



ANDHRA PRADESH POLLUTION CONTROL BOARD
D. No. 33-26-14 D/2, Near Sunrise Hospital, Pushpa Hotel Centre,
Chalamalavari Street, Kasturibaipet, Vijayawada - 520 010
Website: www.pcb.ap.gov.in

CONSENT ORDER FOR ESTABLISHMENT

Order No.266/APPCB/CFE/RO-NLR/HO/2021

29/07/2022

Sub:APPCB – CFE - **M/s. TGV SRAAC Limited (Formerly known as M/s. Sree Rayalaseema Alkalies and Allied Chemicals Limited) at Gondiparla (V), Kurnool (M), Kurnool District** - Consent for Establishment (CFE) for **Change of Product Mix** of the Board under Sec.25 of Water (P & C of P) Act, 1974 and Under Sec.21 of Air (P & C of P) Act, 1981 - Issued - Reg.

Ref: 1. CFE application submitted through APOCMMS on 20.05.2022.
2. RO: Kurnool report dt.02.06.2022.
3. CFE Committee meeting held on 07.06.2022.
4. T.O lr. dt.17.06.2022.

1. M/s. TGV SRAAC Limited (Formerly known as M/s. Sree Rayalaseema Alkalies and Allied Chemicals Limited) vide reference 1st cited, submitted an application to the Board seeking Consent for Establishment (**CFE**) (**CPM**) of the Board with installed capacities as mentioned below, without any additional investment.

As per CFE order dt.23.05.2018:

S. No.	Products	Consented capacity as per CFO Orders dt. 26.02.2014 & 28.10.2015 (TPD)	Proposed capacity for expansion (TPD)	Total capacity after expansion (in TPD)
I.Chloro-Alkali Plant				
1.	Caustic Soda Lye (Or) Flakes Potassium Hydroxide Lye (Or) Flakes (100 % basis)	520	500	1020
2.	Potassium Carbonate	50	-	50
3.	Liquid Chlorine	300	300	600
4.	Hydrochloric Acid (100% basis)	186	127	313
5.	Barium Sulphate	5	5	10
6.	Sodium Hypochlorite (100% Cl ₂ basis)	10	5	15
7.	Calcium Hypochlorite (100% Cl ₂ basis)	10	-	10
8.	Calcium Sulphate	02	-	02

9.	Sodium sulphate	-	10	10
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II. Chloromethanes				
1	Methyl Chloride	0.45	10	10.45
2	Methylene Chloride	61	61	122
3	Chloroform	56	46.45	102.45
By- Products				
4	Carbon tetrachloride	7.6	7.6	15.2
5	Hydrochloric Acid (100%)	23.5	23.5	47
III. Chlorodifluoromethane				
1	Chlorodifluoromethane (R22)	-	10	10
2.	Hydrochloric acid (100%)	-	8.27	8.27
IV. Captive Power Plant				
1	Captive Power Plant (Coal based)	76	-	76
2	Power generation (Furnace Oil) (Standby)	31	-	31
Carbon Tetrachloride (CCl_4) generated will be sold as a feed stock to Authorized users/excess will be incinerated.				

Proposed:

S. No.	Products	Permitted addl. capacity as per CFE order dt.23.05.2018 (TPD)	Proposed capacity for CPM	After CFE CPM
Chloromethanes				
1	Methyl Chloride	10.45	-(9.25)	1.2
2	Methylene Chloride	122	+36	158
3	Chloroform	102.45	-(23.45)	79
By-products				
4	Carbon tetrachloride	15.2	-(3.2)	12
5	Hydrochloric Acid (100%)	47	--	47
Total		297.1	0.1	297.2
Chlorodifluoromethane				
1	Chlorodifluoromethane (R22)	10	--	10
2.	Hydrochloric acid (100%)	8.27	--	8.27

2. As per the application, the above activity is to be located in the existing premises at **Gondiparla (V), Kurnool (M), Kurnool District** in an area of 376.58 Acres

3. The proposed site was inspected by Assistant Environmental Engineer, Regional office, Kurnool, A.P Pollution Control Board on 27.05.2022 and observed that the site is surrounded by:

North	M/s. Shivtek Industries Private Ltd.
South	Road connecting NH - 44 to Gondiparla Village

East	Open lands belonging to the industry followed by M/s Sri Rayalaseema Paper Mill Ltd. Open lands belonging to the industry followed by M/s. Sri Rayalaseema Paper Mill Ltd
West	M/s. SRHHL

4. The Board, after careful scrutiny of the application, verification report of Regional Officer and Recommendations of CFE Committee, hereby issues **CONSENT FOR ESTABLISHMENT FOR CHANGE OF PRODUCT MIX** under Section 25 of Water (Prevention & Control of Pollution) Act 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981 and the rules made there under. **This order is issued to the activity as mentioned at para (1) only.**

