

ANDHRA PRADESH POLLUTION CONTROL BOARD D.No.33-26-14D/2, Near Sunrise Hospital, Pushpa Hotel Centre.

Chalamavari Street, Kasturibaipet, Vijayawada - 520 010 Phone. No.0866-2436200, Website: www.pcb.ap.gov.in

RED CATEGORY Renewal of Consent & Hazardous Waste Authorization

Consent Order No:APPCB/KNL/KNL/16322/CFO&HWA/HO/1987 01/04/2021

CONSENT is hereby renewed for Operation under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorization under Rule 6 of the Hazardous & Other Wastes (Management and Transboundary, Movement) Rules, 2016 and the rules and orders made there under (hereinafter referred to as 'the Acts', 'the Rules') to:

M/s. TGV SRAAC Limited

(Formerly M/s. Sree Rayalaseema Alkalies and Allied Chemicals Limited) Gondiparla (V), Kurnool (M), Kurnool District.

E mail: sraaclab@rediffmail.com, sraaclab@tgvmail.net

(Hereinafter referred to as 'the Applicant') authorizing to operate the industrial plant to discharge the effluents from the outlets and the quantity of emissions per hour from the chimneys as detailed below:

I Out lets for discharge of effluents:

SI. No.	Purpose	Total waste water generation (KLD)	Disposal option
Chlor-	Alkali Plant:		
a.	Process & washings	97.5	
b.	Cooling Tower blow down/ chelating tower rejects/gland seal		After treatment in ETP / STP, the treated effluents shall be used onland for irrigation, within the
C.	Domestic	85	premises (BOD - 30 mg/l).
Castor	oil & Fatty Acid Pla	nt:	
a.	Process & washings	50	
b.	Cooling Tower blow down / chelating tower rejects & boiler blow down	120	After treatment in ETP the treated effluents shall be used onland for irrigation, within the premises (BOD - 100 mg/l)
Co-Gei	n plant:		
a.	Process & washings	220	After treatment in ETP the treated
b.	Cooling Tower blow down/gland seal	150	effluents shall be used onland for irrigation, within the premises

c. Boiler blow down/re generation water		(BOD - 100 mg/l) / processed through new ERP and recycle into process.
d. DM plant fo	I .	Recycle back into the process for brine make up.

II. Emissions from chimneys:

Chimney No.	Description of Chimney
1.	Attached to Oil / H ₂ fired Thermax boiler – 4 TPH
2.	Attached to Oil fired boiler of capacity - 3 TPD
3.	Attached to 4 x 3 TPH Waste Heat Recovery Boiler attached to
	D.G. set - 4 x 6.2 MW
4.	Attached to Husk fired boiler - 12 TPH
5.	Attached to Oil fired AIEC boiler - 3 TPH
6.	Attached to Coal fired HLL boiler - 42 TPH
7.	Attached to Coal fired boiler - 100 TPH
8.	Attached to Salt furnace - 15 Lakh K.Cal/hr x 2 Nos.
9.	Attached to Thermo pack unit – 20 Lakh K.Cal./hr.
10.	Attached to D.G. Sets 500 KVA - 2 Nos.
11.	Tail vents (Chlorine & HCl)

III. HAZARDOUS WASTE AUTHORISATION (FORM – II) [See Rule 6 (2)] M/s. TGV SRAAC Limited (Formerly M/s. Sree Rayalaseema Alkalies and Allied Chemicals Limited) Gondiparla (V), Kurnool (M), Kurnool District is hereby granted an authorization to operate a facility for collection, reception, storage, treatment, transport and disposal of hazardous wastes namely:

Hazardous waste with disposal option:

SI.	Name of the	Stream	Quantity	Disposal Option
No	Hazardous			
	waste			
1	Process (brine sludge)	16.3 of Schedule		Shall send to onsite secured landfill complying with CPCB guidelines (as landfillable waste)
2.	ETP (Sludge)	35.3 of Schedule		Shall send to onsite secured landfill complying with CPCB guidelines (as landfillable waste)
3.	Glycerin Pitch (generated in Oils & Fat division)	36.1 of Schedule		Incineration in furnace followed by Boiler at temperature above 1050°C / Shall be routed through M/s. APEMC, so as to send to authorized cement plants for co-processing (as utilisable waste).

