TAC/Env/MoEF-1/2024

18.05.2024

The Director,
The Ministry of Environment and Forest,
Indira Paryavaran Bhawan,
Jor Bogh road,
New Delhi - 110003

Sub: Half yearly compliance status report for Environmental Clearance M/S. Tuticorin Alkali Chemicals and Fertilizers Limited – reg.

Ref: Environmental clearance Lr. No. J-11011/8/98-IA II, dated 03.09.1998

Dear Sir,

With reference to the above Environmental Clearances, we are herewith submitting the compliance status report (Half Yearly compliance report) and the monitoring data for the period from October 2023 to March 2024.

Thanking you,

Yours faithfully,
For Tuticorin Alkali Chemicals and
Fertilizers Limited

E Rajeshkumar,
Whole Time Director

CC: i) The Director, Ministry of Environment and Forest
Regional Office,
Chennai.
ii) The District Environmental Engineer,
Tamilnadu Pollution Control Board,
Tuticorin.

GENERAL CONDITIONS

S.No	Condition	Compliance
1.	The project authorities must strictly adhere to the stipulations made by Tamil Nadu Pollution Control Board and the State Government.	Complied. The project works were taken up during the year 1998 and completed in the year 2000. The conditions stipulated by the Tamil Nadu Pollution Control Board are being complied with. 1. We are operating the Sewage Treatment Plant efficiently. 2. We are operating the Effluent Treatment Plant efficiently and continuously and the treated effluent is re-used in our process. 3. We are analyzing the treated sewage and effluent.
2.	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests	Complied. No further expansion or modification in the plant was carried out.
3.	At no time, the emissions should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should be immediately put out of operation and should not be restarted without bringing the system back to normalcy.	Complied. Emissions are well within the prescribed limits. At no time, the emissions went beyond the prescribed Standards. In the event of failure of any pollution control system, the respective unit is immediately put out of operation and should not be restarted without bringing the system back to normalcy.
4.	Guard pond(s) of sufficient holding capacity should be provided to cope up with the effluents discharge during the process disturbance.	Complied. We have provided two Guard ponds to cope up with the effluents discharge during the process disturbance. Pond I capacity 80.2 m x 39.5 m x 1.4 m Pond II capacity 42.8 m x 39.5 m x 1.4 m
5.	The hazardous wastes should be handled as per the Hazardous waste (Management and Handling) Rules, 1989 of the Environment Protection Act, 1986.	Complied. The hazardous waste, viz. used oil is disposed to re-cyclers, parties who have got authorization from TNPCB. We are maintaining the limit of storage as prescribed in the Hazardous Waste Authorization issued

6.	Green belt of adequate width and density should be provided to mitigate the effects of fugitive emission all around the plant. A minimum of 25% of the total land acquired should be developed as green belt in consultation with the local DFO. A detailed green belt plan should be submitted to the Ministry for review within 3 months.	Complied. We have developed green belt in the vacant areas since commissioning of the plant. Already an area more than 25% of the total land has been developed as green belt. Greenery development is carried out on continuous basis. Annexure VI
7.	Adequate provisions for infrastructure facilities such as water supply, fuel, sanitation etc. should be ensured for construction workers during the construction phase so as to avoid felling of trees and pollution of water and the surroundings.	Complied. This condition pertains to the constructions phase of the project .Construction of the expansion project was already completed in the year 1999
8.	Occupational health surveillance of the workers should be done on a regular basis and records maintained.	Complied. Regular medical checkup including the Occupational health surveillance is carried out and records are maintained.
9.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA and risk analysis report.	Complied. The environmental protection measures and safeguards recommended in the EIA and risk analysis report are complied with. 1. We have worked out the consequence analysis of ammonia leak from the main supply line. The consequence analysis was worked for the wind speed of 5.3 m/sec - D.Pasquill stability and 1.5 m/sec - F.Pasquill stability. 2. Safety Awareness and motivation is created through Safety Training and Education. 3. The Company is having a well-developed firefighting system.
10.	The project proponent should have a scheme for social upliftment in the nearby villages with reference to contribution in roads construction, education of children, festivals, health centers, sanitation facilities, drinking water supply, community awareness and employment to local people whenever and wherever possible both for technical and non-technical jobs.	Complied. TAC management takes all positive steps to render services to the people, in the nearby villages for their upliftment.by providing employment.

