



ANDHRA PRADESH POLLUTION CONTROL BOARD  
D.No.33-26-14D/2, Near Sunrise Hospital, Pushpa Hotel Centre,  
Chalamalavaari Street, Kasturibaipet, Vijayawada - 520 010  
Phone. No.0866-2463200, Website : <http://pcb.ap.gov.in>

RED CATEGORY  
CONSENT & AUTHORISATION ORDER

Consent Order No : APPCB/VSP/RJY/449/CFO/HO/2019

16/10/2019

CONSENT is hereby granted 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 Authorisation 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:

The Andhra Sugars Ltd., (After Expansion)  
(Chloro Alkali Plant & Poly Aluminum Chloride Plant),  
R.S. No. 132,133,134 & 137,  
Saggonda Village, Gopalapuram Mandal,  
West Godavari District.  
E-mail: [Info.kvr@theandhrasugars.com](mailto:Info.kvr@theandhrasugars.com)

(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) Outlets for discharge of effluents:

Outlet No.	Outlet Description	Max Daily Discharge	Point of Disposal
1.	Process and Washings (70 KLD) + Boiler Blow Down (36 KLD) + DM Plant re-generation (200 KLD) + Cooling Blow Down (460 KLD) after Treatment.	766 KLD	On land for Plantation within the premises duly meeting the standards stipulated.
2.	Domestic Effluents	42 KLD	For onland for plantation after treatment in STP duly meeting the standards stipulated.

ii) Emissions from Chimneys

S. No.	Description of Chimney	Quantity of Emissions in Nm <sup>3</sup> /hr at peak flow
1.	Attached to 1x 10 TPH Husk fired boiler + 1 x 15 TPH Husk fired boiler + 1 x 5 TPH Furnace Oil Fired Boiler (Stand by).	4800
2.	Attached to waste Chlorine absorption tower.	1500
3.	Attached to HCl Plant - 1	60
4.	Attached to HCl Plant - 2	60
5.	Attached to HCl Plant - 3	60
6.	Attached to HCl Plant - 4	60
7.	Attached to HCl Plant - 5	60
8.	Attached to HCl Plant - 6	60

9.	Attached to H <sub>2</sub> SO <sub>4</sub> Plant	24000
10.	Attached to Flare stack for Liquid Hydrogen Purge gases	--
11.	Attached to 4750 KVA Furnace Oil G .Set	22300
12.	Attached to 1250 KVA D.G Set	--
13.	Attached to 1000 KVA D.G Sets	--
14.	Attached to 1000 KVA D.G Sets	
15.	Attached to 1000 KVA D.G Sets	
16.	Attached to PAC Process	--

**iii) HAZARDOUS WASTE AUTHORISATION (FORM - II) [See Rule 6 (2)]**

M/s. The Andhra Sugars Limited., (C&F & PAC Division), Saggonda (V), Gopalapuram (M), West Godavari District., is hereby granted an authorization to operate a facility for collection, reception, storage, treatment, transport and disposal of Hazardous Wastes namely:

• **HAZARDOUS WASTES WITH DISPOSAL OPTION:**

S.No.	Name of the Hazardous Waste	Stream Number as per HWM Rules	Quantity of Hazardous waste	Disposal Option
1.	Sulphur sludge	17.1 of Schedule - I	100 TPA	Shall be disposed as filler material for recycling in the process at Kovvur plant.
2.	Spent V <sub>2</sub> O <sub>5</sub>	17.2 of Schedule - I	1.0 TPA	Shall be disposed to TSDF, Parawada, Visakhapatnam District
3.	ETP Sludge	35.3 of Schedule - I	2.22 TPA	Sent to secured land fill within the premises.

• **HAZARDOUS WASTES WITH RECYCLING OPTION:**

1.	Waste oil	5.1 of Schedule - I	5000 LPA	Shall be disposed to authorised Re-processors / Recyclers.
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• **NON HAZARDOUS / OTHER WASTE**

1.	Ash from boilers	---	18.5 TPD	Sold to Cement and brick manufacturers.
2.	Brine sludge (dry basis)	---	13.75 TPD	Sent to secured landfill within the premises.
3.	Saturated mud (dry basis)	---	0.72 TPD	Sent to secured landfill within the premises.
4.	Used Batteries	--	64 Nos/annum	Sent to Authorized Recyclers
5.	Alumina sludge	--	1.35 TPD	Sent to secured landfill within the premises.

This consent order is valid to manufacture the following products along with quantities only.

