

M/119

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INFRASTRUCTURE &  
REAL ESTATE PVT. LTD.

Ref: MIREPL/119(A)/11442

Dated: 01<sup>st</sup> November, 2013

✓ Ministry of Environment & Forest  
North Eastern Regional  
Law-U-Sib, Lumbatngen  
Near M.T.C. Workshop  
Shillong 79302, Meghalaya.

Subject : Submission of six monthly compliance report for Construction of Hotel-  
cum-Office-Complex at Guwahati, Assam for the period from April 13 to  
September 2013

Dear Sir,

With reference to the above mentioned subject, we humbly submit herewith the following document:

1. Compliance Report for the period from April 13<sup>th</sup> to September 13<sup>th</sup>: **As per Annexure A**, along with
  1. Stack Analysis Report, Noise Level Measurement Analysis Report, Ambient Air Analysis report & Fugitive Emission Analysis Report: **As per Annexure 1**
  2. Water Test Report for the period: **As per Annexure 2**
  3. Soil Test Report for the period: **As per Annexure 3**

Kindly acknowledge the receipt of the same.

Thanking you.

Yours faithfully,  
For **MAXIM INFRASTRUCTURE & REAL ESTATE PVT. LTD.**

Authorized Signatory

Enclosed as above

Received.  
Ruf  
7/11

C.C.: (i) Central Pollution Control Board, "Tum-Sir" Lower Motinagar, Near Fire Brigade  
HQ, Shillong 793014

(ii) Member Secretary Pollution Control Board Bamunimaidam, Guwahati  
781021, Assam



INFRASTRUCTURE &  
REAL ESTATE PVT. LTD.

Ref: MIREPL/119(A)/1442

Dated: 01<sup>st</sup> November, 2013

✓ Ministry of Environment & Forest  
North Eastern Regional  
Law-U-Sib, Lumbatngen  
Near M.T.C. Workshop  
Shillong 79302, Meghalaya

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Dear Sir,

With reference to the above mentioned subject, we humbly submit herewith the following document:

1. Compliance Report for the period from April 13<sup>th</sup> to September 13<sup>th</sup>: **As per Annexure A**, along with
  1. Slack Analysis Report, Noise Level Measurement Analysis Report, Ambient Air Analysis report & Fugitive Emission Analysis Report: **As per Annexure 1**
  2. Water Test Report for the period: **As per Annexure 2**
  3. Soil Test Report for the period: **As per Annexure 3**

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C.C.: (i) Central Pollution Control Board, "Tum-Sir" Lower Motinagar, Near Fire Brigade  
HQ, Shillong 793014

(ii) Member Secretary- Pollution Control Board Bamunimaidam, Guwahati:  
781021, Assam

**COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE**  
**FOR THE PERIOD OF APRIL-2013 TO SEPTEMBER-2013**

**Name of The Company** : M/s. Maxim Infrastructure & Real Estate Pvt. Ltd.  
**Project** : Construction of Hotel cum- Office Complex at Guwahati, Assam.  
**Environmental Clearance Letter** : No. 21-1/2011-IA.III Dated 1<sup>st</sup> June, 2011.

**PART A - SPECIFIC CONDITIONS:**

**1. Construction Phase:**

NO.	CONDITIONS	COMPLIANCE STATUS
(i)	"Consent for Establishment" shall be obtained from Assam State Pollution Control Board under Air and Water Act and a copy shall be submitted to the Ministry before start of any construction work at the site.	"Consent for Establishment" is obtained from Assam State Pollution Control Board wide letter no. WB/GUW/T-2085/11-12/357/933 dated 29/9/2011 and already submitted to the Ministry.
(ii)	Provision shall be made for the housing of 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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	All necessary facilities like temporary house, fuel for cooking, mobile toilets safe drinking facility, etc are provided to construction labour.
(iii)	A First Aid Room will be provided in the project both during construction and operation of the project.	A First Aid Room having Stretcher & medicines is provided.
(iv)	All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.	All the topsoil excavated during construction activities are stored properly and use in horticulture/landscape development within the project site.
(v)	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.	Solid wastes generated in the form of muck during construction phase were disposed taking the necessary precautions for general safety and health aspects of people.
(vi)	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	Soil and ground water samples are being tested.
(vii)	Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.	Necessary precautions like, stored in impervious area, proper disposal, etc. are being taken to avoid leachate from Construction spoils, including bituminous material to contaminate watercourses by leaching into the ground water.

