

**ANDHRA PRADESH POLLUTION CONTROL BOARD**

Paryavaran Bhavan, APIIC Colony Road,  
Gurunanak Colony,  
Autonagar, Vijayawada- 520007.

Website: www.pcb.ap.gov.in

**CONSENT TO ESTABLISH ORDER (Expansion)****Order No.65/APPCB/CTE/RO-VSP/HO/2010****16/04/2024**

Sub: APPCB – CTE - **M/s. Coromandel International Limited, D.No.3-15/1, Beach Road, Vakalapudi Village, Kakinada Rural, Kakinada District** – Consent to Establish of the Board for Expansion under Sec.25 of Water (P & C of P) Act, 1974 and Under Sec.21 of Air (P&C of P) Act, 1981 - Issued - Reg.

- Ref:
1. CTE(Exp) order dt.09.11.2022.
  2. CTO order dt.07.03.2023.
  3. Industry's CTE(exp) application received through APOCMMS on 11.03.2024.
  4. Z.O inspection report dt.06.04.2024.
  5. CTE Committee meeting held on 12.04.2024.
  6. Industry's Ir.dt.12.04.2024 & email received on 15.04.2024.

1. **M/s. Coromandel International Limited**, vide reference<sup>3rd</sup> cited, submitted an application to the Board seeking Consent to Establish (CTE) for Expansion to produce the following, with an additional investment of Rs.465 Cr.

S. No.	Name of the Products and By-Products	Consented capacity as per CTO order dt. 07.03.2023	CTE order dt. 09.11. 2022	Proposed capacity	Total capacity after expansion
1.	Di-Ammonium Phosphate	20.5 Lakhs Tons Per Anum (All the three trains (A, B & C) put together).	---	---	20.5 Lakhs Tons Per Anum (All the three trains (A, B & C) put together).
2.	NPK Fertilizer				
3	Phosphoric Acid Plant	--	750 TPD	--	750 TPD
4.	Sulphuric Acid	---	--	2000 TPD	2000 TPD
5.	Captive Power (Waste Heat Recovery)	--	--	23 MW	23 MW

2. As per the application, the proposed activity is to be located within the existing Plant premises located at D.No.3-15/1, Beach Road, Vakalapudi Village, Kakinada Rural, Kakinada District in an area of 562.5 acres.

3. The above site was inspected by the Joint Chief Environmental Engineer, Zonal Office: Visakhapatnam & Environmental Engineer, Regional Office: Kakinada, A.P Pollution Control Board on 30.03.2024 and observed that the site is surrounded by

**North** : Road  
**South** : M/s. NFCL

**East** : Kakinada Sea Port Road followed by Sea  
**West** : Vacant Land and houses followed by road.

4. The Board, after careful scrutiny of the application, verification report of Zonal Officer and recommendations of CTE committee, hereby issues **CONSENT TO ESTABLISH FOR EXPANSION** under Section 25 of Water (Prevention & Control of Pollution) Act 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981 and the rules made there under. **This order is issued to manufacture the products as mentioned at para (1) only.**
5. This Consent Order now issued is subject to the conditions mentioned in Annexure.
6. This order is issued from pollution control point of view only. Zoning and other regulations are not considered.
7. This order is valid for period of 7 years from the date of issue.

Encl: Annexure

**B SREEDHAR IAS, MS(BS), O/o MEMBER SECRETARY-APPCB**

**To**

**M/s. Coromandel International Limited (Exp),  
D.No.3-15/1, Beach Road, Vakalapudi Village,  
Kakinada Rural, Kakinada District  
srinivasaraoch@coromandel.murugappa.com**

- Copy to:** 1. The JCEE, Z.O:Visakhapatnam for information and necessary action.  
2. The E.E., R.O: Kakinadafor information and necessary action.

**ANNEXURE**

1. The proponent shall obtain Consent to Operate (CTO) from APPCB, as required Under Sec.25/26 of the Water (P&C of P) Act, 1974 and under sec. 21/22 of the Air (P&C of P) Act, 1981, before commencement of the trial runs.
2. The applicant shall properly maintain separate energy meters for Effluent Treatment Plant (ETP) and Air pollution Control equipments to record energy consumed. An alternative electric power source sufficient to operate all pollution control systems shall be provided.
3. The industry shall properly maintain separate storm water drains. No effluents shall be discharged in to the storm water drains.

**Water:**

4. The source of water is Surface water. The maximum permitted water consumption is as following:

S. No.	Purpose	Existing as per CTO Order dt. 07.03.2023 (KLD)	CTE dt. 09.11.2022 PAP plant (KLD)	Proposed expansion for SAP plant (KLD)	Total after CTE (exp) (KLD)
1.	Process and Washing	1210 KLD	4750	340 (DM Water)	6300 KLD
2.	Boiler feed	160 KLD	1450	880 (DM Water)	2490 KLD
3.	Cooling makeup	40 KLD	690	2500	3230 KLD
4.	Gardening /Fire hydrant	175 KLD	100	5	280 KLD
5.	Domestic	100 KLD	10	5	115 KLD
	<b>Total</b>	<b>1685 KLD</b>	<b>7000 KLD</b>	<b>3730 KLD</b>	<b>12415 KLD</b>

5. The maximum waste water generation shall not exceed the following:

S. No.	Purpose	Existing as per CTO Order dt. 07.03.2023 (KLD)	CTE dt. 09.11.2022 PAP plant (KLD)	Proposed expansion for SAP plant (KLD)	Total after CTE (exp) (KLD)
1.	Process (Clarifier blow down)	10 KLD	104	10	124 KLD
2.	Boiler Blow down	10 KLD	72	72	154 KLD
3.	Cooling Tower Bleed off	12 KLD	28	480	520 KLD
4.	Softener & DM Plant regeneration	24 KLD	36	110	170 KLD
5.	Domestic	60 KLD	4.5	4	68.5 KLD
	<b>Total</b>	<b>116 KLD</b>	<b>244.5 KLD</b>	<b>676 KLD</b>	<b>1036.5 KLD</b>

**ETP Details & Mode of Disposal:****After CTE (Expansion):**

Effluent Source	Quantity of Effluent	Treatment Facility	Mode of Disposal
Process (Clarifier), Cooling Tower & Boiler blow down and Softener regeneration	968 KLD	---	Recycled in the process after treatment.
Domestic	68.5 KLD	100 KLD STP	After treatment in STP, the treated wastewater shall be used onland for irrigation, within the industry premises duly meeting the Board's discharge standards (BOD-30 mg/l).

6. All the units of the ETP & STP systems shall be impervious to prevent ground water pollution. The ETP & STP systems shall be maintained properly to achieve the standards.
7. The industry shall provide magnetic flow meters with totalisers at the inlet and outlet of ETP; and to assess the quantity of wastewater recycled in the industry.
8. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas. All pipe valves, sewers, drains shall be leak proof.

**Air:**

9. The Air pollution Control equipment shall be maintained properly and shall comply with the following for controlling air pollution after expansion:

**Existing:-**

S. No	Details of Stack	Existing							
		Stack -I	Stack -II	Stack - III	Stack - IV	Stack -V	Stack -VI	Stack - VII	Stack - VIII
a.	Attached to:	DAP plant -A Train	DAP plant -B Train	DAP plant -C Train	Boilers	Bagging Plant 1	Screen house - 2 & Bagging Plant 2	Bagging Plant 3	DG Sets
b.	Capacity of Boiler/ Furnace/Kiln/Incinerator/ D.G. Set/Others				12 TPH & 7TPH* (standby boiler)				2 x 1000 KVA
c.	Fuel form: Solid / Liquid/ gaseous	Natural Gas	Natural Gas	Natural Gas	Natural Gas				HSD
d.	Stack height:	50m	50m	62m	30m	30m	45m	33m	15m
e.	Details of Air Pollution Control Equipment:	Individual venturi /cyclone + fumes scrubber (dry/wet scrubber)+ tail gas scrubber with mist eliminator			Bag filter	Wet scrubber	Wet scrubber	Wet scrubber	Muffler cum silencers
f.	Concentration of Particulate	PM - 115 mg/Nm <sup>3</sup>			115 mg/Nm <sup>3</sup>	PM - 115 mg/Nm <sup>3</sup>	PM - 115 mg/Nm <sup>3</sup>	PM - 115 mg/Nm <sup>3</sup>	--

Matter-mg/Nm <sup>3</sup>	Ammonium as NH <sub>3</sub> - 300mg/Nm <sup>3</sup> Total Fluoride - <10mg/m <sup>3</sup>	Total Fluoride - <10mg/m <sup>3</sup>	Total Fluoride - <10mg/m <sup>3</sup>	Total Fluoride - <10mg/m <sup>3</sup>
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**Proposed:**

S. No	Details of Stack	As per CTE order dt.09.11.2022 (not yet established)				Proposed for SAP	
		Stack -IX	Stack -X	Stack -XI	Stack -XII	Stack - XIII	Stack -XIV
a.	Attached to:	FBC Boiler	Reactor(Rock Phosphate & Sulfuric acid) & filtration unit	Rock Phosphate grinding unit (Ball Mill)	DG Set	SAP Plant	DG Set
b.	Capacity of Boiler/ Furnace/Kiln/Incinerator/ D.G. Set/Others	45TPH		120TPH	1 x 1010 KVA		1 x 910 KVA
c.	Fuel form: Solid / Liquid/ gaseous	Coal					
d.	Stack height:	60m	35m	35m	30m	63m	9m
e.	Details of Air Pollution Control Equipment:	ESP	Multi stage wet scrubbers	Bag filter	Acoustic enclosure and silencer	Wet scrubber	Acoustic enclosure and silencer
f.	Concentration of Particulate Matter-mg/Nm <sup>3</sup>	PM - 100 mg/Nm <sup>3</sup>	PM - 115 mg/Nm <sup>3</sup> Total Fluoride - <10mg/m <sup>3</sup>	PM - 115 mg/Nm <sup>3</sup> Total Fluoride - <10mg/m <sup>3</sup>	--	SO <sub>2</sub> -950 mg/m <sup>3</sup> Acid Mist/ Sulphur Trioxide -50 mg/m <sup>3</sup>	--

10. A sampling port with removable dummy of not less than 15 cm diameter shall be provided in the stack at a distance of 8 times the diameter of the stack from the nearest constraint such as bends etc. A platform with suitable ladder shall be provided below 1 meter of sampling port to accommodate three persons with instruments. A 15 AMP 250 V plug point shall be provided on the platform.
11. The industry shall properly maintain online pH measuring facility with auto recording system to the scrubbers provided to treat the process emissions.
12. The industry shall implement adequate measures to control all fugitive emissions from the plant.
13. The proponent shall ensure compliance of the National Ambient Air quality standards notified by MoEF, GoI vide notification No. GSR. 826 (E), dated. 16.11.2009 during construction and regular operational phase of the project at the periphery.

The generator shall be installed in a closed area with a silencer and suitable noise absorption systems. The ambient noise level shall not exceed 75 dB(A) during day time and 70 dB(A) during night time.

**Solid / Hazardous Waste:**

14. The industry shall comply with the following for disposal of Solid Waste after expansion:

S. No.	Name of the Hazardous Waste	Qty after CTE (exp)	Mode of disposal
1	Acid residues (Tank bottom sludge)	50 TPA	Recycled into phosphoric acid. Reactor/ shall be routed through APEMC to TSDF, Parawada / processing Co-processing.
2	Sulphur muck (Sulphur sludge)	750 TPA	Recycled in the process as filler material in the granulation plant/ shall be routed through APEMC to TSDF, Parawada / pre-processing co processing
3	Spent catalyst	65 TPA	Shall be routed through APEMC through Authorizedrecyclers
4	Used lubricating oil/Waste oil	4500 LPA	Shall be routed through M/s. APEMC so as to send to authorized agencies for re- processors / recyclers (as recyclable waste).
5	Detoxified Containers and container liners.	1200 Nos per Annum	Shall be routed through APEMC to authorized agencies, after complete detoxification for re-use/ recycle.
6	ETP Sludge	4 TPD	Shall be received through M/s. Andhra Pradesh Environment Management Corporation from M/s. Parry Sugars
7	Calcium Phosphate	17 TPD	Refinery India Pvt Ltd., Kakinada for utilization as filler material in granulation plant along with Dolomite (as utilizable waste)
8	ETP Sludge containing Phosphate from the present proposal	10 TPD	
9	Coal Ash	80 TPD	To brick Manufacturers.
10	Spent Ion Exchange Resin from DM Plant	5 TPA	Generation as per resin change over requirement.

15. The following rules and regulations notified by the MoEF&CC, GoI shall be implemented.

- a) Hazardous waste and other wastes (Management and Transboundary Movement) Rules, 2016.
- b) Plastic Waste Management Rules, 2016.
- c) Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.
- d) Fly Ash Notification, 2016.
- e) Batteries (Management & Handling) Rules, 2010.
- f) E-Waste (Management) Rules, 2016.
- g) Construction and Demolition waste Management Rules, 2016.
- i) Solid Waste Management Rules, 2016.
- j) The Public Liability Insurance Act, 1991 and its amendments thereof.

**Other Conditions:**

16. The industry shall comply the conditions stipulated in the EC (amendment) order to be issued.

17. The industry shall obtain EC(amendment) regarding the modifications pertaining extent of greenbelt as per the commitment given to the Board on Rs.100/- non-judicial stamp paper vide letter dt.31.10.2022 and submit to the

**Board.**

18. The industry shall develop relocation of existing greenbelt as per AP WALTA act as per the Minutes of the Meeting of the EAC (Expert Appraisal Committee, MoEF& CC) meeting held on 26.02.2024, recommended 265 acres of green belt post expansion of (H-Train, Nano DAP/Nano Urea, Phosphoric acid and Sulphuric acid plant).
19. The industry shall take additional measures, like providing more water sprinklers and procuring another sweeping machine, to control the contribution of dust emissions to AAQ as committed during the CTE committee meeting held on 12.04.2024.
20. The industry shall take all necessary measures to avoid frequent exceedances of stack emissions (A and B trains) and improve the existing pollution control equipments to meet the Board standards.
21. The industry shall install on-line pH meters with auto recording facility for Scrubbing units and online SO<sub>2</sub>analysers to sulphuric acid plant to measures the acid mist emissions from the process and connect the same to APPCB server.
22. The industry shall comply with the conditions of the CTE order dt.09.11.2022 and CTO order dt.07.03.2023.
23. The industry shall display online data outside the main factory gate on quantity and nature of hazardous chemicals being used in the plant, water & air emissions and solid waste generated within the factory premises, as per Hon'ble Supreme Court order.
24. The industry shall prepare a safety report and carry out an independent safety audit report of the respective industrial activities including chemical storages / isolated storages by an expert not associated with such industrial activity as required under Rule 10 of MSIHC Rules, 1989 and get it approved by the Factories Dept., and submit the compliance along with copy of the safety report, safety audit report and safety certificate at concerned Regional Office, APPCB.
25. The industry shall submit a copy of the NOC issued by the Andhra Pradesh State Disaster Response and Fire Service Dept., (APSDRFSD) at concerned Regional Office, APPCB.
26. The industry shall submit risk assessment report covering worst scenario clearly describing impact within the industry premises and outside the industry premises and emergency response system.
27. The industry shall obtain PESO clearance & policy under PLI Act before applying for CTO of the Board.
28. The industry shall comply with the Technical suggestions at Chapter No. 7.3 & 7.4 for Hazardous Chemical handling industries by High Power Committee (HPC) of Govt. of Andhra Pradesh. The HPC report is available at

[www.ap.gov.in](http://www.ap.gov.in).

29. The industry shall utilize DG power for captive consumption only & power shall not be supplied to grid and shall follow the amendments issued by MoEF& CC/CPCB from time to time on DG sets in respect of conditions & standards.
30. The industry shall submit compliance to the conditions stipulated in the EC and CTE orders to the concerned Regional Officer of APPCB every six months and shall upload the same at APPCB website viz., [https://pcb.ap.gov.in/UI/Submission\\_Compliance\\_of\\_EC\\_CTE\\_CTO\\_Direction.aspx](https://pcb.ap.gov.in/UI/Submission_Compliance_of_EC_CTE_CTO_Direction.aspx)
31. The industry shall submit the information regarding usage of Ozone Depleting Substance once in six months to the Regional Office and Zonal Office of the Board.
32. The industry shall submit a report on recycling of treated effluent into the process to achieve zero discharge except during rainy season.
33. **Green belt shall be developed all along the boundary & vacant spaces with tall growing trees with good canopy and it shall not be less than 33% of the total area.**
34. Concealing the factual data or submission of false information / fabricated data and failure to comply with any of the conditions mentioned in this order attracts action under the provisions of relevant pollution control Acts.
35. Notwithstanding anything contained in this conditional letter or consent, the Board hereby reserves its right and power Under Sec. 27(2) of Water (Prevention and Control of Pollution) Act, 1974 and Under Sec.21(4) of Air (Prevention and Control of Pollution) Act, 1981 to revoke the order, to review any or all the conditions imposed herein and to make such modifications as deemed fit and stipulate any additional conditions.
36. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules,1982, to such authority (hereinafter referred to as the Appellate Authority) constituted under Section 28 of Water (Prevention and Control of Pollution)Act,1974 and Section 31 of the Air (Prevention and Control of Pollution) Act, 1981.

**B SREEDHAR IAS, MS(BS), O/o MEMBER SECRETARY-APPCB**

To

**M/s. Coromandel International Limited (Exp),  
D.No.3-15/1, Beach Road, Vakalapudi Village,  
Kakinada Rural, Kakinada District**