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File No: IA-J-11011/533/2021-IA-II(I)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division
****

Date **02/01/2024**

To,

Shri Aniruddha M Khadilkar
Rashtriya Chemicals and Fertilizers Ltd
M/s Rashtriya Chemicals and Fertilizers Ltd (A Govt Of India Undertaking) PO-Thal,Taluka-Alibag,Dist-Raigad, Maharashtra, 402208 , Thal Alibag, RAIGAD, MAHARASHTRA, , 402208
edthal@rcfltd.com

Subject: Environmental clearance for the **Setting-up a New 1200 MTPD (DAP BASIS) Complex Fertilizer Plant at existing RCF facility Thal, Maharashtra by M/s Rashtriya Chemicals and Fertilizers Limited (RCF) -reg**.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/MH/IND3/429252/2023 dated 21/11/2023 for grant of prior Environmental Clearance (EC) to the proposed project under the provision of the EIA Notification 2006 and as amended thereof.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23A1901MH5587954N
(ii) File No.	IA-J-11011/533/2021-IA-II(I)
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	5(a) Chemical fertilizers
(vi) Sector	Industrial Projects - 3
(vii) Name of Project	Setting-up a New 1200 MTPD (DAP BASIS) Complex Fertilizer Plant at existing RCF Facility, Thal, Maharashtra" under national vision of Atmanirbhar Bharat
(viii) Name of Company/Organization	Rashtriya Chemicals and Fertilizers Ltd
(ix) Location of Project (District, State)	RAIGAD, MAHARASHTRA
(x) Issuing Authority	MoEF&CC
(xi) Applicability of General Conditions as per EIA Notification, 2006	No

3. The Ministry of Environment, Forest and Climate Change has examined the proposal seeking environmental clearance for **setting-up a New 1200 MTPD (DAP BASIS) Complex Fertilizer Plant at the existing RCF facility Thal, Maharashtra** by M/s Rashtriya Chemicals and Fertilizers Limited (RCF) .

4. All Fertilizer projects are covered under **Category 'A' of 5(a)** Chemical Fertilizer of Schedule of Environment Impact Assessment (EIA) Notification, 2006 as amended from time to time and appraised by EAC (Industry -3).

5. The **ToR was issued** by the Ministry, vide letter no. IA-J-11011/533/2021-IA-II(I); dated **20.01.2022**. The PP applied for Environment Clearance in the Common Application Form and submitted EIA/EMP Report and other documents. The PP in the Form reported that it is an **expansion case**. The proposal was placed in this **70th EAC meeting on 5th December, 2023**, wherein the PP along with accredited Consultant, **M/s Projects & Development India Limited,** NABET/EIA/2124/RA 0246 valid till August 12, 2024] made a detailed presentation on the salient features of the project. The information submitted by the PP is as follows:

6. The PP reported that the existing land area is 3120,000 m2, out of which, 65000 m2 land will be used for proposed expansion and no R&R is involved in the Project. **Greenbelt has been developed in 35.88 %** of total plot area i.e. 277 acres (112 ha) out of total factory area 772 acres (312 ha). The details of products to be manufactured are as follows:

S. No	Product Details (complete name)	CASNO.	Existing Quantity	Proposed Quantity	Total Quantity	Uses
1.	Di Ammonium Phosphate (DAP)	7783-28-0	0	1200 MTPD	1200 MTPD	Fertilizer
2.	NPK 20:20:0:13	66455-26-3	0	1120 MTPD	1120 MTPD	Fertilizer
3.	NPK 10:26:26	66455-26-3	0	1520 MTPD	1520 MTPD	Fertilizer

7. The PP reported that there is no violation case as per the Notification No. S.O. 804(E) dated 14.03.2017 and no direction is issued under E (P) Act/Air Act/Water Act.

