## **COMPLIANCE REPORT**

Project Code - UP-2-37-90

NAME OF PROJECT Indorama India Private Ltd Jagdishpur

**CLEARANCE LETTER NO.** J-11011/185/2010-IA II(I) dated 24.1.2011 & letter No. J-11011/185/2010-

IA-II(I) dated 28.2.2011 related to customised fertiliser plant.

## PERIOD OF COMPLIANCE REPORT October-22 - March -23

Customized fertiliser plant is commissioned in Nov./Dec.2011. All the conditions specified in the Environment clearance letter issued at the time of project stage had been completed & complied.

Detailed compliance status of EC (J-11011/185/2010-IA-II(I) issued on 28.2.2011) of the project is given here under.

## A. SPECIFIC CONDITIONS:

SNo	CONDITION	COMPLIANCE STATUS
i	Bag filter followed by high efficiency scrubber alongwith stack height shall be provided to Granulator & mixer and dryer stack to control particulate matter within 50 mg/Nm3, ammonia within 25mg/Nm3, acid mist within 5 mg/Nm3 and NOx within 50 mg/Nm3.Bag filter followed by scrubber, and adequate stack height shall be installed in cooler to control particulate matter within 50 mg/Nm3.At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Stack emission shall be monitored, and reports submitted to Regional Office at Lucknow, UP. Efficiency of all the air pollution control devices shall be checked regularly.	Dust collection facility i.e. cyclone separators and dust collectors for recovery are provided. Emissions are well within the prescribed limit. No fuel is used in customized fertilisers process, however we use the steam from existing urea plant for the same.
ii	Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry wide G.S.R.No. 826(E) dated 16 <sup>th</sup> September,2009. The level of PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> and Ammonia shall be monitored in the ambient air and displayed at a convenient location near the main gate of the	Regular monitoring of Ambient air quality is being done from 3 Nos. Air monitoring stations .In the year 2019 & 2020,we have developed one station among the three stations for

	company and at important public places. The company shall upload the results of monitored data on its 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 U. P. Pollution Control Board (UPPCB).	continuous online ambient air quality monitoring system of PM-10,PM-2.5,NH3,NOX and SOX parameters, at down wind direction.  Compliance reports having monitoring data are being uploaded on company's website, on six monthly basis.
iii	In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/ materials, multi cyclone separator and water sprinkling system. Dust separation system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. Shall be regularly monitored. The emissions should conform to the limits stipulated by the UPPCB.	The technology has inherent design features for minimum gaseous emissions and dust collection through the use of cyclone separators/filters washing column. In the technology the raw material consumed have no decomposition reaction at the processing temperature and the gaseous emissions are only hot air that is circulated for drying which carries away the moisture.
iv	For further control of fugitive emissions, following steps shall be followed:  a. Closed handling system shall be provided for chemicals.  b. Reflux condenser shall be provided over reactor.  c. System of leak detection and repair of pump/pipeline based on preventive maintenance.  d. The acids shall be taken from storage tanks to reactors through closed pipelines. Storage tanks shall be vented through trap receiver and condenser operated on chilled water.  e. Cathodic protection shall be provided to the underground solvent storage tanks.	- The initial process follows a closed process system with all the raw material consumption in the process without any gaseous emissions. Trace dust generated if any, is collected through cyclone separators and no further control measure is required.  Looking for clean Environment , no acid is being used in the process .
V	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.	Not applicable, as there is no DG set required for the customised fertiliser plant operation.

vi	Total fresh-water requirement from ground water source shall not exceed 60 m3 /day and prior permission shall be obtained from CGWB/SGWB and a copy submitted to the Ministry's Regional Office at Lucknow within 3 months of issue of the environment clearance letter.	The ground water requirement is not exceeding 60 m3/day and the requirement is fulfilled from the existing approved quantity of urea plant. So, no new permission is required from CGWB/SGWB.  Presently, we are using the surface water from River Gomati for process.
vii	The wash water from scrubber shall be recycled/ reused in the process and sludge collected at bottom of scrubber shall be dried and recycled in the process. Efforts shall be made to reduce wash water and bottom sludge of scrubber. Sewage shall be treated in existing sewage treatment plant (STP) and treated water shall be recycled and reused. No treated process effluent shall be discharged outside the premises. As proposed "Zero" discharge shall be ensured.	The water in scrubber which traps dust is recycled in the operation. As proposed "Zero" discharge is maintained in process & sewage water generated from customised fertiliser plant is treated along with existing STP facilities.
viii	The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling, and Transboundary Movement) Rules, 2008 and amended as on date for management of hazardous Wastes and prior permission from UPPCB shall be obtained for disposal of solid/hazardous waste in the TSDF. Measures shall be taken for fire fighting facilities in case of emergency.	In compliance. Small quantity of Used oil is generated from the Customised Fertiliser plant. Expected additional quantity of used oil has been increased in application of Hazardous waste authorization which is valid up to 20.02.2024.
ix	The company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All Transportations of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.	Not applicable as no Hazardous chemical is handled in customised fertiliser plant operation.
х	The company shall undertake following waste minimization measures- a. Metering and control of quantities of active ingredients to minimise waste. b. Reuse of by-products from the process as raw materials or as raw material substitutes in other process. c. Use of automated filling to minimize spillages. d. Use of Close Feed system into batch reactors.	Raw material quantity is measured for use of specific customized fertiliser process. Spillage material is reused in the process.

	e. Venting equipment through vapour recovery	
	system.  f. Use of high-pressure hoses for equipment clearing to reduce wastewater generation.	
xi	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the OISD 117 norms.	In compliance. We have taken appropriate actions for taking care of fire hazards & its control in line with NFPA/TAC/OISD standards.
xii	All the workers shall be regularly monitored for occupational health for relevant parameters and records maintained.	Employees of customized fertiliser are covered in existing practices of regular medical check-up of Urea plant employees
xiii	Green belt shall be developed in 33% of the plant area. Selection of plant species shall be as per the CPCB guidelines.	In compliance. Customized Fertiliser plant is located inside the existing urea plant complex and 33% greenbelt area of total land is maintained.
xiv	Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.	In compliance. Appropriate infrastructure & facilities have been provided to construction labour.