Hazardous waste with Recycling option:

SI. Name of the Stream	Quantity Disposal Option
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No	Hazardous					
	waste					
1.	Process (Spe	nt	36.2 of		1 TPD	Shall be routed through M/s.
	Catalyst)		Schedule I			APEMC, so as to sent back to the manufacturers for reprocessing (as recylable waste) / TSDF, Nellore (as landfillable waste).
2.	Process (Spe	nt	36.2 of		2 TPD	Shall be routed through M/s.
	earth)		Schedule I			APEMC, so as to sent to Authorised recyclers / re-
3.	Fatty acids pito	ch &			7.5 TPD	processors (as recyclable waste)
	residue		Schedule I	j -		
4.	Furnace oil slu	dge	Schedul -I		31.68 TPA	Incineration in furnace followed by boiler at a temperature above 1050 ⁰ C / Shall be routed through M/s. APEMC, so as to send to authorized cement plants for co-processing (as utilisable waste).
5.	Waste oil		5.1 of Schedul -I	е		Shall be routed through M/s. APEMC, so as to sent to Authorised recyclers / re- processors (as recyclable waste)
6.	Used Batterie	es	17 of Schedule -IV	!	150 No's/annu m	Shall be routed through M/s. APEMC, so as to dispose to authorized dealers on buy back basis. (as recyclable waste)

This consent order is valid for manufacturing the following products with quantities mentioned below only.

SI. No.	Name of the products and By- products	Quantity (in TPD)
	Chlor-Alkali Plant	
1.	Caustic soda lye	
2.	Caustic soda flakes	520
3.	Potassium Hydroxide / Caustic soda	
4.	Potassium Carbonate	50
5.	Liquid chlorine	300
6.	Hydrochloric Acid (100% C12 basis)	186
7.	Barium sulphate	05
8.	Sodium hypochloride (100% C12 basis)	10
9.	Calcium Hypochlorite (100% C12 basis)	10
10.	Calcium sulphate	02
11.	Hydrogen	25,253m ³ /day

Oil and	Fatty Acid Plant	
12.	Hydrogenated Castor oil	100
13.	a. 12-Hydroxy Stearic Acid (or) b. Methyl 12-hydroxy stearate (or) c. Ricinolic Acid	60
14.	Dehydrated Castor oil	10
15.	NN BIS Amide	05
16.	Bio-Diesel	10
17.	a. Glycerine (crude)b. Glycerine refind and chemically pure	75
18.	Distilled Fatty Acid	20
19.	Stearic Acid	35
20.	Sodium Sulphate	06
21.	Soap Noodles	100
22.	Toilet soaps & Bathing Bars	50
23.	Captive power plant (D.G sets)	24.8 MW (4X6.2 MW) (Stand by)
	Electricity (power generation-coal based)	45MW (21 MW + 24MW)

This order is subject to the provisions of `the Acts' and the Rules' and orders made thereunder and further subject to the terms and conditions incorporated in the schedule A, B & C enclosed to this order.

This order of consent is valid for a period ending with **28.02.2026.**

DR. B.MADHUSUDHANA RAO, JCEE(MSRB), O/o JOINT CHIEF ENVIRONMENTAL ENGINEER4-APPCB

To M/s. TGV SRAAC Limited (Formerly M/s. Sree Rayalaseema Alkalies and Allied Chemicals Limited) Gondiparla (V), Kurnool (M), Kurnool District.

Copy to:

- 1. The Joint Chief Environmental Engineer, Zonal Office, Kurnool for information and necessary action.
- 2. The Environmental Engineer, Regional Office, Kurnool for information and necessary action.