11.	The project authorities will set up separate Environmental management cell for effective implementation of all the above stipulations under control of Sr.Executive.	Complied. Environment Management Department has been functioning under the control of Whole Time Director.
12.	The project authorities will provide adequate funds, both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.	Complied. Adequate funds have been provided in our Corporate Budget to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds have been utilized only for the purchase of online monitoring system, stack monitoring kits, etc,. We have so far spent an amount of more than Rs.2.5 crores. We are incurring an amount of Rs.10.00 Lakhs every year.
13.	The stipulated conditions will be monitored by the Regional office of this Ministry at Chennai / Central Pollution Control Board / State Pollution Control Board. A six monthly compliance status report and the monitored data along with statistical interpretation should be submitted to them regularly.	Complied. We are submitting Six-monthly compliance report regularly to the regional office of MoEF, Chennai, and the District Environmental Engineer, Tamil Nadu Pollution Control Board, Thoothukudi. Date of submission of last report was on 28.11.2023.

SPECIAL CONDITIONS

S.No.	Condition	Compliance
1	The gaseous emissions (SO_2, NO_x, NH_3) and particulate matters from various process units / storage should conform to the standards prescribed by the concerned authorities from time to time.	Complied. Gaseous emissions and particulate matters are monitored regularly in Ammonium Chloride Dryer Stack & storage area and they conform to the standards prescribed. As per the consent conditions TNPCB, We have lined up Online Monitoring System for Stack Gas (Ammonia and SPM in Ammonium Chloride Drier Section. Online graph is attached as Annexure I

2	Ambient Air Quality Monitoring Station should be set up in the downwind direction as well as where maximum ground level concentration of SPM, SO_2, NH_3 are anticipated in consultation with the State Pollution Control Board. The monitoring stations should be selected on the basis of mathematical modeling to represent short term ground level concentration, human settlements, sensitive targets etc.	Complied. 4 Nos. of Ambient Air Quality Monitoring Stations have been already set up in consultation with the State Pollution Control Board, taking into consideration of the meteorological parameters like wind speed and wind direction. The levels of SPM, RPM, SO_2, NO_x and NH_3 are monitored regularly Twice in a week. Annexure-II .Online ambient air ammonia monitoring system has been installed and the same has been connected with care air centre Annexure- III, TNPCB. CPCB approved third party analysis report also attached. Annexure- IV
3.	Dust suppression and Dust extraction systems should be provided to control fugitive emission at material handling points. Fugitive emission should be regularly monitored and record maintained.	Complied. Dust suppression and Dust extraction systems have been provided to control the fugitive emission at material handling points. Bag Filter has been provided to control fugitive emission. We are analyzing the above parameters once in a month.
4.	There will be no generation of process effluent. The effluent generated from utilities and domestic waste should be adequately treated before disposal into the sea. As reflected in the EMP, the total effluent discharge into sea should not exceed 800 m^3/day. Recommendations of NIO in the marine impact assessment carried out in 1982 should be strictly adhered to.	Complied. The effluent generated from our plants is treated and the same is being re-used completely in our process since 2005. Recommendations of NIO in the marine impact assessment carried out in 1982 had been adhered to.
5	A marine impact assessment should be carried out to assess the long term impact on the aquatic environment due to the disposal of effluent into sea by a nodal/marine/fisheries agency.	Complied. A 2 years joint study with Fisheries College, Tuticorin, was carried out during 1990 to study the impact of effluent discharge in the coastal water to assess the ecological status of the system. Based on the chemical parameters analysed, they have concluded that the basin is perfect and in consonance with the adjacent sea without causing any change in the conservative property of the sea water. Further, the bioassay tests also indicate no significant negative balance.

6.	Adequate number of influent and effluent quality monitoring stations should be set up in consultation with the State Pollution Control Board. Regular monitoring should be carried out for relevant parameters.	Already a well-equipped laboratory has been functioning to monitor the quality of influent and effluent samples for relevant parameters on daily basis. Online analyser for Treated Effluent parameter pH, TSS, Ammonia Nitrogen and flow meters are installed and connected with Water Quality Watch TNPCB. Annexure V
7.	The company must shift from chromate to non-chromate treatment of cooling water not only for the expansion but also for the existing operations to avoid generation of chromium sludge and the time frame should be indicated to the Ministry within 3 months of issue of the letter.	We have already shifted from chromate to non-chromate treatment of cooling water in July 1998; Generation of chromium sludge has been completely eliminated.