8. The PP reported that the Ministry had issued EC earlier vide letter no.J-11011/392/2014-IA II(I); dated 10.02.2016 for Installation of Gas Turbine Generator & HRSG under energy reduction scheme. J-11011/862/2008-IA II(I); dated 10.06.2009 for expansion by De-bottlenecking of Thal Ammonia plants 2 x 1500 MTPD to 2 x 1750 MTPD & Urea plant 3 x 1724 MTPD to 3x 2040 MTPD.J-11012/20/99-IA II(I); dated 12.09.2000 for Expansion Existing Methyl Amine and Di-Methyl Formamide at RCF Thal, Raigad district, Maharashtra.J-11011/65/96-IA II; dated 15.01.1997 for RCF expansion project at Thal.J-11011/8/92-IA. II; dated 22.10.1992 for setting up 8 MTPD Di-Methyl Acetamide at Thal in favour of M/s Rashtriya Chemicals & Fertilizers Limited.

9. The PP reported that the **Certified Compliance Report of the existing EC** has been issued vide letter no 1514/RON/2022 -NGP/12501 dated 14.11.2023 from IRO Nagpur. It is reported that **all the conditions are complied**.

10. The PP reported that there are **no National parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors** etc. within 10 km distance from the project site. There are a few reserved forests located in 10 km study area of the project. Arabian Sea is located at a distance of 1.5 km in west direction. **No Schedule-I species** i.e were observed in the 10 km radius from the proposed project.

11. The PP reported that **ambient air quality monitoring** was carried out at 08 locations during 20.01.2022 to 19.04.2022 and the baseline data indicates the ranges of concentrations as: PM10 (32.0 to 71.0 µg/m3), PM2.5 (14.0 to 32.0-µg/m3), SO2 (8.7 to 18.8 µg/m3) and NO2 (10.7 to 35.5 µg/m3). AAQ modeling study for point source emissions indicates that the maximum concentration considering incremental GLCs after the proposed project would be 94.97 µg/m3, 51.87 µg/m3 and 1.17 µg/m3 with respect to PM10, NH3 & Fluorine. The resultant concentrations are **within the National Ambient Air Quality Standards (**NAAQS).

12. The PP reported that the **fresh water requirement** for the NPK project is 500m3/day. Total fresh water requirement after expansion will be reduced from 49150m3/day to 44550m3/day after upgradation of ETP and recycling of treated

water @ 5000 m3/day. Fresh water requirement will be met from MIDC water supply. NPK fertilizer production is based on the concept of total recycling of the entire liquid effluent and achieving **zero liquid discharge** from the plant. In the existing unit effluent generation is 8500 m3/day, which is treated in the ETP. After upgradation of ETP by providing tertiary treatment, treated effluent @ 5000 m3/day will be recycled/reused. Thereafter, discharge of treated effluent to the marine outfall will be reduced from 8500 m3/day to 5000 m3/day.

13. Power requirement after expansion will be **64500 KVA** including existing **59375 KVA** and will be met from existing Gas Turbo Generators. Existing unit has DG sets of combined capacity 5930 kVA, additionally **800 kVA** DG sets will be used as standby during power failure. Stack(> 20 m) will be provided as per CPCB norms to the proposed DG sets.

14. Existing unit has 3 x 275 TPH **Natural Gas fired boilers**. Additionally, no fired boiler will be installed.
15. Details of fuel: Existing- Natural Gas and Proposed - Natural Gas with calorific value of approximately 8500 kcal/Sm3

16. Details of Process Emissions Generation and its Management:

PP informed that Cyclone separator followed by Pre-scrubber and scrubber will be provided to granulator. Cyclone separator followed by scrubber will be provided to dryer and screen. Bagfilter followed by Wet scrubber will be provided to DAP/NPK product bagging section area. All the vents will be connected to tail gas scrubber packed column ht – 60 m to meet emission standards for ammonia, PM and Fluorine.

Sl.No.	Particulars	Existing status	Addition due to expansion	Status after expansion
1.	No.of stacks	42	02	44
2.	PM concentration	71µg/m3	3.97µg/m3 (for process plant stack)	74.97µg/m3
3.	NH3concentration	47.9µg/m3	3.97 µg/m3 (for process plant stack)	51.87µg/m3
4.	Fluorine concentration	Nil	1.17 µg/m3 (for process plant stack)	1.17µg/m3

- All continuous ambient air quality monitoring systems and one boiler stack are connected to MPCB/CPCB servers.
- Online continuous effluent monitoring (Ammonical nitrogen, pH, Effluent flow) are connected to MPCB/CPCB servers.

