

No: GSCL/EHS/2020-21/05

Dated: 09.06.2020

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

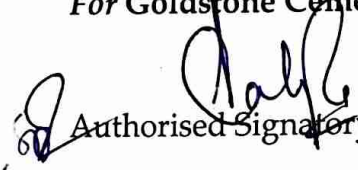
Dear Sir,

With the matter as cited in the subject, we would like to submit the **Half Yearly EC Compliance report for the period 01.04.2019 to 30.09.2019** 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-793014.

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

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

COMPLIANCE REPORT (HALF YEARLY) from 1 st APRIL 2019 to 30 th SEPTEMBER 2019 ON ENVIRONMENTAL STIPULATIONS FOR CEMENT PLANT (CLINKER, 1.65 MTPA; CEMENT, 2.0 MTPA) ALONG WITH CAPTIVE THERMAL POWER PLANT (2 x 20 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
A. SPECIFIC CONDITIONS		
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 ³ 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 NO _x burners should be provided to control NO _x emissions.	<ul style="list-style-type: none"> •The Continuous Stack Monitor (Opacity Meters) is in working condition and online data is being transferred to CPCB & MSPCB. •ESP (Electrostatic Precipitators) for Clinker cooler, Bag house/Bag filters for Raw Mill / Coal Mill & other pollution control equipments were already installed in plant to keep SPM below 30 mg/Nm³ in Cement Plant stacks and 50 mg/Nm³ in Captive Power Plant stack as per our consent guideline.
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.	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. 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 it becomes the remaining quantum of waste heat is not sufficient for setting up WHRB. We have also explored the Cement plants in the near vicinity and none of them have installed Waste Heat Recovery Plant.
iii	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 th November 2009 shall be followed.	The same is being followed during operation of plant. Ambient air quality monitoring is being done through Third party (Recognized laboratory). Ambient air quality parameters are found to be within the limit for all the parameters. <i>(Details attached in Annexure-1)</i>
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.</p> <p>Construction of concrete roads is under progress in the plant. <i>(Photographs are enclosed in Annexure:2)</i></p> <p>Water sprinklers installed in limestone crusher and coal area and plant roads. <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 <i>Annexure:2d</i></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. <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. It is ensured that without valid PUC no vehicle is allowed in plant premises. Few certificates enclosed for your reference. <i>(Details attached in Annexure-3)</i>
vi	Total water requirement for cement and captive power plant shall not exceed 2,370 m ³ / 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 ³ / day as our Plant has been designed as per close circuit arrangements for cooling water. Company has adopted "ZERO discharge" of waste water.
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; however 14 lac liters capacity reservoir is planned. <i>(Photographs are enclosed Annexure:4&4a)</i>
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.	The stream is a seasonal stream. During rainy season, water quality is being Monitored. <i>(Reports are enclosed in Annexure:5)</i> 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.
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.
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-house 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 lime time. Fly ash generated in CPP is used in-house in manufacturing of Pozzolana Portland Cement (PPC). We are manufacturing around 80% PPC with blend of fly ash and around 20% OPC (approximately).

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. Recently a mass planation of around 2500 saplings was made on 9 th Sept 2019. 30% area is already under greenbelt. Balance and required plantation shall be done in phase manner. <i>(Greenbelt development Drawing is enclosed in Annexure :6)</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 th 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.	Company has already constructed workers accommodations with all necessary infrastructure and facilities such as Fuel for cooking, Toilets & Bathrooms, safe drinking water, medical health care etc.
B. GENERAL CONDITIONS		
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 CTE and CTO are being adhered to.



ii	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 th 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 ₂ and NO _x 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.	At present, monthly monitoring of ambient air quality is being carried out with the help of recognized laboratory. 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 as per 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 th May, 1993 and 31 st 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 as per 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 has been done as per factory act and few reports are enclosed. <i>(Details are attached as per Annexure-7)</i> However, the health care center is already available in our Plant Campus. Trained staff and visiting doctor appointed with essential medicine for health surveillance on regular basis.
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; however 14 lac liters capacity reservoir construction is under progress. <i>(Photographs are enclosed in Annexure:4&4a)</i>



ix	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.	We are working on the implementation of the conditions given in EIA/EMP. We are sponsoring for community development programmes. We are providing the drinking water facility in nearby village. We are providing free medicines, free ambulance services to local community.
X	As proposed, Rs 25 Crores and Rs 1.80 Crores shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of environment & Forests as well as the state government. An implementing all the conditions stipulated herein shall be submitted to the Regional office of the Ministry at Shillong .The Funds so provided shall not be diverted for any other purpose	Exhaustive environmental protection measures have been taken by installing following equipments apprx 22.41 Cr as capital cost. <ul style="list-style-type: none"> • ESP and bag houses are installed. • Material transfer points bag filters installed to control fugitive dust • Sox & NOx analyzer and opacity meters have been installed to monitor the emission and data transmission to CPCB server. We have invested approx Rs. 2.01 Cr amount towards recurring cost for environment pollution control measures. <i>(Details are enclosed in annexure: 8)</i>
Xi	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.	Has been implemented. Copy was already submitted to the MOEF &CC.
xii	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 ₂ , NO _x (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.	Environmental Parameters display board has been installed near company main gate. <i>(Photograph is enclosed in annexure-9)</i> The EC and six monthly EC compliance reports are shown in our company website http://gscl.blacktigerso.com/
xiii	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional office of MOEF, the respective Zonal office of CPCB and the SPCB. The Regional office of this Ministry at Shillong / CPCB /SPCB shall monitor the stipulated conditions.	Being submitted



xiv	The environmental statement for each financial year ending 31 st 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 submitted
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 http://envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local news papers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Shillong.	Has been implemented.
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.	Followed the norms and land development work completed accordingly.

For Goldstone cements Ltd.


 Authorized Signatory


Report No. : ENV/GSCL/DW/APR/19-20/01
Date : 10/05/2019

Order No. : SOML/00013/19-20
Date : 13/04/2019

Annex-1

GOLDSTONE CEMENTS LIMITED
Village- Muslang Lamare (Old)
P. O.-: Khlehriat
Meghalaya- 793200

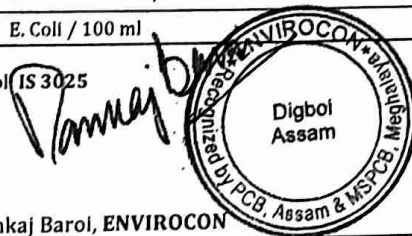
DRINKING WATER ANALYSIS RESULTS

Sample Type : Drinking Water
Collected By : Jointly by Envirocon & Client
Sample Source : Canteen
Collected On : 30.04.2019

Sl. No.	Parameters	Results	Desirable Limit (IS: 10500)
1.	Colour, Hazen Units, Max	<1	5
2.	Odour	Odourless	Agreeable
3.	Taste	Acceptable	Agreeable
4.	Turbidity, NTU, Max	0.21	1.0
5.	pH	6.8	6.5 - 8.5
6.	Total Dissolved Solids, mg/l, Max	168	500
7.	Aluminium (as Al), mg/l, Max	ND	0.03
8.	Boron (as B), mg/l, Max	ND	0.5
9.	Calcium (as Ca), mg/l, Max	26	75
10.	Chloride (as Cl), mg/l, Max	2.8	250
11.	Copper (as Cu), mg/l, Max	ND	0.05
12.	Fluorides (as F), mg/l, Max	ND	1.0
13.	Free Residual Chlorine, mg/l, Min	ND	0.2
14.	Iron (as Fe), mg/l, Max	0.022	0.3
15.	Magnesium (as Mg), mg/l, Max	2.5	30
16.	Manganese (as Mn), mg/l, Max	ND	0.1
17.	Zinc (as Zn), mg/l, Max	ND	5.0
18.	Nitrate (as NO ₃), mg/l, Max	ND	45
19.	Phenolic Compounds (as C ₆ H ₅ OH), mg/l, Max	ND	0.001
20.	Sulfate (as SO ₄), mg/l, Max	25	200
21.	Total Alkalinity (as CaCO ₃), mg/l, Max	91	200
22.	Total Hardness, (as CaCO ₃), mg/l, Max	5.9	200
23.	Cadmium (as Cd), mg/l, Max	ND	0.003
24.	Cyanide (as CN), mg/l, Max	ND	0.05
25.	Lead (as Pb), mg/l, Max	ND	0.01
26.	Mercury (as Hg), mg/l, Max	ND	0.001
27.	Selenium (as Se), mg/l, Max	ND	0.01
28.	Total Arsenic (as As), mg/l, Max	ND	0.01
29.	Total Chromium, (as Cr), mg/l, Max	ND	0.05
30.	Anionic Detergents (as MBAS), mg/l	ND	0.2
31.	Total Coliform, MPN/100 ml	NIL	10 Max
32.	Faecal Coliforms/ 100 ml	NIL	Absent
33.	E. Coll / 100 ml	NIL	Absent

Analysis Protocol IS 3025

ND: Not Detected



Checked By: Mr. Pankaj Barol, ENVIROCON

- NOTE:**
1. Results reported are valid at the time of and under the prevailing conditions of measurement.
 2. Results refer only to the particular parameters tested.
 3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, 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.

Report No.: ENV/GSCL/AAQ/APR/19-20/01
Date : 10/05/2019

Order No. : SOML/00013/19-20
Date : 13/04/2019

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	NO ₂	SO ₂
			(µg/m ³)	(µg/m ³)	(µg/m ³)	(µg/m ³)
	Limit(s) →		60 (24 Hrs. Av.)	100 (24 Hrs. Av.)	80 (24 Hrs. Av.)	80 (24 Hrs. Av.)
1.	Near CPP	29.04.2019	--	64.5	3.4	4.7
		30.04.2019	34.6	--	--	--
2.	Near Secondary Crusher	29.04.2019	--	66.8	6.9	BDL
		30.04.2019	27.5	--	--	--
3.	Near Fly Ash Shed	29.04.2019	--	62.2	6.7	BDL
		30.04.2019	36.3	--	--	--
4.	Near Temple	29.04.2019	--	54.4	6.5	BDL
		30.04.2019	22.9	--	--	--

BDL: Below Detection Level

Analysis Protocol: IS 5182

Sampled & Analysed by: ENVIROCON, Digboi

Pankaj Baroi

 Digboi Assam
 PCB, Assam & MSPCB, Meghalaya

Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/NLM/APR/19-20/01
Date : 10/05/2019

Order No. : SOML/00013/19-20
Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED

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

NOISE LEVEL MEASUREMENT RESULTS

Measurement Date: 30.04.2019

Sl. No.	Location(s)	Day time		Night Time	
		Result(s) (dB - A)	Limit(s) (dB - A)	Result(s) (dB - A)	Limit(s) (dB - A)
1	Near Coal Mill	73	75	68	70
2	Near CPP Area	72	75	65	70
3	Near Limestone Storage Yard	67	75	62	70
4	Near Coal Storage Yard	64	75	59	70
5	Near Raw Mill	73	75	60	70
6	Near Cement Mill	69	75	64	70
7	Near Administrative Building	57	75	50	70
8	Power House	74	75	68	70

Pankaj Barol


Checked By: Mr. Pankaj Barol, ENVIROCON

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

Report No.: ENV/GSCL/FE/APR/19-20/01
 Date : 10/05/2019

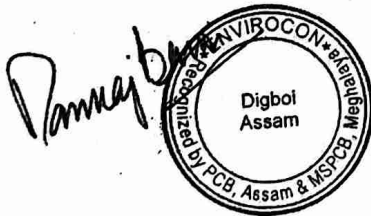
Order No. : SOML/00013/19-20
 Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED
 Village- Musiang Lamare (Old)
 P. O.- Khliehriat
 Meghalaya- 793200

PROCESS FUGITIVE EMISSION TEST RESULTS

Date	Locations	Fugitive Emission Results for SPM ($\mu\text{g}/\text{m}^3$)	Limits ($\mu\text{g}/\text{m}^3$)
29.04.2019	Fly-ash Storage Section	2677	5000
29.04.2019	Coal Storage Section	974	2000
30.04.2019	Limestone Storage Section	1847	5000
30.04.2019	Cement Packing Section	2369	5000

Sampled & Analysed by: ENVIROCON, Digboi



Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE:

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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.

