

REF: TGV SRAAC/APP CB-EnvS/23-24

June 15, 2024

To
The Member Secretary,
A.P. Pollution Control Board,
D.No. 33-26-14 D/2,
Near Sunrise Hospital, Pushpa Hotel Centre,
Chalamalavari Street, Kasturibaipet,
VIJAYAWADA – 520 010.

Respected Sir,

SUB : Environmental Statement for the Financial Year March 2024 – Reg.

We are herewith enclosed duly filled in Form-IV (Filling Annual Returns) & Form-V (Environmental statement) pertaining to our industry for the financial year ending March 2024 for your kind information and record.

Thanking you,

Yours faithfully,
For TGV SRAAC LIMITED,



(C. SRINIVASA BABU)
Occupier & Executive Director (Technical)

Encl : a/a

CC : A.P. Pollution Control Board,
R.O.: D.No. 561/1B (Upstairs)
Shankar Shopping Complex,
Krishna Nagar Main Road,
KURNOOL – 518 002.

Form 4

[see rules 6(5), 13(8) and 20(2)]

FORM FOR FILLING ANNUAL RETURNS

1. Name address of the facility : M/S. TGV SRAAC LIMITED, GONDIPARLA,
KURNOOL, AP-518004
2. Authorization No. and date of issue : APPCB/KNL/KNL/CFO&HWA/HO/1987
Dated: 01/04/2021
3. Name of the authorized person and full address
With telephone, fax and e mail. : Mr. C. Srinivasa Babu, 08518- 28006/7/8.
4. Production during the year (product wise) : 2023-24

Caustic Soda Plant:			
S.No	Name of the Product	Units	Quantity
01	Caustic Soda Lye/Flakes	MT	252297
02	Potassium Hydroxide	MT	30338
03	Potassium Carbonate	MT	2807
04	Liquid Chlorine	MT	202598
05	Hydrochloric Acid	MT	42707
06	Barium Sulphate	MT	0
07	Bleach Liquor	MT	2950
08	Sodium Sulphate	MT	1365

Part A : To be filled by hazardous waste generated.

S.No	Total quantity of waste generated category wise	Quantity dispatched (MT)			Quantity utilized in-house, if any	Quantity in storage at the end of the year.
		To disposal facility	To recyclers or co-processors or pre-processor	Others		
1	Process Brine Sludge	3472				4.0
2	ETP sludge	14				0.5
3	Glycerine pitch (Generated in O&F div.)				Nil	Nil
4	Process (Spent catalyst)		3.36			2.343
5	Process (Spent earth)		Nil			18.96
6	Furnace oil sludge, KL				1.000	1.63
7	Waste oil, KL				2.525	Nil
8	Used Batteries, MT		Nil			0.6
9	E-waste, MT		2.740			Nil

Part B. to be filled by treatment, storage and disposal facility operators

Part C. to be filled by recycles or co-processors or pre-processor or others

Signature of the Occupier
of Operator of the disposal facility

Date : 15.06.2024
Place: Kurnool

Form 4

[See rules 6(5), 13(8) and 20(2)]

FORM FOR FILLING ANNUAL RETURNS

- Name address of the facility : M/S. TGV SRAAC LIMITED, GONDIPARLA, KURNOOL, AP-518004
- Authorization No. and date of issue : 1473568/APP/PCB/KNL/CFO&HWA/HO/2022
Dated: 16/11/2022
- Name of the authorized person and full address
With telephone, fax and e mail. :
- Production during the year (product wise) : 2023-24

Chloromethane Plant:			
S.No	Name of the Product	Units	Quantity
01	Methyl Chloride	MT	47037.137 (Total quantity used as a raw material for Chloromethane Products manufacturing)
02	Methylene Dichloride	MT	52545.86
03	Chloroform	MT	31297.769
By products			
04	Carbon tetra chloride	MT	3330.438
05	Hydrochloric acid(100%)	MT	9497.359
Chlorodifluoromethane Plant:			
01	Chlorodifluoromethane	MT	Plant not being operated
02	Hydrochloric acid(100%)	MT	Plant not being operated

Part A: To be filled by hazardous waste generated.