NO.	CONDITIONS	COMPLIANCE STATUS
(viii)	Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the Assam State Pollution Control Board.	Hazardous waste, if any generated, then it will be disposed as per applicable rules and norms with necessary approvals of the Assam State Pollution Control Board.
(ix)	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.	<ul style="list-style-type: none"> <li>- Low sulphur diesel fuel is being used in the Diesel generator set.</li> <li>- Air &amp; noise monitoring were conducted within site to confirm parameters within standards norms.</li> <li>- Monitoring report is enclosed as <b>annexure-I</b>.</li> </ul>
(x)	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken. DG set shall meet the CPCB norms.	Diesel required for the operating DG sets is procured from nearby petrol pump as and when required and is not stored in site. However to obtain permission of Petroleum & explosives Safety Organisation (PESO), Kolkata is under process.
(xi)	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.	- Good conditioned vehicles having Pollution check certificate is hired for the bringing construction materials and operated only during non-peak hours.
(xii)	Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/ ASPCB.	<ul style="list-style-type: none"> <li>- Ambient noise level and ambient air quality is being monitored regularly.</li> <li>- Monitoring report is enclosed as <b>annexure-I</b>.</li> <li>- Control measures like CGI sheet surrounding the site, Good conditioned vehicles, wetting of road, etc. were adopted to reduce ambient air and noise pollution during construction phase.</li> </ul>
(xiii)	Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27 <sup>th</sup> August, 2003.	Fly ash based cement and bricks are being used in the construction.
(xiv)	Ready mixed concrete must be used in building construction.	Ready mixed concrete is being used in building construction.
(xv)	Storm water control and its re-use as per CGWB and BIS standards for various applications.	Rain water harvesting plan is already proposed and will be constructed accordingly.
(xvi)	Water demand during construction should be reduced by use	Ready mixed concrete is being

NO.	CONDITIONS	COMPLIANCE STATUS
	of pre-mixed concrete, curing agents and other best practices referred.	used in building construction to reduce water demand.
(xvii)	Permission to draw ground water shall be obtained from the competent Authority prior to construction/ operation of the project.	As, location of the project site falls in safe category based on Ground Water Resource Estimation (GWRE) 2009, Permission to draw ground water is not required as per the Guidelines/Criteria for evaluation of proposals/ requests for ground water abstraction (with effect from 15/11/2012) of Central Ground Water Authority. However application to CGWA will be made to obtain NOC.
(xviii)	Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.	Dual plumbing line will be installed for the separation of grey and black water.
(xix)	Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.	Necessary arrangements will be done to control flow of showers, toilet flushing and drinking water fixtures.
(xx)	Use of glass may be reduced by up to 40% to reduce the electricity consumption and load on airconditioning. If necessary, use high quality double glass with special reflective coating in windows.	High quality double glass with special reflective coating in windows will be used to reduce the electricity consumption and load on airconditioning.
(xxi)	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.	Roof of the building will be constructed as per recommended in a Report on the energy conservation measures already submitted.
(xxii)	Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all airconditioned spaces while it is aspirational for non-airconditioned spaces by use of appropriate thermal insulation material to fulfill requirement.	Opaque wall shall be constructed as per Energy Conservation Building Code.
(xxiii)	The approval of the competent authority shall be obtained for structural safety of the buildings due to earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightning etc.	- The approval of the the Assam Engineering Institute, Chandmari, Guwahati is obtained vide letter no. AEI/Proof Check/177, dated 02.06.2012 for structural safety of the buildings due to earthquake and approval of Fire department is obtained vide letter no. SFSO/FPW/GH-17/311/11, dated 07.08.2011 for the

NO.	CONDITIONS	COMPLIANCE STATUS
		<p>adequacy of fire fighting equipments.</p> <ul style="list-style-type: none"> <li>- Lighting arrestor will be provided as per the guidelines.</li> </ul>
(xxiv)	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.	Regular supervision is being carried out by qualified personnel.
(xxv)	Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.	Agreed.