Report No.: ENV/GSCL/ETP/APR/19-20/01
Date : 10/05/2019

Order No. : SOML/00013/19-20
Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED

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

ETP WATER ANALYSIS RESULTS

Sample Type : Treated ETP Water
Sample Source : ETP Outlet

Collected By: Jointly by Envirocon & Client
Collected On: 30.04.2019

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limits (IS: 2490)
01	pH	--	6.9	5.5 – 9.0
02	Temperature	°C	24.6	shall not exceed 5°C above the receiving water temperature
03	Total Suspended Solids	mg/l	18	100
04	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	16	30
05	Chemical Oxygen Demand	mg/l	39	250
06	Oil & Grease	mg/l	1.2	10
07	Total Residual Chlorine	mg/l	<0.01	1.0
08	Ammonical Nitrogen (as N)	mg/l	11.6	50
09	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	35.8	100
01	Free Ammonia (as NH ₃)	mg/l	<0.01	5.0

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.



ENVIROCON

Recognised By

PCB, Assam & MSPCB, Meghalaya

Digboi Stores Building, New Market
Digboi, Assam - 786 171
Ph: 03761-264414, 9435008667, 8876028672
E-mail: envirocon@rediffmail.com
Website: www.envirocon.net.in



Report No.: ENV/GSCL/AAQ/MAY/19-20/01
Date : 03/06/2019

Order No. : SOML/00013/19-20
Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED

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

AMBIENT AIR QUALITY TEST RESULTS

SL. No.	Location(s) ↓ Limit(s) →	Date of Sampling	PM 2.5 ($\mu\text{g}/\text{m}^3$)	PM 10 ($\mu\text{g}/\text{m}^3$)	NO ₂ ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)
			60 (24 Hrs. Av.)	100 (24 Hrs. Av.)	80 (24 Hrs. Av.)	80 (24 Hrs. Av.)
1.	Near CPP	22.05.2019	--	48.2	9.4	4.2
		23.05.2019	18.9	--	--	--
2.	Near Secondary Crusher	22.05.2019	--	41.6	BDL	BDL
		23.05.2019	21.4	--	--	--
3.	Near Fly Ash Shed	22.05.2019	--	37.6	BDL	BDL
		23.05.2019	16.8	--	--	--
4.	Near Temple	22.05.2019	--	33.4	BDL	BDL
		23.05.2019	14.7	--	--	--

BDL: Below Detection Level

Analysis Protocol: IS 5182

Sampled & Analysed by: ENVIROCON, Digboi



Checked By: Mr. Bivash Mahanta, ENVIROCON

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Report No.: ENV/GSCL/FE/MAY/19-20/01
 Date : 03/06/2019

Order No. : SOML/00013/19-20
 Date : 13/04/2019

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

PROCESS FUGITIVE EMISSION TEST RESULTS

Date	Locations	Fugitive Emission Results for SPM ($\mu\text{g}/\text{m}^3$)	Limits ($\mu\text{g}/\text{m}^3$)
22.05.2019	Fly-ash Storage Section	2123	5000
22.05.2019	Coal Storage Section	826	2000
23.05.2019	Limestone Storage Section	1637	5000
23.05.2019	Cement Packing Section	2164	5000

Sampled & Analysed by: ENVIROCON, Digboi



Checked By: Mr. Bivash Mahanta, ENVIROCON

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ENVIROCON

Recognised By

PCB, Assam & MSPCB, Meghalaya

Digboi Stores Building, New Market
Digboi, Assam - 786 171
Ph: 03761-264414, 9436008667, 8876028672
E-mail: envirocon@rediffmail.com
Website: www.envirocon.net.in



Report No.: ENV/GSCL/NLM/MAY/19-20/01

Date : 03/06/2019

Order No. : SQML/00013/19-20

Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old)

P. O.: Khllehriat

Meghalaya- 793200

NOISE LEVEL MEASUREMENT RESULTS

Measurement Date: 22.05.2019

Sl. No.	Location(s)	Day time		Night Time	
		Result(s) (dB·A)	Limit(s) (dB·A)	Result(s) (dB·A)	Limit(s) (dB·A)
1	Near Coal Mill	74	75	68	70
2	Near CPP Area	73	75	67	70
3	Near Limestone Storage Yard	66	75	59	70
4	Near Coal Storage Yard	65	75	56	70
5	Near Raw Mill	74	75	65	70
6	Near Cement Mill	68	75	62	70
7	Near Administrative Building	61	75	53	70
8	Power House	74	75	69	70



Checked By: Mr. Bivash Mahanta, ENVIROCON

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Ph: 03761-264414, 9438008867, 8876028672
E-mail: envirocon@rediffmail.com
Website: www.envirocon.net.in



Report No. : ENV/GSCL/ETP/MAY/19-20/01

Date : 03/06/2019

Order No. : SOML/00013/19-20

Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old)

P. O.:- Khliehriat

Meghalaya- 793200

ETP WATER ANALYSIS RESULTS

Sample Type : Treated ETP Water

Sample Source : ETP Outlet

Collected By: Jointly by ENVIROCON & Client

Collected On: 23.05.2019

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limits (IS: 2490)
01	pH	..	6.7	5.5 - 9.0
02	Temperature	°C	21.3	shall not exceed 5°C above the receiving water temperature
03	Total Suspended Solids	mg/l	23	100
04	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	21	30
05	Chemical Oxygen Demand	mg/l	72	250
06	Oil & Grease	mg/l	0.6	10
07	Total Residual Chlorine	mg/l	<0.01	1.0
08	Ammonical Nitrogen (as N)	mg/l	13.8	50
09	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	36.5	100
01	Free Ammonia (as NH ₃)	mg/l	<0.01	5.0

Analysis Protocol: IS 3025



Checked By: Mr. Bivash Mahanta, ENVIROCON

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Report No. : ENV/GSCL/DW/APR/19-20/01
 Date : 03/06/2019

Order No. : SOML/00013/19-20
 Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED
 Village- Musiang Lamare (Old)
 P. O.- Khliehriat
 Meghalaya- 793200

DRINKING WATER ANALYSIS RESULTS

Sample Type : Drinking Water
 Collected By : Jointly by Envirocon & Client
 Sample Source : Canteen
 Collected On : 23.05.2019

Sl. No.	Parameters	Results	Desirable Limit (IS: 10500)
1.	Colour, Hazen Units, Max	<1	5
2.	Odour	Odourless	Agreeable
3.	Taste	Acceptable	Agreeable
4.	Turbidity, NTU, Max	0.17	1.0
5.	pH	7.1	6.5 - 8.5
6.	Total Dissolved Solids, mg/l, Max	86.2	500
7.	Aluminium (as Al), mg/l, Max	ND	0.03
8.	Boron (as B), mg/l, Max	ND	0.5
9.	Calcium (as Ca), mg/l, Max	22	75
10.	Chloride (as Cl), mg/l, Max	3.1	250
11.	Copper (as Cu), mg/l, Max	ND	0.05
12.	Fluorides (as F), mg/l, Max	ND	1.0
13.	Free Residual Chlorine, mg/l, Min	ND	0.2
14.	Iron (as Fe), mg/l, Max	0.016	0.3
15.	Magnesium (as Mg), mg/l, Max	2.1	30
16.	Manganese (as Mn), mg/l, Max	ND	0.1
17.	Zinc (as Zn), mg/l, Max	ND	5.0
18.	Nitrate (as NO ₃), mg/l, Max	<0.01	45
19.	Phenolic Compounds (as C ₆ H ₅ OH), mg/l, Max	ND	0.001
20.	Sulfate (as SO ₄), mg/l, Max	19	200
21.	Total Alkalinity (as CaCO ₃), mg/l, Max	34	200
22.	Total Hardness, (as CaCO ₃), mg/l, Max	18	200
23.	Cadmium (as Cd), mg/l, Max	ND	0.003
24.	Cyanide (as CN), mg/l, Max	ND	0.05
25.	Lead (as Pb), mg/l, Max	ND	0.01
26.	Mercury (as Hg), mg/l, Max	ND	0.001
27.	Selenium (as Se), mg/l, Max	ND	0.01
28.	Total Arsenic (as As), mg/l, Max	ND	0.01
29.	Total Chromium, (as Cr), mg/l, Max	ND	0.05
30.	Anionic Detergents (as MBAS), mg/l	ND	0.2
31.	Total Coliform, MPN/100 ml	NIL	10 Max
32.	Faecal Coliforms/ 100 ml	NIL	Absent
33.	E. Coll / 100 ml	NIL	Absent

Analysis Protocol: IS 10500

ND: Not Detected

Checked By: 
 Bivash Mahanta, ENVIROCON
 Digboi, Assam

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Report No. : ENV/GSCL/DW/JUN/19-20/01
Date : 11/07/2019

Order No. : SOML/00013/19-20
Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED
Village- Mustang Lamare (Old)
P. O.- Khliehriat
Meghalaya- 793200

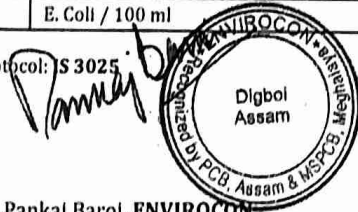
DRINKING WATER ANALYSIS RESULTS

Sample Type : Drinking Water
Collected By : Jointly by Envirocon & Client

Sample Source : Canteen
Collected On : 29.06.2019

Sl. No.	Parameters	Results	Desirable Limit (IS: 10500)
1.	Colour, Hazen Units, Max	<1	5
2.	Odour	Odourless	Agreeable
3.	Taste	Acceptable	Agreeable
4.	Turbidity, NTU, Max	0.09	1.0
5.	pH	7.1	6.5 - 8.5
6.	Total Dissolved Solids, mg/l, Max	82.4	500
7.	Aluminium (as Al), mg/l, Max	ND	0.03
8.	Boron (as B), mg/l, Max	ND	0.5
9.	Calcium (as Ca), mg/l, Max	19	75
10.	Chloride (as Cl), mg/l, Max	2.6	250
11.	Copper (as Cu), mg/l, Max	ND	0.05
12.	Fluorides (as F), mg/l, Max	ND	1.0
13.	Free Residual Chlorine, mg/l, Min	ND	0.2
14.	Iron (as Fe), mg/l, Max	<0.01	0.3
15.	Magnesium (as Mg), mg/l, Max	2.2	30
16.	Manganese (as Mn), mg/l, Max	ND	0.1
17.	Zinc (as Zn), mg/l, Max	ND	5.0
18.	Nitrate (as NO ₃), mg/l, Max	<0.01	45
19.	Phenolic Compounds (as C ₆ H ₅ OH), mg/l, Max	ND	0.001
20.	Sulfate (as SO ₄), mg/l, Max	14	200
21.	Total Alkalinity (as CaCO ₃), mg/l, Max	39	200
22.	Total Hardness, (as CaCO ₃), mg/l, Max	14	200
23.	Cadmium (as Cd), mg/l, Max	ND	0.003
24.	Cyanide (as CN), mg/l, Max	ND	0.05
25.	Lead (as Pb), mg/l, Max	ND	0.01
26.	Mercury (as Hg), mg/l, Max	ND	0.001
27.	Selenium (as Se), mg/l, Max	ND	0.01
28.	Total Arsenic (as As), mg/l, Max	ND	0.01
29.	Total Chromium, (as Cr), mg/l, Max	ND	0.05
30.	Anionic Detergents (as MBAS), mg/l	ND	0.2
31.	Total Coliform, MPN/100 ml	NIL	10 Max
32.	Faecal Coliforms/ 100 ml	NIL	Absent
33.	E. Coli / 100 ml	NIL	Absent

Analysis Protocol: IS 3025



ND: Not Detected

Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/AAQ/JUN/19-20/01

Date : 11/07/2019

Order No. : SOML/00013/19-20

Date : 13/04/2019

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	NO ₂	SO ₂
			(µg/m ³)	(µg/m ³)	(µg/m ³)	(µg/m ³)
	Limit(s) →		60 (24 Hrs. Av.)	100 (24 Hrs. Av.)	80 (24 Hrs. Av.)	80 (24 Hrs. Av.)
1.	Near CPP	28.06.2019	--	43.7	5.2	BDL
		29.06.2019	16.2	--	--	--
2.	Near Secondary Crusher	28.06.2019	--	38.2	BDL	BDL
		29.06.2019	14.7	--	--	--
3.	Near Fly Ash Shed	28.06.2019	--	34.5	BDL	BDL
		29.06.2019	13.9	--	--	--
4.	Near Temple	28.06.2019	--	30.8	BDL	BDL
		29.06.2019	12.6	--	--	--

