



## ANDHRA PRADESH POLLUTION CONTROL BOARD

D.No. 33-26-14 D/2. Near Sunrise Hospital, Pushpa Hotel Centre,  
Chalamalavari Street, Kasturibaipet, Vijayawada - 520010  
Website: www.appcb.ap.nic.in

### BY REGD POST WITH ACK. DUE

**Consent Amendment Order No: APPCB/VJA/NLR/930/HO/CFO/2018-**

**Date: 23.03.2018**

**Sub:** APPCB - UH: IV - CFO - M/s, Thermal Powertech Corporation India Limited, Painampuram & Nelaturu Villages, Muthukur Mandal, SPSR Nellore District - Amendment to CFO&HWA Order - Issued - Reg.

**Ref:** 1. T.O. Consent Order No: APPCB/VJA/NLR/930/HO/CFO/2016-, dated 21.11.2016.  
2. Industry's representation letter dated 19.02.2018.  
3. CFO Committee Meeting held on 15.03.2018.

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The Board in the reference 1<sup>st</sup> cited, has issued combined CFO&HWA order to M/s. Thermal Powertech Corporation India Limited, Painampuram & Nelaturu Villages, Muthukur Mandal, SPSR Nellore District with validity upto 30.11.2021 duly stipulating conditions.

The industry in the reference 2<sup>nd</sup> cited, has requested for amendment in name from M/s. Thermal Powertech Corporation India Limited to M/s. SEMBCORP ENERGY INDIA LIMITED stating that fresh certificate of incorporation was issued by the Registrar of Companies (ROC), Hyderabad, Telangana effecting the change of name of the company. The issue was placed in the CFO Committee meeting of the Board held on 15.03.2018 and the committee recommended to issue amendment to the CFO&HWA Order duly incorporating the name change as per the fresh certificate of incorporation issued by the Registrar of Companies (ROC), Hyderabad, Telangana dated 10.02.2018.

The Board after careful examination of the request of the industry, hereby issues amendment to combined CFO & HWA Order issued in the reference 1<sup>st</sup> cited under Section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 and amendments thereof & under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and amendments thereof.

#### **Amendment:**

The name of the industry is changed from M/s. Thermal Powertech Corporation India Limited, Painampuram & Nelaturu Villages, Muthukur Mandal, SPSR Nellore District and here after read as below:

**Name: M/s. SEMBCORP ENERGY INDIA LIMITED ,  
Painampuram & Nelaturu Villages,  
Muthukur Mandal, SPSR Nellore District – 524 344, A.P.**

All other conditions mentioned in Schedule – A, B & C of the combined CFO&HWA order issued by the Board in the reference 1<sup>st</sup> cited including the validity i.e., **30.11.2021** will remain same.

Bandla Siva Sankar  
Prasad

**MEMBER SECRETARY**

To

**M/s. SEMBCORP ENERGY INDIA LIMITED ,  
Painampuram & Nelaturu Villages,  
Muthukur Mandal, SPSR Nellore District – 524 344, A.P.  
Email: v.maheswaran@sembcorp.com**

Copy to:

1. The JCEE, **ZO: Vijayawada** for information and necessary action.
2. The JCEE (**UH: II**), Vijayawada for information.
3. The EE, **RO: Nellore** for information and necessary action.


**ANDHRA PRADESH POLLUTION CONTROL BOARD**

 Paryavarana Bhavan, A-III, Industrial Estate,  
 Sanathnagar, Hyderabad-500 018

Phone : 040-23887500, Website : www.appcb.ap.nic.in

**RED CATEGORY  
 RENEWAL OF CONSENT & AUTHORIZATION ORDER  
 BY REGISTERED POST WITH ACKNOWLEDGEMENT DUE**
**Consent Order No: APPCB/VJA/NLR/930/HO/CFO/2016-**
**Date: 21.11.2016**

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 and Other Wastes (Management & Transboundary Movement) Rules, 2016 & Amendments thereof and the rules and orders made there under (hereinafter referred to as 'the Acts', 'the Rules') to:

**M/s. Thermal Powertech Corporation (India) Ltd.,  
 Painampuram & Nelaturu Villages,  
 Muthukur Mandal, SPSR Nellore District – 524 344, A.P  
 E-mail: v.maheswaran@sembcorp.com; infor@tccpil.com**