17. Details of Solid Waste/ Hazardous Waste Generation and its Management: During the operation phase a negligible amount of waste will be generated consisting of spent oil/machine oil and process waste. This would be stored and handled according to the guidelines specified under Hazardous & Other Wastes (Handling & Trans-boundary Movement) Rules, 2016

18. The Budget earmarked towards the **Environmental Management Plan** (EMP) is 25 Crore (capital) and the Recurring Cost (operation and maintenance) will be about 2 Crore per annum. Industry proposes to allocate Rs. 17.56 Crore towards Corporate Social Responsibility.

19. Industry has already developed **greenbelt in an area of 35.88 %** i.e., 1120000 m2 out of total factory area of the project.

20. The PP reported that the **Public Consultation** for the project was conducted on 28.2.2023 under the chairmanship of Additional District Magistrate (Maharashtra State Pollution Control Board). Details of issues raised during public hearing and action plan to address the issues are as annexure 2 .

21. The PP proposed to set up an **Environment Management Cell** (EMC) by engaging Plant Head- Plant Manager (GM) – Environment officer- air, water, waste, occupational, fire and safety incharge- Technical team for the functioning of EMC.

22. The PP reported that the Considering a 10-year-old Greenbelt of 4502 trees and assuming the dia and tree height at the age of 10 years as per the standards, the total **Carbon sequestered per year by the proposed greenbelt at its initial age**

will be 194.23 tons per year

23. The PP submitted the Disaster Management Plan and On-site and Off-site Emergency Plans in the EIA report.

24. The **estimated project cost is Rs. 80 Crores** including existing investment of Rs. 13.87 Crores. Existing manpower of the plant is 55 no. For the proposed expansion, an additional 95 no. of staff will be employed. Total manpower after expansion will be 150 no.

25.Deliberations by the EAC:

During deliberations, EAC discussed the following issues:

- The PP reported that the fresh water requirement for the NPK project is 500m3/day. Total fresh water requirement after expansion will be reduced from 49150 m3/day to 44550 m3/day due to upgradation of ETP and recycling of treated water @ 5000 m3/day. Fresh water requirement will be met from MIDC. NPK fertilizer production is based on the concept of total recycling of the entire liquid effluent and achieving zero liquid discharge from the plant. In the existing unit effluent generation is 8500 m3/day, which is treated in the ETP. After upgradation of ETP by providing tertiary treatment, treated effluent @ 5000 m3/day will be recycled/reused. Thereafter, discharge of treated effluent to the marine outfall will be reduced from 8500 m3/day to 5000 m3/day. Sewage will be treated in the 480 m3/day capacity of sewage treatment plant. Upgradation of ETP is expected to be implemented by March 2024. Monitoring of treated effluent viz. pH, flow, Ammonical Nitrogen is transmitted online to MPCB and CPCB portal.
- PP informed that Cyclone separator followed by Pre-scrubber and scrubber will be provided to granulator. Cyclone separator followed by scrubber will be provided to dryer and screen. Bagfilter followed by Wet scrubber will be provided to DAP/NPK product bagging section area. All the vents will be connected to tail gas scrubber packed column ht to meet emission standards for ammonia, PM and Fluorine. A stack 55-60 m. Height and 3 m dia. shall be attached to NPK plant.
- Details of Solid waste/hazardous waste management

Sr. No	Typesofwaste	Existing Quantity (Per Annum)	ProposedQuantityafterNPK	Consented Quantity	Disposal
	Non–HazardousWaste				
1	Waste Bags	220Nos.	30No's/Day	250 Nos./D	Sale toauthorized recycler/re- processor
2	Civil/ Miscellaneous Waste	14MT		25 MT/A	Landfill
3	MetalScrap	38.8MT		50 MT/A	Sale toauthorized recycler/re- processor
4	HDPEContainer/Drums	0	10nos.	2050 Nos./A	Sale toauthorized recycler/re- processor
5	MetalDrums	1132 nos.	0	1500 Nos./A	Sale toauthorized recycler/re- processor