BDL: Below Detection Level

Analysis Protocol: IS 5182

Sampled & Analysed by: ENVIROCON, Digboi



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/NLM/JUN/19-20/01
 Date : 11/07/2019

Order No. : SOML/00013/19-20
 Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED

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

NOISE LEVEL MEASUREMENT RESULTS

Measurement Date: 28.06.2019

Sl. No.	Location(s)	Day time		Night Time	
		Result(s) (dB - A)	Limit(s) (dB - A)	Result(s) (dB - A)	Limit(s) (dB - A)
1	Near Coal Mill	73	75	67	70
2	Near CPP Area	71	75	65	70
3	Near Limestone Storage Yard	67	75	57	70
4	Near Coal Storage Yard	64	75	57	70
5	Near Raw Mill	72	75	62	70
6	Near Cement Mill	72	75	60	70
7	Near Administrative Building	63	75	56	70
8	Power House	73	75	66	70

Pankaj Baroi


Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/FE/JUN/19-20/01
 Date : 11/07/2019


Order No. : SOML/00013/19-20
 Date : 13/04/2019

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

PROCESS FUGITIVE EMISSION TEST RESULTS

Date	Locations	Fugitive Emission Results for SPM ($\mu\text{g}/\text{m}^3$)	Limits ($\mu\text{g}/\text{m}^3$)
28.06.2019	Fly-ash Storage Section	2072	5000
28.06.2019	Coal Storage Section	792	2000
29.06.2019	Limestone Storage Section	1468	5000
29.06.2019	Cement Packing Section	1892	5000

Sampled & Analysed by: ENVIROCON, Digboi

Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/ETP/JUN/19-20/01

Date : 11/07/2019

Order No. : SOML/00013/19-20

Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED

Village- Musiang Lamare (Old)

P. O.:- Khliehriat

Meghalaya- 793200

ETP WATER ANALYSIS RESULTS

Sample Type : Treated ETP Water
Sample Source : ETP Outlet

Collected By: Jointly by Envirocon & Client
Collected On: 29.06.2019

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limits (IS: 2490)
01	pH	--	6.6	5.5 – 9.0
02	Temperature	°C	24.7	shall not exceed 5°C above the receiving water temperature
03	Total Suspended Solids	mg/l	18.7	100
04	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	23	30
05	Chemical Oxygen Demand	mg/l	84	250
06	Oil & Grease	mg/l	0.4	10
07	Total Residual Chlorine	mg/l	<0.01	1.0
08	Ammonical Nitrogen (as N)	mg/l	9.6	50
09	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	24.8	100
10	Free Ammonia (as NH ₃)	mg/l	<0.01	5.0

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/SW/JUN/19-20/01
 Date : 11/07/2019

Order No. : Nil
 Date : Nil

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

SURFACE WATER ANALYSIS RESULTS

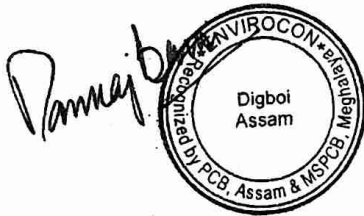
Sample Type : Surface Water
 Sample Source : Plant Nala Downstream

Collected By : Jointly by Envirocon & Client
 Collected On : 23.06.2019

Sl. No.	Parameter(s)	Result(s)	Unit(s)
1.	pH	6.8	--
2.	Temperature	21.8	°C
3.	Biochemical Oxygen Demand (3 days at 27°C)	4	mg/L
4.	Chemical Oxygen Demand	15	mg/L
5.	Oil & Grease	<0.1	mg/L
6.	Total Dissolved Solids	95.3	mg/L
7.	Total Suspended Solids	64	mg/L
8.	Chloride	7.1	mg/L
9.	Total Residual Chlorine	ND	mg/L
10.	Ammonical Nitrogen (as N)	1.6	mg/L
11.	Free Ammonia (as NH ₃)	<0.01	mg/L
12.	Total Kjeldahl Nitrogen (as N)	8.2	mg/L
13.	Sulphate	25	mg/L
14.	Iron (as Fe)	0.06	mg/L
15.	Copper (as Cu)	0.06	mg/L
16.	Zinc (as Zn)	ND	mg/L
17.	Nickel (as Ni)	ND	mg/L
18.	Fluoride (as F)	<0.01	mg/L
19.	E Coli	Absent	MNP/100 ml

Analysis Protocol: IS 3025

ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/SW/JUN/19-20/02
Date : 11/07/2019

Order No. : Nil
Date : Nil

GOLDSTONE CEMENTS LIMITED

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

SURFACE WATER ANALYSIS RESULTS

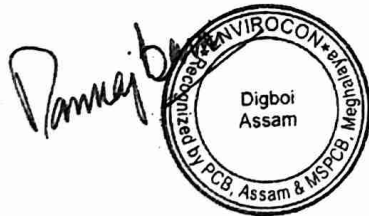
Sample Type : Surface Water
Sample Source : Plant Nala upstream

Collected By : Jointly by Envirocon & Client
Collected On : 23.06.2019

Sl. No.	Parameter(s)	Result(s)	Unit(s)
1.	pH	6.8	--
2.	Temperature	21.8	°C
3.	Biochemical Oxygen Demand (3 days at 27°C)	4	mg/L
4.	Chemical Oxygen Demand	16	mg/L
5.	Oil & Grease	<0.1	mg/L
6.	Total Dissolved Solids	96.8	mg/L
7.	Total Suspended Solids	66	mg/L
8.	Chloride	7.3	mg/L
9.	Total Residual Chlorine	ND	mg/L
10.	Ammonical Nitrogen (as N)	1.8	mg/L
11.	Free Ammonia (as NH ₃)	<0.01	mg/L
12.	Total Kjeldahl Nitrogen (as N)	8.4	mg/L
13.	Sulphate	27	mg/L
14.	Iron (as Fe)	0.08	mg/L
15.	Copper (as Cu)	0.07	mg/L
16.	Zinc (as Zn)	ND	mg/L
17.	Nickel (as Ni)	ND	mg/L
18.	Fluoride (as F)	<0.01	mg/L
19.	E Coli	Absent	MNP/100 ml

Analysis Protocol: IS 3025

ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No. : ENV/GSCL/AAQ/JUL/19-20/01

Date : 10/08/2019

Order No. : SOML/00013/19-20

Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED

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

AMBIENT AIR QUALITY TEST RESULTS

LOCATIONS ↓	Date of Sampling	PM 2.5 (µg/m³)	PM 10 (µg/m³)	NO ₂ (µg/m³)	SO ₂ (µg/m³)	NH ₃ (µg/m³)	CO (mg/m³)	O ₃ (µg/m³)	B(a)P (ng/m³)	C ₆ H ₆ (µg/m³)	Ni (ng/m³)	As (ng/m³)	Pb (µg/m³)
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	08.07.2019	21.9	47.6	10.4	7.2	12.8	0.032	4.3	<0.1	<0.01	<0.01	<0.01	<0.01
Near Secondary Crusher	08.07.2019	23.4	49.2	12.7	8.1	11.2	0.022	3.7	<0.1	<0.01	<0.01	<0.01	<0.01
Near Fly Ash Shed	09.07.2019	24.8	52.7	9.6	6.9	11.6	0.018	4.5	<0.1	<0.01	<0.01	<0.01	<0.01
Near Temple	09.07.2019	16.2	39.2	ND	ND	7.2	<0.01	1.8	<0.1	<0.01	<0.01	<0.01	<0.01

Analysis Protocol: IS 5182
ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE:

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Report No. : ENV/GSCL/DW/JUL/19-20/01
Date : 10/08/2019

Order No. : SOML/00013/19-20
Date : 13/04/2019

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

DRINKING WATER ANALYSIS RESULTS

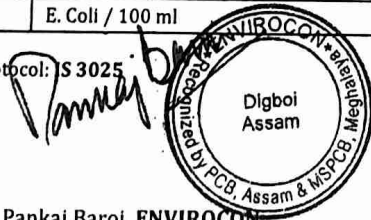
Sample Type : Drinking Water
Collected By : Jointly by Envirocon & Client

Sample Source : Canteen
Collected On : 29.07.2019

Sl. No.	Parameters	Results	Desirable Limit (IS: 10500)
1.	Colour, Hazen Units, Max	<1	5
2.	Odour	Odourless	Agreeable
3.	Taste	Acceptable	Agreeable
4.	Turbidity, NTU, Max	0.081	1.0
5.	pH	6.9	6.5 - 8.5
6.	Total Dissolved Solids, mg/l, Max	84.9	500
7.	Aluminium (as Al), mg/l, Max	ND	0.03
8.	Boron (as B), mg/l, Max	ND	0.5
9.	Calcium (as Ca), mg/l, Max	22	75
10.	Chloride (as Cl), mg/l, Max	2.1	250
11.	Copper (as Cu), mg/l, Max	ND	0.05
12.	Fluorides (as F), mg/l, Max	ND	1.0
13.	Free Residual Chlorine, mg/l, Min	ND	0.2
14.	Iron (as Fe), mg/l, Max	<0.01	0.3
15.	Magnesium (as Mg), mg/l, Max	2.6	30
16.	Manganese (as Mn), mg/l, Max	ND	0.1
17.	Zinc (as Zn), mg/l, Max	ND	5.0
18.	Nitrate (as NO ₃), mg/l, Max	<0.01	45
19.	Phenolic Compounds (as C ₆ H ₅ OH), mg/l, Max	ND	0.001
20.	Sulfate (as SO ₄), mg/l, Max	16	200
21.	Total Alkalinity (as CaCO ₃), mg/l, Max	41	200
22.	Total Hardness, (as CaCO ₃), mg/l, Max	12.6	200
23.	Cadmium (as Cd), mg/l, Max	ND	0.003
24.	Cyanide (as CN), mg/l, Max	ND	0.05
25.	Lead (as Pb), mg/l, Max	ND	0.01
26.	Mercury (as Hg), mg/l, Max	ND	0.001
27.	Selenium (as Se), mg/l, Max	ND	0.01
28.	Total Arsenic (as As), mg/l, Max	ND	0.01
29.	Total Chromium, (as Cr), mg/l, Max	ND	0.05
30.	Anionic Detergents (as MBAS), mg/l	ND	0.2
31.	Total Coliform, MPN/100 ml	NIL	10 Max
32.	Faecal Coliforms/ 100 ml	NIL	Absent
33.	E. Coli / 100 ml	NIL	Absent

Analysis Protocol: S 3025

ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/ETP/JUL/19-20/01
Date : 10/08/2019

Order No. : SOML/00013/19-20
Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED

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

ETP WATER ANALYSIS RESULTS

Sample Type : Treated ETP Water
Sample Source : ETP Outlet

Collected By: Jointly by Envirocon & Client
Collected On: 29.07.2019

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limits (IS: 2490)
01	pH	--	6.8	5.5 - 9.0
02	Temperature	°C	25.1	shall not exceed 5°C above the receiving water temperature
03	Total Suspended Solids	mg/l	9.2	100
04	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	17	30
05	Chemical Oxygen Demand	mg/l	61	250
06	Oil & Grease	mg/l	<0.1	10
07	Total Residual Chlorine	mg/l	<0.01	1.0
08	Ammonical Nitrogen (as N)	mg/l	4.2	50
09	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	16.9	100
10	Free Ammonia (as NH ₃)	mg/l	<0.01	5.0

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/NLM/JUL/19-20/01
 Date : 10/08/2019

Order No. : SOML/00013/19-20
 Date : 13/04/2019

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

NOISE LEVEL MEASUREMENT RESULTS

Measurement Date: 08.07.2019

Sl. No.	Location(s)	Day time		Night Time	
		Result(s) (dB - A)	Limit(s) (dB - A)	Result(s) (dB - A)	Limit(s) (dB - A)
1	Near Coal Mill	72	75	65	70
2	Near CPP Area	68	75	65	70
3	Near Limestone Storage Yard	65	75	54	70
4	Near Coal Storage Yard	65	75	56	70
5	Near Raw Mill	73	75	63	70
6	Near Cement Mill	71	75	62	70
7	Near Administrative Building	61	75	55	70
8	Power House	74	75	67	70

Pankaj Baroi


Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/FE/JUL/19-20/01
 Date : 10/08/2019

Order No. : SOML/00013/19-20
 Date : 13/04/2019

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

PROCESS FUGITIVE EMISSION TEST RESULTS

Date	Locations	Fugitive Emission Results for SPM ($\mu\text{g}/\text{m}^3$)	Limits ($\mu\text{g}/\text{m}^3$)
08.07.2019	Fly-ash Storage Section	1776	5000
08.07.2019	Coal Storage Section	523	2000
09.07.2019	Limestone Storage Section	1502	5000
09.07.2019	Cement Packing Section	1761	5000