SCHEDULE - A

- 1. Any up-set condition in any industrial plant / activity of the industry, which result in, increased effluent / emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.
- 2. The industry should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on

- quarterly basis and submit to the Board.
- 3. All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.
- 4. The industry should put up two sign boards (6x4 ft. each) at publicly visible places at the main gate indicating the products, effluent discharge standards, air emission standards, hazardous waste quantities and validity of CFO and exhibit the CFO order at a prominent place in the factory premises.
- 5. Notwithstanding anything contained in this consent order, the Board hereby reserves the right and powers to review / revoke any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.
- 6. The industry shall ensure that there shall not be any change in the process technology, source & composition of raw materials and scope of working without prior approval from the Board.
- 7. The applicant shall submit Environment statement in Form V before 30th September every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.
- 8. The applicant should make applications through Online for renewal of Consent (under Water and Air Acts) and Authorization under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & HW Authorization of the Board.
- 9. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board. The person authorized should not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the State Pollution Control Board.
- 10.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 Appellate authority constituted under Section 28 of the Water(Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air(Prevention and Control of Pollution) Act, 1981.
- 11. The industry shall be liable to pay Environmental Compensation / Other Environmental Taxes, if any environmental damage caused to the surroundings, as fixed by the Collector & District Magistrate or any other competent authority as per the Rules in vogue.
- 12. The industry may explore the possibility of tapping the solar energy for their energy requirements.
- 13. The industry should educate the workers and nearby public of possible accidents and remedial measures.

SCHEDULE - B

- 1. The industry shall comply with the following non-compliances as mentioned in the Bank Guarantee, failing which the Bank guarantee of Rs. 4 Lakhs will be forfeited without any notice:
 - i. The industry has manufactured the hydrogen gas 1,55,662 m3/day against the consented capacity of 25,253 m3/day and the industry shall obtain amendment for increase in production of Hydrogen gas

ii. The industry has installed new salt furnaces 55 lakhs K.cal/hr x 2 Nos. (Fuel Hydrogen), Thermo pack unit – 20 Lakh K.Cal./hr & DG Set of Capacity – 500 KVA without obtaining CFE and CFO of the Board and the industry shall obtain CFE / CFO for new salt furnaces.

Water Pollution:

2. The project authority shall take steps to reduce water consumption to the extent possible and consumption should NOT exceed the quantities mentioned below:

S.No.	• •	Alkali Plant (in KLD)	Fatty acid	Co-gen plant (in KLD)
1.	Process & washing	342.5	85	
2.	DM water including DM Plant for regeneration water and filter back wash			360
3.	Floor washings	40	6	30
4.	Pump Gland Cooling	60	10	
5.	Cooling (makeup) / humidification / water spraying)	1050	210	6050
6.	Domestic	100	6	60
	Total	1980 KLD	317 KLD	6500 KLD

- 3. The industry shall maintain separate water flow meters for assessing the quantity of water used for each of the purposes and maintain records.
- 4. The effluent discharged should not contain constituents in excess of the tolerance limits mentioned below:

Outlet	Parameter No.	Limiting Standards
Chloro Alkali Pant	Suspended solids	200 mg/l
	pH Value	5.5 to 9.0
	Oil and grease	10 mg/l
	Biochemical Oxygen demand 1 [3 days at 27 oC]	30 mg/l
	Arsenic (as As)	0.2 mg/l
	Chemical Oxygen Demand	250 mg/l
	Cyanide (as CN)	0.2 mg/l
	Fecal Coliform (FC) (Most Probable number per 100 milliliter, MPN/100 ml)	<1000 MPN/100 ml
Castor oil & Fatty Acid Plant &	Suspended solids	200 mg/l
Co-Gen Plant	рН	5.5 to 9.0
	Oil and grease	10 mg/l
	Biochemical Oxygen demand 1 [3 days at 27 oC]	100 mg/l
	Chemical Oxygen Demand	250 mg/l
	Fecal Coliform (FC) (Most Probable number per	<1000 MPN/100

100 milliliter, MPN/100 ml)	ml

AIR POLLUTION:

4. The emissions should not contain constituents in excess of the prescribed limits mentioned in below

S.No	Parameters	Emission standards
1 to 6	SPM	115 mg/Nm ³
7	SPM	100 mg/Nm ³
8	SPM HCl mist	115 mg/Nm ³ 35 mg/Nm ³
	Chlorine	15 mg/Nm ³
9 & 10	SPM	115 mg/Nm ³
11	(Chlorine & HCl)	The sniff ${\rm Cl}_2$ from different chlorine handling sections is collected under suction and sent to ${\rm Cl}_2$ neutralization section. The ${\rm Cl}_2$ 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. ${\rm Cl}_2$ sensors are also provided at ${\rm Cl}_2$ handling section. Water scrubber is installed to scrub the tail gas vents of HCl plant.