## II. Operation Phase:

NO.	CONDITIONS	COMPLIANCE STATUS
(i)	The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Treated effluent emanating from STP shall be recycled/ reused to the maximum extent possible. Treatment of 100% grey water by decentralised treatment should be done. Discharge of unused treated effluent shall conform to the norms and standards of the Assam State Pollution Control Board. Necessary measures should be made to mitigate the odour problem from STP.	<ul style="list-style-type: none"> <li>- Report of certified Sewage Treatment Plant (STP) will be prepared &amp; submitted after installation.</li> <li>- Treated effluent will be recycled/reused for the flushing and gardening purpose.</li> <li>- Regular maintained of STP will be carried out to mitigate odour problem.</li> </ul>
(ii)	The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry / inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.	<ul style="list-style-type: none"> <li>- Solid waste will properly collected and segregated through different colours dust bins.</li> <li>- Biodegradable waste will be composted and use as manure for the plantation.</li> <li>- Dry/inert solid waste will be disposed through Guwahati Municipal Corporation.</li> </ul>
(iii)	Diesel power generating sets proposed as source of back up power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Assam State Pollution Control Board.	<ul style="list-style-type: none"> <li>- Diesel Power generating sets will be kept in closed area having stack height of 2.75 m.</li> <li>- Low sulphur diesel will be used as a fuel.</li> </ul>
(iv)	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	<ul style="list-style-type: none"> <li>- Low noise generating D.G. set will be placed with closed area to control noise levels.</li> <li>- Regular noise monitoring will be carried out.</li> </ul>

NO.	CONDITIONS	COMPLIANCE STATUS
(v)	The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	Adequate green belt will develop and maintained within project site.
(vi)	Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.	Sufficient weep holes in the compound wall will be provided to ensure natural drainage of rain water.
(vii)	Rain water harvesting for roof run- off and surface run- off, as plan submitted should be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 5 mts. above the highest ground water table.	Rain water harvesting will be implemented at the scheme submitted.
(viii)	The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.	Ground water quality is being monitored regularly.
(ix)	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.	<ul style="list-style-type: none"> <li>- Security guard will be appointed to avoid traffic congestion near the entry and exit points.</li> <li>- Around 9792.43 Sq.m. area for 180 no. of cars/vehicles parking spaces will be provided.</li> </ul>
(x)	A Report on the energy conservation measures confirming to energy conservation norms finalize by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submit to the Ministry in three months time.	A report on the energy conservation measures has already been submitted.
(xi)	Energy conservation measures like installation of CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.	<ul style="list-style-type: none"> <li>- CFLs/TFLs for the lighting the areas outside the building will be installed as defined in ASHRAE/IESNA Standard 90.1-2004, Exterior Lighting Section, without amendments.</li> <li>- Used CFLs and TFLs will be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.</li> </ul>
(xii)	Adequate measures should be taken to prevent odour problem from solid waste processing plant and STP.	Regular maintained of STP will be carried out to prevent odour problems during operation phase.
(xiii)	The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.	- Only one building is being constructed.

NO.	CONDITIONS	COMPLIANCE STATUS
(xiv)	Water segregation shall be carried-out at source and organic shall be composted. Adequate space shall be provided within the complex.	<ul style="list-style-type: none"> <li>- Water will be segregated through dual plumbing line.</li> <li>- Organic waste will be composted within site and used as manure for the plantation.</li> </ul>

**PART - B. GENERAL CONDITIONS:**

NO.	CONDITIONS	COMPLIANCE STATUS
(i)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	- Six month compliance report along with monitored data is being submitted regularly to monitoring agencies.
4.	Officials from the Regional Office of MOEF, Shillong who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF should be forwarded to the CCF, Regional office of MOEF, Shillong.	<ul style="list-style-type: none"> <li>- We ensure to provide full cooperation, facilities and documents/data required by the Officials from the Regional Office of MOEF, Shillong during their inspection.</li> <li>- A complete set of all the documents submitted to MoEF is forwarded to the CCF, Regional office of MOEF, Shillong.</li> </ul>
5.	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the Ministry.	Agreed with.
6.	The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Agreed with.
7.	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980, and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities	<p>Statutory clearances like,</p> <ul style="list-style-type: none"> <li>- An approval for storage of diesel from Chief Controller of Explosives is under process.</li> <li>- Approval of Fire Department will be obtained before operation of the project.</li> </ul>
8.	These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.	Agreed with.
9.	The project proponent should advertise in at least two local	- Public notice regarding



