



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

**RED CATEGORY
 CONSENT & AUTHORIZATION ORDER**

Consent Order No APPCB/ VJA/ NLR/ 930/HO/CFO/2016- 16/11/2021

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 5 of the Hazardous Wastes (Management, Handling & Transboundary, Movement) Rules, 2008 & Amendments thereof and the rules and orders made there under (hereinafter referred to as 'the Acts', 'the Rules') to:

**M/s. Sembcorp Energy India Limited (Project -1) (formerly
 M/s. Thermal Powertech Corporation (India) Ltd.)
 Painampuram & Nelaturu Villages, Muthukur Mandal,
 SPSR Nellore District.
 E Mail: vemulapalli@sembcorp.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) Out lets for discharge of effluents:

Outlet No.	Outlet Description	Max Daily Discharge in (M ³ /day)	Point of Disposal
1.	Cooling Water Blow down	116000.0	Shall be discharged into sea through marine out fall
2.	First pass RO reject	22224.0	
3.	Ash pond outlet (excess during rainy season)	6666.0	
4.	Clarifier blow down	1116.0	Most of the water shall be recycled back & remaining if any shall be discharged through marine outfall.
5.	DM Plant regeneration	112.0	Shall be reused within plant premises for green belt development after treatment,
6.	Boiler blow down	80.0	
7.	Misc. Service water (floor wash)	80.0	
8.	Domestic (Plant)	40.0	After treatment in STP, shall be utilized for green belt development.

ii. Emissions from chimneys:

Chimney No.	Description of Chimney	Quantity of Emissions at peak flow m ³ /hr

1	Common Stack with twin flues attached to coal fired boilers of 2 x 2016 TPH capacity	-
2	Stack attached to HSD fired Auxiliary Boiler 1 x 50 TPH capacity	-
3	DG sets capacity of 3 x 1000 KVA	-

iii) HAZARDOUS WASTE AUTHORISATION (FORM – II) [See Rule 5 (4)]:

M/s.Sembcorp Energy India Limited (Project -1) (formerly M/s. Thermal Powertech Corporation (India) Ltd.) Painampuram & Nelaturu Villages, Muthukur Mandal SPSR Nellore District is hereby granted an authorization to operate a facility for collection, reception, storage, treatment, transport and disposal of Hazardous Wastes namely:

S. No	Name of the Hazardous waste	Stream	Quantity of Hazardous waste	Disposal Option
1	Expired Paints/ Paint Waste/ Empty paint cans	21.1 of Schedule-1	5 Ton/ Annum	Shall be routed through APEMC, so as to dispose the same to authorized recyclers / re-processors / Incinerators
2	Expired Chemicals/ Chemical Waste/ Empty Chemical	35.2 of Schedule-1	10 KL/ Annum	Shall be routed through APEMC, so as to dispose the same to authorized recyclers / re-processors / Incinerators
3	Spent Ion Exchange Resins	35.2 of Schedule-1	20 Ton/ Annum	Shall be routed through APEMC, so as to dispose the same to authorized recyclers / re-processors / Incinerators
4	Oil Soaked or Chemicals coated Cotton Waste	33.2 of Schedule-1	1 Ton/ Annum	Shall be routed through APEMC, so as to dispose the same to authorized recyclers / re-processors / Incinerators
5	Used Oil Filters/ Damaged Filters	3.3 of Schedule-1	1 Ton/ Annum	Shall be routed through APEMC, so as to dispose the same to authorized recyclers / re-processors / Incinerators
6	ETP Sludge/ Oil Sludge	34.2 of Schedule-1	1 Ton/ Annum	Shall be routed through APEMC, so as to dispose the same to authorized recyclers / re-processors / Incinerators
7	Used Lubricant Oil	5.1 of Schedule-1	50 KL/A nnum	Shall be routed through APEMC, so as to dispose the same to authorized recyclers / re-processors / Incinerators/ Pre-processors
8	Waste Oil from DG Sets	5.1 of Schedule-1	2 KL/ Annum	Shall be routed through APEMC, so as to dispose the same to authorized recyclers / re-processors / Incinerators/ Pre-processors
9	Aerosols Cans	33.1 of Schedule-1	100 Kgs/ Annum	Shall be routed through APEMC, so as to dispose the same to authorized recyclers / re-processors
10	Used Empty Chemical Jar/ Bottles	33.1 of Schedule-1	1000 Nos./ Annu	Authorized recylcers/ Reprocessors/ Incinerators
11	Used empty PVC oil sample bottle	33.1 of Schedule-1	200 Kgs/Annum	Shall be routed through APEMC, so as to dispose the same to authorized recyclers / re-processors / Incinerators