S. No	Product	Quantity
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1.	Caustic Soda Lye	500 TPD
2.	Caustic Soda flakes	140 TPD
3.	Liquid Chlorine	240 TPD
4.	Hydrogen gas (bottling)	2.83 TPD
5.	Liquid Hydrogen	1 TPD
6.	Sulphuric Acid	300 TPD
7.	Poly Aluminum Chloride	90 TPD
	<b>By-products</b>	
1.	Hydrochloric Acid (33%)	1000 TPD
2.	Sodium Hypochlorite (100%)	40 TPD

Note: The Caustic Soda Flakes of 140 TPD shall be produced from the Caustic Soda produced as mentioned in Sl. No.1 (i.e. 500 TPD) only. The balance only shall be sold as Caustic Soda Lye (i.e. 500 - Caustic Soda Flakes)

This is subject to the provisions of the Act and Rules and orders made there under and further subject to the terms and conditions incorporated in the Schedule - A,-B & C enclosed to this order.

This combined order of consent & Hazardous Waste Authorization shall be valid for a period ending with the 31<sup>th</sup> day of August, 2024.

VIVEK YADAV IAS,

MS(VY), O/o MEMBER SECRETARY-APPCB

To

The Andhra Sugars Ltd.,(After expansion)  
(Chloro Alkali Plant & Poly Aluminum Chloride Plant),  
R.S. No. 132,133,134 & 137,  
Saggonda Village, Gopalapuram Mandal,  
West Godavari District.

Copy to:

1. The JCEE, Zonal Office **Visakhapatnam** for information and necessary action.
2. The Environmental Engineer Regional Office, **Eluru** 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 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.
7. The applicant should make applications through Online for renewal of Consent (under Water and Air Acts) and Authorization under H&OW (M&TM) Rules, 2016 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. 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.
8. 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.
9. The industry may explore the possibility of tapping the solar energy for their energy requirements.

**SCHEDULE - B**

1. The industry shall handover the Consent order No. APPCB/VSP/RJY/449/CFO/HO/2015, dated 20.11.2015, having validity upto 30.11.2019 and Amendment Order No. APPCB/VSP/RJY/449/CFO/HO/2016 of dated 09.02.2016, Auto renewal order dated 14.08.2019 to the RO, Eluru after receipt of this order and the same stands cancelled from the date of receipt of this order.
2. The issue was placed in the CFO committee meeting held on 04.10.2019 and the Committee noted the following non compliances:
  - a. The industry has not provided conveying system for sulfur from stock yard to melting area.
  - b. Housekeeping around salt storage area and sulphur storage area to be improved by avoiding spillages around yard.
  - c. The industry not constructed STP to treat the domestic waste water
  - d. The industry is not provided Piezo wells around storage of Sulphur & NaCl and secured land fill and shall carry out monitoring of wells to know the extent of ground water pollution.
  - e. The Industry not provided rainwater harvesting structures from the roof tops of the buildings to recharge ground water, and to utilize the same for different industrial operations within the plant.
  - f. The industry has to calibrate online analyzers periodically.

The representative of the industry attended the meeting and informed that the conveyance system was not provided due to its corrosive nature; housekeeping in the

salt handling area will be improved by extensive cleaning; STP will be provided within 6 months; piezo wells will be provided within 3 months; rain water is being utilized & extensive rain water recharge will be practiced; online monitors are being calibrated as per the schedule given by the supplier and now onwards the calibration dates will be communicated to the RO & ZO for presence of APPCB officials. After detailed discussions on verification report of the EE, RO: Eluru, agenda and submissions of the representatives of the industry the committee recommended to issue CFO & HWA expansion order to the industry for a period upto 31-08-2024 by stipulating the following conditions:

- i. The industry shall submit action plan for providing the conveyance system for the Sulphur stock yard to the melting area within 15 days.
- ii. The industry shall improve the housekeeping in the plant premises and shall arrest the spillages of the Sulphur and Sodium Chloride.
- iii. The industry shall provide STP to treat the domestic waste water within 6 months.
- iv. The industry shall provide Piezo wells around storage of Sulphur, NaCl and secured land fill within 2 months and shall carry out monitoring of these piezo wells on bi-monthly basis.
- v. The Industry shall provide rainwater harvesting structures to recharge the rain water from the roof tops of the buildings to recharge ground water.
- vi. The industry shall calibrate online analyzers periodically and the calibration dates shall be communicated to the RO, Eluru & ZO, Visakhapatnam so as to calibrate the analysers in presence of the APPCB officials.