Sampled & Analysed by: ENVIROCON, Digboi

Pankaj Baroi

 Digboi Assam
 Recognized by PCB, Assam & MSPCB, Meghalaya

Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/ETP/JUL/19-20/01
 Date : 10/08/2019

Order No. : SOML/00013/19-20
 Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED

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

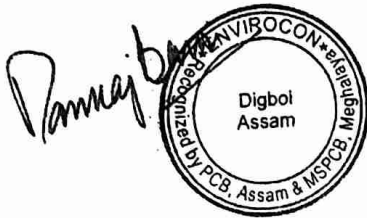
ETP WATER ANALYSIS RESULTS

Sample Type : Treated ETP Water
 Sample Source : ETP Outlet

Collected By: Jointly by Envirocon & Client
 Collected On: 09.07.2019

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limits (IS: 2490)
01	pH	--	6.7	5.5 - 9.0
02	Temperature	°C	27.8	shall not exceed 5°C above the receiving water temperature
03	Total Suspended Solids	mg/l	14.2	100
04	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	21	30
05	Chemical Oxygen Demand	mg/l	75	250
06	Oil & Grease	mg/l	0.2	10
07	Total Residual Chlorine	mg/l	<0.01	1.0
08	Ammonical Nitrogen (as N)	mg/l	7.2	50
09	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	19.7	100
10	Free Ammonia (as NH ₃)	mg/l	<0.01	5.0

Analysis Protocol: IS 3025



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/SW/JUL/19-20/01
 Date : 10/08/2019

Order No. : Nil
 Date : Nil

GOLDSTONE CEMENTS LIMITED
 Village- Musiang Lamare (Old)
 P. O.- Khliehriat
 Meghalaya- 793200

SURFACE WATER ANALYSIS RESULTS

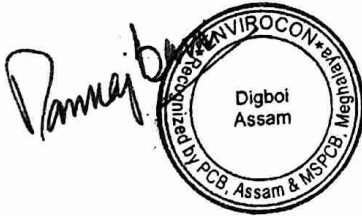
Sample Type : Surface Water
 Sample Source : Plant Nala Downstream

Collected By : Jointly by Envirocon & Client
 Collected On : 29.07.2019

Sl. No.	Parameter(s)	Result(s)	Unit(s)
1.	pH	6.8	--
2.	Temperature	22.8	°C
3.	Biochemical Oxygen Demand (3 days at 27°C)	2	mg/L
4.	Chemical Oxygen Demand	12	mg/L
5.	Oil & Grease	<0.1	mg/L
6.	Total Dissolved Solids	91.2	mg/L
7.	Total Suspended Solids	71	mg/L
8.	Chloride	3.6	mg/L
9.	Total Residual Chlorine	ND	mg/L
10.	Ammonical Nitrogen (as N)	0.92	mg/L
11.	Free Ammonia (as NH ₃)	<0.01	mg/L
12.	Total Kjeldahl Nitrogen (as N)	4.6	mg/L
13.	Sulphate	16.8	mg/L
14.	Iron (as Fe)	<0.01	mg/L
15.	Copper (as Cu)	<0.01	mg/L
16.	Zinc (as Zn)	ND	mg/L
17.	Nickel (as Ni)	ND	mg/L
18.	Fluoride (as F)	<0.01	mg/L
19.	E Coli	Absent	MNP/100 ml

Analysis Protocol: IS 3025

ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/SW/JUL/19-20/02
 Date : 10/08/2019

Order No. : Nil
 Date : Nil

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

SURFACE WATER ANALYSIS RESULTS

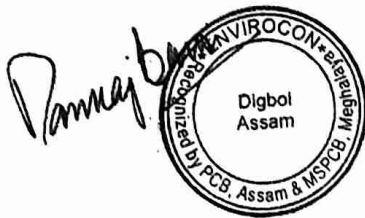
Sample Type : Surface Water
 Sample Source : Plant Nala upstream

Collected By : Jointly by Envirocon & Client
 Collected On : 29.07.2019

Sl. No.	Parameter(s)	Result(s)	Unit(s)
1.	pH	6.8	--
2.	Temperature	22.8	°C
3.	Biochemical Oxygen Demand (3 days at 27°C)	2	mg/L
4.	Chemical Oxygen Demand	14	mg/L
5.	Oil & Grease	<0.1	mg/L
6.	Total Dissolved Solids	93.6	mg/L
7.	Total Suspended Solids	68	mg/L
8.	Chloride	3.7	mg/L
9.	Total Residual Chlorine	ND	mg/L
10.	Ammonical Nitrogen (as N)	0.96	mg/L
11.	Free Ammonia (as NH ₃)	<0.01	mg/L
12.	Total Kjeldahl Nitrogen (as N)	4.2	mg/L
13.	Sulphate	17.2	mg/L
14.	Iron (as Fe)	<0.01	mg/L
15.	Copper (as Cu)	<0.01	mg/L
16.	Zinc (as Zn)	ND	mg/L
17.	Nickel (as Ni)	ND	mg/L
18.	Fluoride (as F)	<0.01	mg/L
19.	E Coli	Absent	MNP/100 ml

Analysis Protocol: IS 3025

ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/AAQ/AUG/19-20/01
 Date : 31/08/2019

Order No. : SOML/00013/19-20
 Date : 13/04/2019

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 (µg/m ³)	PM 10 (µg/m ³)	NO ₂ (µg/m ³)	SO ₂ (µg/m ³)
	Limit(s) →		60 (24 Hrs. Av.)	100 (24 Hrs. Av.)	80 (24 Hrs. Av.)	80 (24 Hrs. Av.)
1.	Near CPP	16.08.2019	23.2	51.2	13.1	7.6
2.	Near Secondary Crusher	16.08.2019	24.8	56.7	12.8	7.9
3.	Near Fly Ash Shed	17.08.2019	23.9	53.9	9.2	6.5
4.	Near Temple	17.08.2019	17.1	37.2	ND	ND

ND: Not Detected

Analysis Protocol: IS 5182

Sampled & Analysed by: ENVIROCON, Digboi



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No. : ENV/GSCL/DW/AUG/19-20/01
 Date : 31/08/2019

Order No. : SOML/00013/19-20
 Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED
 Village- Musiang Lamare (Old)
 P. O.- Khliehriat
 Meghalaya- 793200

DRINKING WATER ANALYSIS RESULTS

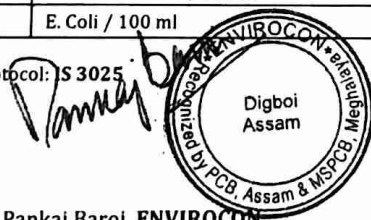
Sample Type : Drinking Water
 Collected By : Jointly by Envirocon & Client

Sample Source : Canteen
 Collected On : 17.08.2019

Sl. No.	Parameters	Results	Desirable Limit (IS: 10500)
1.	Colour, Hazen Units, Max	<1	5
2.	Odour	Odourless	Agreeable
3.	Taste	Acceptable	Agreeable
4.	Turbidity, NTU, Max	0.07	1.0
5.	pH	7.1	6.5 – 8.5
6.	Total Dissolved Solids, mg/l, Max	87.2	500
7.	Aluminium (as Al), mg/l, Max	ND	0.03
8.	Boron (as B), mg/l, Max	ND	0.5
9.	Calcium (as Ca), mg/l, Max	23	75
10.	Chloride (as Cl), mg/l, Max	1.8	250
11.	Copper (as Cu), mg/l, Max	ND	0.05
12.	Fluorides (as F), mg/l, Max	ND	1.0
13.	Free Residual Chlorine, mg/l, Min	ND	0.2
14.	Iron (as Fe), mg/l, Max	<0.01	0.3
15.	Magnesium (as Mg), mg/l, Max	2.3	30
16.	Manganese (as Mn), mg/l, Max	ND	0.1
17.	Zinc (as Zn), mg/l, Max	ND	5.0
18.	Nitrate (as NO ₃), mg/l, Max	<0.01	45
19.	Phenolic Compounds (as C ₆ H ₅ OH), mg/l, Max	ND	0.001
20.	Sulfate (as SO ₄), mg/l, Max	18	200
21.	Total Alkalinity (as CaCO ₃), mg/l, Max	46	200
22.	Total Hardness, (as CaCO ₃), mg/l, Max	15.1	200
23.	Cadmium (as Cd), mg/l, Max	ND	0.003
24.	Cyanide (as CN), mg/l, Max	ND	0.05
25.	Lead (as Pb), mg/l, Max	ND	0.01
26.	Mercury (as Hg), mg/l, Max	ND	0.001
27.	Selenium (as Se), mg/l, Max	ND	0.01
28.	Total Arsenic (as As), mg/l, Max	ND	0.01
29.	Total Chromium, (as Cr), mg/l, Max	ND	0.05
30.	Anionic Detergents (as MBAS), mg/l	ND	0.2
31.	Total Coliform, MPN/100 ml	NIL	10 Max
32.	Faecal Coliforms/ 100 ml	NIL	Absent
33.	E. Coli / 100 ml	NIL	Absent

Analysis Protocol: IS 3025

ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/NLM/AUG/19-20/01
 Date : 31/08/2019

Order No. : SOML/00013/19-20
 Date : 13/04/2019



GOLDSTONE CEMENTS LIMITED

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

NOISE LEVEL MEASUREMENT RESULTS

Measurement Date: 16.08.2019

Sl. No.	Location(s)	Day time		Night Time	
		Result(s) (dB - A)	Limit(s) (dB - A)	Result(s) (dB - A)	Limit(s) (dB - A)
1	Near Coal Mill	71	75	64	70
2	Near CPP Area	67	75	61	70
3	Near Limestone Storage Yard	62	75	55	70
4	Near Coal Storage Yard	64	75	54	70
5	Near Raw Mill	73	75	62	70
6	Near Cement Mill	70	75	63	70
7	Near Administrative Building	63	75	56	70
8	Power House	72	75	68	70

Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/FE/AUG/19-20/01
 Date : 31/08/2019

Order No. : SOML/00013/19-20
 Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED

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

PROCESS FUGITIVE EMISSION TEST RESULTS

Date	Locations	Fugitive Emission Results for SPM ($\mu\text{g}/\text{m}^3$)	Limits ($\mu\text{g}/\text{m}^3$)
16.08.2019	Fly-ash Storage Section	1728	5000
16.08.2019	Coal Storage Section	613	2000
17.08.2019	Limestone Storage Section	1521	5000
17.08.2019	Cement Packing Section	1784	5000

Sampled & Analysed by: ENVIROCON, Digboi



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/ETP/AUG/19-20/01
Date : 31/08/2019

Order No. : SOML/00013/19-20
Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED

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

ETP WATER ANALYSIS RESULTS

Sample Type : Treated ETP Water
Sample Source : ETP Outlet

Collected By: Jointly by Envirocon & Client
Collected On: 17.08.2019

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limits (IS: 2490)
01	pH	--	6.7	5.5 - 9.0
02	Temperature	°C	27.5	shall not exceed 5°C above the receiving water temperature
03	Total Suspended Solids	mg/l	12.9	100
04	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	19	30
05	Chemical Oxygen Demand	mg/l	68	250
06	Oil & Grease	mg/l	<0.1	10
07	Total Residual Chlorine	mg/l	<0.01	1.0
08	Ammonical Nitrogen (as N)	mg/l	5.9	50
09	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	15.6	100
10	Free Ammonia (as NH ₃)	mg/l	<0.01	5.0

Analysis Protocol: IS 3025



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 (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No. : ENV/GSCL/AAQ/SEPT/19-20/01

Date : 03/10/2019

Order No. : SOML/00013/19-20

Date : 13/04/2019

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 ³)	PM 10 (µg/m ³)	NO ₂ (µg/m ³)	SO ₂ (µg/m ³)	NH ₃ (µg/m ³)	CO (mg/m ³)	O ₃ (µg/m ³)	B(a)P (ng/m ³)	C ₆ H ₆ (µg/m ³)	Ni (ng/m ³)	As (ng/m ³)	Pb (µg/m ³)
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	12.09.2019	25.6	50.2	12.6	7.8	14.2	0.058	4.5	<0.1	<0.01	<0.01	<0.01	<0.01
Near Secondary Crusher	12.09.2019	27.2	54.8	13.5	8.4	13.7	0.051	4.1	<0.1	<0.01	<0.01	<0.01	<0.01
Near Fly Ash Shed	13.09.2019	26.8	49.6	11.2	7.5	11.8	0.023	3.8	<0.1	<0.01	<0.01	<0.01	<0.01
Near Temple	13.09.2019	18.4	41.2	ND	ND	7.8	<0.01	2.2	<0.1	<0.01	<0.01	<0.01	<0.01