12	Used Grease	35.4 of Schedule-1	1 Ton/ Annum	Shall be routed through APEMC, so as to dispose the same to authorized recyclers / re-processors / Incinerators
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Other Wastes:

13	Lead Acid Batteries	-- -	200 Nos./ Annum	Return to manufacturers/ dealers on buyback basis / Authorized recyclers
14	E-Waste	--	3 Ton/ Annum	Shall be routed through APEMC, so as to dispose the same to authorized recyclers / re-processors

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

S. No.	Products	Capacity
1.	Electric Power Generation (Fuel : Blended coal 70% indigenous and 30% imported coal)	1320MW (1 st Unit of Stage- I - 1 x 660 MW) (2 nd Unit of Stage- I – 1 x 660 MW)

This order is subject to the provisions of `the Acts' and the 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 order of consent & Hazardous Waste Authorization shall be valid for a period ending with the **30th November, 2026**.

BATCHU SIVA PRASAD, CEE(BSP), O/o CHIEF ENVIRONMENTAL ENGINEER-APPCB
To
M/s. Sembcorp Energy India Limited (Project -1),
(formerly M/s. Thermal Powertech Corporation (India) Ltd.)
Painampuram & Nelaturu Villages, Muthukur Mandal,
SPSR Nellore District.
E Mail: vemulapalli@sembcorp.com

Copy to:

1. The JCEE, Zonal Office, Vijayawada for information and necessary action.
2. The EE, Regional Office, Nellore 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. 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.
5. 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.
 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 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.
 8. 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.
 9. 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.
 10. 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.
 11. The industry may explore the possibility of tapping the solar energy for their energy requirements.
 12. The industry should educate the workers and nearby public of possible accidents and remedial measures.

SCHEDULE – B

Special Conditions:

1. The industry shall provide FGD system to meet the SO₂ emission standard of 200 mg/Nm³ by 31.12.2024, as per MoEF&CC, GoI notification GSR No.243 (E), dt.31.03.2021.
2. The industry shall maintain water sprinklers around the ash pond area to control fugitive emissions in the surrounding area within 2 months and report compliance to RO, Nellore.

WATER POLLUTION:

3. The industry shall comply with the following effluents standards based on the disposal points permitted:

Outlet No.	Parameter	Limiting standards
1 to 3	pH	6.5 to 8.5
	Suspended solids	100.0 mg/l
	Oil & Grease	10.0 mg/l
	Temperature	Shall not exceeded 50 C above the receiving water temperature
	Biochemical oxygen demand (3 days at 270 C)	100 mg/l
	Chemical Oxygen Demand (COD)	250 mg/l
	Arsenic	0.2 mg/l

	Mercury	0.01 mg/l
	Lead	2.0 mg/l
	Cadmium	2.0 mg/l
	Hexavalent Chromium	1.0 mg/l
	Bio essay test	90% survival fish after 96 hours in 100% effluents
5 to 8	pH	5.5 – 9.0
	Suspended solids	100.0 mg/l
	Oil & Grease	10.0 mg/l
	Biochemical oxygen demand (3 days at 270 C)	100.0 mg/l
	Arsenic (as As)	0.2 mg/l
	Cynide (as CN)	0.2 mg/l
	Bio easy test	90% survival fish after 96 hours in 100% effluents
	Copper (Total)	1 mg/l
	Iron (Total)	1 mg/l

4. The source of water is sea water. The following is the permitted water consumption:

Sl.No	Purpose	Quantity in (M3/day)
1.	For cooling tower make up (saline water)	1,98,256.0
2.	Non-cooling water - RO First pass	
	i) Ash handling sealing	2240.0
	ii) Coal handling plant dust suppression	4768.0
	iii) High Vaccum AC make up	1660.0
	iv) Misc. services (for fire fighting etc.)	512.0
	v) RO Reject	22224.0
	vi) Clarifier blow down	1056.0
	RO Second pass	
	i. DM Plant	2080.0
ii. Domestic (Plant)	32.0	
Total		2,32,846.0

5. The industry shall maintain Separate digital water meters in the intake point of sea water (i.e. at sea coast) with totalizer facility unit wise with to asses daily water consumption quantity instead of cumulative water consumptions.
6. The industry shall maintain flow meter preferably Electro Magnetic Flow Meters with totalizers for water and effluent quantity measurements for different streams of effluents and different categories of water usage stipulated in this order.
7. The industry shall maintain leachate collection tank to collect the leachate from garland drain of ash pond.
8. The industry shall maintain provision to collect the excess water from the ash pond into sea to control overflow of saline water from ash pond and to prevent irrigation tanks being polluted.

