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To  
The Joint Director(s)  
Ministry of Environment & Forest  
North Eastern Regional Office, Shillong

Date: 14.08.2014

Sub: Status of Compliance of Environmental Stipulations - Regarding

Sir,

With reference to above, enclosed, please find herewith the detail status of compliance of Environment Stipulations as set by SEIAA for the period 01.12.2013 to 31.05.2014, for your kind information and record please.

Thanking you.

Yours Sincerely

For Green Valliey Industries Ltd.

Authorised Signatory



Encl.

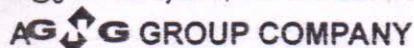
1. Status of compliance report 01.12.2013 to 31.05.2014
2. AAQ Monitoring report
3. Stack Monitoring report
4. Ambient Noise level report

Cc:

✓ To Member Secretary, MSPCB, Shillong

### Green Valliey Industries Limited

Regd. Office and Plant : Vill. Nongsning, P.O. Chienruphi, PS. Khiehnriat, Dist. Jaintia Hills, Meghalaya - 793 200  
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**STATUS OF COMPLIANCE OF ENVIRONMENT STIPULATIONS AS SET BY SEIAA FOR M/S GREEN  
VALLEY INDUSTRIES LTD FOR THE PERIOD ENDING 1<sup>ST</sup> Dec 2013 TO 31st May 2014**

Introduction: M/S Green Valley Industries Ltd was given environmental clearance for construction of an integrated cement plant of 1300 TPD expandable to 2600 TPD along with 2x10 MW Captive Power Plant at village Nongsning, Chiehruph, Jaintia Hills, Meghalaya on 25<sup>th</sup> March 2009.

**STATUS OF COMPLIANCE OF ENVIRONMENT STIPULATIONS :**

**A. SPECIFIC CONDITIONS:**

Sl. No	Conditions	Status
i	Dust extraction and suppression system along with water sprinklers shall be provided for controlling fugitive dust during transportation, in coal storage area and other vulnerable area of the plant.	Water sprinkling system incorporated at Lime Stone crusher Area. Water Tanker is been used on regular basis for water sprinkling, from main road to plant areas.
ii	Water requirement shall be met from the existing water source which would be restricted to 1220 m <sup>3</sup> /day. No ground water shall be extracted for the DG set at any stage	Water is mainly drawn from the Umthiu stream flowing near the factory. GVIL had permission to draw water from the stream from both village Dorbar as well as from state PHE Dept.
iii	Closed cycle cooling system with induced draft cooling towers shall be provided for the DG set.	Have been provided.
iv	The treated effluents shall be re-circulated and reused within the plant area. There shall be no waste water discharge outside the plant boundary.	All water used for plant operation are re-circulated and reused, through water cooling tower.
v	Rainwater harvesting shall be practiced. A detailed scheme for rain water harvesting to recharge the ground water aquifer shall be prepared in consultation with Central Ground water Authority/State Ground Water Board and a copy of the same shall be submitted within six months to the monitoring agency.	In touch with the Central Ground water Board for their advice and guidance.
vi	Leq of noise level in the DG set premises shall be limited to 75dBA and regular maintenance of equipment should be undertaken. For personnel working in high noise areas, personal protection devices should be provided.	The DG Set is not in operation since long time back.