Analysis Protocol: IS 5182

ND: Not Detected



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 (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No. : ENV/GSCL/DW/SEPT/19-20/01
Date : 03/10/2019

Order No. : SOML/00013/19-20
Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED
Village- Musiang Lamare (Old)
P. O.- Khliehriat
Meghalaya- 793200

DRINKING WATER ANALYSIS RESULTS

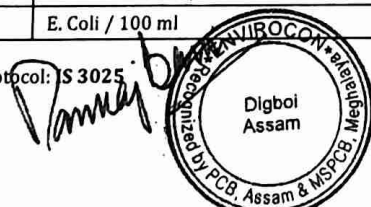
Sample Type : Drinking Water
Collected By : Jointly by Envirocon & Client

Sample Source : Canteen
Collected On : 13.09.2019

Sl. No.	Parameters	Results	Desirable Limit (IS: 10500)
1.	Colour, Hazen Units, Max	<1	5
2.	Odour	Odourless	Agreeable
3.	Taste	Acceptable	Agreeable
4.	Turbidity, NTU, Max	0.077	1.0
5.	pH	7.1	6.5 - 8.5
6.	Total Dissolved Solids, mg/l, Max	86.3	500
7.	Aluminium (as Al), mg/l, Max	ND	0.03
8.	Boron (as B), mg/l, Max	ND	0.5
9.	Calcium (as Ca), mg/l, Max	27	75
10.	Chloride (as Cl), mg/l, Max	2.2	250
11.	Copper (as Cu), mg/l, Max	ND	0.05
12.	Fluorides (as F), mg/l, Max	ND	1.0
13.	Free Residual Chlorine, mg/l, Min	ND	0.2
14.	Iron (as Fe), mg/l, Max	0.012	0.3
15.	Magnesium (as Mg), mg/l, Max	2.1	30
16.	Manganese (as Mn), mg/l, Max	ND	0.1
17.	Zinc (as Zn), mg/l, Max	ND	5.0
18.	Nitrate (as NO ₃), mg/l, Max	<0.01	45
19.	Phenolic Compounds (as C ₆ H ₅ OH), mg/l, Max	ND	0.001
20.	Sulfate (as SO ₄), mg/l, Max	19	200
21.	Total Alkalinity (as CaCO ₃), mg/l, Max	52	200
22.	Total Hardness, (as CaCO ₃), mg/l, Max	16.6	200
23.	Cadmium (as Cd), mg/l, Max	ND	0.003
24.	Cyanide (as CN), mg/l, Max	ND	0.05
25.	Lead (as Pb), mg/l, Max	ND	0.01
26.	Mercury (as Hg), mg/l, Max	ND	0.001
27.	Selenium (as Se), mg/l, Max	ND	0.01
28.	Total Arsenic (as As), mg/l, Max	ND	0.01
29.	Total Chromium, (as Cr), mg/l, Max	ND	0.05
30.	Anionic Detergents (as MBAS), mg/l	ND	0.2
31.	Total Coliform, MPN/100 ml	NIL	10 Max
32.	Faecal Coliforms/ 100 ml	NIL	Absent
33.	E. Coli / 100 ml	NIL	Absent

Analysis Protocol: S 3025

ND: Not Detected



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/NLM/SEPT/19-20/01
 Date : 03/10/2019


Order No. : SOML/00013/19-20
 Date : 13/04/2019

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

NOISE LEVEL MEASUREMENT RESULTS

Measurement Date: 13.09.2019

Sl. No.	Location(s)	Day time		Night Time	
		Result(s) (dB - A)	Limit(s) (dB - A)	Result(s) (dB - A)	Limit(s) (dB - A)
1	Near Coal Mill	72	75	65	70
2	Near CPP Area	65	75	59	70
3	Near Limestone Storage Yard	62	75	54	70
4	Near Coal Storage Yard	61	75	53	70
5	Near Raw Mill	71	75	64	70
6	Near Cement Mill	72	75	64	70
7	Near Administrative Building	66	75	55	70
8	Power House	70	75	67	70

Pankaj Baroi


Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/GSCL/FE/SEPT/19-20/01
 Date : 03/10/2019

Order No. : SOML/00013/19-20
 Date : 13/04/2019

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

PROCESS FUGITIVE EMISSION TEST RESULTS

Date	Locations	Fugitive Emission Results for SPM ($\mu\text{g}/\text{m}^3$)	Limits ($\mu\text{g}/\text{m}^3$)
12.09.2019	Fly-ash Storage Section	1645	5000
12.09.2019	Coal Storage Section	644	2000
13.09.2019	Limestone Storage Section	1501	5000
13.09.2019	Cement Packing Section	1687	5000

Sampled & Analysed by: ENVIROCON, Digboi

Pankaj Baroi


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/ETP/SEPT/19-20/01
 Date : 03/10/2019

Order No. : SOML/00013/19-20
 Date : 13/04/2019

GOLDSTONE CEMENTS LIMITED

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

ETP WATER ANALYSIS RESULTS

Sample Type : Treated ETP Water
 Sample Source : ETP Outlet

Collected By: Jointly by Envirocon & Client
 Collected On: 13.09.2019

Sl. No.	Parameter(s)	Unit(s)	Result(s)	Desirable Limits (IS: 2490)
01	pH	--	6.6	5.5 – 9.0
02	Temperature	°C	27.1	shall not exceed 5°C above the receiving water temperature
03	Total Suspended Solids	mg/l	8.2	100
04	Biochemical Oxygen Demand (3 Days @27°C)	mg/l	18	30
05	Chemical Oxygen Demand	mg/l	62	250
06	Oil & Grease	mg/l	<0.1	10
07	Total Residual Chlorine	mg/l	<0.01	1.0
08	Ammonical Nitrogen (as N)	mg/l	6.3	50
09	Total Kjeldahl Nitrogen (as NH ₃)	mg/l	16.6	100
10	Free Ammonia (as NH ₃)	mg/l	<0.01	5.0

Analysis Protocol: IS 3025




Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE:

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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.

Report No.: ENV/GSCL/SW/SEPT/19-20/01
Date : 03/10/2019

Order No. : SOGM/00103/19-20
Date : 26/08/2019

GOLDSTONE CEMENTS LIMITED

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

SURFACE WATER ANALYSIS RESULTS

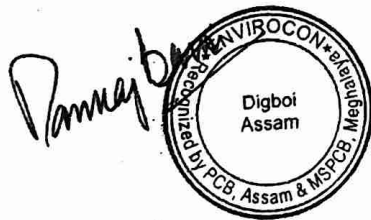
Sample Type : Surface Water
Sample Source : Plant Nala Downstream

Collected By : Jointly by Envirocon & Client
Collected On : 13.09.2019

Sl. No.	Parameter(s)	Result(s)	Unit(s)
1.	pH	6.7	--
2.	Temperature	22.5	°C
3.	Biochemical Oxygen Demand (3 days at 27°C)	5	mg/L
4.	Chemical Oxygen Demand	28	mg/L
5.	Oil & Grease	<0.1	mg/L
6.	Total Dissolved Solids	121.7	mg/L
7.	Total Suspended Solids	64	mg/L
8.	Chloride	4.1	mg/L
9.	Total Residual Chlorine	ND	mg/L
10.	Ammonical Nitrogen (as N)	0.61	mg/L
11.	Free Ammonia (as NH ₃)	<0.01	mg/L
12.	Total Kjeldahl Nitrogen (as N)	4.1	mg/L
13.	Sulphate	19	mg/L
14.	Iron (as Fe)	<0.01	mg/L
15.	Copper (as Cu)	<0.01	mg/L
16.	Zinc (as Zn)	ND	mg/L
17.	Nickel (as Ni)	ND	mg/L
18.	Fluoride (as F)	<0.01	mg/L
19.	E Coli	Absent	MNP/100 ml

Analysis Protocol: IS 3025

ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE:

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Report No.: ENV/GSCL/SW/SEPT/19-20/02
 Date : 03/10/2019

Order No. : SOGM/00103/19-20
 Date : 26/08/2019

GOLDSTONE CEMENTS LIMITED

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

SURFACE WATER ANALYSIS RESULTS

Sample Type : Surface Water
 Sample Source : Plant Nala upstream

Collected By : Jointly by Envirocon & Client
 Collected On : 29.07.2019

Sl. No.	Parameter(s)	Result(s)	Unit(s)
1.	pH	6.7	--
2.	Temperature	22.5	°C
3.	Biochemical Oxygen Demand (3 days at 27°C)	5	mg/L
4.	Chemical Oxygen Demand	31	mg/L
5.	Oil & Grease	<0.1	mg/L
6.	Total Dissolved Solids	124.6	mg/L
7.	Total Suspended Solids	69	mg/L
8.	Chloride	4.2	mg/L
9.	Total Residual Chlorine	ND	mg/L
10.	Ammonical Nitrogen (as N)	0.64	mg/L
11.	Free Ammonia (as NH ₃)	<0.01	mg/L
12.	Total Kjeldahl Nitrogen (as N)	4.3	mg/L
13.	Sulphate	21	mg/L
14.	Iron (as Fe)	<0.01	mg/L
15.	Copper (as Cu)	<0.01	mg/L
16.	Zinc (as Zn)	ND	mg/L
17.	Nickel (as Ni)	ND	mg/L
18.	Fluoride (as F)	<0.01	mg/L
19.	E Coli	Absent	MNP/100 ml

