



CONSENT ORDER FOR ESTABLISHMENT

Order No. 300 /APPCB/CFE/RO-ELR/HO/2008

Dt: 03.12.2018

Sub: APPCB – CFE - **M/s. Andhra Sugars Limited, R.S.No. 535, Venkatarayapuram (V), Tanuku (M), West Godavari District** - Consent for Establishment (CFE) of the Board for **expansion** 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 order dt. 23.06.2017.
2) CFO & HWA order dt. 12.05.2018 and amendment order dt. 21.06.2018.
3) Minutes of the SEIAA, AP meeting held on 01.11.2018.
4) Industry's CFE application received through APOCMMS on 17.11.2018.
5) R.O's inspection report dt. 19.11.2018.
6) CFE Committee meeting held on 20.11.2018.
7) Industry's Ir. dt. 29.11.2018.

1. In the reference 4th cited, an application was submitted to the Board seeking Consent for Establishment (CFE) for **expansion and conversion of UDMH to UH-25 & for increase of MMH**, with an additional project cost of Rs. 102 Crores.
2. As per the application, the above activity is to be located in the existing premises at R.S.No. 535, Venkatarayapuram (V), Tanuku (M), West Godavari District in an area of 5.9 Acres out of 109 Acres.
3. The above site was inspected by the Environmental Engineer, Regional Office, Eluru, A.P Pollution Control Board on 18.11.2018 and observed that the site is surrounded by

North : HTPB Unit
South : Road followed by UH-25 unit
East : Plantation/ Electrical Sub-station followed by Velpur Road and G& V canal
West : Aspirin Granulation plant

4. The Board, after careful scrutiny of the application, verification report of Regional Officer and recommendations of the CFE Committee, hereby issues **CONSENT FOR ESTABLISHMENT** for **expansion and conversion of UDMH to UH-25 & for increase of MMH** as mentioned below 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.

S. No.	Product	As per CFE order dt.23.06.2017	Expansion		Total after expansion
			Phase – I	Phase – II	
HTPB plant					
1.	Hydroxy Terminated Poly Butadiene (HTPB)	540 Kg/day	590	570	1700 kg/day

UDMH & UH-25 Plant					
1.	UH-25 (Physical maxing of UDMH-75% + Hydrogen Hydrate – 25%) – (266 kg/day + 400 kg/day)	666 Kg/day	1504 Kg/day	580 Kg/day	2750 Kg/day
2.	Mono Methyl Hydrazine (MMH)	33 Kg/day	112 Kg/day	55 Kg/day	200 Kg/day
3.	Isrosene	-	4000 Kg/day	4000 Kg/day	8000 Kg/day

By products:			
S.No.	Name of By-Product	Phase-I*	Phase-II
1.	Low molecular weight resins	0.25 TPD	0.15 TPD
2.	Sodium Chloride Salt	13.49 PD	3.82 TPD

*Phase I includes existing capacity.

5. This Consent order issued is subject to the conditions mentioned in the 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

MEMBER SECRETARY

To

**M/s. Andhra Sugars Limited, (expansion)
R.S.No. 535 , Venkatarayapuram (V),
Tanuku (M), West Godavari District
info.tnk@theandhrasugars.com**

- Copy to: 1. The JCEE, Z.O: Visakhapatnam for information and necessary action.
2. The EE, R.O: Eluru for information and necessary action.

Annexure

1. The proponent shall obtain Consent 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 trial runs.
2. The applicant shall provide separate energy meters for Effluent Treatment Plant (ETP) and Air pollution Control equipments to record energy consumed. An alternative electric power source sufficient to operate all pollution control systems shall be provided.
3. The industry shall construct separate storm water drains and provide rain water harvesting structures. No effluents shall be discharged in to the storm water drains.