	Acoustic hoods shall be provided in respect of all equipments that have potential to contribute to noise pollution.	
vii	A stack of appropriate height shall be provided with continuous on-line monitoring system in respect of DG set considering the dispersion sensitivity and geographical location of the plant. The data collected shall be analysed and submitted regularly to the Meghalaya State Pollution control Board and SEIAA.	A stack of 48m height has been provided
viii	The stack emission from various sources shall not exceed 50mg/Nm <sup>3</sup>	This has been maintained strictly, as per norms.
ix	Bag house/filters shall be provided to control the fugitive emissions during loading and unloading of raw materials/intermediate and finished products	A Bag House is been installed at Fly Ash feeding point, to minimize the emission.
x	The project proponent shall store all the raw materials except limestone in covered sheds to control fugitive emissions. The coal storage facility should have water sprinkling facility in order to arrest fire hazard, if any.	Have been done
xi	The locations of ambient air quality monitoring stations shall be set up as per statutory requirement in consultation with the Meghalaya State Pollution Control Board (MSPCB) and additional stations shall be installed, in the downwind direction as well as where maximum ground level concentrations are anticipated.	Locations for AAQ monitoring stations have been identified by MSPCB officials.
xii	Total water requirement shall not exceed 1220 m <sup>3</sup> /day. The project authorities shall install sewage treatment plant of minimum 80 m <sup>3</sup> /day capacity to treat domestic sewage and treated sewage shall be utilized for green belt development. No waste water shall be discharged outside the premises and zero discharge shall be ensured. Surface water restricted to a maximum of 1220 m <sup>3</sup> /day shall be drawn from perennial stream of Umtiling flowing nearby and no surface runoff from the factory premises shall either reach/contaminate Um-lunar or any other stream flowing at a site situated to the west of the industrial location.	Daily water consumption is below the prescribed level. Our staff colony work is under process. STP will be provided once the residential/ staff colony is set up. Septic tanks have been provided for existing temporary residential rooms.
xiii	The project proponent shall make all out effort to use high calorific value hazardous waste in the kiln towards which necessary provision shall be made.	Under consideration of top management.
xiv	The project proponent have not proposed procurement/development of any captive mine in respect of limestone requirement which is estimable to be high. The project proponent shall take expedient steps to procure limestone's mining leases covering such	Work in progress

	<p>mining area that would be necessary to sustain the limestone requirement of the cement plant. The entire process shall be completed by the time the industry becomes operational and the project proponent shall source its limestone's requirement to run its industry only from such mining leases. The project proponent shall compulsorily take all such steps as are necessary to discourage procurement of limestone that would tend to promote unscientific mining and consequential environmental degradation.</p>	
xv	<p>The project proponent shall transport raw materials and industrial products through covered means.</p>	<p>Being carried out.</p>
xvi	<p>The project proponent shall secure a certificate from the Principal Conservator of Forests, Meghalaya that the core project area is a non-forest land within 3 months of issue of prior Environmental clearance.</p>	<p>Certificate from PCCF, Meghalaya already obtained.</p>
xvii	<p>Thirty three percent of the core project area (17ha) shall be developed as green belt as per the guidelines of central pollution control board to mitigate the effects of fugitive emission. The program ought to be completed within 5 years from the date of issue of prior Environmental Clearance adhering to time and cost schedule detailed by the project proponent through incurring and expenditure of Rs. 9.5 Lakhs as stated by him.</p>	<p>More than total 3400 nos of bamboos, champa trees and flowering plants have been planted. The tree plantation and green belt development is being continued to achieve the target.</p>
xviii	<p>The project proponent shall provide a Health care Center with all emergency medicines and ambulance along with full time doctors. There shall be a casualty ward that would be operational round the clock duly attended by a suitable doctor. Occupational health surveillance of the workers shall be carried out on a regular basis in terms of their EMP document and records shall be maintained as per the Factories Act.</p>	<p>Health Centre already functioning with company appointed full time Medical Officer with trained lab technician, nurse and helper. Health register has been maintained.</p>
xix	<p>Measures shall be taken to prevent impact of particulate emission/fugitive emission, if any, from the proposed plant on the surrounding private forest areas depicted in their land use study.</p>	<p>Work in progress.</p>
xx	<p>The project proponent shall raise conservation plots (over an area not less than 2ha) complete with green house, mist chamber etc. in respect of plants of conservation value in consultation with Botanical survey of India complete with cost and activity schedule within 6 months from the date of issue of prior Environmental Clearance and initiate implementation immediately</p>	<p>Scientists from Botanical survey of India had visited the site.</p>