5. This Consent Order now issued is subject to the conditions mentioned in Annexure.

6. This order is issued from pollution control point of view only. Zoning and other regulations are not considered.

7. **This order is valid for period of 7 years from the date of issue.**

Encl: Annexure

VIJAY KUMAR
GSRKR IAS, MEMBER SECY(GSRKRVK), O/o
MEMBER SECRETARY-APPCB

To

M/s. TGV SRAAC Limited
(Formerly known as M/s. Sree Rayalaseema Alkalies and Allied Chemicals Limited)
Gondiparla (V),
Kurnool (M),
Kurnool District.
Email: sraaclab@rediffmail.com,

Copy to: 1. The JCEE, Z.O: Kurnool for information and necessary action.
2. The E.E, R.O: Kurnool for information and necessary action.

ANNEXURE

1. The proponent shall obtain Consents for Operation (CFO) from APPCB, as required Under Sec.25/26 of the Water (P&C of P) Act, 1974 and under sec. 21/22 of the Air (P&C of P) Act, 1981, before commencement of the activity.
2. Compensation is to be paid for any environmental damage caused by it, as fixed by the Collector and District Magistrate as civil liability.
3. The rules and regulations notified by Ministry of Law and Justice, GOI, regarding the Public Liability Insurance Act, 1991 shall be followed.

Water:

4. The source of water is Infiltration well from Thungabhadra river and the maximum permitted water consumption is as following **for Chloromethanes & Chlorodifluoro Methane section:**

S. No.	Purpose	Qty as per CFE Order dt.23.05.2018 (KLD)	Qty after CFE(CPM) (KLD)
1.	Process - CMS	40	40
2.	Process - CDFM	420	420
3.	Scrubbers	40	40
4.	Cooling make up	1600	1600
5.	Domestic	15	15
	Total	2115 KLD	2115 KLD

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

Chloromethanes & Chlorodifluoro Methane:

S. No.	Source	Qty as per CFE Order dt.23.05.2018 (KLD)	Qty after CFE(CPM) (KLD)
1.	Cooling Towers blow down	114	114
2.	Scrubbers	20	40
3.	Domestic	15	15
	Total	149 KLD	169 KLD

ETP Details & Mode of Disposal:

M/s. TGV SRAAC Limited, Gondiparla (V), Kurnool (M), Kurnool District has provided separate ETPs for chloro Alkali plant, Castor oil/ fatty acid plant, Chloromethanes plant and Co-generation plants. For the proposed change of product mix, the industry is utilizing the

existing ERP of capacity - 4MLD constructed by the industry to cater the non process effluents generated from M/s. TGV Group of Companies.

I. Outlet No. 1 & 2 a. Stream Details:	Cooling tower blow down, Scrubbers
b. Treatment unit's details with dimensions and treatment capacity	M/s. TGV SRAAC Limited has installed 4 MLD of Effluent recycling plant and the same is under operation. The 4MLD effluent recycling plant was installed considering future expansions and diversification. ERP consisting of equalization tank – 1600 KL, clarifier – 677 KL, Clear water storage tank – 242 KL, Dual multi-filtration – 130m ³ /hr, ultra filtration – 130m ³ /hr & 2 No's reverse osmosis system - 100 KI/hr each, Second stage reject RO – 40 KI/hr. Over all recovery is 88-90%. The effluent generated from Chloromethanes & power plant is being processed through new ERP and permeate quantity is being recycled back into the process and rejects will be used for Brine makeup purpose in chloroalkali division.
c. Point of disposal	The permeate is being reused as process water in place of river water and rejects will be used for preparation of Brine solution
II. For Domestic waste water:	The industry has proposed to treat the domestic waste water in the oils & fatty acid division. After treatment, the treated waste water will be used for on land for gardening within the premises.

6. The Effluent Treatment Plant (ETP) shall be operated regularly. All the units of the ETP shall be impervious to prevent ground water pollution.
7. The effluents shall be treated to the on land for irrigation standards, as stipulated under Schedule-VI of Environment (Protection) Rules, 1986, notified by Ministry of Environment and Forests, Government of India vide G.S.R.422 (E), dt.19.05.1993 and its amendments thereof.
8. During transfer of materials, spillages shall be avoided and garland drains shall be constructed to avoid mixing of accidental spillages with domestic waste and storm drains.
9. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas. All pipe valves, sewers, drains shall be leak proof.
10. **The industry shall install and connect online effluent quality monitoring system at the outlet of ETP as per CPCB directions.**
11. Separate meters with necessary pipe-line shall be provided for assessing the quantity of water used for each of the purposes mentioned below.
 - a) Industrial cooling, boiler feed.
 - b) Domestic purposes.
 - c) Processing, whereby water gets polluted and pollutants are easily bio-degradable.
 - d) Processing, whereby water gets polluted and the pollutants are not easily bio-degradable.

