

Acknowledgement Copy



December 04, 2018

To,
Member Secretary
Goa State Pollution Control Board,
Nr. Pilerne Industrial Estate,
Opp. Saligao Seminary,
Saligao-Bardez
Goa 403511

Annexure
04/12/2018
Goa State Pollution Control Board
Opp. Saligao Seminary
Saligao, Bardez Goa

Dear Madam,

Subject: Submission of 19th Compliance Status Report of EC conditions including results of monitored data for the period April 2018 to September 2018

Reference: EC no. F.No. J-11011/217/2008-IA-II(I) dated 1st September, 2009 and Corrigendum dated 30th October, 2009 issued by Ministry of Environment and Forests, New Delhi.

With reference to above and in compliance with the stipulated conditions mentioned in the Environmental Clearance (EC) issued to us, we are submitting herewith the 19th Compliance Status Report of the stipulated EC conditions including results of monitored data for the period April 2018 to September 2018. The soft copy of the same is also sent to your office by e-mail at goapcb@gspcb.in and the same is being uploaded on our Company's website at www.zuari.in.

In compliance with the EC conditions, the Compliance Status Report is also submitted, both on hard copy which also has a CD version of the report firmly attached to the last page of the report as well sent as soft copy through e-mail, to RO-MoEF, Bangalore and ZO-CPCB, Bangalore.

All necessary contact details are also submitted herewith as Annexure I.

Thanking You,

Yours faithfully,
For **Zuari Agro Chemicals Ltd.**

N. G. Dessai
Chief General Manager – Operations

Enclosed: as above

ZUARI AGRO CHEMICALS LIMITED

CIN No.: L65910GA2009PLC006177

Registered Office: Jaikisaan Bhawan, Zuarinagar, Goa - 403 726, India.

ZUARI AGRO CHEMICALS LIMITED

JAI KISAAAN BHAWAN, ZUARINAGAR- 403726, GOA

19th COMPLIANCE STATUS REPORT OF ENVIRONMENTAL CLEARANCE CONDITIONS

INCLUDING RESULTS OF MONITORED DATA FOR THE PERIOD April 2018 to September 2018

Reference:

Environmental Clearance No. J-11011/217/2008-IA-II (I) dt. 1st September, 2009 and Corrigendum dt. 30th October, 2009 issued by Ministry of Environment and Forests, Government of India, New Delhi.

Project:

Revamp of Ammonia plant for changeover of feedstock and fuel from Naphtha to NG / RLNG and reduction of specific energy consumption along with debottlenecking the capacity of Ammonia and Urea plants, changeover of fuel from FO to NG / RLNG in the Utility Boilers as also debottlenecking the capacity of NPK plants A & B along with product mix change at Zuarinagar, Goa by M/s. Zuari Agro Chemicals Ltd.

Status of the Project:

Feed and Fuel change over from Naphtha to NG / RLNG in Ammonia plant and Fuel changeover from Furnace Oil to NG / RLNG in Utilities Boilers completely with effect from September, 2013. The project for improved energy efficiency at debottlenecked capacity of the Ammonia-Urea plants has been implemented. The debottlenecking project for enhanced capacity of NPK plant-A and NPK plant-B along with product mix change has been completed and the plants are operational effective from December, 2015 and May, 2017 respectively. We have obtained the necessary Consent to Establish and Consent to Operate from Goa State Pollution Control Board for the project. For further improvement in energy efficiency of the Ammonia-Urea plants, we are in the process implementing Energy Savings Schemes from the BEDP (Basic Engineering Design Package) developed by M/s CASALE, Switzerland in order to be compliant with the preset energy norms set forth by Department of Fertilizers, Government of India in the NUP (New Urea Policy)-2015 at the existing/approved capacities in the EC (Environmental Clearance)/CTO (Consent to Operate). The revamped Scrubbing Systems in the NPK-A and NPK-B Plants have been very effective such that the Ammonia emissions are well below the prescribed emission norms. In the Ammonia plant, in compliance with the EC/CREP, the Solution in the CO₂ Removal section has been swapped from Arsenic bearing Modified Benfield Solution to Non-Arsenic based GV Solution (V₂O₅ based). Necessary hardware additions were also done along with the Solution Swap. The disposal of the modified Benfield Solution through Solidification/Stabilization has been completed in February, 2017.

Sr.No	EC CONDITIONS FOR COMPLIANCE	STATUS / ACTION PLAN
A. SPECIFIC CONDITIONS:		
i)	<p>The project authority shall treat the industrial and domestic effluent as per the standards notified under Environment (Protection) Rules, 1986 or prescribed by Goa State Pollution Control Board whichever are stringent. The treated wastewater shall be recycled/reused/used for irrigation/green belt development and zero discharge shall be maintained.</p>	<p>The industrial effluent is given treatment which includes oil/grit removal, settling, pH correction and temporary storage in Effluent Treatment Plant. The treated industrial effluent is totally recycled to NPK-A and NPK-B plants for process use. The domestic effluent is treated separately in Sewage Treatment Plant and the treated domestic effluent is totally recycled to cooling towers as part make up. Reverse Osmosis (RO) Unit is also installed in ETP to enhance the effluent treatment facility and the permeate is recycled to cooling tower as part make up. Occasionally, the treated effluent is used for green belt maintenance within the complex. Thus, zero effluent discharge is being maintained.</p>
ii)	<p>The water consumption shall not exceed 10135 m³/day and the permission for drawl of same shall be obtained from concerned Department and a copy shall be submitted to the Ministry and its Regional Office at Bangalore within 3 months.</p>	<p>Completed.</p> <p>After revamp project, the water consumption shall not exceed 10135 m³/day.</p>
iii)	<p>The project authorities shall install efficient air pollution control system like vibropriller to Urea Prilling Tower, low NOX burners to Reformer, Scrubbers and Ammonia Stripper etc. to control particulate and gaseous emissions from the plant to achieve the prescribed standards.</p>	<p>Vibropriller is already installed in Urea Prilling Tower. Ammonia Stripper for treatment of process condensate and Scrubbers to control particulate and gaseous emissions from process plants already exist. The particulate and gaseous emissions from process plants are within the standards prescribed by GSPCB, Goa.</p> <p>Modern design burners with lower NO_x emissions are installed in Reformer, Process Heaters and fired Boilers as part of revamp for Gas Conversion. The Revamp of Scrubbing system in NPK-A, B Plants has been completed with M/s INCRO, Spain's Two Stage Scrubbing and M/s Jacobs Dual Mole Scrubbing Technologies respectively.</p>
iv)	<p>The gaseous emissions (SO₂, NO_x, NH₃, Urea dust) & Particulate Matter from various process units shall confirm to the standards prescribed by the concerned authorities from time to time. Emission data shall be periodically monitored and reports submitted to Ministry's Regional Office, CPCB & SPCB.</p>	<p>Various process unit stack emissions monitoring is carried out by external laboratory recognized by MoEF for NH₃, Particulate Matter, SO₂ and NO₂ as per the conditions of Air Consent and the reports are being submitted to GSPCB, Goa once in every three months. The results conform to the standards prescribed by the Board. The compiled data for concerned period is being submitted to concerned RO-MoEF, ZO-CPCB and GSPCB, Goa as Annexure-A along with six monthly Compliance Status Reports.</p>

