



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

**RED CATEGORY
RENEWAL OF CONSENT & AUTHORIZATION ORDER**

Consent Order No: APPCB/VJA/NLR/162/HO/CFO/2018-

28/09/2018

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. Simhapuri Energy Limited,
Sy. Nos. 434-449, 470-490, 501-505, 666,
495, 237, 385, 405-7, 491, 494, 61, 380 & 381,
Thammenapatnam and Mommidi Villages,
Chillakur (M), SPSR Nellore District – 524 412, A.P.
E-mail: info@simhapurienergy.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.	Cooling tower blow down (saline water)	64896 KLD	Shall be recycled as far as possible after treatment. The excess treated effluent shall be discharged into creek, as per CRZ clearance dated 23.07.2009
2.	Clarifier blow down (after passing through sludge thickener)	96 KLD	
3.	RO Rejects	2400 KLD	
4.	Service water	500 KLD	Shall be used for dust suppression at coal yard and ash handling after treatment. The excess effluent shall be used for green belt within the premises.
5.	Boiler Blow down	1392 KLD	
6.	DM Plant back wash	48 KLD	
7.	Domestic – Plant and colony	100 KLD	STP - Treated effluents shall be used for green belt development within the premises.

ii) Emissions from chimneys:

Chimney No.	Description of Chimney
1.	Stack attached to 490 TPH CFBC Boilers
2.	Stack attached to 490 TPH CFBC Boilers
3.	Stack attached to 490 TPH CFBC Boilers

4.	Stack attached to 490 TPH CFBC Boilers
5.	Stack attached to 625 KVA D.G. Set
6.	Stack attached to 625 KVA D.G. Set

iii) Hazardous Waste Authorisation (Form – II) [See Rule 6 (2)]:

M/s. Simhapuri Energy Pvt. Ltd., SPS 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 Recycling Option:**

S. No	Name of Hazardous Waste	Stream	Quantity	Method of disposal
1.	Spent lubricating oil	5.1 of Schedule-I	800 LPA	Authorized Re-processors/Recyclers

This consent order is valid for generation of Electricity to the following capacity only:

S. No	Product	Quantity
1.	Electric Power Generation (with imported coal of ash content < 11% and Sulphur content < 1.3 %)	600 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 **30.11.2021**.

VIVEK YADAV IAS
MEMBER SECRETARY

To

**M/s. Simhapuri Energy Limited,
Sy. Nos. 434-449, 470-490, 501-505, 666,
495, 237, 385, 405-7, 491, 494, 61, 380 & 381,
Thammenapatnam and Mommidi Villages,
Chillakur (M), SPS Nellore District - 524 412, A.P.**

Copy to:

1. The JCEE, ZO: Vijayawada for information and necessary action.
2. The EE, RO: 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 shall carryout analysis of wastewater 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 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. 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 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 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 shall 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.

SCHEDULE-B

1. **The industry shall restart the operations only after obtaining revocation of closure order from CPCB.**

Water:

2. The source of water being Kandaleru Creek. The following is the permitted water consumption:

S. No	Purpose	Quantity (KLD)
1.	Cooling Water Including auxiliary cooling make up (saline water)	97800
2.	DM Plant back wash	48
3.	Boiler make up (which includes RO rejects & clarifier blow down as the saline water is treated through RO Plant before using for boiler make up)	3936
4.	Plant Service	1506
5.	Domestic - Plant and colony	126
	Total	103416

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.

3. The industry shall comply with water consumption limits as per notification S.O. 3305 (E),

dated 07.12.2015 issued by MoEF&CC, GoI.

4. The industry shall adopt closed circuit cooling system with induced draft cooling system. The effluents from cooling tower shall be treated as per prescribed norms. In no case cooling tower blow down effluents shall be used for ash handling.
5. The industry shall comply the following effluent standards based on the disposal points permitted:

Outlet	Parameter	Concentration
1, 2, 3	Colour and odour*	
	Suspended solids	100 mg/l
	Particulate size of suspended solids	a. Floatable solids max. 3 mm. b. Settable solids mix 850 micros
	pH	6.5 – 8.5
	Temperature	Shall not exceed 5°C above the receiving water temperature
	Oil and Grease	10 mg/l
	Total residual chlorine	1.0 mg/l
	Ammonical nitrogen	50 mg/l
	Total kjeldhal Nitrogen	100 mg/l
	Free Ammonia	5.0 mg/l
	Biochemical Oxygen demand [3 days at 27°C]	100 mg/l
	Chemical Oxygen Demand	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
	Free available chlorine	0.5 mg/l
	Total chromium	0.2 mg/l
	Copper	3.0 mg/l
	Zinc	1.0 mg/l
	Selenium	0.05 mg/l
	Nickel	5.0 mg/l
	Cyanide	0.2 mg/l
	Fluoride	15 mg/l
	Phospates	5.0 mg/l
	Sulphide	5.0 mg/l
	Phenoilc compounds	5.0 mg/l
Radioactive materials a. Alpha emitter b. Beta emitter	10 ⁻⁷ micro curie/ml 10 ⁻⁶ micro curie/ml	
Bio assay test	90% survival of fish after 96 hours in 100% effluents	
Manganese	2.0 mg/l	
Iron	3.0 mg/l	
Vanadium	0.2 mg/l	
Nitrate Nitrogen	20 mg/l	
4,5, 6 & 7	Colour and odour*	

Suspended solids	100 mg/l
pH	5.5 to 9.0
Oil and Grease	10 mg/l
Biochemical Oxygen demand [3 days at 27°C]	100 mg/l
Arsenic	0.2 mg/l
Iron (total)	1.0 mg/l
Copper (total)	1.0 mg/l
Cynide	0.2 mg/l
Radioactive materials	
c. Alpha emitter	10 ⁻⁷ micro curie/ml
d. Beta emitter	10 ⁻⁶ micro curie/ml

*All efforts shall be made to remove colour and unpleasant odour as far as practicable.