Analysis Protocol: IS 3025

ND: Not Detected



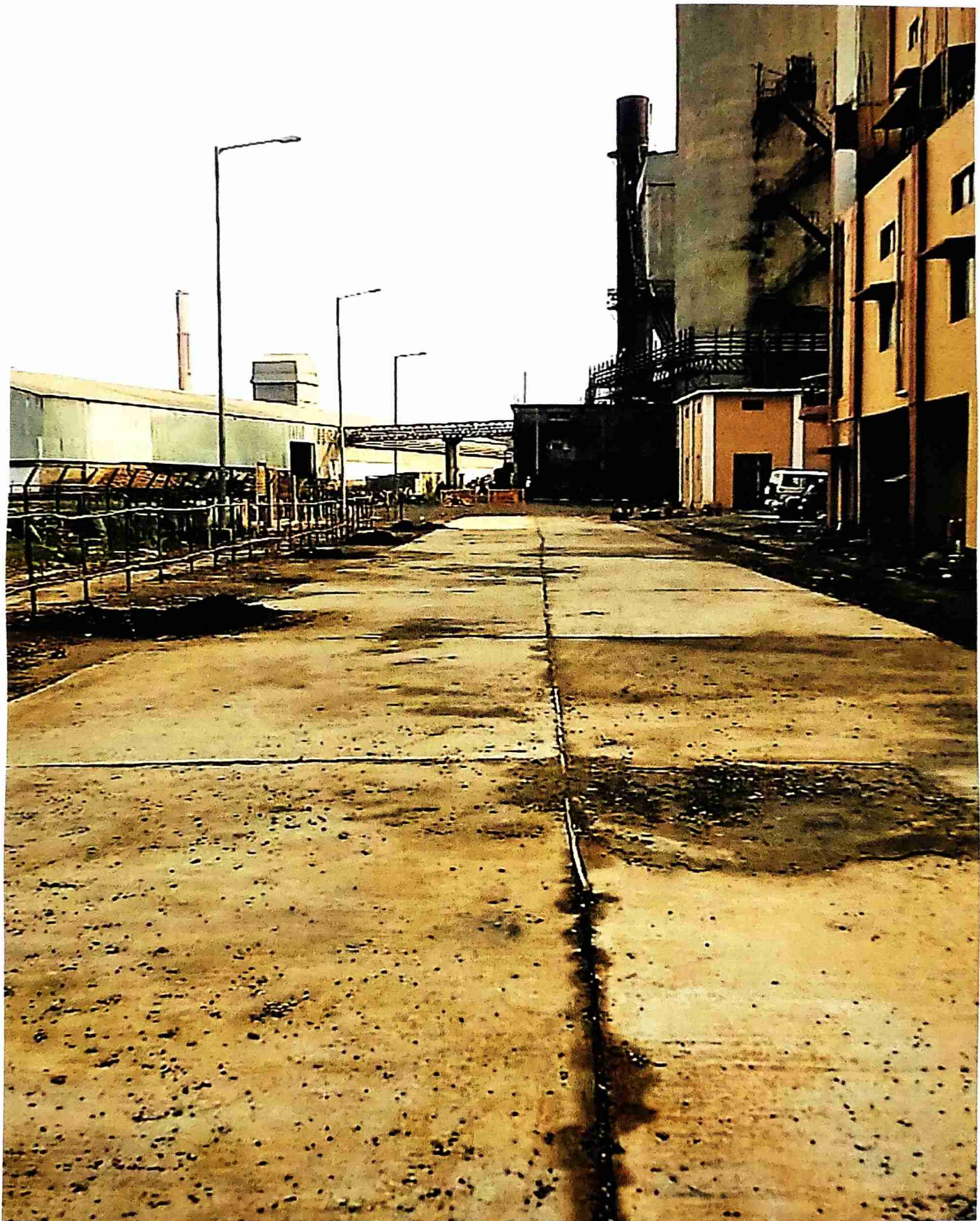
Checked By: Mr. Pankaj Baroi, ENVIROCON

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Annexure: 2



Annexure-2a



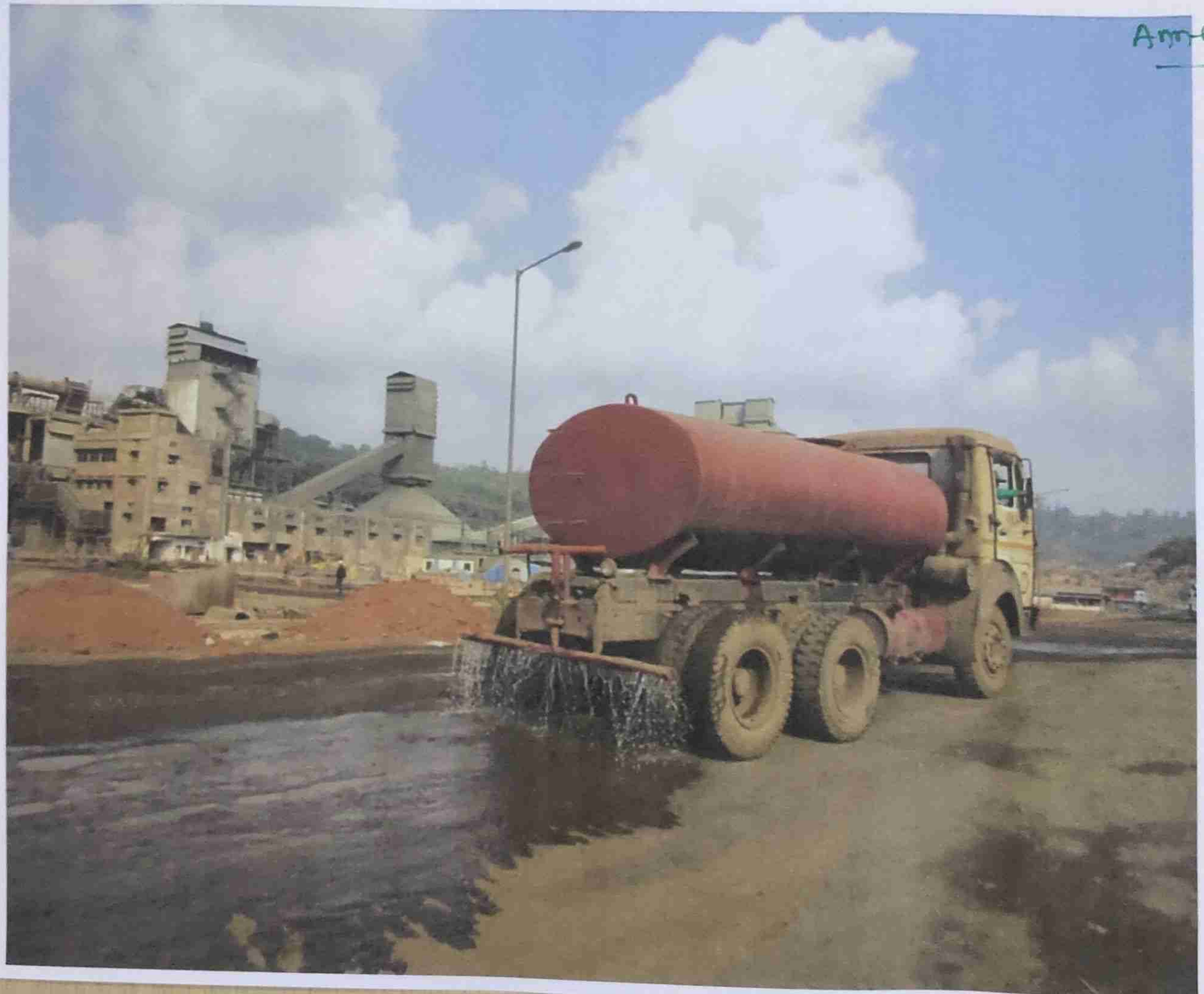
Annexure-2b



Amme-2c



Annex-2d



EMISSION UNDER CONTROL CERTIFICATE
 under the West Bengal Motor Vehicles Rules, 1988)

No. : **WB65C/5886** WB-01-**D 4383838**

Valid upto: **19/May/2019** to **18/Nov/2019**

Reduction Level:
 (%)
 (ppm)
 (HSU)
3.4



Issued by: **BIDHANNAGAR RAETC**
 License No. and Seal: **0**
BIDHANNAGAR, DARJEELING

Vehicle Pass Certificate WB-01-**D 4383838**

		Flush Ino Cycle				
		Avg. RPM Min.	RPM Max.	Temp.		
		1546	2892	36		
S.No.	RPM Min.	RPM Max.	Km ⁻¹	HSU %	Temp.	
102023	1	1166	2092	0.091	4.0	36
	2	2339	2899	0.071	3.1	36
	3	1940	2901	0.071	3.2	36
	Mean		Pass	0.08	3.4	
6854	<u>OilTemp</u>				36	
4444680	<u>Avg.RPMMin</u>		1546			
11863	<u>AvgRPMMax</u>		2892			
1:43:15 PM	<u>Owner Name</u>		ALAM SEKH			
100	<u>Machine Name</u>		SmokeMeter			

TEST RESULTS:

Pragna
2019

IN UNDER CONTROL CERTIFICATE
of the West Bengal Motor Vehicles Rules, 1989

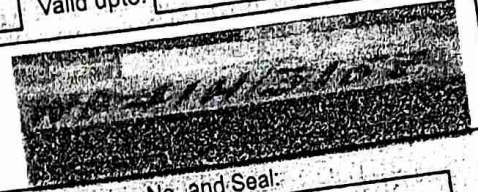
WB41H//3167

WB-01: **D** 2163592

19-AUG-2019

Valid upto: 18-FEB-2020

Level:
(%) 16.19
(m) 0.110
(U)



by *[Signature]*

License No. and Seal:
M/S GHOSH A ETC
LIC. NO. - 10 - 14-15

Signature
GHOSH A ETC
KALNA ROAD PIRPUKUR

Proprietor



POLLUTION CONTROL CERTIFICATE
(Under the West Bengal Motor Vehicle Pollution Control Act, 1980)

Vehicle Registr. No. **WB37D/5595**

Date of Issue: **10/08/2019**

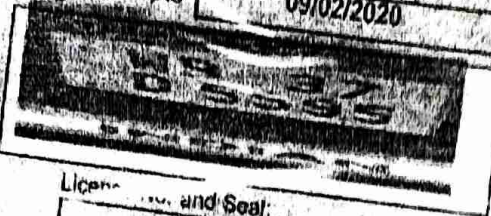
WB-01-D **6247928**

Valid upto **09/02/2020**



Pollution Level

CO (%)	
HC (ppm)	
SD (HSU)	22.2



PUC Certificate issued by:

SHIBAM AET CENTRE

Signature


Licence No. and Seal:

BUN34/2009-10

SHIBAM AET
 No. 115, 116 / 201209-10

Vali
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 Yes
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WB-01-D **6247928**



 Pollution Control Board, West Bengal
 (Under the West Bengal Motor Vehicle Act, 1969)

Vehicle Registn. No. **WB-29/A-8260** WB-01-D **5875740**


Date of issue: **02-Sep-2019** Valid upto: **01-Mar-2020**

Pollution Level:

CO (%)	
HC (ppm)	
SD (HSU)	20.2

PUC Certificate issued by: **18**

License No. and Seal: **30/MND/2014**





Annex-4a



Report No.: ENV/GSCL/SW/JUN/19-20/01
Date : 11/07/2019

Order No. : Nil
Date : Nil

Annex - 5

GOLDSTONE CEMENTS LIMITED

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

SURFACE WATER ANALYSIS RESULTS

Sample Type : Surface Water
Sample Source : Plant Nala Downstream

Collected By : Jointly by Envirocon & Client
Collected On : 23.06.2019

Sl. No.	Parameter(s)	Result(s)	Unit(s)
1.	pH	6.8	--
2.	Temperature	21.8	°C
3.	Biochemical Oxygen Demand (3 days at 27°C)	4	mg/L
4.	Chemical Oxygen Demand	15	mg/L
5.	Oil & Grease	<0.1	mg/L
6.	Total Dissolved Solids	95.3	mg/L
7.	Total Suspended Solids	64	mg/L
8.	Chloride	7.1	mg/L
9.	Total Residual Chlorine	ND	mg/L
10.	Ammonical Nitrogen (as N)	1.6	mg/L
11.	Free Ammonia (as NH ₃)	<0.01	mg/L
12.	Total Kjeldahl Nitrogen (as N)	8.2	mg/L
13.	Sulphate	25	mg/L
14.	Iron (as Fe)	0.06	mg/L
15.	Copper (as Cu)	0.06	mg/L
16.	Zinc (as Zn)	ND	mg/L
17.	Nickel (as Ni)	ND	mg/L
18.	Fluoride (as F)	<0.01	mg/L
19.	E Coli	Absent	MNP/100 ml

Analysis Protocol: IS 3025

ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE:

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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.

Report No.: ENV/GSCL/SW/JUN/19-20/02
 Date : 11/07/2019

Order No. : Nil
 Date : Nil

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

SURFACE WATER ANALYSIS RESULTS

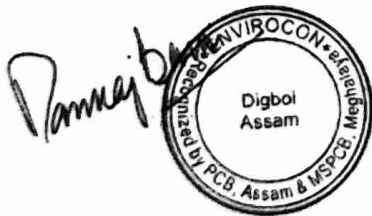
Sample Type : Surface Water
 Sample Source : Plant Nala upstream

Collected By : Jointly by Envirocon & Client
 Collected On : 23.06.2019

Sl. No.	Parameter(s)	Result(s)	Unit(s)
1.	pH	6.8	--
2.	Temperature	21.8	°C
3.	Biochemical Oxygen Demand (3 days at 27°C)	4	mg/L
4.	Chemical Oxygen Demand	16	mg/L
5.	Oil & Grease	<0.1	mg/L
6.	Total Dissolved Solids	96.8	mg/L
7.	Total Suspended Solids	66	mg/L
8.	Chloride	7.3	mg/L
9.	Total Residual Chlorine	ND	mg/L
10.	Ammonical Nitrogen (as N)	1.8	mg/L
11.	Free Ammonia (as NH ₃)	<0.01	mg/L
12.	Total Kjeldahl Nitrogen (as N)	8.4	mg/L
13.	Sulphate	27	mg/L
14.	Iron (as Fe)	0.08	mg/L
15.	Copper (as Cu)	0.07	mg/L
16.	Zinc (as Zn)	ND	mg/L
17.	Nickel (as Ni)	ND	mg/L
18.	Fluoride (as F)	<0.01	mg/L
19.	E Coli	Absent	MNP/100 ml

Analysis Protocol: IS 3025

ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE:

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2. Results refer only to the particular parameters tested.
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Core Services: Environmental Monitoring & Data Generation, EIA & EMP, Environmental Audit & Allied Environmental Management jobs
Associate Services: Certification by Competent Person (CF), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No.: ENV/GSCL/SW/JUL/19-20/01
Date : 10/08/2019