	HazardousWaste				
1	Used/spent Oil	63.78MT	1.6MT/A	75MT/A	Sale toauthorizedrecycler/re-processor
2	Spent Catalyst	626.99 MT	0	1000MT/A	Sale toauthorizedrecycler/re-processor
3	Discarded	0	0	12MT/A	SaletoauthorizedrecycleroratCHWTSDF

	containers/barrels/liners				
4	ETPSludge	5 MT/A	0	7.5MT/A*	CHWTSDF

- 1.8 MW peak capacity solar panels have been installed at reservoirs, building roof tops and ETP Ponds etc. Proposed enhancement of capacity will be done by installing 30 KW peak capacity panels in the FY 2023-24.
- Present NG consumption is @ 4400000 Sm3/day Additional NG consumption shall be 10000 to 14000 Sm3/day for proposed project.
- PP informed that suitable no. of Ammonia gas detectors shall be provided for early warning of a leak in potential sources of emissions such as pump seals, compressor seals, process drains and vents.HC detectors that continuously monitors combustible gases and vapors within the lower explosive limit (LEL) and provides alarm indication shall be installed to identify the leak of NG in piping. Safety audit and health monitoring of the pipeline and equipment shall be done at regular intervals and necessary corrective measures will be taken immediately. Mock drills shall be conducted at regular intervals to cope up with any emergency.
- It was suggested to develop temporary hazardous waste storage facility with lined floor alongwith cover shed with channel and pits to collect leaschate for storage of sludge collected from the ETP tank. Hazardous waste shall not be kept in open or stored on unlined land.

The committee was satisfied with the response provided by PP on above information.

The EAC deliberated the Onsite and Offsite Emergency plans and also the various mitigation measures proposed during the implementation of the project and advised the PP to implement the provisions of the Rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, as amended from time to time.

The EAC deliberated on the proposal with due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC found the proposal in order and recommended for the grant of environmental clearance.

The EAC is of the view that its recommendation and grant of environmental clearance by the regulatory authority to the project/activity is strictly under the provisions of the EIA Notification 2006 and its subsequent amendments. It does not tantamount/construe to approvals/consent/permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The PP shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

26. The EAC, after detailed deliberations, recommended the project for the grant of environmental clearance, subject to the compliance of the terms and conditions as under, and general terms and conditions in Annexure-I:

27. Based on the recommendations made by EAC (Industry- 3) in its meeting held on 4-5 Dec 2023, Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance to the project "**Setting-up a New 1200 MTPD (DAP BASIS) Complex Fertilizer Plant at existing RCF facility Thal, Maharashtra by M/s Rashtriya Chemicals and Fertilizers Limited (RCF)** " under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the Specific and General terms and conditions as mentioned at Annexure-1. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

28. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.

29. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies,

Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

30. The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions.

31. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.

32. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

33. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

34. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

35. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein

This issues with the approval of the Competent Authority.

Copy To

Copy to :

1. The Deputy Director General of Forests (C), Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur- 440001.
2. The Secretary, Environment and Climate Change Department, Govt. of Maharashtra, New Administrative Bhavan, 15th Floor, Madame Kama Road, Mantralaya, MUMBAI - 400032,Maharashtra, India.
3. The Office of the Principal Chief Conservator of Forests (Head of Forests Force) M.S. Nagpur, 3rd Floor Van Bhavan Ramgiri Road Civil Lines Nagpur 440 001.
4. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-110032.
5. The Member, Central Ground Water Authority,18/11, Jamnagar House, Mansingh Road, New Delhi – 110011.
6. The Chairman, Maharashtra Pollution Control Board,Kalpataru Point, 3rd and 4th floor, Opp. PVR Cinema, Sion Circle,Mumbai-400 022.
7. The District Collector, District Collector Office, Near Hirakot Lake, Tahasil-Alibag, District-Raigad, Pin - 402201 (Maharashtra)
8. Guard File/Record File/Monitoring File / MoEF&CC Website.

