Flue gas	:	11.4 m/s	
Stack Temperature	:	324 °K	
Monitoring Period	:	50 m	
Flow Rate	:	20 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	17.5	30	(mg/Nm <sup>3</sup> )

  
Analysed By

  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

June - 2021

Name of Stack & Stack No.	:	CPP (5)	
Date of Monitoring	:	12.06.2021	
Stack Velocity of Flue gas	:	8.9 m/s	
Stack Temperature	:	396 °K	
Monitoring Period	:	35 m	
Flow Rate	:	28.5 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	30.6	50	(mg/Nm <sup>3</sup> )
Sulphur Dioxide (SO <sub>2</sub> )	484.1	600	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NOX)	209.4	300	(mg/Nm <sup>3</sup> )

  
Analysed By

  
Verified By

# GOLDSTONE CEMENTS LIMITED


CIN: U26940ML2007PLC008298




## STACK EMISSION MONITORING REPORT

June - 2021

Name of Stack & Stack No.	:	CPP (5)	
Date of Monitoring	:	26.06.2021	
Stack Velocity of Flue gas	:	9.3 m/s	
Stack Temperature	:	398 °K	
Monitoring Period	:	34 m	
Flow Rate	:	29.8 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	32.9	50	(mg/Nm <sup>3</sup> )
Sulphur Dioxide (SO <sub>2</sub> )	467.7	600	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NO <sub>x</sub> )	181.5	300	(mg/Nm <sup>3</sup> )

  
Analysed By

  
Verified By

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

# GOLDSTONE CEMENTS LIMITED


CIN: U26940ML2007PLC008298




## PROCESS FUGITIVE EMISSION TEST RESULTS

June -2021

Locations	Date of Monitoring	Fugitive Emission Results SPM ( $\mu\text{g}/\text{m}^3$ )	Limits ( $\mu\text{g}/\text{m}^3$ )
Fly Ash Storage Section	11.06.2021	672	5000
Coal Storage Section	12.06.2021	486	2000
Lime Storage Section	18.06.2021	No Sampling Due to Rainfall	5000
Cement Packing Section	19.06.2021	1438	5000

  
Analysed By

  
Verified By

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

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



June -2021

## NOISE LEVEL MEASUREMENT RESULTS

Date : 23.06.2021

S.No.	Locations	Day time (6:00 AM - 9:00 PM)		Night Time (9:00 PM - 6:00 AM)	
		Result(s) (dB - A)	Limit(s) (dB - A)	Result(s) (dB - A)	Limit(s) (dB - A)
1	Near Coal Mill	66	75	61	70
2	Near CPP Area	64	75	57	70
3	Near Limestone Storage Yard	59	75	53	70
4	Near Coal Storage Yard	56	75	51	70
5	Near Raw Mill	68	75	63	70
6	Near Cement Mill	70	75	64	70
7	HR & Mine's Office	63	75	57	70
8	Near CPP TG Building	70	75	66	70

  
Analysed By

  
Verified By

No: GSCL/EHS/2021-22/13

Dated: 04.08.2021

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

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

Sir,

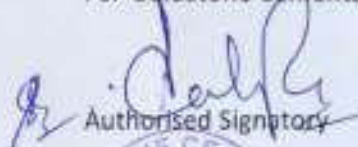
With reference to the subject as cited above, we are herewith submitting Monthly Environmental Monitoring Reports for the month of JULY -2021.

The test reports are enclosed.

We request you to acknowledge the receipt.

Thanking You,

Yours faithfully  
For Goldstone Cements Ltd.



Authorised Signatory



Encl: Test Reports

**Goldstone Cements Limited**


CIN No. : U26940ML2007PLC008298




### AMBIENT AIR QUALITY MONITORING RESULTS

July - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	05.07.2021	No Sampling due to Rain fall			
Near CCR Material Yard	06.07.2021	No Sampling due to Rain fall			
Near Guest House (Yamuna Sadan)	07.07.2021	15.9	22.0	<5.0	<6.0
Residential Colony	08.07.2021	16.7	21.3	<5.0	<6.0

  
Analysed By

  
Verified By

### AMBIENT AIR QUALITY MONITORING RESULTS

July - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	12.07.2021	22.7	31.6	6.4	8.2
Near CCR Material Yard	13.07.2021	23.4	35.9	7.5	9.8
Near Guest House (Yamuna Sadan)	14.07.2021	No Sampling due to Rain fall			
Residential Colony	15.07.2021	13.6	22.4	<5.0	<6.0

  
Analysed By

  
Verified By

### AMBIENT AIR QUALITY MONITORING RESULTS

July - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	19.07.2021	23.4	30.8	7.5	8.2
Near CCR Material Yard	20.07.2021	26.3	32.7	8.7	9.6
Near Guest House (Yamuna Sadan)	21.07.2021	15.6	19.4	<5.0	<6.0
Residential Colony	22.07.2021	16.0	23.5	<5.0	<6.0



Analysed By



Verified By

**AMBIENT AIR QUALITY MONITORING RESULTS**
**July - 2021**

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	26.07.2021	21.7	29.8	8.4	8.4
Near CCR Material Yard	27.07.2021	25.2	31.7	7.6	10.4
Near Guest House (Yamuna Sadan)	28.07.2021	14.4	21.6	<5.0	<6.0
Residential Colony	29.07.2021	15.6	20.0	<5.0	<6.0



  
Analysed By


  
Verified By

## STACK EMISSION MONITORING REPORT

July - 2021

Name of Stack & Stack No.	:	Raw Mill & Kiln (1)		
Date of Monitoring	:	05.07.2021		
Stack Velocity of Flue gas	:	20.5 m/s		
Stack Temperature	:	458 °K		
Monitoring Period	:	40 m		
Flow Rate	:	25.3 LPM		
Parameters	Results	Standard Limits	Unit	
Particulate Matter	21.8	30	(mg/Nm <sup>3</sup> )	
Sulphur Dioxide(SO <sub>2</sub> )	459.5	1000	(mg/Nm <sup>3</sup> )	
Nitrogen Oxide (NOX)	293.1	600	(mg/Nm <sup>3</sup> )	


  
Analysed By

  
Verified By

## STACK EMISSION MONITORING REPORT

July - 2021

Name of Stack & Stack No.	:	Coal Mill (2)	
Date of Monitoring	:	06.07.2021	
Stack Velocity of Flue gas	:	14.8 m/s	
Stack Temperature	:	332 °K	
Monitoring Period	:	40 m	
Flow Rate	:	25.3 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	21.5	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	254.4	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NO <sub>X</sub> )	139.6	600	(mg/Nm <sup>3</sup> )


 Analysed By


 Verified By

# GOLDSTONE CEMENTS LIMITED


CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

July - 2021

Name of Stack & Stack No.	:	Cooler ESP(3)	
Date of Monitoring	:	07.07.2021	
Stack Velocity of Flue gas	:	14.1 m/s	
Stack Temperature	:	513 °K	
Monitoring Period	:	64 m	
Flow Rate	:	15.6 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	17.9	30	(mg/Nm <sup>3</sup> )


  
Analysed By

  
Verified By

## STACK EMISSION MONITORING REPORT

July - 2021

Name of Stack & Stack No.	:	Cement Mill (4)	
Date of Monitoring	:	08.07.2021	
Stack Velocity of Flue gas	:	10.6 m/s.	
Stack Temperature	:	318 °K	
Monitoring Period	:	53 m	
Flow Rate	:	18.8 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	15.6	30	(mg/Nm <sup>3</sup> )


  
Analysed By  
Verified By




## STACK EMISSION MONITORING REPORT

July - 2021

Name of Stack & Stack No.	:	CPP (5)	
Date of Monitoring	:	09.07.2021	
Stack Velocity of Flue gas	:	8.6 m/s	
Stack Temperature	:	388 °K	
Monitoring Period	:	35 m	
Flow Rate	:	28.3 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	31.9	50	(mg/Nm <sup>3</sup> )
Sulphur Dioxide (SO <sub>2</sub> )	475.9	600	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NO <sub>x</sub> )	265.2	300	(mg/Nm <sup>3</sup> )


  
Analysed By

  
Verified By

## STACK EMISSION MONITORING REPORT

July - 2021

Name of Stack & Stack No.	:	Raw Mill & Kiln (1)		
Date of Monitoring	:	20.07.2021		
Stack Velocity of Flue gas	:	21.2 m/s		
Stack Temperature	:	456 °K		
Monitoring Period	:	38 m		
Flow Rate	:	26.4 LPM		
Parameters	Results	Standard Limits	Unit	
Particulate Matter	22.8	30	(mg/Nm <sup>3</sup> )	
Sulphur Dioxide(SO <sub>2</sub> )	484.1	1000	(mg/Nm <sup>3</sup> )	
Nitrogen Oxide (NOX)	335.0	600	(mg/Nm <sup>3</sup> )	



Analysed by





Verified By

## STACK EMISSION MONITORING REPORT

July - 2021

Name of Stack & Stack No.	:	Coal Mill (2)	
Date of Monitoring	:	21.07.2021	
Stack Velocity of Flue gas	:	15.5 m/s	
Stack Temperature	:	338 °K	
Monitoring Period	:	39 m	
Flow Rate	:	25.9 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	20.8	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	270.8	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NOX)	153.5	600	(mg/Nm <sup>3</sup> )




  
Analysed By


  
Verified By

## STACK EMISSION MONITORING REPORT

July - 2021


Name of Stack & Stack No.	:	Cooler ESP(3)		
Date of Monitoring	:	22.07.2021		
Stack Velocity of Flue gas	:	12.8 m/s		
Stack Temperature	:	508 °K		
Monitoring Period	:	70 m		
Flow Rate	:	14.2 LPM		
Parameters	Results	Standard Limits	Unit	
Particulate Matter	16.4	30	(mg/Nm <sup>3</sup> )	

  
Analysed By  
Verified By

## STCK EMISSION MONITORING REPORT

July - 2021


Name of Stack & Stack No.	:	Cement Mill (4)	
Date of Monitoring	:	23.07.2021	
Stack velocity of Flue gas	:	10.4 m/s	
Stack Temperature	:	326 °K	
Monitoring Period	:	56 m	
Flow Rate	:	18.0 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	14.4	30	(mg/Nm <sup>3</sup> )