	thereafter. A copy of the conceptual shall be submitted to the monitoring agency.	
xxi	The project proponent shall sponsor research and development for conservation of threatened category of species occurring locally such as <i>Nepenthes khasiana</i> and <i>Calamus khasiana</i> to be carried out by an appropriate research or academic institution located in Meghalaya within a year of issue of prior Environmental Clearance. The research project shall be instituted at an expenditure of a minimum of Rs. 5 lakhs per year spread over atleast 3 years.	Will be done
xxii	A plan for conservation of wild fauna in consultation with a reputed institution such as Wildlife Institute of India, Dehradun shall be prepared and implemented. Such conservation plan drawn in respect of wildlife would be submitted to the monitoring agency within a maximum of 1 year from the date of issue of prior Environmental Clearance.	Experts from Centre for biodiversity and natural resources conservation, Assam University had visited the campus. Plan already submitted.
xxiii	A sum of Rs. 2302 lakhs (being 9% of capital cost of infrastructure of the project) shall be spent by the project proponent towards environment protection. A further sum of Rs. 15 lakhs per year shall be spent by the project proponent towards economic development of the area till the project subsists.	Work in progress
Xxiv	The pollution control units/processes to be installed shall be vetted by experts from a reputed institute such as NEERI, IIT and NIT.	Have been done.
xxv	The project proponent shall ensure monitoring of biodiversity component at the interval of every five years by an independent expert agency to assess the impact of the project thereupon. The report shall be submitted to the monitoring agency.	Discussed with the experts from Centre for Biodiversity and natural resources conservation, Assam University for their guidance and help in this matter.

**GENERAL CONDITIONS:**

Sl.No	Conditions	Status
i	The project proponent shall abide by the stipulations (as amended from time to time) of the MSPCB/State government or any other statutory body.	GVIL is abiding by the stipulations.
ii	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment and Forests or their nominated authority as the case may be. In case of deviation or alteration in the	GVIL will follow the guidelines.

	<p>project proposal from those submitted to this committee for clearance a fresh reference shall be made to the SEAC through SEIAA to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.</p>	
iii	<p>The gaseous emissions (SO<sub>2</sub>, NO<sub>x</sub>) and particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no point of time, the emissions shall exceed the prescribed limits. Interlocking system of equipment shall be chosen such that in the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.</p>	<p>GVIL is maintaining the standards prescribed by the authorities. Interlocking system of equipments has been provided.</p>
iv	<p>The industry shall undertake the following waste minimization measures: Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. Use of closed pneumatic system for transport of fine material. All venting systems shall be connected with dust or particulate arresting equipments. Dust/particulate matter collected in pollution control equipments shall be reused.</p>	<p>-Pneumatic dust conveyer system to reuse coal dust with hot is under progress. -Clinker conveyor system a) Dust collector installed b) Clinker discharge to stock pile, dust collector installed</p>
v	<p>Fugitive emissions in the work zone environment, product and raw materials storage area shall be regularly monitored. The emissions shall conform to the limits imposed by the SPCB/CPCB.</p>	<p>Being carried out.</p>
vi	<p>The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures such as acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986, Environment (Protection) Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time)</p>	<p>Noise level is within the prescribed standards .</p>
vii	<p>The project authorities shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 as amended and Hazardous Waste (Management Handling) Rules, 1989 as amended from time to time. Authorization from the MSPCB shall be obtained for collection, treatment, storage and disposal of hazardous wastes.</p>	<p>Authorization from the MSPCB has been obtained for collection, storage and disposal of hazardous wastes.</p>
viii	<p>Rainwater harvesting measures shall be done within the premises. Ground water recharge structures shall be</p>	<p>in touch with the Central Ground water Board for their</p>

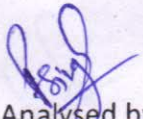
	installed around the plant area in consultation with local authorities to maintain the ground water table.	advice and guidance.
ix	The company shall undertake eco-development measures including community welfare measures in the project area.	Environment management plan (EMP) has already been framed and is under implementation.
x	A separate Environmental management cell equipped with full fledged laboratory facilities as detailed by the project proponent shall be set up to carry out the Environmental Management and monitoring functions	Separate Environment management cell has been constituted. Laboratory is under process of setting up to carry out the Environmental Management and monitoring functions.
xi	All pollution control equipment in STP shall be manned full time by trained personnel.	Will be done shortly.
xii	The implementation of the project vis-a-vis environmental action plans shall be monitored by the Regional office, Ministry of Environment & Forest duly assisted by the SPCBA six monthly status report shall be submitted to the stated institutions and state Environment impact Assessment Authority/SEAC apart from posting the same on the website of the company.	A six monthly status report is being regularly sent.
xiii	The project proponent will make provisions to keep standby spares at the plant site of pollution control units/devices during operation of the cement plant.	We have Reverse Air Bag House in pyro section, which has got additional capacity to arrest dust.
xiv	The project proponent will arrange to carry out regular maintenance of all the pollution control Units/devices to ensure its sufficient performance all the time.	Our maintenance team is regularly doing the needful to keep the pollution control equipments in condition & ensure sufficient performance all the time.