Air:

12. The proponent shall comply with the following for controlling air pollution:

As per CFE (exp) order dt.23.05.2018 :

S. No.	Source of Pollution	Control equipment provided	Stack height in (m) – above GL
Chloro alkali unit:			
1	Attached to Oil / H ₂ fired thermax boiler – 4 TPH and Oil fired boiler of capacity – 3 TPH	Dust collector	20 m
2	Attached to 4 x 3 TPH Waste Heat Recovery Boiler attached to D.G – 4 x 6.2 MW	Bag filters	3 x 36 m each
3	Attached to Husk fired boiler – 12 TPH	Bag filters	---
4	Attached to Oil fired AIEC boiler – 3 TPH	Dust collector (suitably converted for incineration of glycerin pitch)	20
5.	Attached to Coal fired boiler of capacity – 42 TPH	ESP	56
6.	Attached to Coal fired boiler – 100 TPH	ESP	67
7.	Attached to Salt furnace – 15 Lakh K.Cal/hr x 2 Nos.	---	30 m each
8.	Attached to Thermo pack unit – 20 Lakh K.Cal./hr.	Dust collector followed by bag filter	30 m
9.	D.Gset – 500 KVA – 2 Nos	Acoustic enclosures	5 m
10	Tail vents (Chlorine & HCl)	The sniff Cl ₂ from different Cl ₂ handling sections is collected under suction and sent to CL ₂ neutralisation section. The Cl ₂ gas is scrubbed in dilute Sodium Hydroxide solution in two absorption towers to make	

		sodium Hypo chlorite. A closed circuit scrubbing system installed to take care of any accidental leakage from chlorine storage and filling area. Cl ₂ sensors are to be provided at Cl ₂ handling section. Water scrubber is installed to scrub the tail gas vents of HCl Plant.	
Chloro methane plant:			
1.	Stack Attached to LPG/Hydrogen gas fired incinerator of capacity – 343 Kgs/hr	Scrubber	12 m with 0.6 m dia
Power plant:			
1.	Stack Attached to coal fired boiler of capacity – 100 TPH	Dust collector followed by ESP	80.5 m with 2.2 m dia

After CFE (CPM) :

No new boilers are proposed. Existing control systems for point sources and process emissions shall be maintained properly to achieve standards.

13. The evaporation losses in solvents shall be controlled by taking the following measures:
 - i. Chilled brine circulation shall be carried out to effectively reduce the solvent losses into the atmosphere.
 - ii. Transfer of solvents shall be done by using pumps instead of manual handling.
 - iii. Closed centrifuges shall be used to reduce solvent losses.
 - iv. The reactor vents shall be connected with primary & secondary condensers to catch the solvent vapours.
 - v. All the solvent storage tanks shall be connected with vent condensers to prevent solvent vapours.
14. The generators shall be installed in a closed area with silencers and suitable noise absorption systems. The ambient noise level shall not exceed 75 dB(A) during day time and 70 dB(A) during night time.
15. All the internal roads shall be of cement concrete / bitumen to reduce fugitive dust due to the movement of vehicles.

Solid Waste:

16. The proponent shall comply with the following for the proposed expansion:

S. No.	Solid Waste generated from	Stream	Qty as per CFE order dt.23.05.2018	Qty after CFE (CPM)	Disposal Option
Chloromethanes Plant					

1.	Calcium Chloride	16.2 of sch-1	0.04 TPD	0.04 TPD	Shall be disposed secured Landfill within premises.
2.	Silica gel	16.2 of sch-1	0.036 TPD	0.036 TPD	
3.	Bottom residue	20.3 of Sch -I	0.5 TPD	0.5 TPD	Shall be incinerated captive incinerator
3.	Spent Sulfuric acid (75-80%)	---	11.9 TPD	11.9 TPD	Sold as By - product

Chlorodifluoromethane

1.	Calcium Fluoride	--	1.2 TPD	1.2 TPD	Shall be disposed secured Landfill within premises.
2.	Spent Sulfuric Acid (75%)	--	17.3 TPD	17.3 TPD	Shall be Sold as By - product
3.	Antimony Pentoxide	---	0.2 TPD	0.2 TPD	Shall be recovered and re-used.

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

- a) Regulation of Persistent Organic Pollutants Rules, 2018.
- b) Hazardous waste and other wastes (Management and Transboundary Movement) Rules, 2016.
- c) Plastic Waste Management Rules, 2016.
- d) Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989
- e) Fly Ash Notification, 2016.
- f) Batteries (Management & Handling) Rules, 2010.
- g) E-Waste (Management) Rules, 2016.
- h) Construction and Demolition waste Management Rules, 2016.
- i) Solid Waste Management Rules, 2016.
- j) The Public Liability Insurance Act, 1991 and its amendments thereof.