- 5. The industry shall comply with ambient air quality standards of PM10 (Particulate Matter size less than 10 microns) 100 micro gram/ m3; PM2.5 (Particulate Matter size less than 2.5 microns) 60 micro gram/ m3; SO2 80 micro gram/ m3; NOx 80 micro gram/m3, Ammonia 400 micrograms /m3; Chlorine 15 mg/Nm³; HCl mist 35 mg/Nm³ outside the factory premises at the periphery of the industry. Standards for other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009.
- 6. The industry shall comply with the Noise Pollution (Control and Regulation) Rules, 2000 as follows:

Noise Levels: Day time (6 AM to 10 PM) - 75 dB (A) Night time (10 PM to 6 AM) - 70 dB (A)

- 7. The industry should comply with emissions limits for DG sets up to 800 KW as per the Notification G.S.R.520(E), dated 01.07.2003 under the Environment (protection) Amendment Rules, 2003 and G.S.R.448 (E), dated 12.07.2004 under the Environment (Protection) Second Amendment Rules, 2004, In case of DG sets more than 800 KW should comply with emission limits as per the Notification G.S.R.489 (E),dated 09.07.2002 at serial no.96, under the Environment (Protection) Act,1986.
- 8. The industry shall ensure compliance of the National Ambient Air quality standards notified by MoE&F, Gol vide notification GSR 826(E), dt. 16.11.2009 at the boundary of the premises during construction and regular operational phase of the project.

GENERAL:

- 9. The industry shall not manufacture any product, other than those mentioned in this order.
- 10. The industry shall maintain continuous monitoring system to air pollution control equipment and connect the data to APPCB website.
- 11. The industry shall maintain closed sheds for storing of Coal, Husk and Husk ash.
- 12. The industry shall not discharge any effluents/ treated effluents outside drains.
- 13. The industry should not produce beyond the permitted capacity as mentioned in this order, without obtaining prior CFE & CFO of the Board.
- 14. The industry shall maintain and operate continuous temperature recorder with recording facility for recording temperature of Furnace provided for incineration of Glycerin pitch. Records shall be submitted to the RO, Kurnool.
- 15. The industry shall transfer the leachate of landfill to ETP for treatment and disposal through pumping facility.
- 16. The industry shall earmark an amount of Rs. 1.29 crores per annum (I.e. 0.2% of project cost) for 10 years towards the Enterprise social responsibility (ESR) activities and spend the amount in local area.
- 17. The industry shall conduct HAZOP studies & HAZID studies and submit report to the Board regularly.
- 18. The industry shall maintain peizometeric wells around the secured landfill site. Proper records shall be maintained and shall submit the records to RO, Kurnool on half yearly basis.
- 19. The industry shall maintain closed sheds for storing of raw materails.
- 20. The industry is permitted to store treated waste water in guard ponds during rainy season/unavoidable circumstances only. The guard pond should have proper lining away from river Tungabhadra towards northern direction.
- 21. The industry shall maintain chlorine sensors near cylinder storage and filling sections.
- 22. The industry should regularly carry out ground water quality monitoring around the landfill and submit the reports every months to RO, Kurnool.
- 23. The waste water generation for tonne of caustic soda produced should not exceed more than 1 m3 (Excluding cooling tower blow down).
- 24. Thick green belt should be developed and maintained by the industry with tall growing trees in the vacant spaces of the unit as per the norms.
- 25. The industry shall maintain Rain Water Harvesting structure for the percolation of rain water from the roof of the fatty acid & caustic division administration buildings.
- 26.The applicant should submit Environment statement in Form V before 30th September every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.
- 27. The industry shall maintain the following records and the same shall be made available to the inspecting officers of the Board.
- a. Daily production details (ER-I Central Excise Returns)
- b. Quantity of Effluents generated, evaporated in MEE, recycled / reused.
- c. Log books for pollution control systems.
- d. Characteristics of effluents and emissions.
- e. Hazardous / non Hazardous sold waste generated and diposed.
- f. Inspection book.
- g. Manifest copies of effluents / hazardous waste.
- 28. The industry shall submit the information regarding usage of Ozone Depleting Substance once in six months to the Board.