Annexure 1

Specific EC Conditions for (Chemical Fertilizers)

1. Chemical Fertilizers

S. No	EC Conditions
1.1	1. The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented. 1. NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing water from MIDC. State Pollution Control Board shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent shall obtain such permission. 1. Cyclone separator followed by Pre-scrubber and scrubber will be provided to granulator. Cyclone separator followed by scrubber will be provided to dryer and screen. Bagfilter followed by Wet scrubber will be provided to DAP/NPK product bagging section area. All the vents will be connected to tail gas scrubber packed column ht to meet emission standards for ammonia, PM and Fluorine. A stack 55-60 m. Height and 3 m dia. shall be attached to NPK plant. All critical plant parameters shall be indicated in central control panel in the plant control room. Suitable alarms shall be provided to warn the operators in case any critical control parameter goes beyond limits. An online stack monitoring instrument shall be installed and connected to Distributed Control System for getting real time record of plant emission levels. Interlock facility shall be provided. 1. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored. The emissions shall conform to the limits imposed by SPCB. 1. Total fresh water requirement from MIDC water supply after expansion shall be reduced from 49150 m3/day to 44550 m3/day due to upgradation of ETP and recycling of treated water @ 5000 m3/day. Out of which, fresh water requirement for proposed NPK project shall not exceed 500 m3/day. 1. Proposed fertilizer production is based on the concept of total recycling of the entire liquid effluent and achieving zero liquid discharge from the plant. In the existing unit effluent generation is 8500 m3/day, which is treated in the ETP. After upgradation of ETP by providing tertiary treatment, treated effluent @ 5000 m3/day shall be recycled/reused. Therafter, discharge of treated effluent to the marine outfall shall be reduced from 8500 m3/day to 5000 m3/day. Sewage shall be treated in the 480 m3/day capacity of sewage treatment plant. Monitoring of treated effluent viz. pH, flow, Ammonical Nitrogen is shall br transmitted online to MPCB and CPCB portal. The PP should submit the details of utilization to the Integrated Regional Office (IRO), MoEF&CC before 1st July of every year for the activities carried out during the previous year.

S. No	EC Conditions
	1. Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB servers. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises. 1. The green belt of at least 10 m-15m width shall be developed in nearly 112 ha with tree density @ 2500 trees per hectares, mainly along the plant periphery. Indigenous species shall only be developed as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop at least 20 variety of species as a part of greenbelt. Saplings 6 feet high shall be planted. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department and native species shall be developed. Greenbelt development shall be completed before commissioning of the plant. The budget earmarked for the plantation shall be kept in a separate account and should be audited annually. The PP shall annually submit the audited statement along with proof of activities viz. photographs (before & after with geo-location date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year. 1. The hazardous waste shall be managed and disposed as per the HWM Rules 2016. Hazardous waste such as Distillation Residue and incinerable waste shall be either sent to common incineration site or sent for coprocessing. PP shall develop temporary hazardous waste storage facility with lined floor alongwith covered shed with channel and pits to collect leaschate for storage of sludge collected from the ETP tank. Hazardous waste shall not be kept in open of stored on land. 1. Solid waste shall be segregated into dry and wet garbage at site in accordance to the Solid Waste Management Rules, 2016. Wet waste shall be converted into compost and used as manure for greenbelt development. 1. A separate Environmental Management Cell (having qualified persons with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions by engaging Plant Head- Plant Mnager (GM) – Environemnt officer-air, water, waste, occupational, fire and safety incharge- Technical team. In addition to this, one safety & health officer as per the qualification given in Factories Act, 1948 shall be engaged within a month of grant of EC. PP shall provide training annually to atleast 20 local youths/college students for O & M of ETP, hazardous waste management, air pollution control device, greenbelt development etc. The PP should annually submit the audited statement of amount spent towards the engagement of qualified persons in EMC along with details of person engaged to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during the previous year.