Other Conditions:

18. The green belt of at least 5 – 10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department as stipulated in EC order dt.01.05.2018.

The industry shall dismantle all the lagoons for which the Bank Guarantee of Rs.2Lakhs is submitted and inform the Board immediately.

19. The industry shall install automatic leak detection system supported with hooters or alarm system.

20. Mock drills should be conducted at least twice a year.

21. The industry shall display online data outside the main factory gate on quantity and nature of hazardous chemicals being used in the plant, water & air emissions and solid waste generated within the factory premises, as per Hon'ble Supreme Court order.

22. The industry shall prepare a safety report and carry out an independent safety audit

report of the respective industrial activities including chemical storages / isolated storages by an expert not associated with such industrial activity as required under Rule 10 of MSIHC Rules, 1989 and get it approved by the Factories Dept., and submit the compliance along with copy of the safety report, safety audit report and safety certificate at concerned Regional Office, APPCB.

23. The industry shall submit a copy of the NOC issued by the Andhra Pradesh State Disaster Response and Fire Service Dept., (APSDRFSD) at concerned Regional Office, APPCB.
24. The industry shall submit risk assessment report covering worst scenario clearly describing impact within the industry premises and outside the industry premises and emergency response system.
25. The industry shall inventorize the storage quantities of hazardous chemicals (raw materials), products, as per the hazard nature of reactivity / toxicity / flammability / explosive stored/handling in the premises as defined in the Management of Storage, Import of Hazardous Chemicals (MSIHC) Rules, 1989 and the details shall be furnished to the Factories Department and to the Regional Office, APPCB on monthly basis duly certifying the same.
26. The industry shall identify major accident hazard chemicals & list out the hazardous chemicals endangered to human health & environment and the details shall be furnished to the Factories Department and to the Regional Office, APPCB time to time duly certifying the same by the industry. Further the industry shall extend training to the working personnels while handling hazardous chemicals for prevention of accidents and necessary antidotes to ensure the safety, as per the MSIHC Rules, 1989.
27. The industry shall carryout calibration of safety equipments and leak detection systems at regular intervals and shall certify the same with the Factories Department. That certified copy shall be submitted to the APPCB, Regional Office. The industry shall install fluorescent Wind Vane at the highest point in the industry premises.
28. **The industry shall comply with the Technical suggestions at Chapter No. 7.3 & 7.4 for Hazardous Chemical handling industries by High Power Committee (HPC) of Govt. of Andhra Pradesh. The HPC report is available at www.ap.gov.in.**
29. The industry shall utilize DG power for captive consumption only & power shall not be supplied to grid and shall follow the amendments issued by MoEF & CC/CPCB from time to time on DG sets in respect of conditions & standards.
30. **The industry shall submit compliance to the conditions stipulated in the CFE orders to the concerned Regional Officer of APPCB every six months and shall upload the same at APPCB website viz., https://pcb.ap.gov.in/UI/Submission_Compliance_of_EC_CFE_CFO_Direction.aspx.**
31. Emergency visual indicators should be installed at main gate and other important points so that critical information is available within two minutes of declaring emergency.

32. **Windssocks should be positioned such that they are easily visible to all persons and one of them should be visible at night.**
33. Required water drains and Fire fighting hydrants should be provided in the facility.
34. Concealing the factual data or submission of false information / fabricated data and failure to comply with any of the conditions mentioned in this order attracts action under the provisions of relevant pollution control Acts.
35. Greenbelt to be developed along the boundary of industry premises.
36. Notwithstanding anything contained in this conditional letter or consent, the Board hereby reserves its right and power Under Sec. 27(2) of Water (Prevention and Control of Pollution) Act, 1974 and Under Sec.21(4) of Air (Prevention and Control of Pollution) Act, 1981 to revoke the order, to review any or all the conditions imposed herein and to make such modifications as deemed fit and stipulate any additional conditions.
37. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules,1982, to such authority (hereinafter referred to as the Appellate Authority) constituted under Section 28 of Water (Prevention and Control of Pollution)Act,1974 and Section 31 of the Air (Prevention and Control of Pollution) Act, 1981.

**VIJAY KUMAR GSRKR IAS, MEMBER SECY(GSRKRVK), O/o MEMBER SECRETARY-
APPCB**

To

**M/s. TGV SRAAC Limited
(Formerly known as
M/s. Sree Rayalaseema Alkalies
and Allied Chemicals Limited)
Gondiparla (V), Kurnool (M),
Kurnool District.
sraaclab@rediffmail.com,**