  
Analysed By  
Verified By

## STACK EMISSION MONITORING REPORT

July - 2021

Name of Stack & Stack No.	:	CPP (5)	
Date of Monitoring	:	24.07.2021	
Stack Velocity of Flue gas	:	9.5 m/s	
Stack Temperature	:	401 °K	
Monitoring Period	:	30 m	
Flow Rate	:	30.1 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	33.7	50	(mg/Nm <sup>3</sup> )
Sulphur Dioxide (SO <sub>2</sub> )	418.5	600	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NO <sub>x</sub> )	153.5	300	(mg/Nm <sup>3</sup> )


  
Analysed By

  
Verified By

## PROCESS FUGITIVE EMISSION TEST RESULTS

July -2021

Locations	Date of Monitoring	Fugitive Emission Results SPM ( $\mu\text{g}/\text{m}^3$ )	Limits ( $\mu\text{g}/\text{m}^3$ )
Fly Ash Storage Section	09.07.2021	753	5000
Coal Storage Section	10.07.2021	516	2000
Lime Storage Section	16.07.2021	1289	5000
Cement Packing Section	17.07.2021	1637	5000

  
Analysed By  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298




July -2021

## NOISE LEVEL MEASUREMENT RESULTS

Date : 22.07.2021

S.No.	Locations	Day time (6:00 AM - 9:00 PM)		Night Time (9:00 PM - 6:00 AM)	
		Result(s) (dB - A)	Limit(s) (dB - A)	Result(s) (dB - A)	Limit(s) (dB - A)
1	Near Coal Mill	67	75	63	70
2	Near CPP Area	61	75	56	70
3	Near Limestone Storage Yard	57	75	53	70
4	Near Coal Storage Yard	59	75	52	70
5	Near Raw Mill	69	75	65	70
6	Near Cement Mill	71	75	66	70
7	HR & Mine's Office	62	75	56	70
8	Near CPP TG Building	68	75	64	70

  
Analysed By

  
Verified By





**BLACKTIGER**  
C E M E N T

HILA NA PAOGE

o/c

No: GSCL/EHS/2021-22/14

Dated: 02.09.2021

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

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

Sir,

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

The test reports are enclosed.

We request you to acknowledge the receipt.

Thanking You,

Yours faithfully  
For Goldstone Cements Ltd.

  
Authorised Signatory



Encl: Test Reports

**Goldstone Cements Limited**

CIN No. : U26940ML2007PLC008298

Corporate Office

510, 5th Floor, Diamond Heritage,  
16, Strand Road, Kolkata - 700001  
P +91-33-66079604

Factory Office

Village Musiang Lamare (Old),  
Khliehriat, East Jaintia Hills,  
Meghalaya - 793200

Sales & Marketing Office

5A, 5th Floor, Shine Towers, 57 Sati Jaymati Road  
Arya Chowk, Rehabari, Guwahati, Assam 781008  
P +91-361-2607071/72

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## AMBIENT AIR QUALITY MONITORING RESULTS

AUGUST – 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	02.08.2021	No Sampling due to Rain fall			
Near CCR Material Yard	03.08.2021	27.2	31.6	7.8	11.2
Near Guest House (Yamuna Sadan)	04.08.2021	No Sampling due to Rain fall			
Residential Colony	05.08.2021	No Sampling due to Rain fall			

  
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Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## AMBIENT AIR QUALITY MONITORING RESULTS

AUGUST - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	09.08.2021	No Sampling due to Rain fall			
Near CCR Material Yard	10.08.2021	No Sampling due to Rain fall			
Near Guest House (Yamuna Sadan)	11.08.2021	No Sampling due to Rain fall			
Residential Colony	12.08.2021	No Sampling due to Rain fall			

  
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# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## AMBIENT AIR QUALITY MONITORING RESULTS

AUGUST - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	16.08.2021	25.8	29.2	8.6	10.7
Near CCR Material Yard	17.08.2021	No Sampling due to Rain fall			
Near Guest House (Yamuna Sadan)	18.08.2021	No Sampling due to Rain fall			
Residential Colony	19.08.2021	No Sampling due to Rain fall			

  
Analysed By

  
Verified By

**AMBIENT AIR QUALITY MONITORING RESULTS**
**AUGUST - 2021**

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	23.08.2021	No Sampling due to Rain fall			
Near CCR Material Yard	24.08.2021	No Sampling due to Rain fall			
Near Guest House (Yamuna Sadan)	27.08.2021	14.8	23.6	<5.0	<6.0
Residential Colony	28.08.2021	16.3	24.5	<5.0	<6.0


  
 Analysed By


  
 Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

AUGUST - 2021

Name of Stack & Stack No.	:	Raw Mill & Kiln (1)	
Date of Monitoring	:	02.08.2021	
Stack Velocity of Flue gas	:	20.2 m/s	
Stack Temperature	:	443 °K	
Monitoring Period	:	39 m	
Flow Rate	:	25.9 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	19.8	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	467.7	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NO <sub>x</sub> )	376.9	600	(mg/Nm <sup>3</sup> )

  
Analysed By

  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

AUGUST - 2021

Name of Stack & Stack No.	:	Raw Mill & Kiln [1]	
Date of Monitoring	:	23.08.2021	
Stack Velocity of Flue gas	:	21.0 m/s	
Stack Temperature	:	447 °K	
Monitoring Period	:	38 m	
Flow Rate	:	26.6 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	23.1	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	443.1	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NO <sub>x</sub> )	335.0	600	(mg/Nm <sup>3</sup> )

  
Analysed By

  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

AUGUST - 2021

Name of Stack & Stack No.	:	Coal Mill (2)	
Date of Monitoring	:	03.08.2021	
Stack Velocity of Flue gas	:	14.1 m/s	
Stack Temperature	:	324 °K	
Monitoring Period	:	40 m	
Flow Rate	:	24.7 LPM	
Parameters	Results	Standard Limits	Unit
Particulate-Matter	23.9	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	295.4	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NOX)	209.4	600	(mg/Nm <sup>3</sup> )

  
Analysed By

  
Verified By



# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

AUGUST - 2021

Name of Stack & Stack No.	:	Coal Mill (2)	
Date of Monitoring	:	24.08.2021	
Stack Velocity of Flue gas	:	14.2 m/s	
Stack Temperature	:	328 °K	
Monitoring Period	:	41 m	
Flow Rate	:	24.5 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	22.0	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	262.6	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NO <sub>x</sub> )	125.6	600	(mg/Nm <sup>3</sup> )

Analysed By

Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

AUGUST - 2021

Name of Stack & Stack No.	:	Cooler ESP(3)	
Date of Monitoring	:	04.08.2021	
Stack Velocity of Flue gas	:	13.7 m/s	
Stack Temperature	:	495 °K	
Monitoring Period	:	64 m	
Flow Rate	:	15.7 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	21.7	30	(mg/Nm <sup>3</sup> )

  
Analysed By

  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

AUGUST - 2021

Name of Stack & Stack No.	:	Cooler ESP(3)	
Date of Monitoring	:	25.08.2021	
Stack Velocity of Flue gas	:	14.3 m/s	
Stack Temperature	:	492 °K	
Monitoring Period	:	61 m	
Flow Rate	:	16.5 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	17.0	30	(mg/Nm <sup>3</sup> )

  
Analysed By

  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STCK EMISSION MONITORING REPORT

AUGUST - 2021

Name of Stack & Stack No.	:	Cement Mill (4)	
Date of Monitoring	:	05.08.2021	
Stack Velocity of Flue gas	:	10.6 m/s	
Stack Temperature	:	321 °K	
Monitoring Period	:	53 m	
Flow Rate	:	18.8 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	16.1	30	(mg/Nm <sup>3</sup> )

  
Analysed By

  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STCK EMISSION MONITORING REPORT

AUGUST - 2021

Name of Stack & Stack No.	:	Cement Mill (4)	
Date of Monitoring	:	26.08.2021	
Stack Velocity of Flue gas	:	11.2 m/s	
Stack Temperature	:	327 °K	
Monitoring Period	:	52 m	
Flow Rate	:	19.4 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	18.4	30	(mg/Nm <sup>3</sup> )

  
Analysed By

  
Verified By

## STACK EMISSION MONITORING REPORT

AUGUST - 2021

Name of Stack & Stack No.	:	CPP (5)	
Date of Monitoring	:	06.08.2021	
Stack Velocity of Flue gas	:	10.1 m/s	
Stack Temperature	:	398 °K	
Monitoring Period	:	70 m	
Flow Rate	:	14.3 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	32.0	50	(mg/Nm <sup>3</sup> )
Sulphur Dioxide (SO <sub>2</sub> )	434.9	600	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NO <sub>x</sub> )	181.5	300	(mg/Nm <sup>3</sup> )


  
 Analysed By


  
 Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

AUGUST - 2021

Name of Stack & Stack No.	:	CPP (5)	
Date of Monitoring	:	27.08.2021	
Stack Velocity of Flue gas	:	10.8 m/s	
Stack Temperature	:	396 °K	
Monitoring Period	:	65 m	
Flow Rate	:	15.4 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	35.1	50	(mg/Nm <sup>3</sup> )
Sulphur Dioxide (SO <sub>2</sub> )	410.3	600	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NOX)	195.4	300	(mg/Nm <sup>3</sup> )

  
Analysed By

  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## PROCESS FUGITIVE EMISSION TEST RESULTS

AUGUST - 2021

Locations	Date of Monitoring	Fugitive Emission Results SPM ( $\mu\text{g}/\text{m}^3$ )	Limits ( $\mu\text{g}/\text{m}^3$ )
Fly Ash Storage Section	13.08.2021	679	5000
Coal Storage Section	14.08.2021	481	2000
Lime Storage Section	20.08.2021	No Sampling Due to Rainfall	5000
Cement Packing Section	21.08.2021	1247	5000

  
Analysed By

  
Verified By



# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



AUGUST - 2021

## NOISE LEVEL MEASUREMENT RESULTS

Date : 20.08.2021

S.No.	Locations	Day time (6:00 AM - 9:00 PM)		Night Time (9:00 PM - 6:00 AM)	
		Result(s) (dB - A)	Limit(s) (dB - A)	Result(s) (dB - A)	Limit(s) (dB - A)
1	Near Coal Mill	62	75	60	70
2	Near CPP Area	65	75	58	70
3	Near Limestone Storage Yard	55	75	52	70
4	Near Coal Storage Yard	60	75	54	70
5	Near Raw Mill	67	75	63	70
6	Near Cement Mill	69	75	66	70
7	HR & Mine's Office	59	75	55	70
8	Near CPP TG Building	70	75	65	70

Analysed By

Verified By



**BLACKTIGER**  
C E M E N T

HILA NA PAOGE

0/c

No: GSCL/EHS/2021-22/16

Dated: 09.10.2021

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

**Sub: Submission of Monthly Environmental Monitoring Reports-SEPTEMBER-2021**

Dear Sir / Madam,

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


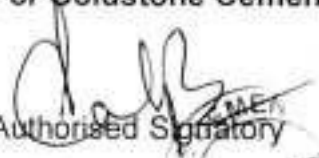
The test reports are enclosed.

