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Date: 28.06.2022

Ref: CIL: KKD: EHS: 03:06:22

Environmental Engineer Andhra Pradesh Pollution Control Board Plot No 2-2, Ramanayyapeta Industrial Area Kakinada 533003

Dear sir,

Sub: Submission of Self Compliance CFE & CFO Six monthly compliance report - Reg.

Ref:

- Consent & Hazardous waste Authorisation Order No: APPCB/VSP/RJY/285/HO/CTO/2021 Dated: 07.03.2023
- 2. CFE Order No: Order No: 65/APPCB/CFE/RO-VSP/HO/2012 Dated: 17.03.2019
- 3. CFE Order No: Order No: 65/APPCB/CFE/RO-VSP/HO/2021 Dated: 28.10.2021
- 4. CFE Order No: Order No: 65/APPCB/CFE/RO-VSP/HO/2010 Dated: 09.11.2022
- 5. EC Order No: No. J-11011/381/2006-IA-II(I) Dt: 11.05.2007
- 6. EC Order No: F.NO. J-11011/1303/2007-IA-II(I) Dt: 11.06.2008
- 7. EC Order No: F.NO. J-11011/158/2016-IA-II (I) Dt: 10.09.2016

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With reference to the above subject, we are here with enclosing self-certified half yearly compliance status to the conditions specified in references (1), (2), (3), (4), (5), (6) & (7) for the months from Oct 2022 to March 2023. The status of compliance is being uploaded in the pcb.gov.in.

This is for your kind information and necessary records.

Thanking You,

Yours faithfully,

#### FOR COROMANDEL INTERNATIONAL LTD, Kakinada.

PV Raco DGM - EHS

Encl: Condition wise Compliance Report along with Attachments

RECEIVED COVER 06 APPOLLUTION CONTROL BOARD KARINADA



Tel: 91-40-27842034 / 27847212 Fax: 91-40-27844117 E-mail: mail@coromandel.murugappa.com

## **EC Condition Compliance**

No.J-11011/1303/2007-IA II(I) dated: 11-06-2008

Enhancement of Complex Fertilizer Plant capacity from 3200 MTPD to 4500 MTPD.



### Enhancement of Complex Fertilizer Plant capacity from 3200 MTPD to 4500 MTPD in the Existing Facility

F.NO. J-11011/1303/2007-IA-II(I) Dt: 11.06.2008

Six Monthly (i.e., October 2022 - March 2023) Compliance Report

### SPECIFIC CONDITIONS:

SI. No.	Conditions	Status of Compliance
		<ul> <li>Complied.,</li> <li>The plant is designed on basis of Zero effluent discharge. The scrubber liquor spills will be collected in a sump and recycled back to process.</li> </ul>
1.	The Project authorities shall treat the waste water generated from all sources and recycle back to maintain zero discharge condition.	<ul> <li>PTZ Camera and online effluent water recycle usage meter is in place and the same was connected to the SPCB server.</li> <li>Enclosed photographs of the central Sump &amp; PTZ camera in AnnexureVII</li> </ul>
		Complied.,
2.	The Project authority shall obtain fresh concurrence for drawl of additional 300 KLD water from the existing summer storage tanks at Samalkot, East Godavari District, A.P. from the concerned authority.	Coromandel is having an agreement with the Public Health Authorities for utilization of 1 MGD water. The present water usage is 0.3 - 0.5 MGD and the additional requirement of water will be met from the existing agreement. No fresh concurrence is required.
	The Project authorities shall not	Complied.,
3.	manufacture the raw materials in the existing plant premises, as there will be imported.	Raw materials are not manufactured within the premises and the same currently either imported or procured from domestic suppliers only.
4.	Multi stage scrubbing system shall be installed to control ammonia and suspended particulate matter in fertiliser plant. The Project authority shall install dust collection system in fertiliser bagging plant.	Complied., Wet scrubbing system is in place to control the Ammonia and SPM for the process. <u>Enclosed photographs of Wet</u> <u>Scrubbing System in Annexure II along with analysis</u> <u>reports in Annexure III.</u> Dust Extraction system is in place for bagging Plant to control the dust emissions from the Bagging plant. <u>Enclosed photographs of dedusting system in</u> <u>AnnexureXII</u>
5.	The Project authority shall install high efficiency scrubber nozzles, tail gas scrubbing system, install additional cyclones in scrubbing system along with mist eliminators in scrubbers.	<b>Complied.,</b> The scrubbing system is upgraded to meet the standards at higher production as indicated above. In normal case one cyclone is sufficient. To meet the additional loads, two cyclones were put into operation. <u>Enclosed</u> <u>photographs of Wet Scrubbing System in Annexure II</u>
6.	The company shall develop the green belt in 350 acres, out of total area of 696 acres to mitigate the effect of fugitive emissions and noise as per the guidelines CPCB.	In Progress., Green belt development is being carried out in and around the plant area to mitigate the fugitive emissions. We have been maintaining 295 Acres of Green belt developed by us. As most of the vacant land is water logged areas., hence developing green belt in these areas is becoming difficult. However, we are planning to develop balance green belt in a phased manner.