Order No. : Nil
Date : Nil

GOLDSTONE CEMENTS LIMITED

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

SURFACE WATER ANALYSIS RESULTS

Sample Type : Surface Water
Sample Source : Plant Nala Downstream

Collected By : Jointly by Envirocon & Client
Collected On : 29.07.2019

Sl. No.	Parameter(s)	Result(s)	Unit(s)
1.	pH	6.8	--
2.	Temperature	22.8	°C
3.	Biochemical Oxygen Demand (3 days at 27°C)	2	mg/L
4.	Chemical Oxygen Demand	12	mg/L
5.	Oil & Grease	<0.1	mg/L
6.	Total Dissolved Solids	91.2	mg/L
7.	Total Suspended Solids	71	mg/L
8.	Chloride	3.6	mg/L
9.	Total Residual Chlorine	ND	mg/L
10.	Ammonical Nitrogen (as N)	0.92	mg/L
11.	Free Ammonia (as NH ₃)	<0.01	mg/L
12.	Total Kjeldahl Nitrogen (as N)	4.6	mg/L
13.	Sulphate	16.8	mg/L
14.	Iron (as Fe)	<0.01	mg/L
15.	Copper (as Cu)	<0.01	mg/L
16.	Zinc (as Zn)	ND	mg/L
17.	Nickel (as Ni)	ND	mg/L
18.	Fluoride (as F)	<0.01	mg/L
19.	E Coli	Absent	MNP/100 ml

Analysis Protocol: IS 3025

ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

NOTE:

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Report No.: ENV/GSCL/SW/JUL/19-20/02
 Date : 10/08/2019

Order No. : Nil
 Date : Nil

GOLDSTONE CEMENTS LIMITED

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

SURFACE WATER ANALYSIS RESULTS

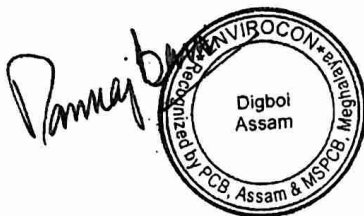
Sample Type : Surface Water
 Sample Source : Plant Nala upstream

Collected By : Jointly by Envirocon & Client
 Collected On : 29.07.2019

Sl. No.	Parameter(s)	Result(s)	Unit(s)
1.	pH	6.8	--
2.	Temperature	22.8	°C
3.	Biochemical Oxygen Demand (3 days at 27°C)	2	mg/L
4.	Chemical Oxygen Demand	14	mg/L
5.	Oil & Grease	<0.1	mg/L
6.	Total Dissolved Solids	93.6	mg/L
7.	Total Suspended Solids	68	mg/L
8.	Chloride	3.7	mg/L
9.	Total Residual Chlorine	ND	mg/L
10.	Ammonical Nitrogen (as N)	0.96	mg/L
11.	Free Ammonia (as NH ₃)	<0.01	mg/L
12.	Total Kjeldahl Nitrogen (as N)	4.2	mg/L
13.	Sulphate	17.2	mg/L
14.	Iron (as Fe)	<0.01	mg/L
15.	Copper (as Cu)	<0.01	mg/L
16.	Zinc (as Zn)	ND	mg/L
17.	Nickel (as Ni)	ND	mg/L
18.	Fluoride (as F)	<0.01	mg/L
19.	E Coli	Absent	MNP/100 ml

Analysis Protocol: IS 3025

ND: Not Detected

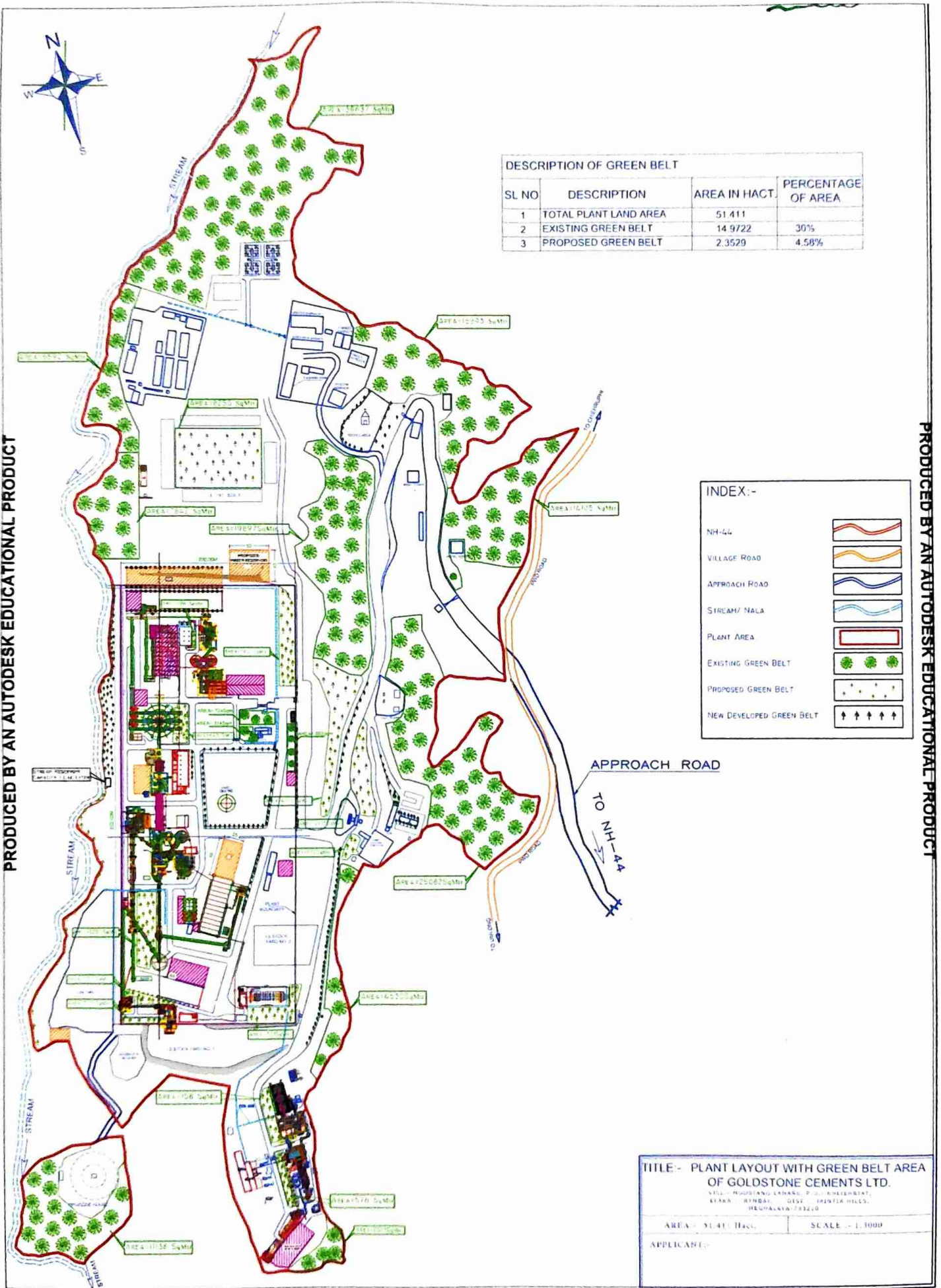


Checked By: Mr. Pankaj Baroi, ENVIROCON

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258

Annex - 7

Patient Name **Gobinda Nomosudra**

Date **28-8-19**

Age **29** Gender **M.**

Recd Naxdom 500

500.0/f

BP = $\frac{115}{71}$

WT = 73

Ht = 169.

ID = B261

ML

Apollo

Next appointment on:

PATIENT INFORMATION FORM

Name: Gabinda Nomcludra Age: 29
Gender / Sex: M Phone No. _____ MR No. _____

HISTORY

1. Do you have history of fever? (Yes / No), If Yes, kindly mention duration in days.
.....
2. Any history of night sweats? (Yes / No) Yes
.....
3. History of persistent cough? (Yes / No), If Yes, kindly mention duration in days.
.....
4. History of coughing up of blood? (Yes / No) No
.....
5. History of fatigue? (Yes / No) No
.....
6. History of loss of weight? (Yes / No) No
.....
7. Past history of Tuberculosis? (Yes / No) No
.....
8. History of Tuberculosis in close family member? (Yes / No) No
.....

Apollo Clinic

Kanchan Rd, Ulubari, Guwahati, Assam 781005, Ph: 90856 12000, 98641 12000
Siddha Point, Opposite Marwar Hospital, Athgaon, Guwahati, Assam 781001, Ph: 90856 19000
www.apolloclinicguwahati.com

Patient Name Govindar Neomosedra

Date 28/8/19

Age 29 Gender M

C/O - Regular check up

DVA(BE) _____ 6/6P

MA(BE) _____ N6

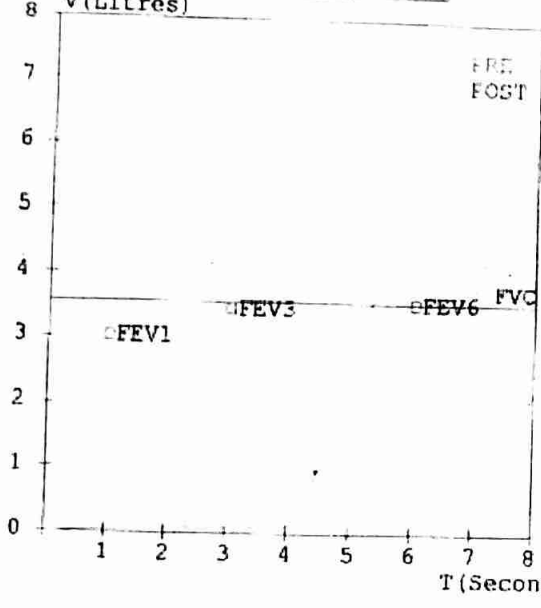
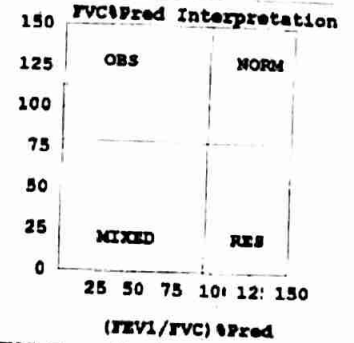
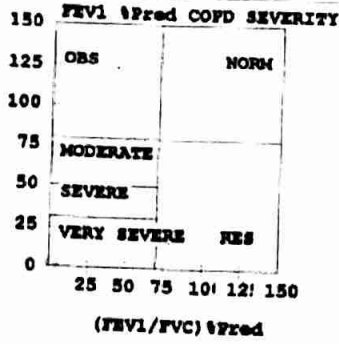
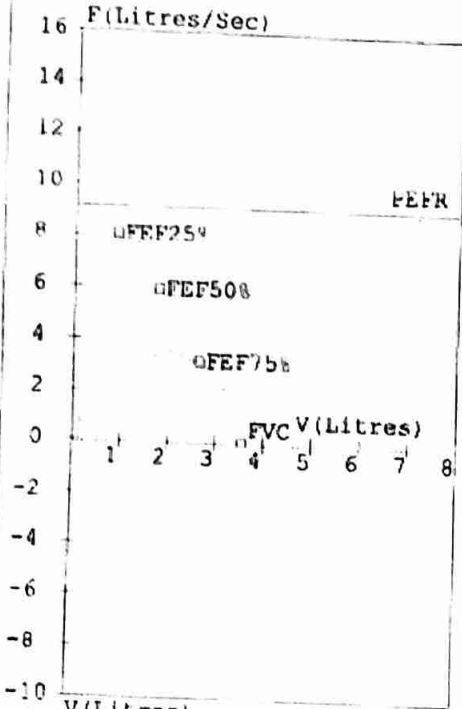
Review after 1 year

(4)

Next appointment on:

Patient: **GOBINDA NOMOSUDRA**
 Refd. By:
 Pred. Eqns: **RECORDERS**
 Date: **28-Aug-2019 04:30 PM**

Age : **29 Years** Gender : **Male**
 Height : **169 Cms** Smoker : **No**
 Weight : **73 Kgs** Eth. Corr: **100**
 ID: **B261** Temp :