We request you to acknowledge the receipt.

Thanking You,

Yours faithfully,

**For Goldstone Cements Ltd.**

  
  
Authorized Signatory

NO LAMAR  
OLD



Encl: Test Reports

**Goldstone Cements Limited**

CIN No. : U26940ML2007PLC008298

**AMBIENT AIR QUALITY MONITORING RESULTS**
**SEPTEMBER – 2021**

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	06.09.2021	25.6	31.2	14.5	16.0
Near CCR Material Yard	07.09.2021	28.8	37.9	11.7	14.6
Near Guest House (Yamuna Sadan)	08.09.2021	12.5	22.0	<5.0	<6.0
Residential Colony	09.09.2021	15.9	21.3	<5.0	<6.0


  
 Analysed By


  
 Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## AMBIENT AIR QUALITY MONITORING RESULTS

SEPTEMBER - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	13.09.2021	23.0	34.9	13.0	14.6
Near CCR Material Yard	14.09.2021	29.7	39.4	8.5	13.7
Near Guest House (Yamuna Sadan)	15.09.2021	14.7	21.6	<5.0	<6.0
Residential Colony	16.09.2021	19.1	26.3	<5.0	<6.0

  
Analysed By



  
Verified By

Report No.: ENV/GSCL/21-22/AA-09/01  
Date: 07/10/2021

Order No.: SOGM/00343/20-21  
Date: 15/03/2021

Report Issued To: **GOLDSTONE CEMENTS LIMITED**  
Village: Musiang Lamare (Old); PO: Khliehriat, Meghalaya- 793200

### AMBIENT AIR QUALITY TEST RESULTS

LOCATIONS ↓	Date of Sampling	PM 2.5 (µg/m <sup>3</sup> )	PM 10 (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )	NH <sub>3</sub> (µg/m <sup>3</sup> )	CO (mg/m <sup>3</sup> )	O <sub>3</sub> (µg/m <sup>3</sup> )	B(a)P (ng/m <sup>3</sup> )	C <sub>2</sub> H <sub>6</sub> (µg/m <sup>3</sup> )	NI (ng/m <sup>3</sup> )	As (ng/m <sup>3</sup> )	Pb (µg/m <sup>3</sup> )
LIMITS →	-	60 (24 hrs. Average)	100 (24 hrs. Average)	80 (24 hrs. Average)	80 (24 hrs. Average)	400 (24 hrs. Average)	4.0 (1 hr. Average)	180 (1 hr. Average)	1.0 (Annual Average)	5.0 (Annual Average)	20 (Annual Average)	6.0 (Annual Average)	1.0 (24 hrs. Average)
Near CPP (Water Reservoir)	19.09.2021	23.6	43.2	5.9	10.7	<5.0	<0.01	<1.0	<0.1	<0.01	<0.01	<0.01	<0.01
Near CCR (Material Yard)	19.09.2021	28.2	49.8	5.3	9.2	<5.0	<0.01	<1.0	<0.1	<0.01	<0.01	<0.01	<0.01
Near Guest House (Yamuna Sadan)	20.09.2021	14.3	31.4	<5.0	<6.0	<5.0	0.023	<1.0	<0.1	<0.01	<0.01	<0.01	<0.01
Residential Colony	20.09.2021	17.8	34.9	<5.0	<6.0	<5.0	0.051	<1.0	<0.1	<0.01	<0.01	<0.01	<0.01



Checked By: Mr. Pankaj Baroi, ENVIROCON

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# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## AMBIENT AIR QUALITY MONITORING RESULTS

SEPTEMBER - 2021

Stations Name	Date of Monitoring	Parameters Results			
		PM <sub>2.5</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>
		Limit 60 µg/m <sup>3</sup>	Limit 100 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>	Limit 80 µg/m <sup>3</sup>
Near CPP Water Reservoir	25.09.2021	28.2	33.1	14.9	13.9
Near CCR Material Yard	27.09.2021	32.4	36.7	15.8	10.5
Near Guest House (Yamuna Sadan)	28.09.2021	17.3	25.3	<5.0	<6.0
Residential Colony	29.09.2021	18.7	29.1	<5.0	<6.0

  
Analysed By



  
Verified By

# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

SEPTEMBER - 2021

Name of Stack & Stack No.	:	Raw Mill & Kiln (1)	
Date of Monitoring	:	10.09.2021	
Stack Velocity of Flue gas	:	21.1 m/s	
Stack Temperature	:	452 °K	
Monitoring Period	:	38 m	
Flow Rate	:	26.4 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	21.3	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	533.3	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NO <sub>x</sub> )	237.3	600	(mg/Nm <sup>3</sup> )

Analysed By



Report No.: ENV/GSCL/21-22/SE-09/03

Date : 07/10/2021

Order No.: SOGM/00343/20-21

Date : 15/03/2021

Report Issued To: **GOLDSTONE CEMENTS LIMITED**

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

### STACK EMISSION TEST RESULTS

01	Test Ref. No.	GSCL/21-22/SE-09/03		
02	Date of Sampling	19.09.2021		
03	Material of Construction	M. S.		
04	Stack Attached To	Raw Mill		
05	Flue Gas Temperature (°C)	176		
06	Exit Velocity of Gas (m/sec)	11.8		
07	Type of Fuel Used	NA*		
<b>Analysis Results of Flue Gas</b>				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	Particulate Matter	21	mg/Nm <sup>3</sup>	30
ii.	Sulphur Dioxide (as SO <sub>2</sub> )	573	mg/Nm <sup>3</sup>	1000
iii.	Oxides of Nitrogen (as NO <sub>x</sub> )	366	mg/Nm <sup>3</sup>	600

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

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# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

SEPTEMBER - 2021

Name of Stack & Stack No.	:	Coal Mill (2)	
Date of Monitoring	:	10.09.2021	
Stack Velocity of Flue gas	:	11.8 m/s	
Stack Temperature	:	328 °K	
Monitoring Period	:	49 m	
Flow Rate	:	20.3 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	24.2	30	(mg/Nm <sup>3</sup> )
Sulphur Dioxide(SO <sub>2</sub> )	377.4	1000	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NOX)	181.5	600	(mg/Nm <sup>3</sup> )

  
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Report No.: ENV/GSCL/21-22/SE-09/02

Date : 07/10/2021

Order No.: SOGM/00343/20-21

Date : 15/03/2021

Report Issued To : **GOLDSTONE CEMENTS LIMITED**

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

### STACK EMISSION TEST RESULTS

01	Test Ref. No.	GSCL/21-22/SE-09/02		
02	Date of Sampling	19.09.2021		
03	Material of Construction	M. S.		
04	Stack Attached To	Coal Mill		
05	Flue Gas Temperature (°C)	66		
06	Exit Velocity of Gas (m/sec)	7.2		
07	Type of Fuel Used	NA*		
Analysis Results of Flue Gas				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	Particulate Matter	26	mg/Nm <sup>3</sup>	30
ii.	Sulphur Dioxide (as SO <sub>2</sub> )	356	mg/Nm <sup>3</sup>	1000
iii.	Oxides of Nitrogen (as NO <sub>x</sub> )	217	mg/Nm <sup>3</sup>	600

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

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# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

SEPTEMBER - 2021

Name of Stack & Stack No.	:	Cooler ESP(3)	
Date of Monitoring	:	11.09.2021	
Stack Velocity of Flue gas	:	11.6 m/s	
Stack Temperature	:	492 °K	
Monitoring Period	:	33 m	
Flow Rate	:	30.0 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	18.8	30	(mg/Nm <sup>3</sup> )

Analysed By





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Report No.: ENV/GSCL/21-22/SE-09/01  
Date : 07/10/2021

Order No.: SOGM/00343/20-21  
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Report Issued To : **GOLDSTONE CEMENTS LIMITED**  
Vill: Musiang Lamare (Old), P. O.: Khliehriat, Meghalaya- 793200

### STACK EMISSION TEST RESULTS

01	Test Ref. No.	GSCL/21-22/SE-09/01		
02	Date of Sampling	19.09.2021		
03	Material of Construction	M. S.		
04	Stack Attached To	Cooler E. S. P.		
05	Flue Gas Temperature (°C)	224		
06	Exit Velocity of Gas (m/sec)	15.9		
07	Type of Fuel Used	NA*		
<b>Analysis Results of Flue Gas</b>				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
1	Particulate Matter	21	mg/Nm <sup>3</sup>	30

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

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# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STCK EMISSION MONITORING REPORT

SEPTEMBER - 2021

Name of Stack & Stack No.	:	Cement Mill (4)	
Date of Monitoring	:	11.09.2021	
Stack Velocity of Flue gas	:	11.0 m/s	
Stack Temperature	:	336 °K	
Monitoring Period	:	54 m	
Flow Rate	:	18.5 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	15.3	30	(mg/Nm <sup>3</sup> )

  
Analysed By



  
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Report No.: ENV/GSCL/21-22/SE-09/04

Date : 07/10/2021

Order No.: SOGM/00343/20-21

Date : 15/03/2021

Report issued To : **GOLDSTONE CEMENTS LIMITED**

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

### STACK EMISSION TEST RESULTS

01	Test Ref. No.	GSCL/21-22/SE-09/04		
02	Date of Sampling	20.09.2021		
03	Material of Construction	M. S.		
04	Stack Attached To	Cement Mill		
05	Flue Gas Temperature (°C)	61		
06	Exit Velocity of Gas (m/sec)	12.7		
07	Type of Fuel Used	NA*		
Analysis Results of Flue Gas				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
1.	Particulate Matter	17	mg/Nm <sup>3</sup>	30