S.No	Total quantity of waste generated category wise	Quantity dispatched MT			Quantity utilized in-house, if any	Quantity in storage at the end of the year.
		To disposal facility	To recyclers or co-processors or pre-processor	Others		
Chloromethane Plant:						
1	Calcium Chloride	4.040	Nil	Nil	Nil	0
2	Silica gel	0	Nil	Nil	Nil	0
3	Bottom Residue	59.450	Nil	Nil	Nil	0.5
4	Spent Sulfuric acid	8142.64	Nil	Nil	Nil	37.499
Chlorodifluoromethane Plant: (Plant not Erected)						
6	Calcium Fluoride	***	***	***	***	***
7	Spent sulfuric acid (75%)	***	***	***	***	***
8	Antimony pentoxide	***	***	***	***	***

Part B. to be filled by treatment, storage and disposal facility operators

Part C. to be filled by recycles or co-processors or pre-processor or others

Signature of the Occupier
of Operator of the disposal facility

Date : 13.06.2024
Place: Kurnool

FORM – V
(See Rule 14)

Environmental Statement for the Financial Year ending MARCH 2023

PART –A

- 1) Name and Address of the Occupier
Of the Industry, operation or process. : a) Mr. C. Srinivasa Babu, Occupier,
TGV SRAAC LIMITED,
GONDIPARLA,
KURNOOL - 518004 (A.P)
- b) Manufacture of Caustic soda and
Allied products, Potassium Hydroxide,
Castor oil and Fatty Acid derivatives.
- ii) Date of the last environmental audit
report submitted. : 30.06.2022 for the year ending March-2022

PART – B

- i) Water and Raw-material consumption :
- A) Water consumption : 4903 m³/day (including cogeneration power
and Chloromethanes plant)
- a) Process :}
- b) Cooling :}4819 m³/day (including cogeneration power)
- c) Domestic : 80 m³/day

Name of the Products	Water consumption per unit of products during the current financial year 2023-24
1) Caustic soda lye including cooling towers	6.3 m ³ /MT
2) Castor Oil and Fatty acid derivatives	2.1 m ³ /MT
3) Cogeneration Power plant	150 m ³ /MW

ii) Raw-material consumption :

A) CAUSTIC SODA DIV. :

PRODUCTS : Caustic soda, Liquid chlorine, Hydrochloric Acid, Sodium Hypochlorite,
 Hydrogen gas and Barium Sulphate.

Name of Raw-material	Consumption of raw-material per unit of output during the current financial year 2023-24	
a) Common salt	MT	1.60
b) Barium Carbonate	KG	Nil
c) Sodium Carbonate	KG	6.601
d) Sulphuric acid	KG	18.450
e) Coal	MT	193493

B) CASTOR OIL DERIVATIVES :

PRODUCTS : Hydrogenated Castor Oil, 12-Hydroxy Stearic acid.
RAW-MATERIALS :

a) Castor oil	MT	1.04
b) Nickel Catalyst	KG	1.06
c) Hydrogen Gas	m ³	86
d) Caustic soda (92.138%)	KG	168
e) Sulphuric Acid (on 98% basis)	KG	225

(a), (b) and (c) are used in processing hydrogenated castor oil (d) and (e) are used in processing 12-Hydroxy Stearic Acid.

FATTY ACID DERIVATIVES :

PRODUCTS : Stearic acid of different grades and Glycerine.

RAW-MATERIALS :

a) PFAD and other acid oils	MT	0.93
b) Nickel Catalyst	Kg	2.2
c) Hydrogen Gas	Nm ³	45

RAW-MATERIALS : GLYCERINE

a) Crude Glycerine	MT	1.35 – 1.50
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PRODUCTS : Soap Noodles.

RAW-MATERIALS :

a) Caustic	MT	0.120
b) Distilled Fatty Acid	MT	0.800

PART – C
Pollution Generated
 (Parameter as specified in the Consent issued)

Pollutants	Qty. of pollution generated	Percentage of variation from Prescribed standards with reasons
I. Water	Caustic div. ERP	Below prescribed limits.
	O&F 240	”
	Co-gen ERP	”
H. Air		
a) Caustic soda unit.	Chlorine : 0.1 – 0.17mg/Nm ³ Hypo tower outlet.	Below the prescribed Standards.
	Hcl vapour : <5mg/Nm ³ at Hcl Absorption tower outlet.	”
b) Stack Gas :		
- HLL Boiler	SPM 90 mg/Nm ³	”
- 100 TPH Boiler	SPM 92 mg/Nm ³	”
- 110 TPH Boiler	91 mg/Nm ³	”

PART – D
HAZARDOUS WASTE
 (as specified under Hazardous wastes / Management and Handling Rules, 1989)

Hazardous Wastes	Total quantity (MT)
	During the current financial year 2023-24
From Process	3472
From ETP	14
Spent Catalyst	3.360
Spent Earth	Nil
Furnace oil sludge recycled	1.00
Fly Ash from Co-gen Plant	27050
Coarse Ash from Co-gen plant	36070

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PART – E
SOLID WASTES

Total quantity (MT) :: During the current Financial year 2023-24

NIL

PART – F

Please specify the characteristics (in terms of concentration and quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

- Characteristics of Hazardous Waste :