SI. No.	Conditions	Status of Compliance
		Enclosed photographs of Existing Greenbelt in Annexure XIII
7.	The company shall Implement all the Recommendations made in THE CHARTER ON CORPORATE RESPONSIBILITY FOR ENVIRONMENTAL PROTECTION (CREP) for fertilizer industries.	<b>Complied.,</b> The Charter on Corporate Responsibility points are complied with. <u>Enclosed status of CREP in Annexure IX</u>
8.	Occupational health surveillance of the workers shall be carried out on a regular basis and records shall be maintained as per the Factories Act.	<b>Complied.,</b> We have an Occupational Health Centre and regular health check-ups are being carried out as per the statute and records are being maintained as per the Factories Act.
9.	Risk assessment shall be carried out and report shall be submitted to SPCB and CPCB and to the Ministry's Regional Office at Bangalore.	<b>Complied.,</b> Risk assessment Study carried out by M/s. Cholamandalam MS Risk Services, Chennai, was submitted to authorities.
10.	The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.	<b>Complied.,</b> Adequate fire hydrant system was provided to meet any fire hazards in case of emergency. Besides the above, portable fire extinguishers and mobile fire tender are available to meet the emergencies. M/s. Coromandel is also having tie up with neighbouring industries for mutual aid in case of emergencies.
11.	During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic waste and storm drains.	<b>Complied.,</b> The Existing drains surrounding the process plants are routed to the collection sumps at respective plants where the water recycled back to the process. Storm water drains are separate where the water is flowed to the collection pond especially during the rainy season.
	B. GENER	AL CONDITIONS
1.	The Project authorities shall strictly adhere to the stipulations of the SPCB / State Government or any statutory body.	Complied with
2.	The gaseous emissions $(SO_2, SO_3, NO_x, NH_3, fertiliser dust)$ and particulate matter from	Complied.,
	various process units shall conform 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 and SPCB.	<ul> <li>Wet Scrubbing system is in place to ensure that the emissions generated from the process to meet the standards prescribed by the board.</li> <li>Online Emission Monitoring system (OCEMS) is in place for continuously monitoring the emissions generated from the process stacks. <u>Enclosed photographs of Wet Scrubbing System in Annexure II</u></li> <li>Regular Third-Party Monitoring is being done &amp; submitted to the APPCB, Regional Office. The average stack emissions for the last six months from the third-party analysis report are furnished below: PM: 53.23 mg/Nm<sup>3</sup>; Ammonia:74.16 mg/Nm<sup>3</sup></li> </ul>







