



सत्यमेव जयते

File No: J-11011/84/2016-IA-II(I)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division



Date 04/11/2024



To,

Jaswanth Reddy N
SREE RAYALASEEMA ALKALIES AND ALLIED CHEMICALS LIMITED
Sree Rayalaseema Alkalies and Allied Chemicals Limited Gondiparla Village Kurnool Mandal Dist AP
518004 , Gondiparla, KURNOOL, ANDHRA PRADESH, , 518004
sraaclab@rediffmail.com

Subject: Grant of prior Environmental Clearance (EC) to the proposed project " Phase II Expansion of Chlor-Alkali, Chloromethanes, and captive power plant under 7 (ii) (a) of the EIA notification upto 40% of existing capacity in phased manner in existing site area located at Sy. No. 51/1, 2A, 2B, 2C1, 2C2, 2C3, 56/1, 58/1, 59/1, 60, 62/3/2D2, 2C1/A2, 2C1/A3, 2C2/C, 2G/1, 2E, 2F, 1A, 1B, 62A, 62 B, 63, 64, 70/C2, 72/P, Gondiparla village, Kurnool mandal and district, Andhra Pradesh by M/s. TGV SRAAC Limited " under the provision of the EIA Notification 2006 -regarding.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/AP/IND3/486016/2024 dated 13/08/2024 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.	EC24A1601AP5883242N
(ii) File No.	J-11011/84/2016-IA-II(I)
(iii) Clearance Type	Fresh EC
(iv) Category	A
(v) Project/Activity Included Schedule No.	4(d) Chlor-alkali industry,5(f) Synthetic organic chemicals industry
(vi) Sector	Industrial Projects - 3 Expansion of Chlor-Alkali and Synthetic Organic Chemicals manufacturing unit at Sy. No. 51/1, 2A, 2B, 2C1, 2C2, 2C3, 56/1, 58/1, 59/1, 60, 62/3/2D2, 2C1/A2, 2C1/A3, 2C2/C, 2G/1, 2E, 2F, 1A, 1B, 62A, 62 B, 63, 64, 70/C2, 72/P, Gondiparla village, Kurnool mandal and district, Andhra Pradesh by M/s. TGV SRAAC Limited.
(vii) Name of Project	

(viii) Name of Company/Organization	SREE RAYALASEEMA ALKALIES AND ALLIED CHEMICALS LIMITED
(ix) Location of Project (District, State)	KURNOOL, ANDHRA PRADESH
(x) Issuing Authority	MoEF&CC
(xi) Applicability of General Conditions as per EIA Notification, 2006	Yes

3. The Ministry of Environment, Forest and Climate Change has examined the proposal seeking environmental clearance for Expansion of Chlor-Alkali and Synthetic Organic Chemicals manufacturing unit at Sy. No. 51/1, 2A, 2B, 2C1, 2C2, 2C3, 56/1, 58/1, 59/1, 60, 62/3/2D2, 2C1/A2, 2C1/A3, 2C2/C, 2G/1, 2E, 2F, 1A, 1B, 62A, 62 B, 63, 64, 70/C2, 72/P, Gondiparla village, Kurnool mandal and district, Andhra Pradesh by M/s. TGV SRAAC Limited.

4. The project/activity is covered under Category 'A' of item 4(d) and 5 (f)-Synthetic organic chemicals of Schedule of Environment Impact Assessment (EIA) Notification, 2006 (as amended) as the project is located outside the notified industrial area and general condition is also applicable as Interstate boundary between Telangana and Andhra Pradesh is at 1.3 km in northeast direction.

5. The Standard ToR has been granted by the Ministry vide letter File No F. No. J-11011/84/2016-IA II (I) dated 15.03.2023. The PP applied for Environment Clearance in Common Application Form and submitted EIA/EMP Report and other documents. The PP reported that it is **an Expansion case under 7(ii)**. The proposal was placed in 84th EAC Meeting held on 22.8.2024, in which EAC deferred the proposal for want of requisite information. Thereafter the proposal has been placed in 86th EAC meeting held on **30th Sept – 1st Oct 2024** wherein the Project Proponent and an accredited Consultant M/s. Team Labs and Consultants [Accreditation number. NABET Accreditation No. NABET/EIA/22-25/SA 0218. Valid till 29.01.2025], made a detailed presentation on the salient features of the project and informed the following:

6. The PP reported that the Existing land area is **152.4 Ha** land will be used for proposed expansion. No additional land acquired and no R& R is involved in the Project. The details of products and by-products are as follows:

