



**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/182/HO/CFO/2016- 14/12/2021**

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 Authorization 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 -2),**  
**(formerly M/s. Thermal Powertech Corporation (India) Ltd.),**  
**Near Ananthavaram Village, Varakavipudi Panchayat,**  
**TP Gudur Mandal, SPSR Nellore District.**  
**E Mail: [pavan.vemulapalli@sembcorp.com](mailto:pavan.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 (M3/day)	Point of Disposal
1.	Cooling Water Blow down	210560.0	Shall be discharged into sea through marine out fall.
2.	Clarifier blow down	807.0	
3.	First pass RO reject	14908.0	
4.	Boiler blow down, DM Plant re-generation & Process drains from intermediate sump	467.0	Shall be reused within plant premises for green belt development after treatment.
5.	Domestic	100.0	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 <sup>3</sup> /hr
1	Common Stack with twin flues attached to boilers of 2 x 2000 TPH capacity	-
2	Stack attached to the Auxiliary Boiler 1 x 30 TPH capacity	-
3	DG sets capacity of 3 x 1500 KVA	-

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

M/s.Sembcorp Energy India Limited (Project -2) (formerly M/s. Thermal Powertech Corporation (India) Ltd.), Ananthavaram and Varakavipudi 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/Annum	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./ Annum	Authorized recyclers/ 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	2 Ton/ Annum	Shall be routed through APEMC, so as to dispose the same to authorized recyclers / re-processors / Incinerators

**Other Wastes:**

13	Lead Acid Batteries	-- -	1.5 Ton/ Annum	Return to manufacturers/ dealers on buyback basis / Authorized recyclers
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14	E-Waste	--	3 Ton/ Annum	Shall be routed through APEMC, so as to dispose the same to authorized recyclers / re-processors
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This consent order is valid to manufacturing the following products along with quantities indicated only.

S. No.	Products	C a p a c i t y
1.	Electric Power Generation (Fuel : Blended coal 70% indigenous and 30% imported coal)	1320MW (2 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 **28th February, 2027.**

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

**To**

**M/s. Sembcorp Energy India Limited (Project -2),  
(formerly M/s. Thermal Powertech Corporation (India) Ltd.),  
Near Ananthavaram Village, Varakavipudi Panchayat,  
TP Gudur Mandal, SPSR Nellore District.  
E Mail: pavan.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**

1. **Concrete /asphalt internal roads shall be repaired/ laid within 3 months.**
2. **100% fly ash utilization shall be achieved by March 2022.**

**WATER POLLUTION:**

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

<b>Outlet No.</b>	<b>Parameter</b>	<b>Limiting standards</b>
1 to 3	pH	6.5 to 8.5
	Suspended solids	100.0 mg/l
	Oil & Grease	20.0 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	
4 & 5	pH	5.5 – 9.0
	Suspended solids	200.0 mg/l
	Oil & Grease	10.0 mg/l

	Biochemical oxygen demand (3 days at 270 C)	100.0 mg/l
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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)	273728.0
2.	<b>Non-cooling water - RO First pass</b>	
	i) Clarifier	27714.0
	ii) Misc. services	6300.0
	<b>RO Second pass</b>	
	i. DM Plant	1590.0
	ii. Domestic (Drinking Water)	75.0
<b>Total</b>		<b>3,09,407.0</b>

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 assess 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 contamination of irrigation tanks.

**AIR POLLUTION:**

9. 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 <sup>3</sup>
	SO <sub>2</sub>	*200 mg/Nm <sup>3</sup>
	NOx	450 mg/Nm <sup>3</sup>
	Mercury (Hg)	*0.03 mg/Nm <sup>3</sup>

\*The industry shall meet the SO<sub>2</sub> emission standard of 200 mg/Nm<sup>3</sup> by 31.12.2024, as per MoEF&CC, GoI notification GSR No.243 (E), dt.31.03.2021.