Water:

1. The source of water is Bore well / G & V Canal and the maximum permitted water consumption is as following:

Sl. No.	Purpose	As per CFO order dt. 12.05.2018 (KLD)	Total After Expansion (KLD)
1.	HTPB unit	13.7	Process 172.8
2.	UH-25 Plant – I & MMH	107.4	Boiler Feed 50.0
3.	UH-25 Plant – II	133.4	Cooling Tower 830
4.	UH-25 Plant – III	---	RO Plant 12.5
5.	ISROSENE	---	Domestic 12.0
	Total	254.5	1077.3

Separate meters with necessary pipe-line shall be provided for assessing the quantity of water used for each of the purposes mentioned above.

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

As per CFO order dt. 12.05.2018:

Outlet No.	Outlet Description	Max Daily Discharge KLD	Point of Disposal
HTPB Unit			
1.	Trade effluents after pretreatment	9.5	Combined ETP located in Sugar Unit and treated effluent should be disposed for on land irrigation.
2.	Domestic effluents	0.5	
Conversion of UDMH to UH-25 (Plant-I)			
3.	Trade effluents	36	Combined ETP located in Sugar Unit and treated effluent should be disposed for on land irrigation.
4.	Domestic Effluents	3	
Conversion of UDMH to UH-25 (Plant-II)			
5.	Process - (from reaction & scrubber)	39	Combined ETP located in Sugar Unit and treated effluent should be disposed for on land irrigation.
6.	Cooling tower pumps	12	
7.	Floor washings	9	
8.	Domestic	5	

After expansion:

S.No	Purpose	Total Quantity	Point of disposal
1.	Process- 183.6 KLD	183.6 KLD	After primary treatment sent to biological treatment plant and treated waste water sent to double RO system.
2.	RO/DM Rejects-12.5 KLD, Boiler Blow downs-10 KLD, Cooling Tower Blow down-140 KLD	162.5 KLD	After primary treatment sent to Ultra filtration followed by double RO system, MEE ad ATFD. RO permeate to reuse for cooling towers make up and rejects sent to MEE followed by ATFD. MEE & ATFD Condensate are reused for cooling tower makeup and MEE salt to TSDF.
3.	Domestic	10 KLD	Combined Biological ETP located within Sugar Unit and treated effluent shall be disposed for on land irrigation.

- The Effluent Treatment Plant (ETP) shall be operated effectively. All the units of the ETP shall be impervious to prevent ground water pollution.
- The industry shall provide flow meters with totalisers at the inlet and outlet of ETP.
- 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.

Air:

- The Air pollution Control equipment shall be operated effectively to comply with the following for controlling air pollution:

Existing:

S. No.	Source of Pollution	Control equipment provided	Stack height in m above GL
1.	Stack attached to 12 TPH boiler – 2 No.s (Natural gas/ Bio-gas / Coal fired boiler.)	Cyclone dust collectors	36 m.
2.	Stack attached to 1000 KVA DG set- 2 No.s (one standby)	Silencers and Mufflers	6.5 m above the building level
3.	Stack attached to 860 KVA DG set- 1 No.s	Silencers and Mufflers	5 m above the building level
4.	Stack attached to 380 KVA DG set- 1 No.s	Silencers and Mufflers	4 m above the building level
5.	Attached to 2 TPH Oil Fired Boiler	---	Connected to the existing stack of 30 m height

Proposed expansion:

S. No.	Source of Pollution	Control equipment	Stack height above GL
1	Stack attached to 12 TPH boiler	Bag filters	36 m.
2	Stack attached to 1000 KVA DG set	Silencers and Mufflers	6.5 m above the building level

*The required steam and power will be drawn from sugar unit and consequently proposed boiler and DG set also to be installed in the sugar unit.

7. A sampling port with removable dummy of not less than 15 cm diameter shall be provided in the stack at a distance of 8 times the diameter of the stack from the nearest constraint such as bends etc. A platform with suitable ladder shall be provided below 1 meter of sampling port to accommodate three persons with instruments. A 15 AMP 250 V plug point shall be provided on the platform.
8. The industry shall implement adequate measures to control all fugitive emissions from the plant.
9. The proponent shall ensure compliance of the National Ambient Air quality standards notified by MoEF, Gol vide notification No. GSR. 826 (E), dated. 16.11.2009 during construction and regular operational phase of the project at the periphery.

The generator shall be installed in a closed area with a silencer 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.