SI. No.	Conditions	Status of Compliance
		Total Fluorine: 1.42 mg/Nm <sup>3</sup> . <u>Enclosed Analysis Reports of process stacks in</u> <u>Annexure III</u>
3.	All the waste waters generated from the various processes shall be recycled / reuse in the plant and zero discharge shall be maintained. The domestic waste water shall be treated in septic tanks and treated waste shall be used for irrigation in the green belt.	<ul> <li>Complied.,</li> <li>The plant is designed on basis of Zero effluent discharge. The scrubber liquor spills will be collected in a sump and recycled back to system.</li> <li>PTZ Camera and online effluent water usage is in place and the same was connected to the CPCB / SPCB office.</li> <li>Enclosed photographs of the central Sump &amp; PTZ camera in Annexure VI</li> <li>The wastewater generated from cooling tower and boiler is pumped back to the plant to use in the process.</li> <li>Domestic water is being treated in the STP and treated water is used for greenbelt development. Enclosed photographs of STP in Annexure VII</li> </ul>
4.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted.
5.	At no time, the emissions shall not exceed the prescribed limits. 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.	<b>Complied.,</b> Necessary interlocks were envisaged to cut off the feeds in case of failure of pollution control devices.
6.	The locations of ambient air quality monitoring stations shall be reviewed in consultation with the State Pollution Control Board (SPCB) and additional stations shall be installed, if required, in the downwind direction as well as where maximum ground level concentrations are anticipated.	<ul> <li>Complied.,</li> <li>3 Nos., of online AAQ monitoring systems were provided and the stations have been connected to APPCB Server.</li> <li>Enclosed photographs of CAAQMS in Annexure IV</li> <li>Periodical monitoring is being carried out at various locations by third party including downwind direction. Ambient air quality at ecologically sensitive areas also being carried out in a periodical interval.</li> </ul>
7.	Dedicated scrubbers and stacks of appropriate height as per the Central Pollution Control Board guidelines shall be provided to control the emissions from various vents. The scrubbed water shall be	<ul> <li>Complied.,</li> <li>Dedicated scrubbers and stacks were provided as per the norms.</li> <li>No ETP is required as the scrubber water is recycled back into the process from scrubber collection tank.</li> <li>Sumps were provided to collect any spilled liquor and</li> </ul>





SI. No.	Conditions	Status of Compliance
	sent to ETP for further treatment.	pumped back to the process for consumption. <u>Enclosed</u> photographs Wet Scrubbing System in Annexure II
8.	All the storage tanks will be under negative pressure to avoid any leakages. Breather valves, $N_2$ blanketing and secondary condensers with brine chilling system shall be provided for all the storage tanks to minimize vapour losses. All liquid raw material shall be stored in storage Tanks and Drums.	<b>Complied</b> Our Chemicals are not explosive in nature and do not require $N_2$ blanketing. All the storage tanks are built as per the statutory norms taken into the safety considerations and approved by the Factory inspectorate.
9.	The company shall undertake following Waste Minimization measures:	<b>Complied.,</b> Company was Certified for ISO 14001 and taken all steps for waste minimization of Raw materials, Lubricants and utilities.
	<ul> <li>Metering and control of qualities of active ingredients to minimize waste.</li> </ul>	Electronic weigh feeders and metering system provided for raw materials.
	Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.	- No bye product from the process. The spillage and off grade product will be used again in the process.
	Use of automated filling to minimize spillage.	Bin weighers are provided with indications and alarms for automated filling to minimize the spillages.
	Use of "Close Feed" system into batch reactors.	Closed feed systems is in place.
	Venting equipment through vapour recovery Systems.	The safety valve outlets are connected to scrubbing system.
	Use of high pressures hoses for equipment clearing to reduce wastewater generation.	Implemented
		Complied.,
10.	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 State Pollution Control Boards / Central Pollution Control Board.	Fugitive emissions monitoring is being carried out on quarterly basis in work zone environment for SPM. All the internal roads are concreted to prevent the dust emissions generated from the roads and the raw materials are stored in the sheds to prevent the dust emissions generated from the storage area. <u>Enclosed</u> <u>photographs of Raw Material Storage Sheds and third</u> <u>party fugitive analysis report in Annexure V</u>
		Complied.,
11.	The Project authorities shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994 and January,	<ul> <li>Dyke walls are constructed for the Storage tanks of Ammonia, Sulphuric Acid and Phosphoric Acid.</li> <li>Ammonia detectors are provided at 31 locations for monitoring the Ammonia content in atmosphere.</li> <li>Onsite Emergency plan was developed to meet the</li> </ul>