## **B. GENERAL CONDITIONS**

SNo	CONDITION	COMPLIANCE STATUS
i	The project authorities shall strictly adhere to the	Noted.
	stipulations made by the U.P. Pollution Control Board.	
ii	No further expansion or modifications in the plant	We agree. A letter for
	shall be carried out without prior approval of the	operation of the customised
	Ministry of Environment and Forests. In case of	fertiliser plant has already
	deviations or alterations in the project proposal from	submitted at MOEF, New
	those submitted to this Ministry for clearance, a fresh	Delhi on 24.8.2011 & UPPCB
	reference shall be made to the Ministry to assess the	on 23.8.2011 for information
	adequacy of conditions imposed and to add	& records.
	additional environmental protection measures	
	required, if any	

iii	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	In Compliance. Regular monitoring of Ambient air quality is being done from 3 Nos Air monitoring stations. In the year 2019 & 2020, we have developed one station among the three stations for continuous online ambient air quality monitoring system of PM-10, PM-2.5, NH3, NOX and SOX parameters, at down wind direction.  Existing AAQ stations have been reviewed by the SPCB vide their letter No. 330/Air monitoring/08-09 dated 6.8.2008  Further on our request, the location of air monitoring stations have been reviewed by the SPCB and found satisfactory vide their letter no.1025/i-2/c/11-12 dated 27.01.12.
iv	The overall noise levels in and around the plant area shall be kept well within the standards by providing	Moreover, on our request, these are again reviewed by the SPCB vide their letter no.638/I-2/11-12 dated 30.11.2012 based on which AAQ station No3 has been relocated as per recommendation of SPCB.  In Compliance. Overall noise level for day/ night
	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 Environment (Protection) Act, 1986 Rules 1989 viz. 75 dBA (day time) and 70 dBA (night time.)	time is 51.66/44.50 dB during the period October - 22 – March -23 which is well within the specified norms.
V	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.	In Compliance. Ground water department (GWD) informed vide their letter No. 77/GW khand-5-Sul/RWH dated 6.5.2005 that rain- water

		harvesting system installed at Jagdishpur will not be fruitful due to sufficient water table in this area. Letter from GWD already submitted at SPCB. However, a recharge pit and rainwater harvesting scheme of sufficient area have been installed for aquifer recharge of rain- water.
vi	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Preemployment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	We agree. Customised fertiliser plant employees are also covered in existing scheduled training programme on safety & health aspects including chemical handling and fire hazards of Urea plant.
vii	Usage of Personnel Protection Equipments (PPEs) by all employees/ workers shall be ensured.	In Compliance
viii	The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.	In Compliance
ix	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area CSR activities shall be undertaken by involving local villages and administration.	In compliance. Indo Gulf Jan Seva Trust (IGJST) is working since inception for upliftment and welfare of nearby rural population like medical care, providing artificial limbs to handicapped, eye care camps, leprosy eradication etc. In addition to it, IGJST also extends their heling hands in collaboration with NGOs for development of Infrastructure like School, Kharanza etc. in villages and improvement of their

		livelihoods. The same practices are continued after customised fertiliser plant operation.
x	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement on the environment.	In compliance. Please refer point No. IX
хi	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	In Compliance. Environment management cell is in place with well equipped laboratory.
xii	Company shall earmark adequate funds toward capital cost and recurring cost to implement the conditions stipulated by the Ministry of Environment and Forests as well the State Government along with the implementation schedule for all the conditions stipulated herein and submitted to regional office of MOEF at Lucknow. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.	We agree.
xiii	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal.	Not applicable, since no suggestion/representation from nearby Panchayat/NGO was received.
xiv	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEFCC, the respective Zonal Office of CPCB and the U.P. Pollution Control Board. A Copy of Environmental Clearance and six-monthly compliance status report shall be posted on the website of the company.	In compliance
xv	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated shall be submitted 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	We agree. Features of pollution status for customised fertiliser plant are incorporated in Environment Statement of urea plant, which is submitted regularly to State

xvii	The 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	Delhi, through our letter dated 08.03.2011.  We agree. Customized fertilizer has come under production and information
xvi	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 UPPCB/ Committee and may also be seen at website of the Ministry at <a href="http://envfor.nic.in">http://envfor.nic.in</a> . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers 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 shall be forwarded to the concerned Regional Office of the Ministry.	In compliance. We have published the information regarding the issuance of Environment Clearance & website of the ministry in two local news papers (Dainik Jagaran & The Hidustan Times-Hindi edition) on 05.03.2011 & 06.03.2011. The copy of the same is forwarded to the MOEF regional office, Lko as well as Central office, New
	clearance conditions and shall also be sent to the respective Regional Offices of MoEFCC by e-mail.	pollution control board and MoEFCC.