NO.	CONDITIONS	COMPLIANCE STATUS
	<p>Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Assam Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a>. The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Shillong.</p>	<p>Environmental clearance was published in the two local Newspapers widely circulated in the region i.e. The North East Times on dated 06/07/2011 and Janasadharan on dated 06/07/2011.</p> <ul style="list-style-type: none"> <li>- A copy of the clearance letter is forwarded to the Regional office of Ministry at Shillong.</li> </ul>
10.	<p>Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.</p>	<p>Agreed with.</p>
11.	<p>A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla 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>	<ul style="list-style-type: none"> <li>- No suggestions/ representations were received from concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban Local Body and the Local NGO.</li> <li>- Clearance letter is placed on the company's website i.e. <a href="http://www.hmgrou.net.in">www.hmgrou.net.in</a>.</li> </ul>
12.	<p>The proponent shall upload the status of compliance of the stipulated EC 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 MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.</p>	<ul style="list-style-type: none"> <li>- Status of compliance of the stipulated EC conditions, including results of monitored data is uploaded on our website i.e. <a href="http://www.hmgrou.net.in">www.hmgrou.net.in</a> and being updated periodically.</li> <li>- Simultaneously is being regularly sent to the Regional Office of MoEF at Shillong and the Assam Pollution Control Board.</li> </ul>
13.	<p>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 BC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.</p>	<p>Agreed with.</p>

**Recognized by Pollution Control Board, Assam.**

**AMBIENT AIR ANALYSIS REPORT**

<b>Date:</b>	06/07/2013
<b>Rep.No.</b>	130706_14010007_01_001

**Name & Address:**

M/s. MAXIM INFRASTRUCTURE &  
REAL ESTATE PVT.LTD.  
OPP. SECRETARIAT PLAY GROUND  
G.S. ROAD, DISPUR,  
GHY-781006, ASSAM.

**Ambient Locations:**

1. Near GS Road (south west direction)
2. Near HT Tower (west direction)
3. Near Deep Bore Well (north east direction)

**Date of Sampling:** 26.06.2013

**Date of Analysis:** 27.06.2013

**Sample Collected By:** M/s. EEEPL

SR.NO.	PARAMETERS	LIMITS	RESULTS		
			1	2	3
1.	Duration of Survey (hours)	-	8	8	8
2.	PM <sub>10</sub> (microgram / m <sup>3</sup> )	100	58	60	56
3.	PM <sub>2.5</sub> (microgram / m <sup>3</sup> )	60	38	42	38
3.	NO <sub>x</sub> (microgram / m <sup>3</sup> )	80	18.5	19.3	18.2
4.	SO <sub>2</sub> (microgram / m <sup>3</sup> )	80	23.7	21.9	22.1

**Method of Analysis Followed: I.S. 5182 Part I to XVIII**

**Opinion :** All Parameters are within permissible limit

**En-Vision Enviro Engineers Pvt Ltd, Guwahati**

  
(Quality control Manager)

LAB/FM/07

End of Report

**Recognized by Pollution Control Board, Assam.**

**FUGITIVE EMISSION ANALYSIS REPORT**

Date:	06/07/2013
Rep.No.	130706_14010007_04_001

**Fugitive Locations:**

1. Near Main Gate.

**Name & Address:**

M/s. MAXIM INFRASTRUCTURE &  
REAL ESTATE PVT.LTD.  
OPP. SECRETARIAT PLAY GROUND  
G.S. ROAD, DISPUR,  
GHY-781006, ASSAM.

**Date of Sampling:** 26/06/2013

**Date of Analysis:** 27/06/2013

**Sample Collected By:** M/s. EEEPL

SR.NO.	PARAMETERS	LIMITS	RESULTS
			1
1.	Duration of Survey (hours)	-	8
2.	Fugitive (microgram / m <sup>3</sup> )	1000	813

**Method of Analysis Followed: I.S. 5182 Part I to XVIII**

**Opinion :** All Parameters are within permissible limit

**En-Vision Enviro Engineers Pvt Ltd, Guwahati**



**(Quality control Manager)**

**End of Report**

**LAB/FM/03**

**Recognized by Pollution Control Board, Assam.**

**NOISE LEVEL MEASUREMENT ANALYSIS REPORT**

Date:	06/07/2013
Rep.No	130706_14010007_06A_01

**Name & Address:**

M/s. MAXIM INFRASTRUCTURE &  
REAL ESTATE PVT.LTD.  
OPP. SECRETARIAT PLAY GROUND  
G.S. ROAD, DISPUR,  
GHY-781006, ASSAM.