S. No	EC Conditions
	1. The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented. The budget proposed under EMP [25 Crore (Capital cost) and 2 Crore per Annum (Recurring cost)] shall be kept in a separate account and should be audited annually. The PP should submit the annual audited statement along with proof of implementation of activities proposed under EMP duly supported by photographs (before & after with geo-location date & time) and other document as applicable to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during the previous year. 1. The PP shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard. 1. The project proponent shall comply with the environment norms for Ferlilizer Industry as notified by the Ministry of Environment, Forest and Climate Change, *vide* GSR 1607 (E), dated 29.12.2017 under the provisions of the Environment (Protection) Rules, 1986. 1. All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The PP shall implement the onsite/offsite emergency plan/mock drill etc. and mitigation measures as prescribed under the rules and guidelines issued in the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996. The occupier of new as well as expansion projects shall be required to comply with the provisions of the MSHIC Rules, 1989 including notifying their activities or seeking site approval from the concerned authorities, to address operational safety aspects. In doing so, various schedule, particularly Schedule-5 of the said rules may be referred. 1. The storage of toxic/hazardous raw material shall be bare minimum with respect to quantity and inventory. Quantity and days of storage shall be submitted to the Regional Office of Ministry and SPCB along with the compliance report. 1. The occupational health centre for surveillance of the worker’s health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection. 1. Training shall be imparted to all employees on safety and health aspects for handling chemicals. Safety and visual reality training shall be provided to employees. Action plan for

S. No	EC Conditions
	mitigation measures shall be properly implemented based on the safety and risk assessment studies. The unit shall make the arrangement for the protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms. 1. The storm water from the roof top shall be channelized through pipes to the storage tank constructed for harvesting of rain water in the premises and harvested water shall be used for various industrial processes in the unit. No recharge shall be permitted within the premises. Process effluent/ any wastewater shall not be allowed to mix with storm water. 1. The PP shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapor recovery system. (f) Use of high pressure-hoses for equipment cleaning to reduce wastewater generation. 1. As proposed, suitable no. of Ammonia gas detectors shall be provided for early warning of a leak in potential sources of emissions such as pump seals, compressor seals, process drains and vents. HC detectors that continuously monitors combustible gases and vapors within the lower explosive limit (LEL) and provides alarm indication shall be installed to identify the leak of NG in piping. Safety audit and health monitoring of the pipeline and equipment shall be done at regular intervals and necessary corrective measures will be taken immediately. Mock drills shall be conducted at regular intervals to cope up with any emergency. 1. The activities and the action plan proposed by the project proponent to address the issues raised during the public hearing as well as the related socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit. 1. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products and no parking to be allowed outside on public places. 1. Storage of raw materials shall be either in silos or in covered areas to prevent dust pollution and other fugitive emissions. All stockpiles should be constructed over impervious soil and garland drains with catch pits to trap runoff material shall be provided. Biomass/Chemicals shall be stored in covered sheds and wind breaking walls/curtains shall be provided around biomass storage area to prevent its suspension during high wind speed. All Internal roads shall be paved. Industrial vacuum cleaner shall be provided to sweep the internal roads. The Air Pollution Control System shall be interlocked with process plant/machinery for

S. No	EC Conditions
	shutdown in case of operational failure of Air Pollution Control Equipment. PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

Standard EC Conditions for (Chemical fertilizers)

1.

S. No	EC Conditions
1.1	No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. 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/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
1.2	The Project proponent shall strictly comply with the rules and guidelines issued under the Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989, as amended time to time, the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996, and Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 and other rules notified under various Acts.
1.3	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.
1.4	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 the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
1.5	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. The activities shall be undertaken by involving local villages and administration. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
1.6	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
1.7	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom

S. No	EC Conditions
	suggestions/ representations, if any, were received while processing the proposal.
1.8	The project proponent shall also upload/submit six monthly reports on Parivesh Portal on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data to the respective Integrated Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
1.9	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Integrated Regional Office of MoEF&CC by e-mail.
1.10	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/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/. 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.
1.11	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.
1.12	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