- 29. 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.
- 30. The industry shall update the information in OCEMS Industry Information Data Entry Software for Compliance Reporting Protocol in PART-II (Sections F & G) Every Quarter on 1st January, 1st April, 1st July and 1st October through this software system.
- 31. The industry shall take all safety measures and provide firefighting equipment in the plant.
- 32. The industry shall comply with the conditions stipulated in EC and CFE orders.
- 33.Any other directions / circulars / notices issued by CPCB, MoEF&CC and APPCB shall be followed from time to time.

Special conditions:

- 34. The industry shall submit Risk analysis and risk assessment covering worst scenario clearly describing impact within the industry premises and outside the industry premises and emergency response system.
- 35.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.
- 36. 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.
- 37. 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.
- 38. The industry shall submit the copy of the safety audit report and On-Site / Off Site Emergency Plans as applicable after being certified by the Factories Department to the APPCB, Regional Office from time to time, if the storage quantity of hazardous chemicals is equal to or, in excess of the threshold quantities specified in schedule 2 & 3 of MSIHC Rules, 1989.
- 39. The industry shall carryout calibration of safety equipment 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.
- 40. The industry shall inventorize the hazardous wastes and its quantities stored within the industry premises as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 (HOWM

Rules, 2016) and shall furnish the details to Regional Office, APPCB on monthly basis duly certifying the same by the industry.

SCHEDULE - C [See rule 6(2)]

[CONDITIONS OF AUTHORISATION FOR OCCUPIER OR OPERATOR HANDLING HAZARDOUS WASTES]

- 1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
- 2. The authorisation shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.
- 3. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.
- 4. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.
- 5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time:
- 6. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty".
- 7. It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.
- 8. An application for the renewal of an authorisation shall be made as laid down under these Rules.
- 9. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.

Specific Conditions:

- 10. The industry shall enter an agreement with the Cement industries for disposal of incinerable waste or shall dispose to Alternative Fuel Raw material facility (AFRF) OR to TSDF for co-incineration.
- 11. The industry shall comply with the provisions of HWM Rules, 2016 in terms of interstate transport of Hazardous Waste and manifest document prescribed Under Rule 18 and 19 of the HWM Rules, 2016.
- 12. The industry shall not store hazardous waste for more than 90 days as per the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
- 13. The industry shall store Used / Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal to the manufacturers / dealers on buyback basis.
- 14. The industry shall transport the hazardous waste to cement industries only through vehicle fitted with GPS tracking system.
- 15. The industry shall maintain 7 copy manifest system for transportation of waste generated and a copy shall be submitted to concerned Regional Office of APPCB. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.

- 16.The industry shall maintain proper records for Hazardous and Other Wastes stated in Authorisation in Form-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form-4 as per Rule 20 (2) of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
- 17.Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

The project authority shall submit Half yearly compliance reports to all the stipulated conditions in Environmental Clearance (EC), Consent for Establishment (CFE) and Consent for Operation (CFO) through website i.e., https://pcb.ap.gov.in by 1st of January and 1st July of every year. The first half yearly compliance reports shall be furnished by the project authority and second half yearly compliance reports shall be the audited through MoEF&CC recognized and National Accreditation Board for Laboratory Testing (NABL) accredited third party.

DR. B.MADHUSUDHANA RAO, JCEE(MSRB), O/o JOINT CHIEF ENVIRONMENTAL ENGINEER4-APPCB

To

M/s. TGV SRAAC Limited

(Formerly M/s. Sree Rayalaseema Alkalies and Allied Chemicals Limited) Gondiparla (V), Kurnool (M), Kurnool District.

E mail: sraaclab@rediffmail.com, sraaclab@tgvmail.net