**The Consent Order No: APPCB/VJA/NLR/930/HO/2016, dated 15.02.2016 issued to the industry, having validity upto 30.11.2016, stands cancelled.**

(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 in M <sup>3</sup> /day Stage-I (2x660MW)	Point of Disposal
1.	Cooling Water Blow down	116000.0	Shall be discharged into sea through marine out fall facility.
2.	First pass RO reject	22224.0	
3.	Ash pond outlet	6666.0	
4.	Clarifier blow down	1116.0	To ash pond.
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	After treatment in STP, shall be reused for green belt development .
8.	Domestic (Plant)	40.0	

**ii) Emissions from chimneys:**

Chimney No.	Description of Chimney
1	Common Stack with twin flues attached to coal fired boilers of 2x2016 TPH capacity
2	Stack attached to the HSD fired Auxiliary Boiler 1x50 TPH capacity
3	DG set capacity of 3x1000 KVA

**iii) Hazardous Waste Authorisation (Form – II) [See Rule 6]:**

M/s. Thermal Powertech Corporation (India) Ltd., SPSR Nellore 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 Hazardous Waste	Quantity	Method of disposal
1.	Used lubricant oil	30 KL/annum	Disposed to authorized recyclers
2.	Lead Acid Batteries	200 Nos/annum	Disposed to authorized recyclers

This consent order is valid for the power generation of following quantity only:

S. No	Product	Quantity
1.	Electric Power Generation Fuel - Blended coal (70% indigenous coal and 30% imported coal)	1320 MW (1 <sup>st</sup> unit of stage-I - 1x660 MW 2 <sup>nd</sup> unit of stage-I - 1x660 MW)

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 combined order of consent & Hazardous Waste Authorization shall be valid for a period ending with the 30<sup>th</sup> November, 2021.

Sd/-  
MEMBER SECRETARY

To  
M/s. Thermal Powertech Corporation (India) Ltd.,  
Painampuram & Nelaturu Villages,  
Muthukur Mandal, SPSR Nellore District - 524 344, A.P

//T.C.F.B.O//

*K. Rao*  
Joint Chief Environmental Engineer  
(UH: IV)

**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 shall 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 shall be followed as applicable.
4. The industry shall 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. Not withstanding 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 file the water cess returns in Form-I as required under section (5) of Water (Prevention and Control of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along with water meter readings. The industry shall remit water cess as per the assessment orders as and when issued by 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 shall 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. The industry shall 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 shall 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.

**SCHEDULE-B**

**Water Pollution:**

1. The industry shall comply with the following effluent standards based on the disposal points permitted:

<b>Outlet</b>	<b>Parameter</b>	<b>Limiting standards</b>
1 to 3	pH	6.5 to 8.5
	Suspended solids	100 mg/l
	Oil & Grease	10 mg/l
	Temperature	Shall not exceeded 5° C above the receiving water temperature
	Biochemical oxygen demand (3 days at 27°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-assay test	90% survival fish after 96 hours in 100% effluents
	5 to 8	pH
Suspended solids		100 mg/l
Oil & Grease		10 mg/l
Biochemical oxygen demand (3 days at 27°C)		100 mg/l
Arsenic (as As)		0.2 mg/l
Cyanide (as CN)		0.2 mg/l
Bio-assay test		90% survival fish after 96 hours in 100% effluents
Copper (Total)		1 mg/l
Iron (Total)		1 mg/l

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

S. No	Purpose	Quantity in KLD (for 2X660 MW)
1.	For cooling tower make up (saline water)	1,98,256
2.	<b>Non-cooling water - RO First pass</b>	
	i) Ash handling sealing	2240
	ii) Coal handling plant dust suppression	4768
	iii) High Vacuum AC make up	1660
	iv) Misc. services (for firefighting etc.)	512
	v) RO Reject	22224
	vi) Clarifier blow down	1056
	<b>RO Second pass</b>	
	i. DM Plant	2080
	ii. Domestic (Plant)	50
	<b>Total</b>	<b>2,32,846</b>