**WATER POLLUTION:**

3. The effluent discharged shall not contain constituents in excess of the tolerance limits mentioned below:

Outlet	Parameter No.	Limiting Standards
1 & 2	pH	5.50 - 9.0
	TSS	200 mg/l
	TDS	2100 mg/l
	Oil and Grease	10 mg/l
	COD	250 mg/l
	BOD	100 mg/l
	Chlorides as cl-	1,000 mg/l

4. The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below:

S.No	Purpose	Applied quantity (total after partial expansion)
1.	Process and washings	<b>1905 KLD</b> (Fresh - 1675 KLD & Recycled /RO Reject - 230 KLD)
2.	Boiler Feed	<b>283 KLD</b>
3.	Cooling Tower	<b>2500 KLD</b> (Fresh - 1964 KLD & Recycled / RO Permeate - 536 KLD)
4.	RO / DM Plant regeneration	<b>200 KLD</b>
5.	Domestic	<b>50 KLD</b>
6.	Gardening and irrigation	<b>50 KLD</b>
	<b>TOTAL</b>	<b>4988 KLD</b>
	<b>Fresh</b>	<b>4222 KLD</b>

Recycled	766 KLD
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5. Separate meters with necessary pipeline should be provided by the individual units / developer 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 pollutant are easily biodegradable.
  - d. Processing, whereby water gets polluted and pollutant are not easily biodegradable.
6. The industry shall maintain Electromagnetic digital flow meters for effluent generation, Inlet and outlet of ETP & Inlet and outlet of RO Plants.
7. The industry shall maintain water meters to RO permeate recycled and for RO rejects.
8. Process condensate generated from the plant operation shall be collected in tank and utilized for electrolysis as feed water/ saturated make up water.
9. The industry shall ensure that effluents shall not be discharged onland or any water bodies or aquifers or outside under any circumstances. Floor washings shall be admitted into effluent collection system only and shall not be allowed to find their way into storm water drains or open areas.
10. The industry shall improve the ETP equalization tank and shall maintain minimum 1 feet buffer to avoid overflow of the effluent.
11. There shall not be any spillages of chemicals / effluents on ground. The drums containing chemicals & wastes shall be stored on elevated platform under shed with a provision to collect leachate / spillages in the collection pit. In no case the drums shall be stored on the naked open ground.
12. The wash water/rain water from the RO plant areas shall be routed to the ETP for treatment and shall not be allowed to mix with storm water.
13. Storm water shall be channelized through separate drains passing through a pit having capacity of 10 minutes (hourly average) of rainfall.
14. Proper drainage system shall be maintained so that rain water shall not be allowed to mix with either trade or domestic effluents.
15. The industry shall construct rainwater runoff tank for collection and storage of first flush storm water. The industry shall maintain dry condition outside drains in non-rainy season.
16. The industry shall provide Piezo wells around storage of Sulphur, NaCl and secured land fill within 2 months and shall carry out monitoring of these piezo wells on bi-monthly basis.
17. The industry shall provide STP to treat the domestic waste water within 6 months.
18. The Industry shall provide rainwater harvesting structures to recharge the rain water from the roof tops of the buildings to recharge ground water.

**AIR POLLUTION:**

19. The emissions shall not contain constituents in excess of the prescribed limits mentioned below.

Chimney No	Parameter	Emission Standards
1&10	Particulate matter	115 mg/Nm <sup>3</sup>
2	Chlorine	15 mg/Nm <sup>3</sup>
3-8	HCl	35 mg/Nm <sup>3</sup>
9	SO <sub>2</sub> Acid Mist	0.5 Kg/MT of H <sub>2</sub> SO <sub>4</sub> Produced 40 mg/Nm <sup>3</sup>
16	Particulate matter	115 mg/Nm <sup>3</sup>