**Name of location:**

1. Near GS Road (south west direction)
2. Near HT Tower (west direction)
3. Near Deep Bore Well (north east direction)

**Date of Sample Collection:** 26.06.2013

**Sample Collected By:** M/s. EEEPL

Code	Time	Unit	RESULTS		
			1	2	3
N <sub>1</sub>	11:10 a.m. to 11:40 a.m.	dB(A)	52	59	56

**Opinion :** All Parameters are within permissible limit

**En-Vision Enviro Engineers Pvt Ltd.**



**(Quality Manager)**

**End of Report**

LAB/FM/08

**Recognized by Pollution Control Board, Assam.**

**STACK ANALYSIS REPORT**

Date: 06/07/2013

Rep.No. 130706\_14010007\_02\_001

**Name & Address:**

M/s. MAXIM INFRASTRUCTURE &  
REAL ESTATE PVT.LTD.  
OPP. SECRETARIAT PLAY GROUND  
G.S. ROAD, DISPUR,  
GHY-781006, ASSAM.

**Stack Description:**

Stack attached to DG 125 KVA.

**Date of Sampling:** 26/06/2013

**Date of Analysis:** 27/06/2013

**Sample Collected By:** M/s. EEEPL

CODE	PARAMETERS	LIMITS	RESULTS
S <sub>1</sub>	Temperature of Flue Gas (°C)	-	140
S <sub>2</sub>	Average Flue Gas Velocity (m/sec)	-	5.03
S <sub>3</sub>	Suspended Particular Matter (mg / Nm <sup>3</sup> )	50	32.1
S <sub>4</sub>	NO <sub>x</sub> (ppm)	50	19.6
S <sub>5</sub>	SO <sub>2</sub> (ppm)	100	22.2

**Method of Analysis Followed:** I.S. 11255, part I to IV

**Opinion :** All Parameters are within permissible limit

En-Vision Enviro Engineers Pvt Ltd, Guwahati.



(Quality Manager)

**End of Report**

LAB/FM/04



EIA PROJECT, GAUHATI UNIVERSITY  
DEPARTMENT OF CHEMISTRY  
Guwahati 781014, Assam (INDIA)

Telephone 91 (0) 361 2573535 (Office)  
2571529 (Res) 9864031987(m)  
Fax 91 (0) 361 2570599  
Email krishna2604@s-fy.com, kgbhattacharyya@gmail.com

Reference: 130716\_14080032\_0  
Date: 19 July 2013

TEST REPORT

Name & Address of Client	En-vision Enviro Engineers Pvt. Ltd. 203, G-Tower, Shankaradwar Complex, Sagrapura, Surat-395002, Gujarat
Name of the project or Sample ID	Project situated at Guwahati, District Kamrup, Assam
Description of sample	Water collected from Bore Well located at site
Date of Sampling	18/07/2013   Date of receipt of Sample : 19/07/2013
Sample Collected by	En-vision Enviro Engineers Pvt. Ltd. Team

NO.	PARAMETERS FOR WATER	UNIT	RESULT	REFERENCE METHOD	DETECTABLE LIMIT
1.	pH	--	7.7	Potentiometric	0.01
2.	Total TDS	mg/L	11	Nephelometric	0.03
3.	TDS	mg/L	107.5	Dried at 100°C	0.1
4.	Total Hardness	mg/L	113.0	EDTA Titrimetric	0.1
5.	Calcium	mg/L	24.55	EDTA Titrimetric	0.01
6.	Magnesium	mg/L	19.09	EDTA Titrimetric	0.1
7.	Total Alkalinity	mg/L	200.0	Titrimetric	0.1
8.	Chlorides	mg/L	14.28	Argentometric	0.01
9.	Sulphates	mg/L	21.63	Turbidimetric	0.05
10.	Nitrates	mg/L	1.65	Spectrophotometric	0.01
11.	Fluoride	mg/L	2.13	SPADNS Method	0.01
12.	Residual chlorine	mg/L	BDL	Iodometric	1.0
13.	Copper	mg/L	0.059	AAS	0.0001
14.	Iron	mg/L	0.148	AAS	0.0001
15.	Cadmium	mg/L	BDL	AAS	0.0001
16.	Lead	mg/L	0.020	AAS	0.0001
17.	Zinc	mg/L	0.0341	AAS	0.0001
18.	Chromium	mg/L	BDL	AAS	0.0001
19.	Manganese	mg/L	0.054	AAS	0.0001
20.	Selenium	mg/L	BDL	AAS	0.0001