10. 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) All the solvent storage tanks shall be connected with vent condensers to prevent solvent vapours.
 - v) The reactor vents shall be connected with primary & secondary condensers to prevent escaping of solvent vapour emissions into atmosphere.

Solid Waste:

11. The industry shall comply with the following for disposal of Solid wastes:

As per CFO order dt. 12.05.2018:

S. No.	Name of the Hazardous Waste	Quantity	Disposal Option
1.	Butadiene residue	1.08 TPA	To TSDF for incineration

After expansion:

S. No	Source of solid waste	Quantity	Method of disposal
a)	Used Oil / Waste Lubrication Oil	7 KLPA	To be used as lubricant within the premises / to authorized Re-processors / Recyclers / to the Cement industries to use as alternate fuel in the kiln.
b)	Containers & Container Liners	1100 Nos./month	To authorized agencies, after complete detoxification for re-use/ recycle.
c)	Used Lead Acid Batteries	15 Nos./year	To dealers on buy back system
d)	Insulation and Glass wool waste	0.5 TPM	To authorized agencies (or) TSDF, Parawada / Cement Industries
e)	Process residue from HTPB	1.5 TPD	To the authorized Cement industries for being used as alternate fuel in the kiln (or) TSDF, Parawada for incineration
f)	Batch failures in HTPB	2.0 TPA	To the authorized Cement industries for being used as alternate fuel in the kiln (or) TSDF, Parawada for incineration
g)	Process residue from ISROSENE	170 KG/day	To Cement industry for Co-processing
h)	Process residue from UH-25	1.35 TPD	TSDF/Sent to Cement industry for Co-processing.
i)	Catalyst from ISROSENE	20 Kg/day	To the Supplier for recovery
j)	Softner/DM Plant Resins	2 TPA	To TSDF, Parawada for secured land filling.
k)	Used / Discarded RO Membranes	0.5 TPA	To TSDF for incineration
l)	Used filters	15 Nos/day	
m)	Discarded PPE	0.5 TPA	
n)	Forced Evaporation Salts / Mixed Salts	1.5 TPD	To TSDF for secured land filling.
o)	ETP Sludge	2 TPD	
p)	Boiler ash	50 TPD	
q)	Paper, cotton waste & packing materials	5 TPA	Sale to outside agencies
r)	Metal scrap	10 TPA	Sale to outside agencies/recycler
s)	E-Waste	0.2 TPA	Authorized recyclers
t)	Canteen waste	5 Kg/day	Composted & used as manure
u)	Plastic waste	0.5 TPA	Authorized recyclers.
v)	Glass Bottles	250 Nos/month	Dispose-off to outside agencies after detoxification

12. The proponent shall place the chemical drums and / or any drums in a shed provided with concrete platform only. The Platform shall be provided with sufficient dyke wall and effluent collection system. The industry shall provide containers detoxification facility. Container & Container liners shall be detoxified at the specified covered platform with dyke walls and the wash wastewater shall be routed to low TDS collection tank.
13. The following rules and regulations notified by the MoEF&CC, GoI shall be implemented.
 - a) Hazardous waste and other wastes (Management and Transboundary Movement) Rules, 2016.
 - b) Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989
 - c) Fly Ash Notification, 2016.
 - d) Batteries (Management & Handling) Rules, 2010.
 - e) E-Waste (Management) Rules, 2016.
 - f) Construction and Demolition waste Management Rules, 2016.

Other Conditions:

14. **The industry shall start construction of expansion unit only after receipt of Environmental Clearance from the SEIAA, AP. A copy of the Environmental Clearance shall be submitted to the Regional Officer, Eluru.**
15. Existing green belt shall be maintained all along the boundary & vacant spaces with tall growing trees with good canopy. The existing green belt shall not be disturbed due to proposed expansion.
16. 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.
17. 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.
18. 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.

MEMBER SECRETARY

To

**M/s. Andhra Sugars Limited, (expansion)
R.S.No. 535 , Venkatarayapuram (V),
Tanuku (M), West Godavari District
info.tnk@theandhrasugars.com**