AIR POLLUTION:

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

Chimney No.	Parameter	Emission standards in mg/Nm³
1 – 2	Particulate Matter	50

10.The industry shall comply with ambient air quality standards of PM10 (Particulate Matter size less than 10 m) - 100 g/ m³; PM2.5 (Particulate Matter size less than 2.5 m) - 60 g/ m³; SO₂ - 80 g/ m³; NO_x - 80 g/m³, 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.

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

Night time (10 PM to 6 AM) - 70 dB (A)

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

Chimney No.	Parameter	Emission Standards
1 & 2	Particulate matter	50 mg/Nm ³
	SO ₂	*200 mg/Nm ³
	NO _x	450 mg/Nm ³
	Mercury (Hg)	*0.03 mg/Nm ³

*The industry shall meet the SO₂ emission standard of 200 mg/Nm³ by 31.12.2024, as per MoEF&CC, GoI notification GSR No.243 (E), dt.31.03.2021.

12.The industry shall comply with emission limits for DG sets of capacity upto 800 KW as per the Notification G.S.R.520 (E), dated 01.07.2003 and ~S.R.448(E), dated 12.07.2004 under the Environment (Protection) Act Rules. In case of DG sets of capacity 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.

13.The industry shall maintain wind barriers/ wind breaking walls to the coal yards as temporary arrangement to control fugitive dust emissions on immediate surroundings.

14.The industry shall regularly operate water sprinklers provided to control stock yard to mitigate fugitive dust on the surroundings from coal handling area.

15.The industry shall provide necessary air pollution control systems at coal transfer points in coal conveyer system from port boundary to industry premises within 3 months.

16.The industry shall upgrade the air pollution control systems at coal crusher within 3 months.

17.The industry shall provide separate energy meters along with totalizer facility for each ESP.

18.The industry shall comply with the MoEF&CC Notification S.O.No.3305 dt.07.12.2015 and S.O. 682 (E)dt.07.03.2016 as applicable and report compliance to RO, Nellore.

GENERAL:

19.The industry shall handover the original consent dated 15.02.2016 to the RO, Nellore after receipt of this order.

20.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 and disposed.
- 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 hazardous

21.The industry shall dispose solid waste (Non-Haz) as follows:

S. No.	Name of the solid waste	Quantity	Disposal
1	Fly ash	0.96 Million Tons/ Annum	To cement / brick units
2	Bottom Ash	0.24 Million Tons/ Annum	To Cement, brick Manufacturing units. Utilized bottom ash to ash pond in slurry mode

22. The industry shall relocate the CAAQM stations provided at sea intake point to suitable location in consultation with RO, Nellore.
23. The industry shall operate CAAQM stations for monitoring SPM, SO₂ and NO_x with recording facility and maintain connectivity to PCB server.
24. The industry shall install online effluent and stack monitoring systems for specified parameters as per CPCB directions dated 05.02.2014 & 02.03.2015 and maintain connectivity to APPCB/CPCB websites
25. The industry shall carry out regular calibration for the on-line stack monitoring systems and CAAQM stations with tamper proof mechanism.
26. The industry shall dispose 100% of fly ash generated as per the Fly ash Notification
27. The industry shall develop the thick green belt in an area of 395 acres all along the periphery of the industry and ash pond area.
28. The industry shall submit a copy of policy of PLI duly indicating the amount contributed towards ERF to the RO once in six months.
29. The industry shall comply with Board directions issued from time to time.
30. The industry shall comply with standards and directions issued by CPCB/ MoEF&CC as and when notifications are issued.
31. The industry shall submit compliance report on the conditions mentioned in the consent order every six months i.e. on 1st of January and July of every year to the RO/ZO.

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. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and

disposed of as per specific conditions of authorisation.

9. An application for the renewal of an authorisation shall be made as laid down under these Rules.
10. 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.
11. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.
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 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.
15. 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.

BATCHU SIVA PRASAD, CEE(BSP), O/o CHIEF ENVIRONMENTAL ENGINEER-APPCB

To

**M/s. Sembcorp Energy India Limited (Project -1),
(formerly M/s. Thermal Powertech Corporation (India) Ltd.),
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