Calcium Carbonate	:	15.91	%
Magnesium Hydroxide	:	1.98	%
Acid Insoluble matter	:	31.8	%
Moisture	:	48.7	%

- Spent Catalyst :

Nickel content	:	8 – 10	%
Oil	:	25 – 40	%
Insolubles	:	8 – 10	%
Moisture	:	Rest	

- Spent Earth :

Oil	:	20 – 25	%
Insolubles	:	Rest	
Moisture	:	< 5	%

- ETP Sludge :

Calcium as CaCO ₃	:	5.0 – 6.0	%
Magnesium as Mg(OH) ₂	:	3.0 – 5.0	%
Acid Insolubles	:	80 - 90	%

- Glycerin Pitch :

Glycerin	:	12 – 20	%
Moisture	:	< 25	%
Ash	:	30 - 40	%
Mong	:	30 - 40	%

Characteristics of Solid Waste :

All the above solid wastes are classified as Hazardous waste by A.P.P.C.B., in the authorization letter issued by APPCB Ltr.No. APPCB/KNL/KNL/ 16332/CFO&HWA/ HO/1987 DTD.01.04.2021.

- There is no generation of any other solid waste.

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PART – G

Impact of the pollution control measures on conservation of natural resources and consequently on the cost of production.

- Recovery of Sodium Sulphate :

About 1357 MT of Anhydrous Sodium sulphate is recovered,
558000 M³ pure water recycled,
119760 M³ of High TDS effluent is recycle to Brine Plant.



(C. SRINIVASA BABU)
Occupier & Executive Director (Technical)

**TGV SRAAC LIMITED
(CHLOROMETHANE DIVISION)
ANNEXURE**

**ENVIRONMENTAL STATEMENT FORM-V
(See rule 14)**

Environmental Statement for the financial year ending **MARCH 2024**

PART-A

- i) Name and address of the Occupier : a) Mr. C. Srinivasa Babu, Occupier,
Of the industry, operation or process. TGV SRAAC Limited,
GONDIPARLA,
KURNOOL- 518004 (AP).
- b) Manufacture of Chloromethane
Products

- ii) Date of the last environmental
Statement submitted. : June 2023

PART .B

- i) Water and Raw Material Consumption:

B) Water consumption in M³/d : 1267 M³

Process : 80 M³
Cooling : 1172 M³
Domestic : 15 M³

Name of the products	water consumption per unit of products during the current financial year 2023-24
1) Cooling towers	5.31 m ³ /MT
2) water for 32%HCl	40 m ³ /day
3) Scrubber	40 m ³ /day

- i. Raw material consumption

Products : Methyl Chloride, Methylene Chloride, Chloroform and carbon tetrachloride

Name of the Raw Material	units	Consumption of raw material per unit of output	
		During the previous financial year 2022-23	During the current financial year 2023-24
a) Methanol	MT	0.360	0.366
b) Chlorine	MT	1.065	1.067

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PART-C

Pollution Generated
(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants generated	Percentage of variation from prescribed standards with reasons.
(I) Water	Cooling tower blowdown: 105 M3 per day (FOR BOTH UNITS)	Below prescribed limits
(II) Air a) Chloro methane unit	for 30 hours HCl : 10mg/Nm ³ CO : NIL mg/Nm ³ Total Organic Carbon :10 HF : Nil Total dioxins and furans: Nil Cd+Th+their compounds: Nil Mercury and its compounds : Nil Cd+Pb+As+Co+Cr+Cu+ Mn+Ni+V+ their compounds: Nil	Below prescribed limits Below prescribed limits Below prescribed limits

PART-D

HAZARDOUS WASTES

(As specified under Hazardous Wastes (Management & Handling Rules,1989).

PART . E

SOLID WASTES:

Solid Wastes	Total Quantity (Kg)	
	During the previous financial year 2022-23	During the current financial year 2023-24
	Nil	Nil

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PART . F

Please specify the characteristics (in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Characteristic of hazardous waste

a) Calcium Chloride

Composition / Characteristics	percentage
Calcium Chloride	58.0 %
water	41%
Iron	0.004%

b) Silica gel

Composition / Characteristics	percentage
SiO ₂	95.0%
water	Rest

c) Bottom residue

Composition / Characteristics	percentage
Carbon tetrachloride	1.0 %
Heavy ends	98.0%
Moisture	0.1%

d) Carbon tetrachloride

Composition / Characteristics	percentage
Carbon tetrachloride	99.80 %

Characteristic of solid waste

All the above wastes are classified as Hazardous waste by A.P.C.B in the authorization letter issued by APPCB Ltr. No . APPCB/KNL/KNL/ 1473568 / CFO& HWA/HO/2022- dated 16.11.2022.

- There is no generation of other solid waste

PART-G

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.

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Executive Director (Technical)