

Category of the Industry :

RED



CONSENT ORDER NO. 2307154214043 DATED: 20/10/2023.

PROCEEDINGS NO.T1/TNPCB/F.0101AMB/RL/AMB/W/2023 DATED: 20/10/2023

SUB: Tamil Nadu Pollution Control Board –CONSENT TO OPERATE FOR EXPANSION-I -M/s. M/S COROMANDEL INTERNATIONAL LIMITED , S.F.No. 37/B2,38/5A,39/B1,39/6A,246/2,3,4,5,6,7,247/(part)1A,2A,3C,3A, ERNAVOOR village Thiruvottiyur Taluk and Chennai District - Consent for the operation of the plant and discharge of sewage and/or trade effluent under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 as amended in 1988 (Central Act 6 of 1974) – Issued- Reg.

REF: 1. CTO Bd. Proc.No..T1/TNPCB/F.0101AMB/RL/AMB/W&A/2021 DATED: 23/11/2021.
2. RCO Bd.Proc. No. T1/TNPCB/F.0101AMB/RL/AMB/W&A/2022 DATED: 21/11/2022
3. Unit's application for CTO Expansion dated: 26.07.2023
4. IR.No : F.0101AMB/RL/JCEE-M/AMB/2023 dated 06/10/2023
5. Minutes of 219th TSC meeting held on 18.10.2023 vide agenda item.No. 219-04

CONSENT TO OPERATE FOR EXPANSION is hereby granted under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 as amended in 1988 (Central Act, 6 of 1974) (hereinafter referred to as “The Act”) and the rules and orders made there under to

The Executive Director
M/s . M/S COROMANDEL INTERNATIONAL LIMITED
S.F No. 37/B2,38/5A,39/B1,39/6A,246/2,3,4,5,6,7,247/(part)1A,2A,3C,3A
ERNAVOOR Village
Thiruvottiyur Taluk
Chennai District.

Authorising the occupier to make discharge of sewage and /or trade effluent.

This is subject to the provisions of the Act, the rules and the orders made there under and the terms and conditions incorporated under the Special and General conditions stipulated in the Consent Order issued earlier and subject to the special conditions annexed.

This CONSENT is valid for the period ending March 31, 2028

Digitally signed by
R SARASAVANI
Date: 2023.10.20
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For Member Secretary,
Tamil Nadu Pollution Control Board,
Chennai

To
The Executive Director,
M/s.M/S COROMANDEL INTERNATIONAL LIMITED,
M/S COROMANDEL INTERNATIONAL LIMITED, COROMANDEL HOUSE', 1-2-10, SARDAR PATEL ROAD,
SECUNDERABAD -TELANGANA, INDIA
Pin: 500003

Copy to:

- 1.The Commissioner, CHENNAI CORPORATION-Corporation, Thiruvottiyur Taluk, Chennai District .
 - 2. The District Environmental Engineer, Tamil Nadu Pollution Control Board, AMBATTUR.
 - 3. The JCEE-Monitoring, Tamil Nadu Pollution Control Board, Chennai.
 - 4. File
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SPECIAL CONDITIONS

1. This consent to operate for Expansion is valid for operating the facility for the manufacture of products (Col. 2) at the rate (Col. 3) mentioned below. Any change in the products and its quantity has to be brought to the notice of the Board and fresh consent has to be obtained.

Sl. No.	Description	Quantity	Unit
Product Details			
1.	Ammonium Phosphate Potash Sulphate (APPS)	400000	TPA
By-Product Details			
1.	Gypsum	492000	TPA
Intermediate Product Details			
1.	Sulphuric Acid	258000	TPA
2.	Phosphoric Acid	66000	TPA
3.	Captive Power	4	MW

2. This consent to operate for Expansion is valid for operating the facility with the below mentioned permitted outlets for the discharge of sewage/trade effluent. Any change in the outlets and the quantity has to be brought to the notice of the Board and fresh consent has to be obtained.

Outlet No.	Description of Outlet	Maximum daily discharge in KLD	Point of disposal
Effluent Type : Sewage			
1.	Sewage	10.0	On Industrys own land
Effluent Type : Trade Effluent - NIL			
1.	Reject Water from MED Plant	4800.0	To Sea
2.	Cooling Tower Blow Down &Condensate Recovery Water	1095.0	Recycling to process

3. The effluent discharge shall not contain constituents in excess of the tolerance Limits as laid down hereunder.

Sl. No.	Parameters	Unit	TOLERANCE LIMITS - OUTLETS -Nos				
			Sewage		Trade Effluent		
			1		1	1	
1.	pH		5.5 to 9		5.5 to 9	5.5 to 9	
2.	Temperature	oC	-		shall not exceed 5°C above the receiving water temperature	shall not exceed 5°C above the receiving water temperature	
3.	Particle size of Suspended solids	-	-		a).Floatable solids maximum 3 mm b). Settable solids maximum 850 micron	shall pass 850 micron IS sieve	
4.	Total Suspended Solids	mg/l	30		a).For Process waste water- 100 b). For Cooling water effluent 10 percent above total suspended matter of influent cooling water	100	
5.	Total Dissolved solids (inorganic)	mg/l	-		-	2100	
6.	Oil & Grease	mg/l	-		20	10	
7.	Biochemical Oxygen Demand (3 days at 27oC)	mg/l	20		100	30	
8.	Chemical Oxygen Demand	mg/l	-		250	250	
9.	Chloride (as Cl)	mg/l	-		-	1000	
10.	Sulphates (as SO4)	mg/l	-		1000	1000	
11.	Total Residual Chlorine	mg/l	-		1	1	
12.	Ammonical Nitrogen (as N)	mg/l	-		-	50	
13.	Total Kjeldahl Nitrogen (as N)	mg/l	-		100	100	
14.	Free Ammonia (as NH3)	mg/l	-		5	5	
15.	Arsenic (as As)	mg/l	-		0.2	0.2	
16.	Mercury (as Hg)	mg/l	-		0.01	0.01	
17.	Lead (as Pb)	mg/l	-		1	0.1	
18.	Cadmium(as Cd)	mg/l	-		2	2	
19.	Hexavalent Chromium (as Cr+6)	mg/l	-		1	0.1`	
20.	Total Chromium (as Cr)	mg/l	-		2	2	
21.	Copper (as Cu)	mg/l	-		3	3	
22.	Zinc (as Zn)	mg/l	-		1.5	1	
23.	Selenium (as Se)	mg/l	-		0.05	0.05	
24.	Nickel (as Ni)	mg/l	-		3	3	
25.	Boron (as B)	mg/l	-		2	2	
26.	Percent Sodium	%	-		-	-	

27.	Residual Sodium Carbonate	mg/l	-		-	-	
28.	Cyanide (as CN)	mg/l	-		0.2	0.2	
29.	Fluoride (as F)	mg/l	-		15	2	
30.	Dissolved Phosphates(as P)	mg/l	-		-	5	
31.	Sulphide (as S)	mg/l	-		5	2	
32.	Pesticides	mg/l	-				
33.	Phenolic Compounds (as C ₆ H ₅ OH)	mg/l	-		5	1	
34.	Radioactive materials a) Alpha emitters	micro curie/ml	-		10-7	10-7	
35.	Radioactive materials b). Beta emitters	micro curie/ml	-		10-7	10-6	
36.	Fecal Coliform	MPN/100ml	-		-	-	

4. All units of the sewage and Trade effluent treatment plants shall be operated efficiently and continuously so as to achieve the standards prescribed in Sl No.3 above or to achieve the zero liquid discharge of effluent as applicable.
5. The occupier shall maintain the Electro Magnetic Flow Meters/water Meters installed at the inlet of the water supply connection for each of the purposes mentioned below for assessing the quantity of water used and ensuring that such meters are easily accessible for inspection and maintenance and for other purposes of the Act.
 - a. Industrial Cooling, Spraying in mine pits or boiler feed.
 - b. Domestic purpose.
 - c. Process.
6. The occupier shall maintain the Electro Magnetic Flow Meters with computer recording arrangement for measuring the quantity of effluent generated and treated for the monitoring purposes of the Act.
7. Log book for each of the unit operations of ETP have to be maintained to reflect the working condition of ETP along with the readings of the Electro Magnetic Flow Meters installed to assess effluent quantity and the same shall be furnished for verification of the Board officials during inspection.
8. The occupier shall at his own cost get the samples of effluent/surface water/ground water collected in and around the unit by Board officials and analyzed by the TNPC Board Laboratory periodically.
9. Any upset condition in any of the plants of the factory which is, likely to result in increased effluent discharge and result in violation of the standards mentioned in Sl. No.3 above shall be reported to the Member Secretary / Joint Chief Environmental Engineer-Monitoring and the concerned District/Assistant Environmental Engineer of the Board by e-mail immediately and subsequently by Post with full details of such upset condition.
10. The occupier shall always comply and carryout the order/directions issued by the Board in this Consent Order and from time to time without any negligence. The occupier shall be liable for action as per provisions of the Act in case of non compliance of any order/directions issued.
11. The occupier shall develop adequate width of green belt at the rate of 400 numbers of trees per Hectare.
12. The occupier shall provide and maintain rain water harvesting facilities.
13. The occupier shall ensure that there shall not be any discharge of effluent either treated or untreated into storm water drain at any point of time.

14. In the case of zero liquid discharge of effluent units, the occupier shall adhere the following conditions as laid under.
- i). The occupier shall ensure zero liquid discharge of effluent, thereby no discharge of untreated / treated effluent on land or into any water bodies either inside or outside the premises at any point of time.
 - ii) The occupier shall operate and maintain the Zero liquid discharge treatment components comprising of Primary, Secondary and tertiary treatment systems at all times and ensure that the RO permeate/Evaporator condensate shall be recycled in the process and the final RO reject shall be disposed off with the reject management system ensuring zero liquid discharge of effluents in the premises.
 - iii) The occupier shall operate and maintain the reject management system effectively and recover the salt from the system which shall be reused in the process if reusable or shall be disposed off as ETP sludge.
 - iv) In case of failure to achieve zero discharge of effluents for any reason, the occupier shall stop its production and operations forthwith and shall be reported to the Member Secretary/Joint Chief Environmental Engineer-Monitoring and the concerned District/Assistant Environmental Engineer of the Board by e-mail immediately and subsequently by Post with full details of such upset condition.
 - v) The occupier shall restart the production only after ascertaining that the Zero discharge treatment system can perform effectively for achieving zero discharge of effluents.

Special Additional Conditions:

The unit shall obtain No Objection Certificate (NOC) from the Tamil Nadu Bio Diversity Board /National Bio Diversity Authority if the unit is using any Biological resources or knowledge associated thereto as per the provisions of Biological Diversity Act 2002.

The industries shall take all efforts to use and popularize “Mission LiFE” logo and mascot which is available in TNPCB & MoEFCC website. They shall also request their employees to adopt “Mission LiFE” action points and document the same and furnish half yearly report to Board.

Additional Conditions:

1. The unit shall be liable for remittance of consent fee as per the gross fixed assets under the provisions of the Water and Air Acts for the establishment carried out for this expansion activity, if any.
2. The unit shall comply with all the conditions stipulated in the environmental clearance issued by the MoEF vide letter dated 03.09.2007.
3. The unit shall comply with all the conditions imposed in the no increase in pollution load certificate issued by the Board vide letter dated 12.03.2021 & 21.07.2023.
4. The unit through the QCI consultant shall analyse & validate the load based values projected to the 'Pollution Load Assessment Committee' and shall furnish the report to the TNPC Board, after three months on the issue of this CTO Expansion from TNPC Board for increased production capacity based on the NIPL certificate.
5. The unit shall under take to work out the pollution loads after commencing the operation of product mix change and submit report to TNPCB.
6. The unit shall furnish Environmental Management Plan and 3rd party Audit within three months time.
7. The unit shall operate and maintain the STP efficiently and continuously so as to achieve the treated sewage standards prescribed by the Board consistently and it shall ensure that the treated sewage is utilized on their own land for gardening within the unit premises without any stagnation or ponding.
8. The unit shall ensure that the EMFM & CEMS for the parameter pH provided at the outlet of STP is connected to WQW, TNPCB, Chennai & CPCB server at all times.
9. The unit shall ensure that the RO reject let out from Multiple Effect Desalination Plant (6 stages of RO) in to Bay of Bengal is achieving the marine disposal standards consistently and also ensure that the flow meter & CEMS for the parameter pH provided at the outlet of RO reject is connected to WQW, TNPCB, Chennai & CPCB server at all times.
10. The unit shall ensure that the trade effluent generated from the plant except Multiple Effect Desalination plant is reused in the process.
11. The unit shall maintain the gypsum pond as per CPCB guidelines and to monitor the ground water quality in and around the gypsum pond by collecting the samples from the piezometres periodically. The unit shall ensure that the leachate generated is reused in Phosphoric Acid Plant & Gypsum is used in Cement industries & by farmers.
12. The unit shall dispose the hazardous wastes to the authorized facilities then & there before 90 days as per the conditions stipulated in the authorization issued under the provisions of Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016.
13. The unit shall maintain Form-3 for the generation of hazardous waste from the unit and shall file annual return in Form-4 to the Board. The unit shall maintain the hazardous waste display board in front of the unit clearly updating the same regularly as mandated by the Hon'ble Supreme Court Order dated 14.10.2003 in the matter of WP No.657/1995.
14. The unit shall comply with the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
15. The unit shall ensure that the storm water arising from the plant area during rainy season shall not contain any chemical contaminants and shall satisfy the inland surface water standards before disposal.
16. The unit shall comply with the CPCB guidelines for "Management, Handling, Utilisation and Disposal of Phosphogypsum generated from Phosphoric Acid Plants" with respect to the following aspects at all times.
 - a. Management and handling of phosphogypsum
 - b. Environmental impacts associated with phosphogypsum dumping yards
 - c. Guidelines for transportation, storage, management, handling, utilisation and disposal of phosphogypsum
 - d. Guideline for utilisation of phosphogypsum
 - e. Monitoring protocol for assessment of environmental impacts in and around the phosphogypsum stack with respect to ambient air quality monitoring, ground water monitoring, surface water monitoring, soil samples monitoring and radioactivity in ground water.
17. The unit shall carry out analysis to determine U-238 and Ra-226 content in each imported consignment of rock phosphate as well as in phosphogypsum produced from its processing and shall be examined by the AERB.
18. The unit shall install Effluent Treatment Plants (ETPs) comprising of neutralisation with lime followed by clarification to treat excess process water from existing phosphoric acid plants which may require disposal especially during monsoon, so as to meet the discharge norms for pH, phosphates, fluoride, sulphate and as stipulated under the Environment (Protection) Act, 1986.
19. The unit shall ensure that the floor wash water, wastewater generated from vehicle washing bay and run-off contaminated with phosphogypsum shall be collected properly and routed to Effluent Treatment Plant (ETP) for treatment.
20. The unit shall install Continuous Ambient Air Quality Monitoring Stations at 3 prominent (upwind, downwind) locations at 120° (within the industry boundary) covering the phosphogypsum stack yard

at regular intervals. For heavy metals (Pb and As) monitoring frequency is once in a year

21. The unit shall monitor the surface water (nullah/ river, impoundments) for pH, EC, SS, TDS, heavy metals (such as As, Cd, Cr, Ni, Pb and Zn), P O₄, F, SO₄, Total Alkalinity and Total hardness at upstream and downstream, surge ponds, retention ponds, toe drains and holding ponds located in adjoining area at least twice in a year.

22. The unit shall collect and analyse the soil samples for the parameters pH, EC, heavy metals (such as As, Cd, Cr, Ni, Pb and Zn) and leachable concentration of PO₄ and Fluoride at least twice in a year (Pre Monsoon/Post Monsoon).

23. The unit shall analyse the ground water around the phosphogypsum stacks for the presence of radioactivity once in a year through AERB/competent authority.

24. The unit shall analyse the ground water around the phosphogypsum stacks for pH, P and F and other parameters like EC, SS, heavy metals (such as As, Cd, Cr, Hg, Ni, Pb and Zn), F, NO₃, SO₄, PO₄, Total Alkalinity (excluded in coastal region) and Total Hardness at least once in a quarter.

25. The unit shall ensure that the atleast 3 ground water samples should be collected up to a radial distance of 1 KM from the phosphogypsum stack in down gradient of prevailing groundwater flow. If no open wells or tube wells are available within a radial distance of 1 KM, it is required to drill new test wells.

26. The unit shall ensure that at least four monitoring wells (piezometric) around the phosphogypsum stack i.e. one on up gradient of the ground water flow and other three on the down gradient side of the ground water flow at least up to 'shallow water bore well'.

27. The unit shall not use 'use and throwaway plastics' such as plastic sheets used for food wrapping, spreading on dining table etc., plastic plates, plastic coated tea cups, plastic tumbler, water pouches and packets, plastic straw, plastic carry bag and plastic flags irrespective of thickness, within the industry premises. Instead it shall encourage use of eco friendly alternative such as banana leaf, areca nut palm plate, stainless steel, glass, porcelain plates/cups, cloth bag, Jute bag etc.,

28. The unit shall comply with the E- waste management Rules 2016.

29. In case of revision of consent fee by the Government, the unit shall remit the difference in amount within one month from the date of notification. Failing to remit the consent fee, this consent order will be withdrawn without any notice and further action will be initiated against the unit as per law.

30. The unit shall submit the Environmental Statement for the financial year ending on 31st March on or before 30th of September every year

R

SARASAVANI

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For Member Secretary,
Tamil Nadu Pollution Control Board,
Chennai

GENERAL CONDITIONS

1. The occupier shall make an application along with the prescribed consent fee for grant of renewal of consent at least 60 days before the date of expiry of this Consent Order along with all the required particulars ensuring that there is no change in Production quantity and change in sewage/Trade effluent.
2. This Consent is issued by the Board in consideration of the particulars given in the application. Any change or alteration or deviation made in actual practice from the particulars furnished in the application will also be ground for review/variation/revocation of the Consent Order under Section 27 of the Act and to make such variation as deemed fit for the purpose of the Act.
3. The consent conditions imposed in this order shall continue in force until revoked under Section 27(2) of the Act.
4. After the issue of this order, all the 'Consent to Operate' orders issued previously under Water (Prevention and Control of Pollution) Act, 1974 as amended stands defunct.
5. The occupier shall maintain an Inspection Register in the factory so that the inspecting officer shall record the details of the observations and instructions issued to the unit at the time of inspection for adherence.
6. The occupier shall provide and maintain an alternate power supply along with separate energy meter for the Effluent Treatment Plant sufficient to ensure continuous operation of all pollution control equipments to maintain compliance.
7. The occupier shall provide all facilities to the Board officials for inspection and collection of samples in and around the factory at any time.
8. The occupier shall display the flow diagram of the sources of effluent generation and pollution control systems provided at the ETP site.
9. The solid waste such as sweepings, wastage, package, empty containers, residues, sludge including that from air pollution control equipments collected within the premises of the industrial plant shall be collected in an earmarked area and shall be disposed off properly.
10. The occupier shall collect, treat the solid wastes like food waste, green waste generated from the canteen and convert into organic compost.
11. The occupier shall segregate the Hazardous waste from other solid wastes and comply in accordance with Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008.
12. The occupier shall maintain good house-keeping within the factory premises.
13. All pipes, valves, sewers and drains shall be leak proof. Floor washings shall be admitted into the trade effluent collection system only and shall not be allowed to find their way in storm drains or open areas.
14. The occupier shall ensure that there shall not be any diversion or by-pass of trade effluent on land or into any water sources.
15. The occupier shall ensure that solar Evaporation pans shall be constructed in such a way that the bottom of the solar pan is at least 1 m above the Ground level (if applicable).
16. The occupier shall furnish the following returns in the prescribed formats to the concerned District office regularly.
 - a) Monthly water consumption returns of each of the purposes with water meter readings in Form-I on or before 5th of every month.
 - b) Yearly return on Hazardous wastes generated and accumulated for the period from 1st April to 31st March in Form-4 before the end of the subsequent 30th June of every year (if applicable).
 - c) Yearly Environmental Statement for the period from 1st April to 31st March in Form -V before the end of the subsequent 30th September of every year(if applicable).
17. If applicable, the occupier has to comply with the provisions of Public Liability Insurance Act, 1991 to provide immediate relief in the event of any hazard to human beings, other living creatures/plants and properties while handling and storage of hazardous substances.
18. The issuance of this consent does not authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any natural watercourse or in Government Poromboke lands.
19. The issuance of this Consent does not convey any property right in either real personal property or any exclusive privileges, nor does it authorize any injury to private property or Government property or any invasion of personal rights nor any infringement of Central, State laws or regulation.

- 20. The occupier shall forth with keep the Board informed of any accident of unforeseen act or event of any poisonous, noxious or polluting matter or emissions are being discharged into stream or well or air as a result of such discharge, water or air is being polluted.
- 21. If due to any technological improvements or otherwise the Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any treatment system, either in whole or in part) the Board shall, after giving the applicant an opportunity of being heard, vary all or any of such conditions and thereupon the applicant shall be bound to comply with the conditions as so varied.
- 22. In case there is any change in the constitution of the management, the occupier of the new management shall file fresh application under Water (Prevention and Control of Pollution) Act, 1974, as amended in Form-II alongwith relevant documents of change of management immediately and get the necessary amendment with renewal of consent order.
- 23. In case there is any change in the name of the company alone, the occupier shall inform the same with relevant documents immediately and get the necessary amendments for the change of name from the Board.
- 24. The occupier shall display this consent order granted to him in a prominent place for perusal of the inspecting Officers of this Board.

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SARASAVANI

For Member Secretary,
Tamil Nadu Pollution Control Board,
Chennai

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