Additional EC Conditions

N/A

Annexure2

S. No.	Issue Raised	Response /Commitment from Project Proponent	Action Plan with time frame and budget
1.	Environmental Impact AssessmentBaseline study period 20.01.2022 to 19.04.2022 is incorrect and misleading. Pollution is high during the months of June to September but survey is not carried out during this period.	As per government guidelines for environmental impact assessment study, the baseline studyshould not be carried out in monsoon season because rainwater can lead to vague sampling thus giving incorrect representative samples.MoEF&CC has issued a guidance document in the form of Standard Terms of Reference (ToR) for all types of industries. ToR for the proposed project was issued by MoEF&CC on 19.01.2022. Hence, the baseline study was conducted from 20.01.2022 to 19.04.2022 (3 months). The study was carried out by EIA Consultant M/s PDIL in area around RCF site and samples were analysed in CPCB approved Environmental Lab of M/s PDIL.	---
2.	In Punjab, due to excessive use of chemical fertilizers and pesticides, soil and water pollution is occurring, and cancer patients are being found in every house. To avoid such pollution, the local people are against the project establishment at Thal.	The demand of NPK fertilizer (DAP basis) is increasing pan India and to fulfil this demand, it is being imported from foreign countries resulting in high cost of fertilizer and loss of foreign currency. Therefore, under the National Vision of "Atmanirbhar Bharat" and ready availability of Ammonia & other utilities at Thal, RCF's 1200 MTPD (DAP Basis) NPK/DAP complex fertilizer have been proposed. Also, the proposed project uses state-of-the-art technology. There is no evidence that NPK project can cause diseases like respiratory diseases, cancer.	---
3.	What RCF is going to do about the new project of RCF that will put additional stress on the roads and infrastructure of Vaishet Thal due to more vehicles coming from Pen. How will be the fertilizer produced from the new project transported?	300 tonnes per day of excess Ammonia, currently produced is sold out through movement of 30-35 tankers daily from RCF Thal. This excess Ammonia will be used for the new NPK/DAP plant, thus stopping the tanker movement. Around 55-60 tankers are expected for transporting the raw material required for new project. Therefore, the net load of the transportation will increase by only 30 tankers per day i.e. 1 tanker per hour. Finished product from the new project will be transported by Rail. Hence, there would not be significant increase in stress on road and other infrastructure.	ESC/CER budget of Rs. 90 lakhs has been allocated to meet the infrastructural demand of the area i.e. construction / repair of the roads in nearby villages.

Annexure2

4.	The report says that Ammonia poses risk to the people residing in the surrounding area and can even cause death at concentration above 5000 ppm. No training is given to the people residing in the nearby vicinity of the RCF premises in this regard. RCF must conduct meetings & trainings from time to time as per approved Disaster Management Plan which is not being done.	Ammonia storage tanks are in existence since last 30 years. These are atmospheric pressure refrigerated storage tanks built by reputed contractors with strictest applicable design standards. These are being operated by well-trained operators on round the clock basis and supervised by qualified engineers. And all individual process and control safety are ensured the safety, health and environment. Ammonia sensors for ambient air monitoring are installed on the boundary of plant premises to detect any accidental leakage of Ammonia as soon as possible and initiate disaster control mechanism. Mock drill is being regularly conducted as per schedule.	Earlier RCF was conducting awareness and training program for villagers periodically. It was discontinued during COVID period. RCF has resumed the training and awareness program for villagers.
5.	80% of the job opportunities should be given to locals as per current law. Out of the total tankers bringing acids from JNPT, 50% should belong to locals.	RCF is a Public Sector Unit (PSU). Recruitment of manpower is carried out as per Central Government guidelines applicable to public sector.	---
6.	At present, the railway line of RCF is posing problem in the way that at the time of railway transport done by RCF, the whole traffic is blocked and traffic jam upto 1-2 km is faced. Serious patients couldn't be taken to Alibaghospital, therefore, construction of over-bridge is essential at the crossing.		RCF will explore the alternatives in consultation with appropriate authorities to address the issue of traffic jam.
7.	In an accident happened in RCF a few days ago, the AC of the hospital, in which patient was admitted, was not working. This company of central Govt., what arrangements have been made to combat any such accident after expansion?	Medical officer of PP replied that RCF has 25 beds NABH accredited hospital in the township which infers that the hospital is equipped with modern facilities. Patients are shifted to Mumbai in case; they need further treatment beyond the RCF hospital facilities.	ESC/CER budget of Rs. 625 lakhs has been allocated to meet the Health care & Medical aid/facilities viz. monthly health check-up camp and distribution of essential medicines, supply of specialized equipments to nearby hospitals