6. The effluents from outlet No. 1 to 3 shall be treated to the marine discharge water standards and effluents from outlet No. 4 to 7 shall be treated to the onland for irrigation standards as stipulated under sch. VI of E(P) Rules, 1986, notified by MoEF, GOI in vide GSR 422 (E) dt.19.05.1993 and its amendments thereof.
7. The industry shall implement adequate measures to ensure compliance with discharge standards for environment pollutants and guidelines for discharge point for condenser cooling water for thermal power plant as notified at S.No.84 of Schedule - I of E (P), Rules, 1986 and amendments thereof.
8. The industry shall conduct marine water quality monitoring at Kandaleru creek quarterly and submit analysis reports to the RO: Nellore, APPCB.
9. The industry shall monitor the ground water quality for mercury and other heavy metals (Hg, Cr, As, Pb, etc) around the ash handling area including surface water bodies in the vicinity. The monitoring data shall be compared with baseline data and requisite measures shall be implemented to prevent any kind of direct/indirect contamination of water resources in the project surroundings.
10. The industry shall provide 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.

Air:

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

Chimney No.	Parameter	Emission Standards
1 to 4	Particulate matter	50 mg/Nm ³
	Sulphur Dioxide (SO ₂)	200 mg/Nm ³
	Oxides of Nitrogen (NO _x)	300 mg/Nm ³
	Mercury (Hg)	0.03 mg/Nm ³

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

13. 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.
14. Provision for flue gas Desulphurisation Plant shall be provided.

Solid Waste:

15. The industry shall dispose solid waste (NON HAZARDOUS) as follows:

S. No	Name of the Solid Waste	Quantity	Disposal
1.	Fly Ash (85% PLF)	0.2052 MTPA	Disposed to Cement plants / Brick manufacturing units.
2.	Bottom Ash (85% PLF)	0.0228 MTPA	Disposed to Brick manufacturing units.

16. Fly ash shall be collected in dry form and storage facility (silos) shall be provided. 100% fly ash utilization shall be ensured from day one of operation of the plant on enhanced capacity as per MoE&F, GOI Office order dated 01.01.2010. Mercury and other, heavy metals (As, Hg, Cr, Pb etc.) shall be monitored in the bottom ash as also in the effluents emanating from the ash pond. No ash shall be disposed off in low lying area.
17. The industry shall achieve 100% disposal of fly ash and bottom ash as per Fly Ash Notification issued by MOE&F, GOI vide S.O.2804 (E), dated 3.11.2009 and submit compliance report every quarter to RO: Nellore.
18. The industry shall dispose the fly ash stored in the silo from time to time to cement plants / brick units. The industry shall under take loading the fly ash directly into the trucks from ash silo.
19. The ash pond constructed by the industry is not fit for disposal of ash. The industry shall not dispose the ash into ash pond under any circumstances as committed during meeting. The industry shall take prior permission from the Board for disposing the ash to ash pond.
20. Ash pond shall be lined with impervious lining. HDPE/LDPE or any other suitable impermeable lining materials such that at any instance, no leachate takes place. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached. After settlement of slurry, the overflow shall be collected in settling tank from where the treated wastewater shall be pumped back to the plant for reuse.
21. The ash slurry is to be conveyed to the ash pond by ash slurry pumps & pipes. The ash pond is to be constructed in compartments such that the dyke is formed to contain the ash slurry.
22. M/s. Simhapuri Energy Pvt. Ltd. and other power plants shall install dedicated pipeline system for transportation of ash from boiler section to ash pond area to control fugitive emissions.

General:

23. The industry install online continuous effluent and emission monitoring systems and connect monitoring system to APPCB/CPCB websites as per CPCB directions dated 05.02.2014. The online monitoring system shall be calibrated periodically as per equipment suppliers manual / CPCB guidelines

24. The industry shall maintain the following records and the same shall be made available to the inspecting officers of the Board:
 - a. Quantity of Effluents generated, treated, recycled/reused and discharged into creek/ sea.
 - b. Log Books for pollution control systems.
 - c. Characteristics of effluents, ambient air and emissions.
 - d. Solid waste generated and disposed.
 - e. Inspection book.
25. The industry shall ensure that regular mock drills shall be carried out for checking on-site emergency plan prepared and also to ensure changes / improvements required in the plant
26. All Thermal Power plants shall adopt soil reclamation methods and to select specific type of tree species, which are endemic to local ecological conditions for the sustenance and growth.
27. All Thermal Power plants shall set up web cameras at all coal stock yards to monitor operation of water sprinkling systems for effective fugitive dust mitigation on to the surroundings within one month.
28. All Thermal Power plants shall set up a dedicated Environmental Wing fully equipped with expertise to ensure Environmental Compliance in all aspects.
29. The industry shall comply with all the conditions stipulated in CRZ Clearance dated 23.07.2009.
30. The industry shall maintain Rain Water Harvesting (RWH) structures within the plant site. The industry shall ensure that effluent shall not enter the Rain Water Harvesting structure.
31. The industry shall comply with the Task Force directions dated 12.12.2017.
32. Green belt of adequate width and density shall be developed along the boundary of the industry with minimum area of 33% of total area including around coal yard and ash pond.
33. 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.
34. The industry shall comply with standards and directions issued by CPCB / MoEF&CC as and when notifications are issued.
35. 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 Regional Office/ Zonal Office.

SCHEDULE – C

[See rule 6 (2)]

**[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.

VIVEK YADAV IAS
MEMBER SECRETARY

To

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