10. The industry shall comply with ambient air quality standards (day average) of PM10 - 100 microg/ m<sup>3</sup>; PM2.5 - 60 microg/ m<sup>3</sup>; SO<sub>2</sub> - 80 microg/ m<sup>3</sup>; NOx - 80 microg/m<sup>3</sup>, outside the factory premises at the periphery of the industry.

Standards for parameters as mentioned in the National Ambient Air Quality Standards in CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009 shall be complied.

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

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

11. 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.

12. The industry shall maintain wind barriers/ wind breaking walls to the coal yards as temporary arrangement to control fugitive dust emissions on immediate surroundings.
13. The industry shall regularly operate water sprinklers provided to control stock yard to mitigate fugitive dust on the surroundings from coal handling area.
14. The industry shall provide & maintain necessary air pollution control systems at coal transfer points in coal conveyer system from port boundary to industry premises.
15. The industry shall upgrade the air pollution control systems at coal crusher within 3 months.
16. The industry shall provide separate energy meters & hour meters for each ESP.
17. The industry shall provide FGD system to meet the SO<sub>2</sub> emission standard of 200 mg/Nm<sup>3</sup> by 31.12.2024, as per MoEF&CC, GoI notification GSR No.243 (E), dt.31.03.2021.

**GENERAL:**

18. 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
19. The industry shall dispose solid waste (Non-Haz) as follows:

<b>S. No.</b>	<b>Name of the solid waste</b>	<b>Quantity</b>	<b>Disposal</b>
1	Fly ash	1.50 Million Tons/ Annum	To cement / brick units
2	Bottom Ash	0.40 Million Tons/ Annum	To Cement/ brick Manufacturing units/ ash pond.

20. The industry shall operate CAAQM stations for monitoring SPM, SO<sub>2</sub> and NO<sub>x</sub> with recording facility and maintain connectivity to PCB server.
21. The industry install & maintain 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
22. The industry shall carryout regular calibration for the on-line stack monitoring systems and CAAQM stations with tamper proof mechanism.
23. The industry shall dispose 100% of fly ash generated as per the Fly ash Notification
24. The industry shall develop & maintain thick greenbelt in an area of 315 acres all along the periphery of the industry and ash pond area.
25. The industry shall submit a copy of policy of PLI duly indicating the amount contributed towards ERF to the RO once in six month.
26. The industry shall comply with Board directions issued from time to time.
27. The industry shall comply with standards and directions issued by CPCB/ MoEF&CC as and when notifications are issued.
28. The industry shall submit compliance reports on the conditions mentioned in the consent order, safety audit reports, Fire NOC, Onsite / Offsite emergency plans (modifications if any), every six months i.e., on 1st of January and July of every year to the Regional Office/ Zonal Office.

**Special conditions:**

1. The industry shall maintain a copy of the NOC issued by the Andhra Pradesh State Disaster Response and Fire Service Dept., (APSDRFSD) at concerned Regional Office, APPCB.

2. The industry shall prepare a safety report and carry out an independent safety audit report of the respective industrial activities including chemical storages / isolated storages by an expert not associated with such industrial activity as required under Rule 10 of MSIHC Rules, 1989 and get it approved by the Factories Dept., and submit the compliance along with copy of the safety report, safety audit report and safety certificate at concerned Regional Office, APPCB.
3. The industry shall extend training to the working personnel for the prevention of accidents and necessary antidotes to ensure safety, as per the MSIHC Rules, 1989.
4. 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.
5. The industry shall install fluorescent Wind Vane at the highest point in the industry premises.
6. 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.
7. 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.

**SCHEDULE – C**

***[See rule 6 (2)]***

**[CONDITIONS OF AUTHORIZATION FOR OCCUPIER OR OPERATOR  
HANDLING HAZARDOUS WASTES]**

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization 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 authorized 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 authorized 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 utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
9. An application for the renewal of an authorization 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 Authorization 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 -2)  
(formerly M/s. Thermal Powertech Corporation (India) Ltd.),  
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