SI. No.	Conditions	Status of Compliance
	2000 and Hazardous Waste (Management and Handling) rules, 1989, as amended from time to time. Authorisation from the SPCB shall be obtained for collection, treatment, storage and disposal of hazardous wastes.	<ul> <li>Emergencies.</li> <li>Mock Drills were conducted for every three months. Last Mock drill was conducted on 11.11.2022 and a report for the same was submitted to boards office vide Ref No: CK: EHS:3.1.12 Dated: 01.12.2022</li> <li>The Company has also implemented Process Safety Management System (PSMS) on voluntary basis.</li> <li>Obtained combined order i.e., CFO &amp; HWA from APPCB.</li> <li>(Consent Order No: APPCB/ VSP/ RJY/ 285/HO/CTO/2021 Dated: 07.03.2023 Valid up to 30.09.2026)- CTO Copy is enclosed in Annexure I</li> </ul>
12.	The overall noise levels in and around the plant area shall be kept well within the standards by providing 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).	<b>Complied.,</b> The noise levels are monitored in and around the plant on monthly basis and the reports are being submitted to APPCB, RO, Kakinada. <u>Enclosed Noise Monitoring</u> <u>Report in Annexure XI</u>
13.	The company shall develop rain water harvesting structures to harvest the run off water for recharge of ground water.	<b>Complied.,</b> As the ground water table is very high as the plant location is very near to the sea, construction of rain water harvesting is difficult. However, two rainwater harvesting structures are constructed at Technical Building & Bagging Plant. In addition to that we have a large water storage collection pond to collect the water during the rains. <u>Enclosed photographs of the collection pond in</u> Annexure X
14.	The company shall undertake eco- developmental measures including community welfare measures in the project area for the overall improvement of the environment. The eco-development plan should be submitted to the SPCB within three months of receipt of this letter for approval.	<b>Complied.</b> , The Company is being undertaken welfare measures and community development measures for the local people in the vicinity of the project area. Sufficient funds have been allocated under CSR activity.
15.	The project proponent shall also comply with all the environmental protection measures and safeguards proposed in the EIA/EMP report.	Complied with.
16.	A separate Environmental Management cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	<b>Complied.,</b> Coromandel is having full-fledged laboratory attached to Quality Assurance Department, which is having the infrastructure to carry out environmental related parameters in-addition to the periodical MOEF approved third party monitoring.
17.	The Project authorities shall earmark adequate funds to implement the conditions	<b>Complied.,</b> Adequate funds are provided in Capital and Revenue







SI. No.	Conditions	Status of Compliance
	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 shall not be diverted for any other purpose.	Budget.
18.	The implementation of the project vis-à-vis environmental action plans shall be monitored by the concerned Regional Office of the Ministry / SPCB / CPCB. A six monthly compliance status report shall be submitted to monitoring agencies and shall be posted on the website of the Company.	<b>Complied.,</b> Six monthly compliance reports are being submitted as per the statutory requirements. <b>Last submitted on</b> <b>28.11.2022</b> .
19.	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 SPCB and may also be seen at Website of the Ministry at <u>http://envfor.nic.in</u> . 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.	Notification was published 20 <sup>th</sup> June, 2008 in Eenadu and Hindu daily news papers. Copy of the same was sent to MOEF, Bangalore and Regional Office, APPCB, Kakinada.
20.	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 concerned authorities and the date of start of the project.	<b>Complied.,</b> Work started in April, 2008 and Completed by September, 2009. Subsequent approvals from the SPCB are being taken during the consent renewals.