S. No.	Product Name	Unit	Capacity		
			Existing/ Permitted (Including Phase I)	Proposed (Phase II 20%)	Total after Phase II
I. Chlor-Alkali Plant					
1	Caustic Soda Lye (Or) Flakes	TPD	1220	200	1420
	Potassium Hydroxide Lye (or) Flakes (100 % basis)	TPD			
2	Liquid Chlorine	TPD	720	120	840
II. Chloromethanes					
1	Methyl Chloride	TPD	1.44	0.24	1.68
2	Methylene Chloride	TPD	189.6	31.6	221.2
3	Chloroform	TPD	94.8	15.8	110.6
Total – Chloromethanes			285.84	47.64	333.48
III. Chlorodifluoromethane					
1	Chlorodifluoromethane (R22) only for feedstock purpose.	TPD	10	2	12
IV. Captive Power Plant					
1	Captive Power Plant (Coal based)	MW	76	30	106
2	Power generation Furnace Oil#	MW	31	----	31
V. Oil and Fatty Acid Division					
1	Oil and Fatty Acid Products (Non-EC Products)	TPD	498	99.5	597.5

By-Products					
I. Chlor-Alkali Plant					
1	Hydrochloric Acid (100%)	TPD	369.05	56.05	425.1
2	Hydrogen Gas	Nm3	341596	55996	397592
3	Sodium Hypochlorite (100% Cl ₂ basis)	TPD	18	3	21
4	Barium Sulphate	TPD	10	----	10
5	Potassium Carbonate	TPD	50	----	50
6	Sodium Sulphate	TPD	12	2	14
7	Calcium Hypochlorite (100% Cl ₂ basis)	TPD	10	----	10
8	Calcium Sulphate	TPD	2	----	2
II. Chloromethanes Plant					
1	Carbon tetrachloride*	TPD	14.4	2.4	16.8
2	Hydrochloric Acid (100 %)	TPD	56.4	9.4	65.8
III. Chlorodifluoromethane Plant					
1	Hydrochloric Acid (100 %)	TPD	9.92	1.65	11.57

* Carbon Tetrachloride (CCl₄) generated will be sold as a feed stock to Authorized users/excess will be incinerated. # shall be kept as standby Phase II: Additional 20%.

HCFC-22 shall be installed only for feedstock purpose after obtaining prior registration under ODS Rules, 2000 as amended from time to time. PP shall install incinerator for destruction of HFC -23.

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 Ministry has issued EC earlier vide letter no F. No. J-11011/84/2016-IA-II (I) dated 02.01.2024 for 20% expansion of Chlor-Alkali plant and synthetic organic chemicals manufacturing unit in favor of **M/s. TGV SRAAC Limited**.

9. The **Certified compliance report** is obtained from the Integrated Regional Office of MoEFCC, Vijayawada, Andhra Pradesh vide letter no. F. No. SO/VIJ/EPA/EC-A/101/06-82/2024 dated 20.06.2024 in which 4 specific conditions are partially complied regarding EMC, EMP, monitoring of VOCs emissions on monthly basis and monitoring reports to be submitted along with six monthly compliance reports on regular basis, details regarding the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project. PP has submitted verified ATR on partly complied points by the Integrated Regional Office of MoEFCC, Vijayawada, Andhra Pradesh vide letter no. F. No. SO/VIJ/EPA/EC-A/ 101/06-82/2024/464 dated 17.09.2024, mentioning that all the conditions mentioned in EC are satisfactory complied is submitted in ADS response on 19.09.2024

10. The PP reported that there are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc., lies within 10 km distance from the project site. There are two reserve forests in the study area. Gadidmadugu RF at 5.5 km in east direction. Pullaiah RF at 9.3 km in southwest direction. No Schedule-1 Species within 10 km distance from the project site.

11. The PP reported that Ambient air quality monitoring was carried out at eight locations during March 2024 -May 2024 and the baseline data indicates that ranges of concentrations of PM₁₀ (25-52 g/m³), PM_{2.5} (12-27 g/m³), SO₂ (7-14 g/m³) and NO₂ (8-26 g/m³) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLC_S after the proposed project would be 0.45 g/m³, 1.91 g/m³, and 2.61 g/m³ with respect to PM₁₀, SO_X and NO_X. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

12. The PP reported the total water requirement after Phase II expansion is 20284.3 KLD (Existing including Phase I: 16129.1 KLD; and Phase II: 4155.2 KLD) out of which 17973.8 KLD (Existing including Phase I: 15058.4 KLD and Phase II: 2915.4 KLD) will be fresh water and 2310.5 KLD (Existing including Phase I: 1070.7 KLD and Phase II: 1239.8 KLD) is recycled. The required water is drawn from Tungabhadra River through infiltration wells. The unit obtained permission to abstract water from Tungabhadra River in the order of 20MLD. Effluent of 2316.5 m³/day (Existing including Phase I: 1853.8 m³/day and Phase II: 462.7 m³/day) will be treated through "Zero Liquid Discharge" based

effluent treatment system and treated wastewater reused for process, utility make-up and greenbelt development. Rejects from RO used for brine saturation.