- 20.The industry shall maintain online stack analyser to the stack connected to boiler, and process vents and data shall be connected to the APPCB & CPCB servers.
- 21.The industry shall comply with emission limits for DG sets upto 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 shall 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.
- 22.The industry shall comply with ambient air quality standards of PM10 (Particulate Matter size less than 10 micro grams) - 100 micro gram/ m<sup>3</sup>; PM2.5 (Particulate Matter size less than 2.5 micro grams) - 60 micro gram/ m<sup>3</sup>; SO<sub>2</sub> - 80 micro gram/ m<sup>3</sup>; NO<sub>x</sub> - 80 micro gram/ m<sup>3</sup>, 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 Noise Levels:  
Day time - (6 AM to 10 PM) - 75 dB (A)  
Night time - (10 PM to 6 AM) - 70 dB (A).
- 23.The industry shall maintain dedicated multi stage scrubbers to the process vents to control the process emissions and other gaseous emissions. The industry shall maintain online pH monitoring system to the scrubbers provided to treat the process emissions. Scrubbed liquid shall be recycled as far as possible.
- 24.The details of chemicals consumption used in the scrubber should be recorded and kept accessible for the inspection officials of the Board.
- 25.The industry shall implement adequate measures for control all fugitive emissions from the plant.
- 26.The industry shall maintain the CAAQM stations to monitor SO<sub>2</sub>., NO<sub>x</sub> ,Cl<sub>2</sub>, HCl, PM<sub>2.5</sub> and PM<sub>10</sub> with networking facility to the Board Office and submit the data to RO, Eluru for every 3 months.
- 27.The industry shall calibrate the online emission monitors, CAAQM stations and other sensors at regular intervals. The industry shall inform the RO, Eluru about the calibration schedule and calibration shall be done in presence of the Board officials.
- 28.The industry shall provide & maintain online continuous emission monitoring system to the boiler stacks and shall connect the data to the APPCB & CPCB servers.
- 29.The industry shall submit the data obtained from SO<sub>2</sub> analyser recorder to the Regional Office, Eluru.
- 30.The industry shall follow all the recommendations of safety measures recommended in the Risk analysis report of IICT and they shall carry out HAZOP study through a reputed institution having expertise in this field so as to avoid release of toxic gases from the plant and report the compliance to the RO in three months.

#### **GENERAL**

- 31.The industry shall commission Sewage Treatment Plant for treatment of domestic effluents within 6 months.
- 32.The industry shall not manufacture new products and not exceeding the production quantity without CFE / CFO of the Board.
- 33.The industry shall ensure that there shall not be any change in the process technology, source of raw material and scope of working without prior approval from the Board.
- 34.The industry shall submit action plan for providing the conveyance system for the Sulphur stock yard to the melting area within 15 days.
- 35.The industry shall improve the housekeeping in the plant premises and shall arrest the spillages of the Sulphur and Sodium Chloride.
- 36.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-1 Central Excise Returns).
  - b. Quantity of Effluents generated, treated, recycled/reused.
  - c. Log Books for pollution control systems.
  - d. Characteristics of effluents and emissions.
  - e. Hazardous/non hazardous solid waste generated and disposed.
  - f. Inspection book.
  - g. Manifest copies of effluents / hazardous waste.
- 37.The industry shall submit the information regarding usage of Ozone Depleting Substance once in six months to the Board.
- 38.The industry shall comply with CPCB directions dated 05.02.2014 / 02.03.2015 and guidelines issued regarding online monitoring systems issued from time to time. The online monitoring system shall be calibrated periodically as per equipment suppliers manual / CPCB guidelines.
- 39.The industry shall comply with the Regulation of Persistent Organic Pollutants Rules,2018 notified by the MoEF&CC Notification vide G.S.R. 207 (E) dated 30.05.2018. As per the notification, the following 7 chemicals are prohibited to manufacturer, trade, use, import and export:
- a. Chlordecone,
  - b. Hexabromobiphenyl,
  - c. Hexabromodiphenyl ether and heptabromodiphenyl ether (commercial octa-BDE),
  - d. Tetrabromodiphenyl ether and pentabromodiphenyl ether (commercial penta-BDE),
  - e. Pentachlorobenzene,
  - f. Hexabromocyclododecane and
  - g. Hexachlorobutadine.
- 40.The industry shall renew the PLI policy which includes Environmental Relief Fund (ERF) and submit copy to RO, Eluru on yearly base.
- 41.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.
- 42.Any other directions / circulars / notices issued by CPCB, MoEF&CC and APPCB shall be followed from time to time.
- 43.The industry shall maintain green belt in all the vacant places. In future, excess green belt over and above 33 % of total area can be utilized for industrial activity as per requirement of industry.
- 44.The industry shall comply with the Task Force directions issued by the Board from time to time.
- 45.The conditions are stipulated without prejudice to the rights and contentions of this Board in any Court of Law.

**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. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.
11. 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.
12. The industry shall transport the hazardous waste to cement industries through GPS vehicle.
13. The industry shall not store hazardous waste for more than 90 days as per the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
14. 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.
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.

The industry 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 industry and second half yearly compliance reports shall be the audited through NABL accredited third party.

VIVEK YADAV IAS, MS(VY), O/o MEMBER SECRETARY-APPCB

To  
The Andhra Sugars Ltd.,  
(Chloro Alkali Plant & Poly Aluminum Chloride Plant),  
R.S. No. 132,133,134 & 137,

Saggonda Village, Gopalapuram Mandal,  
West Godavari District.