Annexure2

8.	In case any tanker overturns, the arrival of RCF's fire tenders take time. Even a fire tender requires gate pass in case of emergency. Due to this reason, their fire station should be located outside plant premises.	Chairperson asked PP to clarify why the fire station vehicles couldn't reach in time. She also opined that fire tender should not require a gate pass. PP replied that, their fire services are prompt and served at so many incidences like recent accident happened at Chondhi, Mandawa. Also, Fire tender does not required any gate pass while moving out. PP also informed that they have provided training to nearby educational institutions, villagers, students on how to respond and call on RCF's emergency nos. in case of fire.	---
9.	Implementation of various medical schemes in the hospital should be done through CSR funds.	Chief General Manager from PP replied that RCF have provided all possible updated facilities to 25 bedded hospital. Post COVID updated system have been bought.	---
10.	If retired 10th pass persons can operate the plant, then why local engineering graduates of PAPs & locals here can't be given an opportunity to work.	RCF is a Public Sector Unit (PSU). Recruitment of manpower is carried out as per Central Government guidelines applicable to public sector. Chairperson suggested that all the information regarding the cadre in which the personnel are required should be given to Gram Panchayats in the area along with the posts. Training should be imparted to local young boys & girls and job opportunities should be given to them. If RCF is unable to do so, then there is a skill development department of Govt. of Maharashtra and RCF, in coordination with them, can plan a training program after which the trained locals may be absorbed in RCF.	RCF is already providing training to nearby eligible candidates regarding syllabus, exam pattern, marking pattern, and selection methodology conducted by internal experts as well as external faculties. Also every year, RCF recruits around 200 apprentice trainees from vicinity and give them on-job training.
11.	If RCF can adopt a Minister's village why can't develop its surrounding villages.	The underprivileged villages selected by Central Govt. only are adopted under CSR as per aspirational district program launched by Honourable Prime Minister.	---

Annexure2

12.	What % of profit is spent as CSR? Fund earmarked for the area should be used in the locality.	PP answered that 2% of the average profit before tax of previous three FY and CSR fund was 3.58 Cr for 2020-21, 6.86 Cr for 2021-22 and was 11. 7 Cr for 2022-23 out of which 6.76 cr have been spent on various schemes implemented in the vicinity area. PP agreed for use of fund in the locality.	---
13.	Asked about Enterprise Social Commitment (ESC)	Member of PH committee replied that ESC is @ 2.5 % of the project cost to be implemented in next five years for various environmental upgradation schemes, drinking water, construction of toilets, roads etc. It has to be done with the approval of Hon'ble DC and is mandatory. PP explained that estimated project cost is Rs. 914.58 Cr, which includes GST @ 18% and working capital for one month. Therefore the basic project cost is Rs. 702.24 Cr and 2.5 % of the same i.e. Rs. 17.56 Cr have been earmarked for ESC.	ESC plan along with activities and budget allocated is included in EIA report after PH
14.	It is apprehended that there is no transparency in allocation of CSR fund. The information of CSR fund allocation in last 2-3 years should be shared	Chairperson asked to share the information to concerned person.	RCF distributed copies of CSR fund allocation in last 3 years after completion of Public Hearing at Hotel Sai INN, Chondi on 28.02.2023
15.	RCF claims to supply water to nearby villages while they buy the same from MIDC. Water should be given by RCF.	PP replied that an agreement have been signed among Gram Panchayat and RCF. MIDC has laid the pipeline to supply water for Industrial use only. As per terms of MIDC nobody should be given water outside. But RCF has taken the responsibility of water supply in Thal, Navgaon, @ 1200 m^3 and 600 m^3 respectively. Other Gram Panchayats have requested but MIDC says the water is reserved for industrial use only. However, RCF tries to contribute some of its water savings by implementation of latest technology and conservation plan in its plants. Chairperson said that, Grampanchayat may take the schemes under ZilhaParishad Water supply scheme and PP will support under CSR	ESC/CER budget of Rs. 350 lakhs has been allocated for drinking water supply and sanitation (may also include installation of common RO plant for group of beneficiaries)

Signature Not Verified

Digitally Signed by : Mr A N Singh
Member Secretary, MoEFCC (EC)

Date: 02/01/2024