Note:  
For Gauhati University.

*K G Bhattacharyya*  
K G Bhattacharyya  
Coordinator, EIA project

*18/07/2013*



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Reference: 130713\_14080032\_0  
Date: 19 July 2013

TEST REPORT

Name & Address of Client	En-vision Enviro Engineers Pvt. Ltd. 208, G-Tower, Shankhleshwar Complex, Sagrampara, Surat-395002, Gujarat		
Name of the project or Sample ID	Project situated at Guwahati, District Kamrup, Assam		
Description of sample	Water collected from Bore Well located at site		
Date of Sampling	19/08/2013	Date of receipt of Sample	20/08/2013
Sample Collected by	En-vision Enviro Engineers Pvt. Ltd. Team		

NO.	PARAMETERS FOR WATER	UNIT	RESULT	REFERENCE METHOD	DETECTABLE LIMIT
1.	Dissolved Oxygen	mg/L	4.8	Aphe modification	0.1
2.	BOD	mg/L	8.1	5 Day at 27°C	0.1
3.	COD	mg/L	7.3	Dichromate-acid	0.1

Note:

For Gauhati University,

*K G Bhattacharyya*  
K G Bhattacharyya  
(Coordinator, EIA project) 26/08/2013

Coordinator  
EIA Project  
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Reference: 130718\_14080032\_0  
 Date: 19 July 2013

**TEST REPORT**

<b>Name &amp; Address of Client</b>	Envision Enviro Engineers Pvt. Ltd. 218, G-Tower, Shrikrishnwar Complex, Sagrampura, Surat-395002, Gujarat
<b>Name of the project or Sample ID</b>	Project situated at Guwahati, District Kamrup, Assam
<b>Description of sample</b>	Soil collected from project site
<b>Date of Sampling</b>	16/07/2013
<b>Date of receipt of Sample</b>	20/07/2013
<b>Sample Collected by</b>	Envision Enviro Engineers Pvt. Ltd. Team

NO.	PARAMETERS FOR SOIL	UNIT	RESULT	REFERENCE METHOD	DEFECTABLE LIMIT
1.	pH		8.4	Potentiometric	0.01
2.	Soil type	--	Loamy sand		
	Sand	%	84.6	Hydrometer	0.1
	Clay	%	7.1	Hydrometer	0.1
	Silt	%	8.0	Hydrometer	0.1
3.	Nitrogen	Kg/ha	313.6	Alkaline KMnO4	0.1
4.	Phosphorus	mg/ha	79.0	Olsen Method	0.1
5.	Potassium	mg/ha	19.5	NH4- Acetate Extraction	0.1
6.	Electrical conductivity	mS/cm	0.17	Conductivity bridge	0.01
7.	Water holding capacity	%	16.3	Lab method	0.1
8.	Organic matter	%	3.7	Titrimetric	0.01
9.	Salinity	mS/cm	0.17	As EC of 1:5 soil-water suspension	0.01
10.	Iron	g/kg	4.21	AAS	0.0001
11.	Copper	mg/kg	45	AAS	0.0001
12.	Nickel	mg/kg	38	AAS	0.0001
13.	Manganese	mg/kg	542	AAS	0.0001
14.	Zinc	mg/kg	63	AAS	0.0001
15.	Sodium absorption ratio	mol/kg	0.12	Computation	0.01
16.	Chlorides	mg/kg	142.8	Argentometric	0.1

Note:

For Guwahati University,  
 K G Bhattacharyya  
 Coordinator, EIA project

*(Signature)*