Spirometry (FVC Results)					
Parameter		Pred	M. Pre %Pred	M. Post %Pred	%Imp
FVC	(L)	03.55	04.02	113	---
FEV1	(L)	03.02	00.07	002	---
FEV1/FVC	(%)	85.07	01.74	002	---
FEF25-75	(L/s)	04.42	03.29	074	---
PEFR	(L/s)	09.16	03.64	040	---
FIVC	(L)	-----	03.81	---	---
FEV.5	(L)	-----	00.05	---	---
FEV3	(L)	03.45	00.09	003	---
PIFR	(L/s)	-----	02.74	---	---
FEF75-85	(L/s)	-----	02.55	---	---
FEF.2-1.2	(L/s)	07.59	02.97	039	---
FEF 25%	(L/s)	08.06	03.52	044	---
FEF 50%	(L/s)	05.92	03.50	059	---
FEF 75%	(L/s)	03.16	02.80	089	---
FEV.5/FVC	(%)	-----	01.24	---	---
FEV3/FVC	(%)	97.18	02.24	002	---
FET	(Sec)	-----	05.72	---	---
ExptTime	(Sec)	-----	00.07	---	---
Lung Age	(Yrs)	029	057	197	---
FEV6	(L)	03.55	04.02	113	---
FIF25%	(L/s)	-----	02.74	---	---
FIF50%	(L/s)	-----	02.51	---	---
FIF75%	(L/s)	-----	02.36	---	---

Pre Test COPD Severity
 Very Severe stage COPD as FEV1/FVC < 70% and 0% ≤ FEV1 ≤ 30%

*Slow Start
 otherwise Normal
 Spirometry.*

Pre Medication Report Indicates
 Early Small Airway Obstruction as FEF 25-75 %Pred or PEFR %Pred < 70
 Severe Obstruction as (FEV1/FVC)%Pred < 65 and FVC%Pred > 80

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

Apollo Clinic
 Kandian Road, Opp. Bhai Sahib,
 G.S. Road, Guwahati- 781007
 Phone (0361) 246 1473 - 74
 E-mail guwahati@theapoloclinic.com

Apollo Clinic
 Siduli Point, J. Road
 Athgaon, Opp. Marwari Hospital
 Phone: 9085619000(M)
 www.apoloclinic.com



986412000 / 94356 23456
 Accredited as per ISO - 15189 : 2012 - NABL Standards
 1ST NABL ACCREDITED LABORATORY IN ASSAM

Patient Name	: Mr. Gobinda Homosudra	Age / Gender	: 28Y/Male
UHID/MR No.	: FGUN 0000030267	OP Visit No	: FGUWOPV40690
Visit Date	: 30-08-2019 18:06	Reported on	: 14-09-2019 14:42
Sample Collected on	: 31-08-2019 14:06	Specimen	: Serum
Ref Doctor	: SELF	Pres Doctor:	:
Package Name	: GOLD STONE MEDICAL AMC - WORKERS - GUN		
Emp/Auth/TPA ID	: 256		
Sponsor Name	: GOLD STONE CEMENTS LTD		

DEPARTMENT OF LABORATORY MEDICINE

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

Results are to be correlated clinically

Lab Technician / Technologist
Rupen_Das


Dr Aubreen R Khan
MD Microbiologist



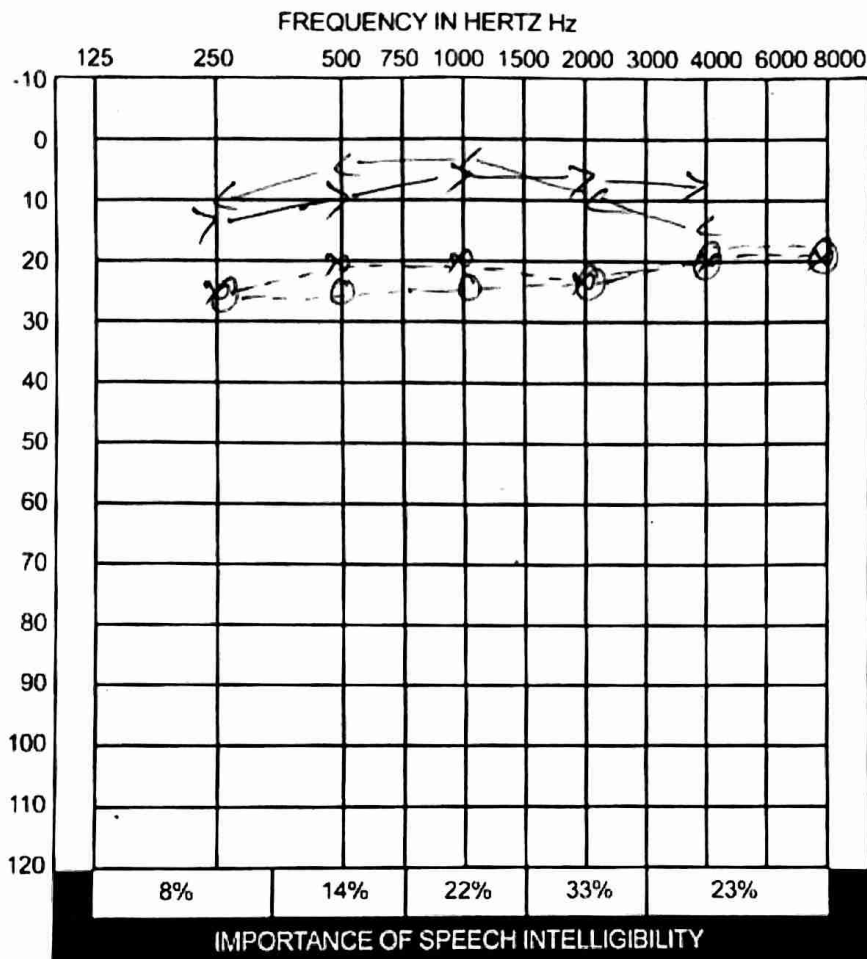
AUDIOGRAM

Apollo

Doctor / Audiologist

Name: Gabinda - Nomosudra Age 20 Sex M

Address: _____ Date 28-8-19



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 hg. sensitivity

Name : Gobinda Nansabra
Referred By : self
Patient's Id : 203
Procedure : X-Ray Chest (PA view)

Age : 29 Yrs Sex: male
Date: 11-Oct-2019

Poor quality skiagram

No active parenchymal lesion seen in the visible lung fields.

Cardio-thoracic ratio is within normal limit.

Aorta is normal.

Both the pleural area appear clear.

Visible bony thorax appear intact.



Dr Sandipan Nath

Consultant Sonologist (Radiodiagnosis)

This is a professional report based on imaging findings only, correlate with other relevant investigations. This report is not for medico-legal purpose (In case of any discrepancy due to machine error or typing error, please get it rectified immediately)



Goldstone Cements Ltd.
Musiang Lamare (Old)

Investment Sheet of Pollution Equipments

Sl.No	Particulars	Supplier	Equipment	Mechanical	Civil	Electrical & Instrument	Transportation (Equipment, steel, Electricals, misscellaneous)	Total
1	Crusher Bag Filter	Larsen & Tourbo, Kansbahal	4396200	40000000	52500000	21000000	10000000	
2	Raw Mill Bag House	Thermax	60683388					
3	Clinker Cooler ESP							
4	Bag Filter							
5	Auxillaries							
6	Ancillaries							
7	Cement Mill Bag House	Rieco	13878650					
8	Packing House Bag house	Flsmidth	3982307					
9	Bag Filter + Fans	Thyssenkrupp	2294403					
10	Fans for : (i) Raw Mill Bag House (ii) Cement Mill Bag House (iii) Clinker cooler ESP	Flaktindia	5131605					
11	Missellaneous + Others	Flexocon/L&T	2280695					
12	SOX/NOX analyser and opacity meters etc	Forbes Marshall	3348688					
13	DATA NORAMALISATION, DATA CONTROLLER, TEMPERETURE SENSOR, PRESSURE AND FLOW METER	NEVCO ENGINEERS PVT LTD.	500497					
	STACK MONITORING KIT	Envirotech	124490					
14	Commissioning/Supervision		4000000					
	Total		100620923	40000000	52500000	21000000	10000000	224120923
				(APPROX)	(APPROX)	(APPROX)	(APPROX)	(APPROX)

A TOTAL INVESTMENT IN POLLUTION CONTROL EQUIPMENT - 100620923/-

B TOTAL INVESTMENT IN CIVIL/MECHANICAL/TRANSPORTATION OF POLLUTION CONTROL EQUIPMENT - 123500000/- (APPROX)

TOTAL A+B

224120923

Goldstone Cements Limited

Recurring Pollution Control Expenditure for 2018-19

upto Date: 31.03.2019

SI No	Date	Particulars	Purchase Order Number	Quantity	Amount
1	04.05.2018	Bag Filter 149MM dia X 7060 MM LG	PGMS/00058/18-19	1000 bags	5510410
2	19.06.2018	Bag Filter 160MM dia X 4550 MM LG	PGMS/00228/18-19	200 bags	863760
3		Filter Bags-149MM DIA X 4265 MM LG		400 bags	
4	12.07.2018	Bag Filter 149MM dia X 7060 MM LG	PGMS/00294/18-19	1000 bags	5510410
5	20.07.2018	Solenoid Valve spare kit for Cement mill, Coal Mill,Raw Mill bag Filter	PGKS/00109/19-19		124519.5
6	07.08.2018	Filter Bags-149MM DIA X 4265 MM LG	PGMS/00354/18-19	700 bags	892080
7	11.08.2018	Filter Bags Cage	PGMS/00369/18-19	700 bags	1342132
8	22.08.2018	Bag Filter 160MM dia X 4550 MM LG	PGMS/00400/18-19	350 bags	584080
9	29.06.2018	Sox Nox Analyser spare parts	PGKS/00100/18-19		444187
10	22.09.2018	Opacity Monitor and spare parts	PGKS/00140/18-19		1117342
11	25.10.2018	ESP Spare parts	PGKS/00157/18-19		1033416
12	31.03.2019	Greenbelt Development			27000
13	31.03.2019	Third party environmental monitoring			751660
14	31.03.2019	Salaries and wages for Environmental activities			1149000
15	31.03.2019	Construction of Concrete road			775336
		Toal			20125332.5



GOLDSTONE CEMENTS LIMITED.

Musiang Lamare (Old)

ENVIRONMENTAL INFORMATION BOARD

Ambient Air Quality, Stack Emission, Noise & Water Analysis Data

1. AMBIENT AIR QUALITY ($\mu\text{g}/\text{m}^3$) Parameters	Monthly	Locations				Permissible Limits		
	Date of Monitoring 13-03-19	Near CPP	Near Secondary Crusher	Near Fly Ash Shed	Near Temple	National Ambient Air Quality Standards Permissible Limits for Rural, Ind. & Residential Area		
(A) Particulate matter (>2.5)		56.8	52.8	55.9	50.2	< 60 $\mu\text{g}/\text{m}^3$		
(B) Particulate matter (>10)		98.9	95.4	97.8	88.2	< 100 $\mu\text{g}/\text{m}^3$		
(C) Sulphur Dioxide- SO_2		26.1	21.4	19.2	15.8	< 80 $\mu\text{g}/\text{m}^3$		
(D) Nitrogen Dioxide- NO_2		43.2	38.6	28.9	24.8	80 $\mu\text{g}/\text{m}^3$		
2. STACK EMISSION	Date of Monitoring	Locations	Monthly	Average Results		Permissible Limits		
			PM	SO_2	NO_x	PM	SO_2	NO_x
		1. Raw Mill	19.2	393.5	201.4	30	1000	600
		2. Coal Mill	23.7	346.8	144.8	-	-	-
		3. Cooler ESP	21.5	BDL	BDL	-	-	-
		4. Cement Mill	23.7	BDL	BDL	-	-	-
		5. CPP	37.4	477.1	224.6	50	600	300
3. WATER Quality	Date of Monitoring	DRINKING Water (Results)	Permissible Limits (mg/l)	FUGITIVE EMISSION		Results ($\mu\text{g}/\text{m}^3$)	Limits	
1. PH		7.2	6.5-8.5	Fly Ash Storage Section		2374	5000	
2. Total Dissolve Solids (mg/l)		166	< 500	Coal Storage Section		1420	2000	
3. RFC (mg/l)		-	-0.2	Limestone Storage Section		1786	5000	
4. Chloride (mg/l)		3.2	250	Cement Packing Section		2426	5000	
5. Total Hardness (mg/l)		5.8	200					
6. Total Alkalinity (mg/l)		92.0	75					
7. Calcium (mg/l)		26.0	30					
8. Magnesium (mg/l)		3.3						
4. NOISE LEVEL DATA								
A) Industrial Area	Result	NEAR ADMIN BUILDING	NEAR COALMILL	NEAR CEMENT MILL	NEAR CPP	STANDER LIMIT		
• Day Time	< 70	64	73	67	71	75 (dBA)		
• Night Time	< 64	52	65	60	66	70 (dBA)		