\*NA: Not Applicable



Checked By: Mr. Pankaj Baroi, ENVIROCON

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# GOLDSTONE CEMENTS LIMITED

CIN: U26940ML2007PLC008298



## STACK EMISSION MONITORING REPORT

SEPTEMBER - 2021

Name of Stack & Stack No.	:	CPP (5)	
Date of Monitoring	:	13.09.2021	
Stack Velocity of Flue gas	:	8.7 m/s	
Stack Temperature	:	379 °K	
Monitoring Period	:	37 m	
Flow Rate	:	29.4 LPM	
Parameters	Results	Standard Limits	Unit
Particulate Matter	33.9	50	(mg/Nm <sup>3</sup> )
Sulphur Dioxide (SO <sub>2</sub> )	516.9	600	(mg/Nm <sup>3</sup> )
Nitrogen Oxide (NO <sub>X</sub> )	223.3	300	(mg/Nm <sup>3</sup> )

  
Analysed By







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### STACK EMISSION TEST RESULTS

01	Test Ref. No.	GSCL/21-22/SK-09/05		
02	Date of Sampling	20.09.2021		
03	Material of Construction	Refractory Brick		
04	Stack Attached To	Captive Power Plant (CPP)		
05	Flue Gas Temperature (°C)	91		
06	Exit Velocity of Gas (m/sec)	11.9		
07	Type of Fuel Used	Coal		
<b>Analysis Results of Flue Gas</b>				
Sl. No.	Parameter(s)	Result(s)	Unit(s)	Limit(s)
i.	Particulate Matter	36	mg/Nm <sup>3</sup>	50
ii.	Sulphur Dioxide (as SO <sub>2</sub> )	469	mg/Nm <sup>3</sup>	600
iii.	Oxides of Nitrogen (as NO <sub>x</sub> )	219	mg/Nm <sup>3</sup>	300
iv.	Mercury (as Hg)	0.016	mg/Nm <sup>3</sup>	0.05



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Report No.: ENV/GSCL/21-22/FE-09/01

Date : 07/10/2021

Order No.: SOGM/00343/20-21

Date : 15/03/2021

Report Issued To: **GOLDSTONE CEMENTS LIMITED**

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

**PROCESS FUGITIVE EMISSION TEST RESULTS**

Sl. No.	Locations	Date of Sampling	Results for SPM ( $\mu\text{g}/\text{m}^3$ )	Limits ( $\mu\text{g}/\text{m}^3$ )
01	Fly-ash Storage Section	19.09.2021	897	5000
02	Coal Storage Section	19.09.2021	473	2000
03	Limestone Storage Section	20.09.2021	1725	5000
04	Cement Packing Section	20.09.2021	1829	5000

Analysis Protocol: IS 5182



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/21-22/N-09/01  
Date : 07/10/2021

Order No.: SOGM/00343/20-21  
Date : 15/03/2021

Report Issued To : **GOLDSTONE CEMENTS LIMITED**  
Vill.: Musiang Lamare (Old), P. O.: Khliehriat, Meghalaya- 793200

### NOISE LEVEL MEASUREMENT RESULTS

Sl. No.	Location(s)	Date Of Measurement	Day time		Night Time	
			L <sub>eq</sub> (dB-A)	Limit (dB-A)	L <sub>eq</sub> (dB-A)	Limit (dB-A)
1	Near Coal Mill	19.09.2021	69.2	75	60.4	70
2	Near CPP Area	19.09.2021	58.5	75	53.5	70
3	Near Coal Storage Yard	19.09.2021	56.8	75	50.2	70
4	Near Raw Mill	20.09.2021	66.3	75	50.3	70
5	Near Cement Mill	20.09.2021	71.2	75	63.2	70
6	HR & Mine's Office	21.09.2021	65.3	75	62.4	70
7	CPP TG Building	21.09.2021	63.8	75	54.8	70



Checked By: Mr. Pankaj Baroi, ENVIROCON

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ISO 9001:2015 Certified  
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Report No.: ENV/GSCL/21-22/DW-09/01  
Date : 07/10/2021

Order No.: SOGM/00343/20-21  
Date : 15/03/2021

Report Issued To: **GOLDSTONE CEMENTS LIMITED**  
Vill.: Musiang Lamare (Old), P. O.: Khliehriat, Meghalaya- 793200

## DRINKING WATER ANALYSIS RESULTS

Sample Ref. No.: GSCL/21-22/DW-2109/01  
Collected On : 21-09-2021

Sample Source : Narmada Sadhan  
Received On : 24-09-2021

Sample Type : Drinking Water  
Collected By : Envirocon Representative

Sl. No.	Parameters	Results	Acceptable Limit*	Permissible Limit* in the Absence of Alternate Source
1.	Colour, Hazen Units, Max	1	5	15
2.	Odour	Odourless	Agreeable	Agreeable
3.	Taste	Acceptable	Agreeable	Agreeable
4.	Turbidity, NTU, Max	0.16	1	5
5.	pH	6.72	6.5 - 8.5	No Relaxation
6.	Total Dissolved Solids, mg/l, Max	82	500	2000
7.	Aluminium (as Al), 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.	22	75	200
10.	Chloride (as Cl), mg/l, Max	6.1	250	1000
11.	Copper (as Cu), mg/l, Max	ND	0.05	1.5
12.	Fluorides (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	0.023	0.3	No Relaxation
15.	Magnesium (as Mg), mg/l, Max	1.1	30	100
16.	Manganese (as Mn), mg/l, Max	ND	0.1	0.3
17.	Zinc (as Zn), mg/l, Max	ND	5.0	15
18.	Nitrate (as NO <sub>3</sub> ), mg/l, Max	0.42	45	No Relaxation
19.	Sulfate (as SO <sub>4</sub> ), mg/l, Max	ND	200	400
20.	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH), mg/l, Max.	ND	0.001	0.002
				--Continued--

\*Limits as per IS 10500:2012

Analysis Protocol: IS 3025  
ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

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ISO 9001:2015 Certified  
ISO 45001:2018 Certified

Report No.: ENV/GSCL/21-22/DW-09/01

Date : 07/10/2021

Order No.: SOGM/00343/20-21

Date : 15/03/2021

Report issued To: **GOLDSTONE CEMENTS LIMITED**

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

## DRINKING WATER ANALYSIS RESULTS

Sample Ref. No.: GSCL/21-22/DW-2109/01

Sample Source: Narmada Sadhan

Sample Type: Drinking Water

Collected On : 21-09-2021

Received On : 24-09-2021

Collected By: Envirocon Representative

Sl. No.	Parameters	Results	Acceptable Limit*	Permissible Limit* in the Absence of Alternate Source
21.	Total Alkalinity(as CaCO <sub>3</sub> ), mg/L Max.	68	200	600
22.	Total Hardness, (as CaCO <sub>3</sub> ), mg/L Max.	21	200	600
23.	Cadmium (as Cd), mg/L Max.	ND	0.003	No Relaxation
24.	Cyanide (as CN), mg/L Max.	ND	0.05	No Relaxation
25.	Lead (as Pb), mg/L Max.	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
-End of Report-				

\*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. Panikaj Baroi, ENVIROCON

- NOTE:**
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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, I.O.C.I (AOD) New Market, Digboi - 786171, 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.



# envirocon

Recognised By  
Pollution Control Board, Assam

Envirocon Building, I.O.C.I. (AOD) New Market  
P.O.: Digboi, Dist.: Tinsukia, Assam - 786 171  
Ph: 03751-264414, 9438008657, 8878028872  
E-mail: envirocon@rediffmail.com

ISO 9001:2015 Certified  
ISO 45001:2018 Certified

Report No.: ENV/GSCL/21-22/WW-09/01  
Date : 07/10/2023

Order No.: SOGM/00343/20-21  
Date : 15/03/2021

Report Issued To : **GOLDSTONE CEMENTS LIMITED**  
Vill.: Musiang Lamare (Old), P. O.: Khliehriat, Meghalaya- 793200

### WASTE WATER ANALYSIS RESULTS

Sample Ref. No. : GSCL/21-22/WW-2109/01  
Sample Type/Source : Waste Water (Treated)/ETP Outlet  
Sample Collected By : Representative of ENVIROCON  
Sample Collected On : 21.09.2021  
Sample Received On : 24.09.2021  
Analysis Protocol : IS 3025

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Limit (As Per CPCB Standards)
1.	pH	--	6.72	5.5 - 9.0
2.	Temperature	°C	27.4	shall not exceed 5°C above the receiving water temperature
3.	Total Suspended Solids	mg/l	16	100
4.	Biochemical Oxygen Demand	mg/l	21	30
5.	Chemical Oxygen Demand	mg/l	90	250
6.	Oil & Grease	mg/l	<4.0	10
7.	Total Residual Chlorine	mg/l	<0.01	1.0
*8.	Ammonical Nitrogen (as N)	mg/l	3.2	50
9.	Total Kjeldahl Nitrogen (as NH <sub>3</sub> )	mg/l	13	100
10.	Free Ammonia (as NH <sub>3</sub> )	mg/l	<0.01	5.0



Checked By: Mr. Pankaj Baroi, ENVIROCON

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# ENVIROCON

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Ph: 03751-264414, 9435006657, 8876028672  
E-mail: envirocon@rediffmail.com

ISO 9001:2015 Certified  
ISO 45001:2018 Certified

Report No.: ENV/GSCL/21-22/WW-09/02  
Date : 07/10/2021

Order No.: SOGM/00343/20-21  
Date : 15/03/2021

Report Issued To: **GOLDSTONE CEMENTS LIMITED**  
Vill.: Mustang Lamare (Old), P. O.: Khliehriat, Meghalaya- 793200

### WASTE WATER ANALYSIS RESULTS

Sample Ref. No. : GSCL/21-22/WW-2109/02  
Sample Type/Source : Waste Water/Boiler Blow Down  
Sample Collected By : Representative of ENVIROCON  
Sample Collected On : 21.09.2021  
Sample Received On : 24.09.2021  
Analysis Protocol : IS 3025

Sl. No.	Parameters	Analysis Results	Units	Limit
1.	Total Suspended Solids	19.3	mg/l	100
2.	Oil & Grease	<0.1	mg/l	20
3.	Copper	<0.01	mg/l	1.0
4.	Iron	<0.01	mg/l	1.0



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Ph: 03751-264414, 9438008657, 8879038672  
E-mail: envirocon@rediffmail.com

ISO 9001:2015 Certified  
ISO 45001:2018 Certified

Report No.: ENV/GSCL/21-22/WW-09/03

Date : 07/10/2021

Order No.: SOGM/00343/20-21

Date : 15/03/2021

Report Issued To : **GOLDSTONE CEMENTS LIMITED**

Vill:- Musiang Lamare (Old), P. O.: Khliebriat, Meghalaya- 793200

### WASTE WATER ANALYSIS RESULTS

Sample Ref. No. : GSCL/21-22/WW-2109/03  
Sample Type/Source : Waste Water/Cooling Tower Blow Down  
Sample Collected By : Representative of ENVIROCON  
Sample Collected On : 21.09.2021  
Sample Received On : 24.09.2021  
Analysis Protocol : IS 3025

Sl. No.	Parameters	Analysis Results	Units	Limit
1.	Residual Free Chlorine	<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/l	5.0



Checked By: Mr. Pankaj Baroi, ENVIROCON

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**Associate Services:** Certification by Competent Person (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.