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

- The industry shall provide separate digital water meters in the intake point of sea water (i.e. at sea coast) with totalizer facility to assess daily water consumption quantity instead of cumulative water consumptions.
- The industry shall comply with the MoEF&CC notification S.O. 3305 (E), dated 07.12.2015 and S.O. 682 (E), dated 07.03.2016 as applicable pertaining to water consumption and report compliance to RO: Nellore.
- The industry shall maintain separate flow meters preferably Electro Magnetic Flow meters with totalisers for water and effluent quantity measurements for different streams of effluents and different categories of water usage stipulated in this order.
- The industry shall provide leachate collection tank to collect the leachate from garland drain of ash pond.
- The industry shall provide 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:

- 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>
	Sulphur Dioxide (SO <sub>2</sub> )	*200 mg/Nm <sup>3</sup>
	Oxides of Nitrogen (NO <sub>x</sub> )	*300 mg/Nm <sup>3</sup>
	Mercury (Hg)	*0.03 mg/Nm <sup>3</sup>

\*The thermal power plant shall meet the limits on or before 7<sup>th</sup> December, 2017 as per MoEF&CC notification S.O. 3305 (E) dated 07.12.2015.

- The industry shall comply with ambient air quality standards of PM10 (Particulate Matter size less than 10µm) - 100 µg/ m<sup>3</sup>; PM2.5 (Particulate Matter size less than 2.5 µm) - 60 µg/ m<sup>3</sup>; SO<sub>2</sub> - 80 µg/ m<sup>3</sup>; NO<sub>x</sub> - 80 µg/m<sup>3</sup>, 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)

- 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 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 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.

11. The industry shall provide closed sheds for storage of coal. The industry shall provide wind barriers/ wind breaking walls to the coal yards as temporary arrangement to control fugitive dust emissions on immediate surroundings.
12. The industry shall provide water sprinklers around the ash pond area to control fugitive emissions in the surrounding area within 2 months and report compliance to RO: Nellore.
13. The industry shall regularly operate water sprinklers provided at the coal stock yard to mitigate fugitive dust on the surroundings from coal handling area.
14. 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.
15. The industry shall upgrade the air pollution control systems at coal crusher within 3 months.
16. The industry shall provide separate energy meters along with totalizer facility for each ESP.
17. The industry shall comply with the MoEF&CC notification S.O. 3305 (E), dated 07.12.2015 and S.O. 682 (E), dated 07.03.2016 as applicable and report compliance to RO: Nellore.

**General:**

18. **The industry shall handover the Original Consent Order dated 15.02.2016 to the RO: Nellore after receipt of this CFO order.**
19. The drums containing chemicals / solvents shall be stored under a roof on elevated platform with a provision to collect leakages / spillages in the collection pit.
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 ambient air, effluents and emissions.
  - e. Hazardous/non hazardous solid waste generated and disposed.
  - f. Inspection book.
  - g. Manifest copies of hazardous waste.
21. The industry shall dispose solid waste (NON HAZARDOUS ) 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. Unutilized bottom ash to ash pond in slurry mode.

22. The industry shall relocate the CAAQM station provided at sea intake point to suitable location in consultation with RO: Nellore.
23. 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.
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 carryout 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 covering all along the periphery of the industry, coal stack yard and ash pond area.
28. The industry shall submit a copy of policy of Public Liability Insurance (PLI) duly indicating the amount contributed towards Environmental Relief Fund (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 1<sup>st</sup> of January and July of every year to the Regional Office/ Zonal Office.

**SCHEDULE - C**

*[See rule 6]*

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

1. All the rules and regulations notified by Ministry of Environment and Forests, Government of India under the E (P) Act, 1986 in respect of management, handling, transportation and storage of the Hazardous wastes should be followed.
2. The industry shall not store hazardous waste for more than 90 days as per the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
3. 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.
4. 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.
5. 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.

**Sd/-  
MEMBER SECRETARY**

**To  
M/s. Thermal Powertech Corporation (India) Ltd.,  
Painampuram & Nelaturu Villages,  
Muthukur Mandal, SPSR Nellore District - 524 344, A.P**

//T.C.F.B.O//

*K. Rao*  
23/11/16  
Joint Chief Environmental Engineer  
✓ (UH: IV)