13. Power requirement after expansion will be 149.3 MW including existing 128.3 MW and will be met from AP Transco and captive power plant. Existing unit has standby DG sets of capacity 4 x 6.2 MW, 3 x 500 kVA DG sets as standby during power failure. Stack (height 4 m) provided as per CPCB norms to the DG sets of 3 x 500 kVA which will be used as standby during power failure.

14. Existing unit has 1 x 110 TPH, 1 x 100 TPH, 1 x 42 TPH coal fired boilers, 1 x 20 TPH hydrogen gas fired boiler, 1 x 3 TPH oil fired boiler (standby), 1 x 4 TPH oil and hydrogen gas fired boilers. Electro Static Precipitators and a stack with height of 80m, 69m and 55m for 1 x 110 TPH, 1 x 100 TPH, 1 x 42 TPH coal fired boilers respectively are installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm³) and 80m for 1 x 20 TPH hydrogen gas fired boiler and unit has 4 x 3 waste heat recovery boilers, 1 x 20 lc k.cal/hr, 1 x 35 lac k.cal/hr thermo packs, 2 x 55 lac k.cal/hr, 2 x 15 lac k.cal/hr salt furnaces. Additionally, 1 x 120 TPH coal fired boiler will be installed. Electro Static Precipitators and a stack with height of 80m for 1 x 120 TPH coal fired boiler will be installed for controlling the particulate emission within statutory limit of 115 mg/Nm³ for the proposed boilers and 1 x 55 lac k.cal/hr salt furnace.

15. Details of fuel:

S. No	Description	Unit	Existing	Proposed	Total
1	Coal	TPD	402.5	191.6	594.1

16. Details of Process emissions generation and its management:

The gaseous emissions from Chlor-Alkali process are Chlorine and Hydrogen Chloride vapors. Scrubbers are provided to neutralize sniff gases effectively. The secondary gaseous pollutant from chloro-alkali plant is hydrogen chloride gas emissions. To avoid emissions in the plant, tail gas vents are connected to a water scrubber and the lean acid formed is used for absorption of Hydrogen chloride gas in absorber.

The gaseous emission from Chloromethane plant is chlorine and hydrogen chloride vapours. HCl gas produced from thermal chlorination unit is used to produce methyl chloride. Excess HCl available is absorbed in HCl absorber to produce 32% HCl. To avoid emissions from HCl absorber, tail gas vents are connected to a tail gas tower followed by organic stripper to remove organics. The gaseous emission from Chlorodifluoromethane plant is HCl which is sent to Hydrochloric acid absorption system, to produce 28 to 30% HCl.

17. Details of Solid waste/ Hazardous waste generation and its management

Sludge is generated during brine purification stage. Barium Sulfate and sodium Sulfate is being recovered, which are sold as by products. The sludge generated from effluent treatment plant will be disposed to landfill which contains mostly inorganics. Used silica gel, calcium chloride, Calcium Fluoride, Antimony Pentoxide and Spent Sulphuric Acid are the wastes generated from the Chloromethane and Chlorodifluoromethane process. Used silica gel and calcium chloride are sent to secured landfill within plant premises. Spent sulphuric acid sold as by-product and Calcium Fluoride is sold to hydrogen fluoride manufacturers. Waste oil and used batteries from the DG sets are sent to authorize recyclers. Other solid wastes expected from the unit are containers, empty drums which are returned to the product seller or sold to authorized buyers after detoxification. Coal ash from boiler is sold to cement/ brick manufacturers.

18. The Budget earmarked towards the Environmental Management Plan (EMP) is 6.86 crores(capital) and the Recurring cost (operation and maintenance) will be about 4.3 crores per annum. Industry proposes to allocate Rs. 80 Lakhs towards CER.

S. No	Description	Capital (Rs. Lakhs)	Recurring Cost (Rs. Lakhs)
1	Air Pollution Control	395	150
2	Water Pollution Control	43	133.3
3	Noise Pollution Control	100.0	15
4	Environment Monitoring and Management	74	10
5	Occupational Health	27.9	60
6	Green Belt	19.3	8

7	Others (S. Waste)	27	52.7
	Total	686.2	429

19. Industry has already developed Greenbelt in an area of **58.42 % i.e., 89.03 Ha** out of **152.4 Ha** of area of the project site.