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Ph: 03751-264414, 9435008857, 8876028672  
E-mail: envirocon@rediffmail.com

ISO 9001:2015 Certified  
ISO 45001:2018 Certified

Report No.: ENV/GSCL/21-22/WQ-09/01  
Date : 07/10/2021

Order No.: SOGM/00343/20-21  
Date : 15/03/2021

Report Issued To : **GOLDSTONE CEMENTS LIMITED**  
Vill: Musiang Lamare (Old), P. O.: Khliehriat, Meghalaya- 793200

### WASTE WATER ANALYSIS RESULTS

Sample Ref. No. : GSCL/21-22/WQ-2109/01  
Sample Type/Source : Waste Water/Condenser Cooling Point  
Sample Collected By : Representative of ENVIROCON  
Sample Collected On : 21.09.2021  
Sample Received On : 24.09.2021  
Analysis Protocol : IS 3025

Sl. No.	Parameters	Analysis Results	Units	Limit
1.	pH	6.82	-	6.5 - 9.5
2.	Temperature	19.7	°C	Not more than 5°C higher than the intake water temperature
3.	Residual Free Chlorine	<0.01	mg/l	0.5



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/21-22/SW-09/02

Date : 21/09/2021

Order No.: SOGM/00343/20-21

Date : 15/03/2021

Report Issued To: **GOLDSTONE CEMENTS LIMITED**

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

## TEST RESULTS

Sample Ref. No.: GSCL/21-22/SW-1509/01

Collected On : 12-09-2021

Sample Source: Wah-Umsangat Upstream

Received On : 13-09-2021

Sample Type: Surface Water

Collected By: Envirocon Representative

Sl. No.	Parameters	Results	Tolerance Limit* (Class - C)
1.	Colour, Hazen Units, Max.	17	300
2.	pH Value	6.35	6.5 - 8.5
3.	Dissolved Oxygen, mg/l, Min.	5.9	4.0
4.	Total Dissolved Solids, mg/l, Max.	332	1500
5.	Biochemical Oxygen Demand, mg/l, Max.	ND	3.0
6.	Oil and Grease, mg/l, Max.	<0.01	0.1
7.	Lead (as Pb), mg/l, Max.	<0.01	0.1
8.	Copper (as Cu), mg/l, Max.	<0.01	1.5
9.	Arsenic (as As), mg/l, Max.	<0.01	0.2
10.	Iron (as Fe), mg/l, Max.	3.9	50
11.	Zinc (as Zn), mg/l, Max.	0.18	15
12.	Fluorides (as F), mg/l, Max.	0.21	1.5
13.	Chlorides (as Cl), mg/l, Max.	38	600
14.	Chromium (as Cr <sup>6+</sup> ), mg/l, Max.	<0.01	0.05
15.	Cyanides (as CN), mg/l, Max.	<0.01	0.05
16.	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH), mg/l, Max.	<0.001	0.005
17.	Sulphates (as SO <sub>4</sub> ), mg/l, Max.	210	400
18.	Nitrates (as NO <sub>3</sub> ), mg/l, Max.	8.6	50
19.	Total Coliform Organisms, MPN/100 ml, Max.	1600	5000

\*Limits as per IS 2296:1992

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, ENVIROCON

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**Associate Services:** Certification by Competent Person (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No.: ENV/GSCL/21-22/SW-09/01

Date : 21/09/2021

Order No.: SOGM/00343/20-21

Date : 15/03/2021

Report issued To: **GOLDSTONE CEMENTS LIMITED**

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

## TEST RESULTS

Sample Ref. No.: GSCL/21-22/SW-1209/01

Sample Source: Wah-Umangat Downstream

Sample Type: Surface Water

Collected On : 12-09-2021

Received On : 13-09-2021

Collected By: Envirocon Representative

Sl. No.	Parameters	Results	Tolerance Limit* (Class - C)
1.	Colour, Hazen Units, Max.	15	300
2.	pH Value	6.42	6.5 - 8.5
3.	Dissolved Oxygen, mg/l, Min.	6.1	4.0
4.	Total Dissolved Solids, mg/l, Max.	312	1500
5.	Biochemical Oxygen Demand, mg/l, Max.	Nil	3.0
6.	Oil and Grease, mg/l, Max.	<0.01	0.1
7.	Lead (as Pb), mg/l, Max.	<0.01	0.1
8.	Copper (as Cu), mg/l, Max.	<0.01	1.5
9.	Arsenic (as As), mg/l, Max.	<0.01	0.2
10.	Iron (as Fe), mg/l, Max.	3.8	50
11.	Zinc (as Zn), mg/l, Max.	0.16	15
12.	Fluorides (as F), mg/l, Max.	0.22	1.5
13.	Chlorides (as Cl), mg/l, Max.	36	600
14.	Chromium (as Cr <sup>6+</sup> ), mg/l, Max.	<0.01	0.05
15.	Cyanides (as CN), mg/l, Max.	<0.01	0.05
16.	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH), mg/l, Max.	<0.001	0.005
17.	Sulphates (as SO <sub>4</sub> ), mg/l, Max.	200	400
18.	Nitrates (as NO <sub>3</sub> ), mg/l, Max.	8.3	50
19.	Total Coliform Organisms, MPN/100 ml, Max.	1500	5000

\*Limits as per IS 2296:1982

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, ENVIROCON

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# **Annexure – 2**

## **Construction of Concrete Roads**





**Annexure – 2a,2b,2c,2d**

**Water  
Sprinkling**











# **Annexure – 3**

## **PUC Certificates**

# POLLUTION TESTING STATION

LADTHALABOH, JAINTIA HILLS

Name of Licence Holder:-  
**M/s JASPER I SLONG**  
Ladthalaboh, Jaintia Hills  
Jowai - 793150



LICENCE NO. Com/Trans/74/2004/5  
DATE OF ISSUE :- 21ST March, 2005

Book No. **60**

SI No. **5974**

Date 21-06-2021

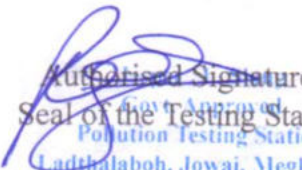
## SMOKE EMISSION TEST REPORT (DIESEL DRIVEN VEHICLES)

The Vehicle No ML11 3250 is tested for emission level and reading is as under.

Type of Vehicle other than agriculture tractors	Notified Standard of Maximum smoke density			Actual Reading	
	Light absorption co-efficient	Hatidye Units	Bosch Unit	Light absorption co-efficient	Hatidye Units
1. Full load at 60 to 70% of maximum engine rated rpm declared by the manufacture. or	3.25	75	5.2		38-06
2. Free acceleration	2.45	65	5.2		

Certified that the vehicle meets the emission standard fixed under Rule 115 (2) of the Central Motor Vehicles Rules 1989. This Certificate is valid 20-12-2021

Com/ Trans/PTS (JIS)/44/2005/74,dated: 17.05.2017

  
Authorised Signature  
Seal of the Testing Station  
Pollution Testing Station  
Ladthalaboh, Jowai, Meghalaya

# POLLUTION TESTING STATION

LADTHALABOH, JAINTIA HILLS

Name of Licence Holder:-  
M/s JASPER I SLONG  
Ladthalaboh, Jaintia Hills  
Jowai - 793150



LICENCE NO. Com/Trans/74/2004/5  
DATE OF ISSUE :- 21ST March, 2005

Book No. **60**

SI No. **5970**

Date 21-06-2021

## SMOKE EMISSION TEST REPORT (DIESEL DRIVEN VEHICLES)

The Vehicle No ML11 3101 is tested for emission level and reading is as under.

Type of Vehicle other than agriculture tractors	Notified Standard of Maximum smoke density			Actual Reading	
	Light absorption co-efficient	Hatidye Units	Bosch Unit	Light absorption co-efficient	Hatidye Units
1. Full load at 60 to 70% of maximum engine rated rpm declared by the manufacture. or	3.25	75	5.2		38.09
2. Free acceleration	2.45	65	5.2		

Certified that the vehicle meets the emission standard fixed under Rule 115 (2) of the Central Motor Vehicles Rules 1989. This Certificate is valid 20-12-2021.

Com/ Trans/PTS (JIS)/44/2005/74, dated: 17.05.2017

Authorised Signature  
Seal of the Testing Station  
Pollution Testing Station  
Ladthalaboh, Jowai, Meghalaya

# POLLUTION TESTING STATION

LADTHALABOH, JAINTIA HILLS

Name of Licence Holder:-  
**M/s JASPER I SLONG**  
Ladthalaboh, Jaintia Hills  
Jowai - 793150



LICENCE NO. Com/Trans/74/2004/5  
DATE OF ISSUE :- 21ST March, 2005

Book No. **60**

SI No. **5976**

Date 21-06-2021

## SMOKE EMISSION TEST REPORT (DIESEL DRIVEN VEHICLES)

The Vehicle No ML11 3245 is tested for emission level and reading is as under.