**AMBIENT AIR QUALITY MONITORING**

Sampling Location: Near Guest House  
Date of sampling: 04.03.2014 to 05.03.2014  
Duration of Sampling: 24-hrs  
Ambient Temperature: Maximum – 20.4 °C  
Minimum – 16.7 °C  
Relative Humidity: Maximum – 89%  
Minimum – 78%

Parameters	Observed values ( $\mu\text{g}/\text{m}^3$ )	Permissible Limits ( $\mu\text{g}/\text{m}^3$ )
PM10	52.5	100
PM2.5	30.45	60
SO <sub>2</sub>	ND	80
NO <sub>x</sub>	18.60	80

Remarks: The parameters tested were found to be within the permissible limits.

  
Analysed by:

  
Verified by:

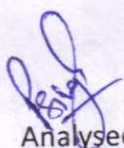


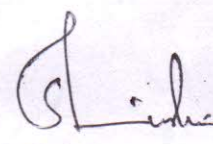
**AMBIENT AIR QUALITY MONITORING**

Sampling Location: Near CCR  
Date of sampling: 06.03.2014 to 07.03.2014  
Duration of Sampling: 24-hrs  
Ambient Temperature: Maximum – 20.4 °C  
Minimum – 16.7 °C  
Relative Humidity: Maximum – 89%  
Minimum – 78%

Parameters	Observed values ( $\mu\text{g}/\text{m}^3$ )	Permissible Limits ( $\mu\text{g}/\text{m}^3$ )
PM10	71.80	100
PM2.5	49.75	60
SO <sub>2</sub>	18.45	80
NO <sub>x</sub>	31.55	80

Remarks: The parameters tested were found to be within the permissible limits.

  
Analysed by:

  
Verified by:

AMBIENT AIR QUALITY MONITORING

Sampling Location: Near Staff Quarter

Date of sampling: 08.03.2014 to 09.03.2014

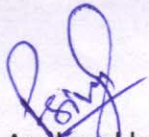
Duration of Sampling: 24 hrs

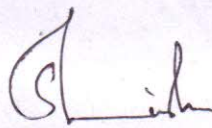
Ambient Temperature: Maximum - 21.5 °C  
Minimum - 17.5 °C

Relative Humidity: Maximum - 97%  
Minimum - 71%

Parameters	Observed values ( $\mu\text{g}/\text{m}^3$ )	Permissible Limits ( $\mu\text{g}/\text{m}^3$ )
PM10	60.80	100
PM2.5	31.45	60
SO <sub>2</sub>	ND	80
NO <sub>x</sub>	24.40	80

Remarks: The parameters tested were found to be within the permissible limits of Stack Emission Standards.


  
Analysed by:

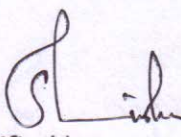
  
Verified by:

**STACK MONITORING**

Sl. No.	Date of Sampling	Name of Stack	Parameter	Observed values (mg/Nm <sup>3</sup> )	Permissible Limits (mg/Nm <sup>3</sup> )
1	14.03.2014	Kiln & Raw Mill	Particulate Matter (PM10)	43	50.0
2	14.03.2014	Coal Mill BF		40	50.0
3	14.03.2014	Carrier ESP		34	50.0
4	15.03.2014	Cement Mill BF		39	50.0
5	15.03.2014	Crusher BF		36	50.0

Remarks: The parameters tested were found to be within the permissible limits of Stack Emission Standards.

  
Analysed by:

  
Verified by:


**AMBIENT NOISE LEVEL**


Sl. No.	Date of Monitoring	Location	Observed values [dB(A)]		Standards [dB(A)]	
			Day	Night	Day	Night
1	17.03.2014	Main Gate	52.5	43.2	75	70
2	17.03.2014	HeD Block	50.7	41.3	75	70
3	17.03.2014	Staff Colony	61.6	49.6	75	70

Noise Level Leq (day) - 61.55 dB

Noise Level Leq (night) - 54.31 dB

Remarks: The parameters tested were found to be within the permissible limits of Noise Level Standards.

  
Analysed by:

  
Verified by: