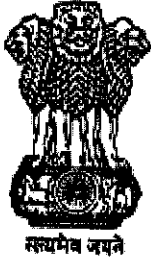


**By speed post/online**



**F. No. IA- J-11011/51/2016- IA II(I)**

Government of India

Ministry of Environment, Forest & Climate Change

Impact Assessment Division

\*\*\*

Indira Paryavaran Bhawan,  
Vayu Wing, 3<sup>rd</sup> Floor, Aliganj,  
Jor Bagh Road, New Delhi-110 003

Dated: 07<sup>th</sup> January, 2021

To,

**Sh. Kumaresan,**  
M/s Coromandel International Limited  
Post Box. No: 1116,  
Sriharipuram,  
Malkapuram post,  
Visakhapatnam, Andhra Pradesh  
e-mail: rajasekhark@coromandel.murugappa.com

**Sub: Enhancement of Phosphoric Acid production from 700 MTPD to 1000 MTPD P<sub>2</sub>O<sub>5</sub> and other auxiliary facilities within the Existing Fertilizer Complex by M/s Coromandel International Limited located at Sriharipuram, Vishakhapatnam district, Andhra Pradesh - Amendment in Environment Clearance regarding.**

Sir,

This refers to your online proposal No. IA/AP/IND2/149474/2020 for amendment in the environmental clearance to the above project.

2. The Ministry of Environment, Forest and Climate Change has considered the above proposal for amendment in the environmental clearance granted by the Ministry vide letter dated 14.07.2017 for the project "Enhancement of Phosphoric Acid production (from 700 MTPD to 1000 MTPD) P<sub>2</sub>O<sub>5</sub> and other auxiliary facilities within the existing Fertilizer Complex" located at Sriharipuram, Vishakhapatnam district, Andhra Pradesh in favor of M/s Coromandel International Limited (Formerly M/s Coromandel Fertilizer Limited).

3. The project proponent has requested for amendment in the EC with the details are as under:

*Signature*

Sr. No	Para of EC issued by MoEF&CC	Details as per EC	To be revised /read as	Justification/Reason
1.	Subject	Enhancement of Phosphoric Acid production (from 700 MTPD to 1000 MTPD) P205 and other auxiliary facilities within the existing Fertilizer Complex, Sriharipuram, Vishakhapatnam District, Andhra Pradesh by M/s Coromandel International Limited (Formerly M/s Coromandel Fertilizer Limited)	"Proposed setting up of new 1500 MTPD Sulphuric acid (100%) plant within the Existing Fertilizer Complex, for total Sulphuric acid production of 3600 MTPD at Sriharipuram, Vishakhapatnam district, Andhra Pradesh, without increase pollution load and total production of NP/NPK (3900 MTPD) and Phosphoric Acid (1400 MTPD) by M/s. Coromandel International Limited (Formerly M/s Coromandel Fertilizers limited)."	Change in total sulphuric acid production capacity due to Additional 1500 MTPD sulphuric acid plant. Both Sulphuric Acid and Phosphoric Acid are intermediates to chemical fertilizers (Phosphoric fertilizers), which stand alone is not covered under the ambit of EIA notification 2006
2.	Point 2	The Ministry of Environment, Forests and Climate Change has examined the application. It is noted that proposal is for	The Ministry of Environment, Forests and Climate Change has examined the application. It is noted that proposal is for <u>setting up of</u>	

87-2

		<u>Enhancement of Phosphoric Acid production (from 700 MTPD to 1000 MTPD) P205 and other auxiliary facilities within the existing Fertilizer Complex, Sriharipuram, Vishakhapatnam district, Andhra Pradesh by M/s Coromandel International Limited (Formerly M/s Coromandel Fertilizer Limited).</u>	<u>new 1500 MTPD Sulphuric acid (100%) plant within the Existing Fertilizer Complex, for total Sulphuric acid production of 3600 MTPD at Sriharipuram, Vishakhapatnam district, Andhra Pradesh, without increase pollution load and total production of NP/NPK (3900 MTPD) and Phosphoric Acid (1400 MTPD) by M/s. Coromandel International Limited (Formerly M/s Coromandel Fertilizers limited)."</u>	
3.	Point 3	<p>Existing land area is Total plot area is <b><u>438 Acres</u></b>, of which 145 acres is developed as greenbelt. <b><u>Total cost of the project is ~ 225 Crore.</u></b> The estimated cost of various environmental management programs in the proposed project is ~ 26.42 Cr which is</p>	<p>Existing land area is <b><u>313 Acres</u></b>, of which 120 acres is developed as greenbelt. <b><u>Additional cost of the project is ~ 400 Crore.</u></b> The additional estimated cost of various environmental management programs in the proposed project is ~ 10 Cr which is</p>	<ul style="list-style-type: none"> <li>• Change in plot area and greenbelt area due to de-lease of 123 acres of land to M/s Visakhapatnam Port trust, including 25 acres of green belt.</li> <li>• Proposed installation of Sulphuric acid plant of 1500 MTPD capacity (standalone being exempted from EC as being inorganic product)</li> </ul>

8742

	<p>around 12% of proposed project cost. <u>In order to achieve consented production of 3900 MTPD NP/NPK production, the facility intends to adopt the following modifications and upgrades in the upstream of the complex fertilize manufacturing units:</u></p> <p>Enhancing Phosphoric acid plant production capacity from 700 MTPD to 1000 MTPD including evaporation section and fluorine recovery unit.</p> <p>De-bottlenecking the existing sulphuric acid plant-1 from 1400 MTPD to 1700 MTPD,</p> <p>De-bottlenecking the existing sulphuric acid plant -2 from 300MTPD to 400MTPD.</p> <p>Installing a 40MTPH coal fired boiler to meet the</p>	<p>around 2.5% of proposed Additional project cost. <u>In order to achieve consented production of 3900 MTPD NP/NPK production, the facility intends to adopt the following modifications and upgrades in the upstream of the complex fertilize manufacturing units:</u></p> <ul style="list-style-type: none"> <li>• Installation of Additional 1500 MTPD of Sulphuric Acid production plant along with existing 2100 MTPD Sulphuric Acid Plant (SAP-1 (1700 MTPD) &amp; SAP2 (400 MTPD)). Total production capacity of Sulphuric acid shall be 3600 MTPD</li> <li>• Use of low sulphur coal in coal fired boiler and optimizing</li> </ul>	
--	--	--	--

872

		<p>additional steam required for the increased evaporation capacity.</p> <p>Installing a 5 MW back pressure turbine in order to maximize the efficiency of steam utilization.</p> <p>Installing of storage facility for a capacity of 20000 MT (P2O5 solution) for phosphoric acid.</p> <p>Installation of 400 MTPD evaporation system for phosphoric acid including fluorine recovery system.</p> <p>Installing of storage facility for a capacity of 5000 MT for Sulphuric Acid (100% strength)</p>	<p>operations of existing sulphuric acid plant – I and coal fired boiler for no change in SO2 emission from the sanctioned emission load.</p> <ul style="list-style-type: none"> <li>Existing Phosphoric acid plant with production capacity of 1400 MTPD</li> <li>Provision of storage capacity of 2 x 5000 MT + 2 X 12,500 MT + 1500 MT along with existing storage capacity of 15,000 MT</li> </ul>	
4.	Point 4	<p>Power requirement will be increased from <b><u>14 MW to 20 MW</u></b>. The facility has contracted grid power of 12 MW, 5 MW from APGPCL and in-house steam turbine capacity of 5MW. The net available power for the existing operation is in the order of 22</p>	<p>Power requirement will be increased from <b><u>20 MW to 21 MW</u></b>. The facility has contracted grid power of 12 MW, 5 MW from APGPCL and in-house steam turbine capacity of 5MW. The net available power for the existing operation is in the order of 22</p>	<p>Due to installation of Sulphuric acid plant (production of sulphuric acid being inorganic is exempted from EC). There shall be increase in 1MW of energy consumption.</p> <p>Due to installation of Sulphuric acid plant there shall be 1800 m3/d water requirement and for production of</p>

342

		MW. Hence the available power is adequate to meet the total requirement of <u>20 MW</u> post enhancement.	MW. Hence the available power is adequate to meet the total requirement of <u>21 MW</u> post enhancement.	enhanced phosphoric acid as per granted consent there shall be additional water requirement of 2400 m3/day. Thus Additional 4200 m3/day of water requirement shall be sourced from GVMC.
5.	Point para 3	Fresh water requirement will be increased from <u>8700 m3/day to 12000 m3/day</u> , which will be sourced from Greater Vishakhapatnam Municipal Corporation (GVMC). Sea water consumption will be increased from <u>63000 m3/ day to 84600 m3/ day</u> .	Fresh water requirement will be increased from <u>10350 m3/day to 14550 m3/day</u> , which will be sourced from Greater Vishakhapatnam Municipal Corporation (GVMC). Sea water consumption will be same i.e <u>84600 m3/ day</u> .	
6.	A-Specific Condition 1	Green Belt of 10 M wide (Perennial trees) to be developed in three sides of plant periphery totaling <u>145-acre area</u> .	Green Belt of 10 M wide (Perennial trees) to be developed in three sides of plant periphery totaling <u>120-acre area</u> .	Change in greenbelt area due to de-lease of 123 acres of land to M/s Visakhapatnam Port trust, including 25 acres of green belt.
7.	A-Specific Condition 2	The present freshwater requirement is <u>8700 m3/day</u> . <u>Additional fresh water for the proposed enhancement is to be limited to 1650 m3/day. The total freshwater requirement post enhancement</u>	The present freshwater requirement is <u>10350 m3/day</u> . <u>Additional fresh water for the proposed enhancement will be 4200 m3/day. The total freshwater requirement post enhancement</u>	Due to installation of Sulphuric acid plant there shall be 1800 m3/d water requirement and for production of enhanced phosphoric acid as per granted consent there shall be additional water requirement of 2400 m3/day. Thus Additional 4200 m3/day of water

*Signature*

		<u>shall not exceed 10350 m3/day.</u> The present sea water requirement for once through cooling is <u>63000 m3 / day and the same will be increased post enhancement to 84600 m3 / day.</u>	<u>shall not exceed 14550 m3/day.</u> The present sea water requirement for once through cooling will remain to be <u>84600 m3 / day.</u>	requirement shall be sourced from GVMC.
8.	A-specific Condition 4	Post enhancement, the SO2 emissions from Sulphuric acid plant-I and sulphuric acid plant-2 shall be maintained at 1 kg/MT and 0.65 kg/MT.	Post amendment, the SO2 emissions from Sulphuric acid plant-I and sulphuric acid plant-2 shall be maintained at 0.75 kg/MT and 0.65 kg/MT and in Sulphuric Acid Plant-3 shall be maintained at 0.75 kg/MT.	Reduction of SO2 emission in sulphuric acid plant -1 from 1 to 0.75 kg/MT of acid through addition of Caesium content catalysts in 5th bed of the converter.

4. The proposal was examined by the Expert Appraisal Committee (25<sup>th</sup> EAC-Industry-2) in the Ministry in its meeting held on 24th November, 2020 (F/Minutes). The EAC, **after detailed deliberations recommended for amendment in EC as proposed by the project proponent with all other terms and conditions remain unchanged. Accordingly, amendment is mentioned under:**

- (i) Subject shall be read as: *"Proposed setting up of new 1500 MTPD Sulphuric acid (100%) plant within the Existing Fertilizer Complex, for total Sulphuric acid production of 3600 MTPD at Sriharipuram, Vishakhapatnam district, Andhra Pradesh, without increase pollution load and total production of NP/NPK (3900 MTPD) and Phosphoric Acid (1400 MTPD) by M/s. Coromandel International Limited (Formerly M/s Coromandel Fertilizers limited)."*
- (ii) Point 2 shall be read as *"The Ministry of Environment, Forests and Climate Change has examined the application. It is noted that proposal is for setting up of new 1500 MTPD Sulphuric acid (100%) plant within the Existing Fertilizer Complex, for total Sulphuric acid production of 3600*

*37-2*

**MTPD at Sriharipuram, Vishakhapatnam district, Andhra Pradesh, without increase pollution load and total production of NP/NPK (3900 MTPD) and Phosphoric Acid (1400 MTPD) by M/s. Coromandel International Limited (Formerly M/s Coromandel Fertilizers limited)."**

- (iii) Point 3 shall be read as "Existing land area is **313 Acres**, of which 120 acres is developed as greenbelt. **Additional cost of the project is ~ 400 Crore.** The additional estimated cost of various environmental management programs in the proposed project is ~ 10 Cr which is around 2.5% of proposed Additional project cost. **In order to achieve consented production of 3900 MTPD NP/NPK production, the facility intends to adopt the following modifications and upgrades in the upstream of the complex fertilize manufacturing units:**

- Installation of Additional 1500 MTPD of Sulphuric Acid production plant along with existing 2100 MTPD Sulphuric Acid Plant (SAP-1 (1700 MTPD) & SAP2 (400 MTPD)). Total production capacity of Sulphuric acid shall be 3600 MTPD
- Use of low sulphur coal in coal fired boiler and optimizing operations of existing sulphuric acid plant – I and coal fired boiler for no change in SO<sub>2</sub> emission from the sanctioned emission load.
- Existing Phosphoric acid plant with production capacity of 1400 MTPD
- Provision of storage capacity of 2 x 5000 MT + 2 X 12,500 MT +1500 MT along with existing storage capacity of 15,000 MT"

- (iv) Point 4 shall be read as "Power requirement will be increased from **20 MW to 21 MW**. The facility has contracted grid power of 12 MW, 5 MW from APGPCL and in-house steam turbine capacity of 5MW. The net available power for the existing operation is in the order of 22 MW. Hence the available power is adequate to meet the total requirement of **21 MW** post enhancement."

- (v) Point 4 para 3 shall be read as "Fresh water requirement will be increased from **10350 m<sup>3</sup>/day to 14550 m<sup>3</sup>/day**, which will be sourced from Greater Vishakhapatnam Municipal Corporation (GVMC). Sea water consumption will be same i.e **84600 m<sup>3</sup>/ day**."

- (vi) A-Specific Condition 1 shall be read as "Green Belt of 10 M wide (Perennial trees) to be developed in three sides of plant periphery totaling **120-acre area**"

- (vii) A-Specific Condition 2 shall be read as "The present freshwater requirement is **10350 m<sup>3</sup>/day. Additional fresh water for the proposed enhancement will be 4200 m<sup>3</sup>/day. The total freshwater requirement post**





**enhancement shall not exceed 14550 m3/day.** The present sea water requirement for once through cooling will remain to be **84600 m3 / day.**"

- (viii) A-specific Condition 4 shall be read as "Post amendment, the SO2 emissions from Sulphuric acid plant-1 and sulphuric acid plant-2 shall be maintained at 0.75 kg/MT and 0.65 kg/ MT and in Sulphuric Acid Plant-3 shall be maintained at 0.75 kg/MT."

5. Based on recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords approval to the proposed amendments in the environmental clearance dated 14th July, 2017 as stated above, for the project "Enhancement of Phosphoric Acid production (from 700 MTPD to 1000 MTPD) P205 and other auxiliary facilities within the existing Fertilizer Complex" located at Sriharipuram, Vishakhapatnam district, Andhra Pradesh in favor of M/s Coromandel International Limited.

6. All other terms and conditions stipulated in the environmental clearance dated 14th July, 2017 shall remain unchanged.

7. This issues with approval of the competent authority.

*8742  
07/01/2021*

**(Ashok Kumar Pateshwary)**

**Director**

**Copy to: -**

1. The Principal Secretary, Department of Environment, Forest, Science & Technology, Government of Andhra Pradesh, Hyderabad (Andhra Pradesh).
2. The APCCF, Ministry of Environment, Forest and Climate Change, Regional Office (SEZ), 1<sup>st</sup> & 2<sup>nd</sup> Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai - 34
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Andhra Pradesh Pollution Control Board, Paryavaran Bhawan, A-III, Industrial Estate, Sanath Nagar, Hyderabad (AP)
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhavan, Jor bagh Road, New Delhi
6. The District Collector, Visakhapatnam, Andhra Pradesh
7. Guard File/Monitoring File/ Parivesh Portal /Record File

**(Ashok Kumar Pateshwary)**

**Director**

**Email: ak.pateshwary@gov.in**

**Tele-fax: +91-11-24695290**