Type of Vehicle other than agriculture tractors	Notified Standard of Maximum smoke density			Actual Reading	
	Light absorption co-efficient	Hatidye Units	Bosch Unit	Light absorption co-efficient	Hatidye Units
1. Full load at 60 to 70% of maximum engine rated rpm declared by the manufacture. or	3.25	75	5.2		34.03
2. Free acceleration	2.45	65	5.2		

Certified that the vehicle meets the emission standard fixed under Rule 115 (2) of the Central Motor Vehicles Rules 1989. This Certificate is valid 20-12-2021

Com/ Trans/PTS (JIS)/44/2005/74,dated: 17.05.2017

Authorized Signature  
Seal of the Testing Station  
Pollution Testing Station  
Ladthalaboh, Jowai, Meghalaya

# **Annexure – 4**

## **Water Reservoir**

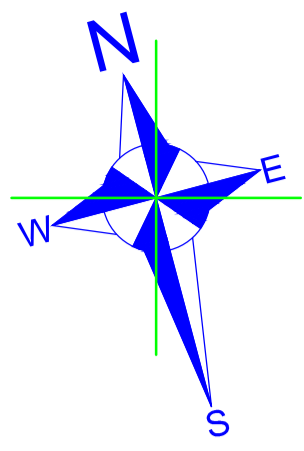
**GOLDSTONE CEMENTS LIMITED**  
MEGHALAYA  
**STREAM**  
**WATER RESERVOIR**  
CAPACITY- 1.0 Lac Litters





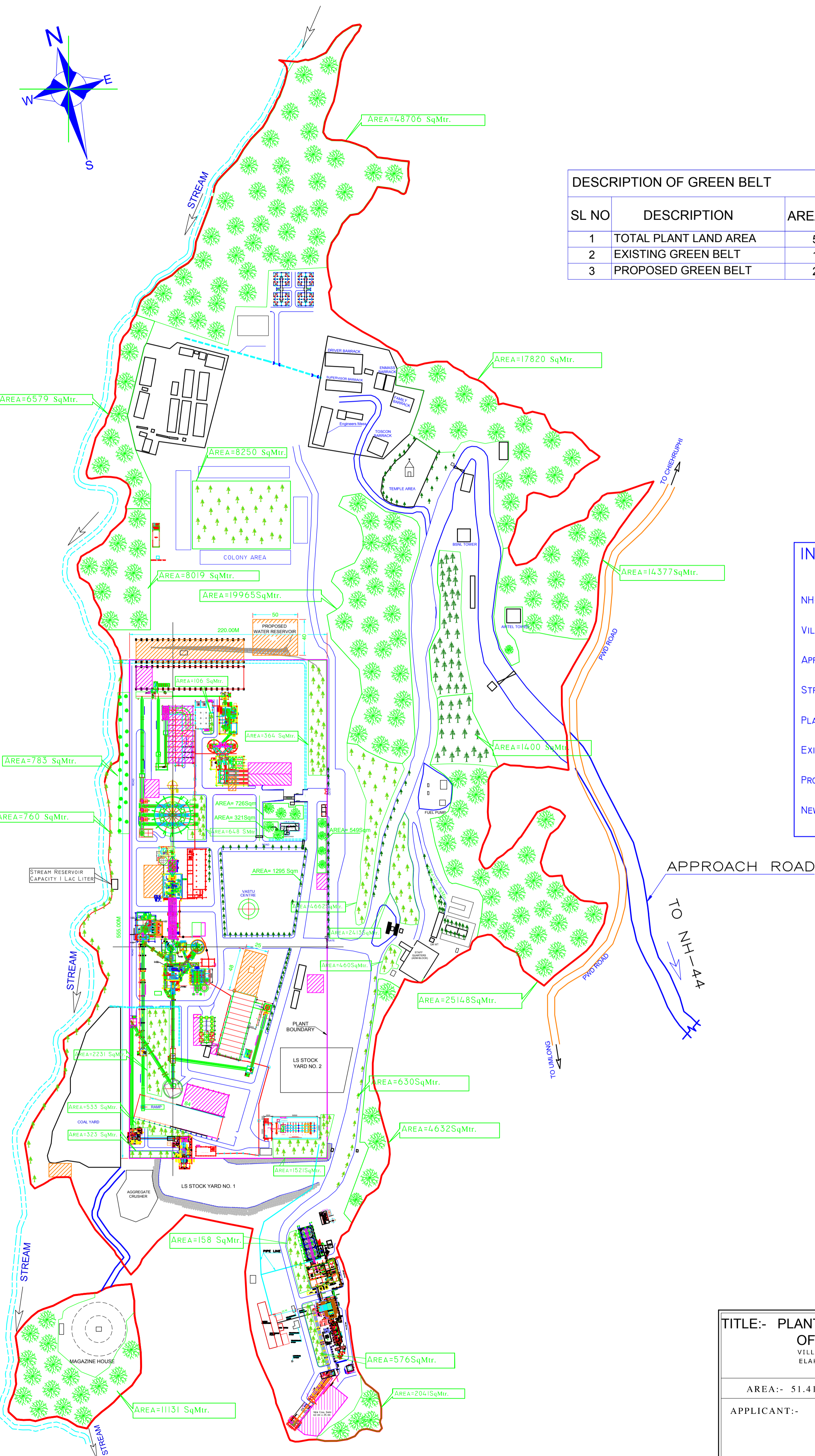
# **Annexure – 5**

## **Greenbelt Development**



DESCRIPTION OF GREEN BELT			
SL NO	DESCRIPTION	AREA IN HACT.	PERCENTAGE OF AREA
1	TOTAL PLANT LAND AREA	51.411	
2	EXISTING GREEN BELT	16.3662	31.83%
3	PROPOSED GREEN BELT	2.3529	4.58%

INDEX:-	
NH-44	
VILLAGE ROAD	
APPROACH ROAD	
STREAM/ NALA	
PLANT AREA	
EXISTING GREEN BELT	
PROPOSED GREEN BELT	
NEW DEVELOPED GREEN BELT	



**TITLE:- PLANT LAYOUT WITH GREEN BELT AREA OF GOLDSTONE CEMENTS LTD.**  
 VILL.- MOOSIANG LAMARE, P.O.- KHLIEHRIAT,  
 ELAKA :- RYMBAI, DIST :- JAINTIA HILLS,  
 MEGHALAYA-793210

AREA:- 51.411 Hact.	SCALE :- 1:3000	DATE- 18.12.20
---------------------	-----------------	----------------

APPLICANT:-

# **Annexure – 6**

## **Pollution Control Expenses**

# Goldstone Cements Ltd.

Musiang Lamare (Old), Meghalaya.

## Capital Investment Summary Sheet of Pollution Equipments

Sl.No	Location	Particulars	Supplier	Equipment	Mechanical	Civil	Electrical & Instrument	Transportation (Equipment, steel, Electricals, miscellaneous)	Total	Installed Date					
1	Primary Crusher & Secondary crusher	Bag Filters	Himen viro	4396200	40000000	52500000	21000000	10000000		2016					
2	Raw Mill	Raw Mill Bag House	Thermax	60683388										2016	
3	Cooler	Clinker Cooler ESP													2016
4	All material transfer points	De dusting Bag Filters													2016
5	CPP	ESP	Rieco											2016	
6	Cement Mill	Cement Mill Bag House	Rieco	13878650										2016	
7	Coal Mill	Coal Mill bag house	Thermax											2016	
8	Packing House	Packing House Bag house	Flsmidth	3982307										2016	
9	Packing plant	Bag Filter + Fans	Thyssenkrupp	2294403										2016	
10	Raw Mill Bag House Cemet Mill bag house Clinker cooler	Fans for : (i) Raw Mill Bag House (ii) Cement Mill Bag House (iii) Clinker cooler ESP	airochem Flaktindia Solyvent-Flakt	5131605										2016	
11		Missellaneous + Others	Flexocon/L&T	2280695										2016	
12	All Stacks	SOX/NOX analyser and opacity meters etc	Forbes Marshall	3348688										2017	
13	Coal Mill	DATA NORAMALISATION, DATA CONTROLLER, TEMPERETURE SENSOR, PRESSURE AND FLOW METER	NEVCO ENGINEERS PVT LTD.	500497						2019					
14	Plant	STACK MONITORING KIT	Envirotech	124490						2019					
15	Plant	Burial Pit & Sharp Pit		98999.95						2020					
16	Plant	Hazardous waste storage Shed		230642.05						2019					
17	Plant	LED DISPLAY BOARD	ADDSOFT	377600						2020					
18	Plant	AMBIENT AIR Quality MONITORING SET	Envirotech	362175						2020					
19	CPP	New coal shed(Mechanical, Civil, Materials)		19712197						2021					
20	CPP	CPP Chemical shed ( For storage of chemicals)		150000						2020					
21	CPP	Instalation of Dust suppression system by using of N-pit water		34673						2021					
22	Plant	Construction of Concrete road		3593564						2021					
23	Plant	RCC Septic tank for CCR		288531											
24	Plant	EHS Lab		34596						2021					
25	Plant	Coal Shed Extension at Cement Plant (In front of Store)		9885804						2020					
26	Plant	Clinker Loading Shed		719349						2020					
27		Commissioning/Supervision		4000000	40000000	52598999.95	21000000	10000000	127599000						
		<b>Total</b>		<b>136109053</b>	(APPROX)	(APPROX)	(APPROX)	(APPROX)	(APPROX)						

<b>A</b>	<b>TOTAL INVESTMENT IN POLLUTION CONTROL EQUIPMENT (APPROX) - 136109053</b>
----------	---

<b>B</b>	<b>TOTAL INVESTMENT IN CIVIL/MECHANICAL/TRANSPORTATION OF POLLUTION CONTROL EQUIPMENT (APPROX)</b>	<b>123599000</b>
----------	--	------------------