20. The PP proposed to set up an Environment Management Cell (EMC) to engage Environment officials for the functioning of EMC.

21. The PP reported that the proposed expansion proposal was submitted under 7 (ii) (a) of the EIA notification. The office memorandum (F. No. IA3-22/10/2022-IA. III [E 177258]) dated 11th April 2022 guidelines which envisages issue of prior environmental clearance up to 40% of the capacity by exempting Public Hearing.

22. The PP submitted the Onsite and Offsite disaster management plan in their EIA report.

23. The estimated project cost for Phase II 20% is Rs 100 crores in addition to existing investment of Rs. 1380 crores. Total Employment will be 3785 persons as direct and 525 persons indirect after expansion.

24. The proposal was earlier considered in the 84th EAC meeting held on 22.8.2024 in which EAC deferred the proposal for want of information. Reply for the same has been submitted on 19.09.2024.

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

The EAC constituted under the provisions of the EIA Notification, 2006 comprising expert members /domain experts in various fields, examined the proposal submitted by the PP in desired format along with the EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the PP.

The EAC noted that the PP has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the PP.

The EAC noted that the EIA reports are in compliance with the ToR issued for the project, reflecting the present environmental status and the projected scenario for all the environmental components. The EAC deliberated on the proposed mitigation measures towards Air, Water, Noise and Soil pollutions. The EAC advised that the storage of toxic/explosive raw materials/products shall be undertaken with utmost precautions and following the safety norms and best practices.

The EAC deliberated on the Onsite and Offsite Emergency plans and various mitigation measures to be proposed during the implementation also 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, as amended time to time, and the Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996.

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 expert members of the EAC found the proposal in order and recommended for 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.

25. Minutes of the meeting is available at : https://parivesh.nic.in/utildoc/109036684_1728297739341.pdf

26. The EAC, after detailed deliberations, recommended the project for the grant of environmental clearance for expansion from 20% to 40% of the existing capacity, subject to the compliance of the terms and conditions, and general terms and conditions in Annexure I.

27. Based on the recommendations made by EAC in its 86th meeting of the Expert Appraisal Committee (Industry-3 sector), held on 30 Sept- 1 Oct 2024, Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance for “ **Phase II Expansion of Chlor-Alkali, Chloromethanes, and captive power plant under 7 (ii) (a) of the EIA notification upto 40% of existing capacity in phased manner in existing site area located at Sy. No. 51/1, 2A, 2B, 2C1, 2C2, 2C3, 56/1, 58/1, 59/1, 60, 62/3/2D2, 2C1/A2, 2C1/A3, 2C2/C, 2G/1, 2E, 2F, 1A, 1B, 62A, 62 B, 63, 64, 70/C2, 72/P, Gondiparla village, Kurnool mandal and district, Andhra Pradesh by M/s. TGV SRAAC Limited** ” 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. The Environmental Clearance to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project. The Project Proponent is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC.

28. General Instructions:

(a) 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.

(b) 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.

(c) 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.

(d) 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.

(e) 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.

(f) 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.

(g) 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.

(h) 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 and Other Wastes (Management 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

1. ANDHRA PRADESH ENVIRONMENT MANAGEMENT CORPORATION LTD Environment, Forests, Science & Technology Department, Government of Andhra Pradesh , 2nd Floor, AP.Markfed Building, APIIC Colony, Jawahar Auto Nagar, Vijayawada-520007
2. Inspector General of Forests, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, Vijayawada Green House, Gopalareddy Road, Vijayawada – 520010, Andhra Pradesh
3. The Member Secretary, Andhra Pradesh Pollution Control Board, Paryavaran Bhavan, APIIC Colony Road, Gurunanak Colony, Autonagar, Vijayawada- 520007.
4. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi – 32
5. The Collector & District Magistrate, Collectors Office, Collectorate complex, Kurnool - 518002
6. Guard File/Monitoring File/PARIVESH

Annexure 1

Specific EC Conditions for (Synthetic Organic Chemicals Industry)

1. Specific Conditions

S. No	EC Conditions
1.1	(i) APCE ESP with adequate stack height shall be provided to proposed additional coal based 120 TPH boiler for controlling the particulate matter emissions within the statutory limit of 50 mg/Nm ³ . Adequate stack height shall be provided to proposed 1 x 55 lac salt furnace. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually. As proposed, oil fired boiler (1x 3 TPH) and Husk fired boiler (1 x 12 TPH) shall be dismantled.
1.2	(ii) Total fresh water requirement after expansion from 20% to 40% from Tungabhadra River shall not exceed 17973 KLD. The required water shall be drawn from Tungabhadra River through infiltration wells. The PP shall ensure that water supply should not be above the permissible limit and fresh water shall be withdrawan only after obtaining requisite approval of the Concerned Authority. The PP shall submit the details of utilization to the Integrated Regional Office (IRO), MoEF&CC before 1 st July of every year for the activities carried out during the previous year.

S. No	EC Conditions
1.3	(iii) The total effluent generation shall not exceed 2316.5 KLD. Effluent shall be treated in the effluent treatment plant followed by Ultra filtration and RO. Permeate reused as process water, utility make-up and rejects sent for brine saturation. Domestic effluent shall be treated in the STP and treated water shall be reused for horticulture purpose. This unit shall maintain Zero Liquid Discharge (ZLD).
1.4	(iv) The PP shall develop /maintain greenbelt over an area of 89.03 Ha i.e 58.4 % by planting number of saplings preferably, within a year of grant of EC. The saplings selected for the plantation should be of sufficient height, preferably 6-ft. The budget earmarked for the plantation shall be kept in separate account and should be audited annually. PP should 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 1 st July of every year for the activities carried out during previous year.
1.5	(v) Plantation of saplings shall be carried out as a part of tree plantation campaign "EK PED MA ke NAAM" and details of the same to be uploaded in the MeriLiFE portal (https://merilife.nic.in) in respect to this Ministry's OM No. IA3-22/3/2024-IA.III(E-241594) dated 24th July 2024.
1.6	(vi) 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 and shall also engage HOD EHS Division- HOD Q&A division- HOD O& F division - HOD CMS division. 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 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 1 st July of every year for the activities carried out during previous year.
1.7	(vii) 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 propose under EMP is 6.862 crores (Capital cost) and 4.29 crores per annum (Recurring cost) shall be kept in 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 1 st July of every year for the activities carried out during previous year.
1.8	(viii) The use of cleaner fuel shall be explored.
1.9	(ix) 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

S. No	EC Conditions
	within the premises.
1.10	(x) Bottom residue from chloromethanes shall be sent to inhouse incinerator. ETP sludge and process inorganic residues shall be sent to secured landfill within the plant premises. The same mechanism shall also be continued for the existing units also.
1.11	(xi) All the hazardous waste shall be managed and disposed as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. Hazardous waste such as Distillation Residue and Off Specification Products shall be either sent to common incineration site or sent for coprocessing. 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. Fly ash shall be collected in silo and sent to cement manufacturing unit/brick manufacturing unit.
1.12	(xii) No banned chemicals shall be manufactured by the project proponent. No banned raw materials shall be used in the unit. The project proponent shall adhere to the notifications/guidelines of the Government in this regard.
1.13	(xiii) The project proponent shall comply with the environment norms for synthetic organic chemical as notified by the Ministry of Environment, Forest and Climate Change, <i>vide</i> GSR 608 (E), dated 21. 7.2010 under the provisions of the Environment (Protection) Rules, 1986.
1.14	(xiv) The project proponent 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.
1.15	(xv) All necessary precautions shall be taken to avoid accidents and action plan shall be implemented for avoiding accidents. The project proponent 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.
1.16	(xvi) The volatile organic compounds (VOCs)/Fugitive emissions shall be controlled at 99.97 % with effective chillers/modern technology. Regular monitoring of VOCs shall be carried out.
1.17	(xvii) 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.

S. No	EC Conditions
1.18	(xviii) 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.
1.19	(xix) 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 mitigation measures shall be properly implemented based on the safety and risk assessment studies.
1.20	(xx) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.
1.21	(xxi) The solvent management shall be carried out as follows: (a) Reactor shall be connected to chilled brine condenser system. (b) Reactor and solvent handling pump shall have mechanical seals to prevent leakages. (c) Solvents shall be stored in a separate space specified with all safety measures. (d) Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done. (e) Entire plant shall be fire proof. The solvent storage tanks shall be provided with breather valve to prevent losses. (f) All the solvent storage tanks shall be connected with vent condensers with chilled brine circulation.
1.22	(xxii) 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.
1.23	(xxiii) PP shall obtain registration under Ozone Depleting Substances (Regulation and Control) Rules 2000 as amended from time to time for generation of HCFC -22 as products for feedstock applications and Carbon Tetra Chloride as byproduct, which is an Ozone Depleting Substance. Incinerator shall be installed to destruct HFC23.
1.24	(xxiv) 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.

Standard EC Conditions for (Synthetic organic chemicals industry)

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

S. No	EC Conditions
	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 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

S. No	EC Conditions
	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