<b>TOTAL CAPITAL INVESTMENT IN POLLUTION CONTROL EQUIPMENT APPROX (A+B):</b>	<b>259708053</b>
--	------------------

**Goldstone Cements Limited, Meghalaya.**  
**Recurring Pollution Control Expenditure for 2021-22**

**Upto Date: 01.04.2021 to 30.09.2021**

SI No	Date	Particulars	Purchase Order/Invoice Number	Quantity	Amount
1	30.09.2021	Procurement of Emission Monitoring Equipment accessories			230947.94
2	30.09.2021	ELECTRICITY EXPENSES FOR RUNNING THE POLLUTION CONTROL EQUIPMENTS in Cement Unit			14047644.95
3	23.06.2021	Glens Data Transmission AMC	GL/21-22/06/178		58410.00
4	30.09.2021	Salaries & Wages for Environmental activities			1294000.00
5	30.09.2021	Dust Suppression through Water Tanker			150000.00
6	30.09.2021	ETP Maintainanance Expences			25000.00
7	30.09.2021	Third party environmental monitoring	7500000031		172044.00
8	12.04.2021	Coal mill baghouse(149*4265)	35	20	19803.52
9	01.05.2021	Coal mill baghouse(149*4265)	35	610	604007.36
10	02.09.2021	Fine coal bin bag filter(160*2550)	76	9	3421.46
11	30.09.2021	CPP- N-Pit Maintainance expences			15600.00
12	30.09.2021	CPP - Esp internal maintaiance			14959.50
13	30.09.2021	CPP-Fly ash Silo & ash conditioner mainatanance			15160.00
14	30.09.2021	CPP-DT Card change in SPM analyser			40000.00
15	30.09.2021	CPP-Electrical power consumption for ESP & AHP			2340000.00
		<b>Total Recurring Pollution Control Expenditure for 2021-22: (April to Sept)</b>			<b>19030998.73</b>

# **Annexure – 7**

## **Environmental Parameters Display**

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



- Name of the Industry/facility with contact details : **GOLDSTONE CEMENTS LIMITED, Vill-Musiang Lamare (Old) Khliehriat, East Jaintia Hills, Meghalaya-793210**  
(as per the Consent to Establish/Operate) **Mr. Vishal Jain, (MD) 0361-2607071/72**
- Date of update of display : **08.09.2021**
- Consent to Operate and Authorization : **No.MPCB/CON-13-2011/Pt-1/2020-2021/88, Validity-30.06.2021**
- Hazardous waste Authorization : **No.MPCB/ATH-45-2017/Pt-1/2018-2019/3, Validity-31.07.2023**
- Operational status : **Operational ✓ / Non-Operational**
- Production Details :

S.No.	Product Manufactured (including Recycling /Utilization)	Used Hazardous Chemicals with quantity and purpose	Type of HW generated (MT/KL) with category as per HW Rules-2016 Year - (2020-2021)	QTY.of HW generated storage (MT/KL)	QTY.of HW Disposed/Utilized inhouse (MT/KL)	Mode of treatment and disposal (Co-processing, /Utilizing/reuse/incinerator etc.)			
1	Cement, Clinker & Power	NA	Used Oil 1.987 KL	Fly Ash —	1.933	Co-processing incinerator Utilizing			
2			Turbine Oil 0.098 KL	Bed Ash —	0.098				
3			Gear Oil 0.196 KL	Chemical Container 16 nos	0.195		13 nos	0.199	25 nos
4									

## 7. Air Emission :

S.No.	Source of Air Pollution	Air Pollution Control System (APCS)		Parameters Monitored w.e.t. Air Pollution			Limits/Standard prescribed by SPCBs/CPCB (mg/Nm <sup>3</sup> )
		Stack Height (in meter)	PM (mg/Nm <sup>3</sup> )	SO <sub>2</sub> (mg/Nm <sup>3</sup> )	NO <sub>x</sub> (mg/Nm <sup>3</sup> )		
1	Raw Mill & KILN	Baghouse	40.0	21.5	455.4	356.0	PM-30, SO <sub>2</sub> - 1000 NO <sub>x</sub> -600
2	Coal Mill	Baghouse	58.1	23.0	279.0	167.5	
3	Cooler ESP	ESP	45.0	19.4	...	...	
4	Cement Mill	Baghouse	42.0	17.3	...	...	
5	CPP	ESP	76.1	33.6	422.6	188.5	

OCEMS Connectivity details (Date of installation: 14/09/2017 and Operational Status: Operational ✓ / Non-Operational)

## 8. Effluent Discharge :

S.No.	Source of Effluent discharge with Qty.	Treatment method	Mode of Disposal of treatment (Drain/sewer/land etc.)		Effluents discharge monitoring parameters						
			Dust suppression & gardening	Out let (mg/l)	pH	TSS	BOD	COD	N	TKN	NH <sub>3</sub>
1	Domestic effluent	20 M <sup>3</sup> /day EPT	Dust suppression & gardening	Out let (mg/l)	6.79	25	25	150	3.8	9.5	<0.01
2	DM Plant N Pit	36 m <sup>3</sup> /day		Out let (mg/l)	6.63	14	<0.01	26.2	<4.0	<0.01	Iron

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

Stack 1 Flour Mill	PM	15.37	مطهر
Stack 7 Fuel Mill	PM	20.97	مطهر
Stack 3 Cement Mill	PM	22.53	مطهر
Stack 4 Cement Mill	PM	14.69	مطهر
Stack 5 Fuel	PM	76.6	مطهر
Stack 6 Fuel	PM	161.85	مطهر
Stack 3 Fuel	PM	583.75	مطهر
Stack 1 Flour Mill	PM	107.7	مطهر
Stack 1 Flour Mill	PM	222.01	مطهر



# **Annexure – 8**

## **Occupational Health Surveillance**

Patient Name

Madhab Pal

Date 3-12-20

Age 26 Gender M

**BP:** 112/67

**Pulse:** 81

**Height:** 168

**Weight:** 51

ne

07 par D. 10  
B. 1 cup daily before food  
(i) Agri 8 to 10 mg  
2x2 1st. sus. after food  
?

nasal spray 2x daily

11/08/20  
12/08/20

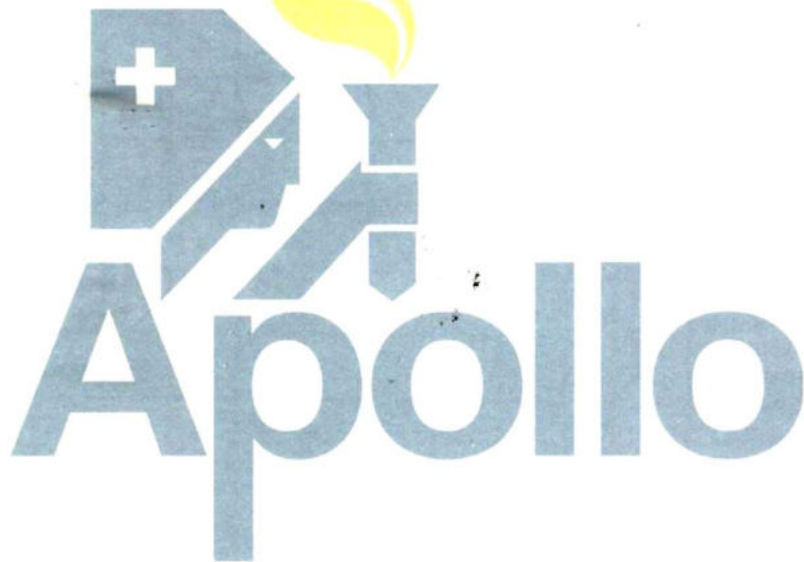
TOUCHING LIVES

Next appointment on:

Patient Name [Redacted] Date 3/12/2020  
Age 26 Gender M

CL - Regular check-up

DVA (R/E) ——— 6/6  
6/6



Calou Vm = N

TOUCHING LIVES

Adv - Review after 1 year



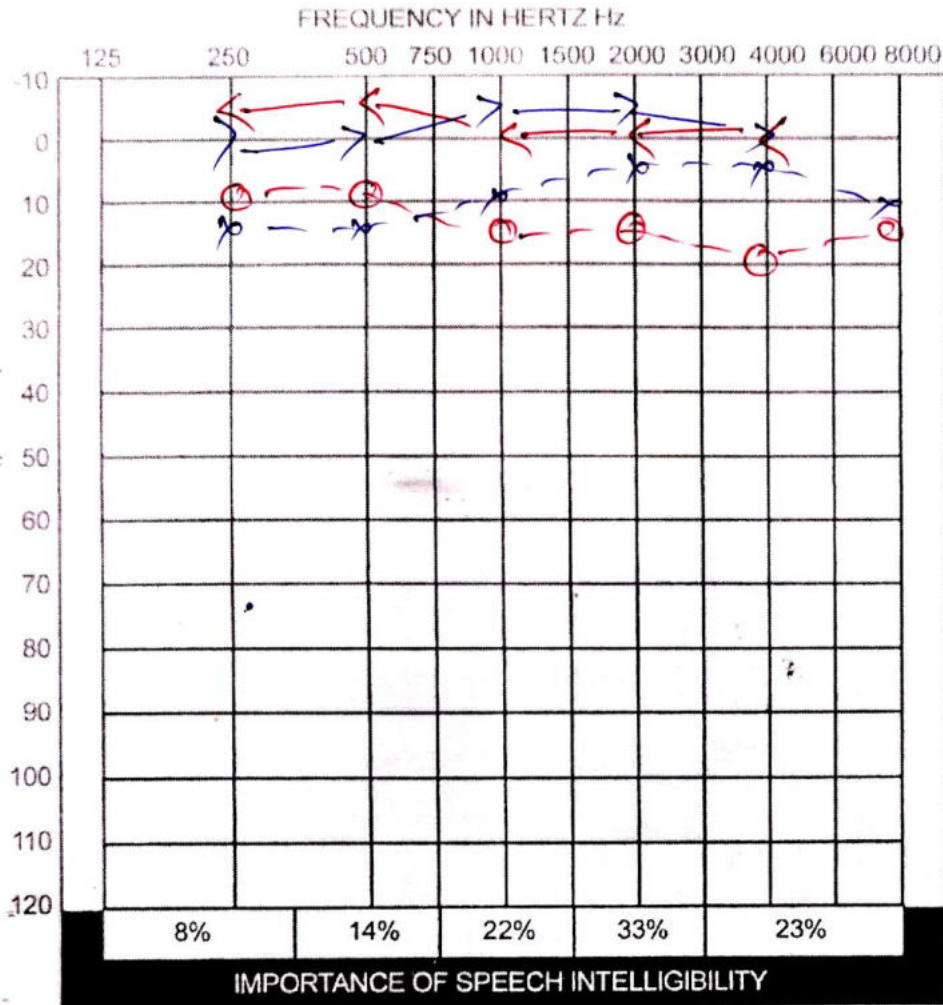
Next appointment on:

# AUDIOGRAM

Doctor / Audiologist

Name: Madhab Pal Age 26 Sex M

Address: \_\_\_\_\_ Date \_\_\_\_\_



HEARING LEVEL IN DECIBELS (ANSI) 1989

- NORMAL / MINIMAL HEARING LOSS**  
Ability to understand speech
  - MILD HEARING LOSS**  
No significant difficulty with faint speech
  - MODERATE HEARING LOSS**  
Difficulty only with faint speech  
Amplification needed
  - MODERATELY SEVERE HEARING LOSS**  
Frequent difficulty with normal speech
  - SEVERE HEARING LOSS**  
Frequent difficulty with loud speech  
Understand only shouted or amplified speech
  - PROFOUND HEARING LOSS**  
May not understand every amplified speech
- <Value List Missing>

SPEECH RESULT				
Speech Reception Threshold (SRT)	Most Comfortable Level (MOL)	Un Comfortable Level (UOL)	Word Discrimination Percentage	Discrimination Level (dB)
Right				
Left				
Binaural				
Unaided Boundfield				
Aided Boundfield				

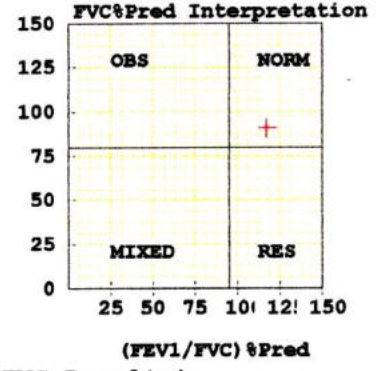
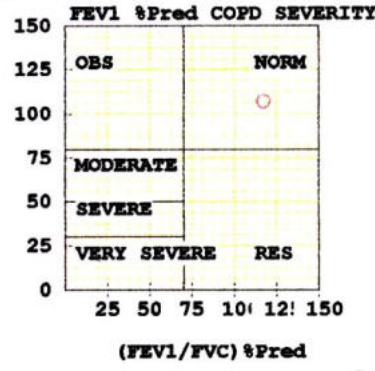
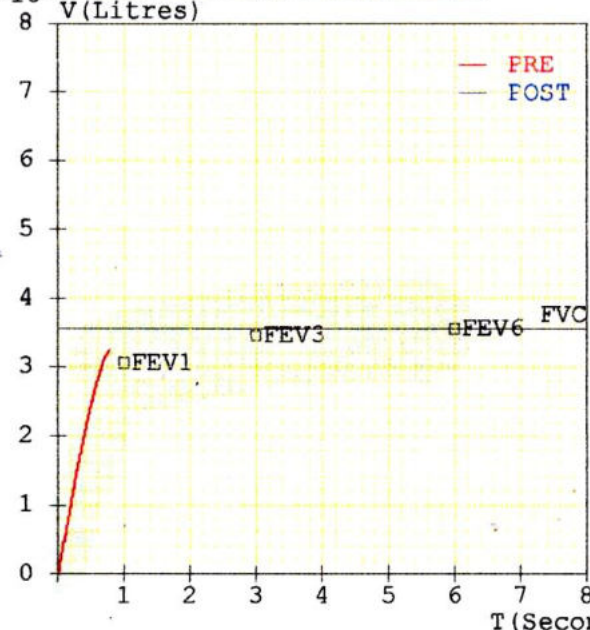
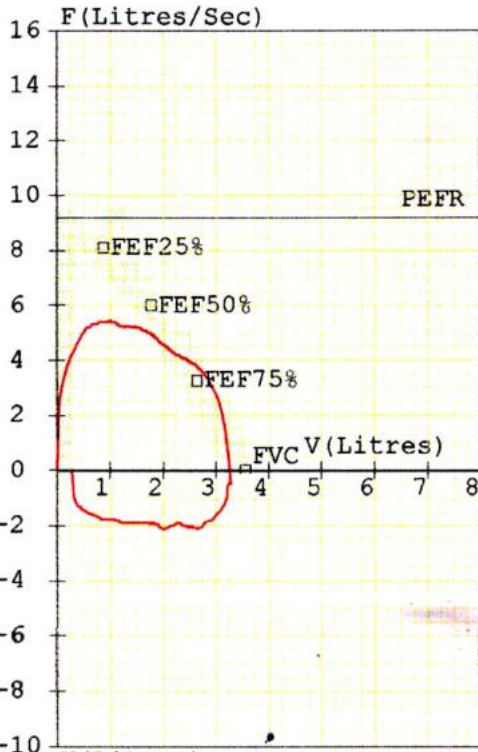
AUDIOGRAM KEY									
	L	R	NRL	NRR		L	R	NRL	NRR
Air Condition	X	O	X ↘	O ↙	Bone Conduction Forehead	V	V	V ↘	V ↙
Air Condition Masked	□	△	□ ↘	△ ↙	Bone Conduction Forehead Mask	⌈	⌈	⌈ ↘	⌈ ↙
Bone Conduction	>	<	⋈	⋈	Threshold of Discomfort Pure	●	●	● ↘	● ↙
Bone Conduction Masked	]	[	]	[					

**COMMENTS**

normal hearing.

Patient: MADHAB PAUL  
 Refd. By:  
 Pred.Eqns: RECORDERS  
 Date : 03-Dec-2020 11:27 AM

Age : 26 Years Gender : Male  
 Height : 168 Cms Smoker : No  
 Weight : 51 Kgs Eth. Corr: 100  
 ID: BT20 Temp :



### Spirometry (FVC Results)

Parameter	Pred	M. Pre %Pred	M. Post %Pred	%Imp
FVC (L)	03.55	03.24 091	---	---
FEV1 (L)	03.04	03.24 107	---	---
FEV1/FVC (%)	85.63	100.00 117	---	---
FEF25-75 (L/s)	04.53	04.81 106	---	---
PEFR (L/s)	09.20	05.38 058	---	---
FVC (L)	---	02.99 ---	---	---
FEV.5 (L)	---	02.48 ---	---	---
FEV3 (L)	03.44	03.24 094	---	---
PIFR (L/s)	---	02.11 ---	---	---
FEF75-85 (L/s)	---	03.70 ---	---	---
FEF.2-1.2 (L/s)	07.74	04.93 064	---	---
FEF 25% (L/s)	08.09	05.31 066	---	---
FEF 50% (L/s)	05.99	05.04 084	---	---
FEF 75% (L/s)	03.27	04.01 123	---	---
FEV.5/FVC (%)	---	76.54 ---	---	---
FEV3/FVC (%)	96.90	100.00 103	---	---
FET (Sec)	---	00.81 ---	---	---
ExptTime (Sec)	---	00.15 ---	---	---
Lung Age (Yrs)	026	024 092	---	---
FEV6 (L)	03.55	---	---	---
FIF25% (L/s)	---	01.88 ---	---	---
FIF50% (L/s)	---	02.10 ---	---	---
FIF75% (L/s)	---	01.83 ---	---	---

**Pre Test COPD Severity**  
 Test within normal limits

### Pre Medication Report Indicates

Early Small Airway Obstruction as FEF 25-75 %Pred or PEFR %Pred < 70  
 Spirometry within normal limits as (FEV1/FVC)%Pred >95 and FVC%Pred >80.

R.K. Life Services Pvt Ltd. (CIN. No : U85110AS2002PTC006987)

The contents of this report require clinical co-ordination before any clinical action.  
**Apollo Clinic**  
 Kanchan Road, Opp. Bora Service,  
 G.S. Road, Guwahati- 781007  
 Phone : (0361) 246 1473 - 74  
 E-mail : guwahati@theapolloclinic.com

**Apollo Clinic**  
 Sidha Point, S.J. Road  
 Athgaon, Opp. Marwari Hospital  
 Phone : 9085619000(M)  
 www.apolloclinic.com



Home Blood Collection & Delivery of reports  
 98641 12000 / 94356 23456

Accredited as per ISO - 15189 : 2012 - NABL Standards  
**1ST NABL ACCREDITED LABORATORY IN ASSAM**

Patient Name : Mr. Madhab Pal  
Age/Sex : 26 Y/ M  
Ref.by : SELF

MR No : FG UW.0000064712  
Bill Date : 04-Dec-20 1:13:00 PM

**CHEST (PA VIEW)**

Lung fields do not reveal any active parenchymal lesion.

Pleural angles are clear and domes of the diaphragm are of normal contour.

Cardio-thoracic ratio is within normal limits.

Hilar shadows are normal.

Bony thorax is intact.

Soft tissue shadows are normal.

- RADIOGRAPH IS ESSENTIALLY WITHIN NORMAL LIMITS.



Dr. Sandeepan Nath  
Consultant Radiologist



Patient Name : Mr. Madhab Pal  
UHID/MR No. : FGUW.0000064712  
Visit Date : 04-12-2020 13:12  
Sample Collected on : 07-12-2020 18:43  
Ref Doctor : SELF  
Package Name : GOLD STONE MEDICAL AMC - WORKERS - GUW  
Emp/Auth/TPA ID : 20  
Sponsor Name : GOLD STONE CEMENTS LTD

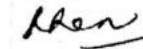
Age / Gender : 26Y/Male  
OP Visit No : FGUWOPV94471  
Reported on : 09-12-2020 14:02  
Specimen : Sputum  
Pres Doctor: :

## DEPARTMENT OF LABORATORY MEDICINE

TEST NAME	RESULT	BIOLOGICAL REFERENCE INTERVALS	UNITS
AFB STAIN (ZN) / SMEAR EXAM - SPUTUM	No Acid fast bacilli seen in the smear examined.		
AFB STAIN (ZN) / SMEAR EXAM - SPUTUM	<b>End of the report</b>		

*Results are to be correlated clinically*

Lab Technician / Technologist  
Rupen\_Das



Dr. AUBREEN R KHAN  
MD Microbiologist

