



RED CATEGORY
CONSENT & AUTHORISATION ORDER
BY REGISTERED POST WITH ACKNOWLEDGEMENT DUE

Consent Order No : APPCB/VJA/NLR/162/HO/CFO/2014- 6648

Date :03.03.2014

(Consent Order for Existing/New or altered discharge of sewage and/or trade effluents/outlet under Section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and amendments thereof, Operation of the plant 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.

CONSENT is hereby granted under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974, under section 21 of Air (Prevention & Control of Pollution) Act 1981 and Authorisation under the provisions of HW (MH & TM) Rules, 2008 (hereinafter referred to as 'the Acts', 'the Rules') and the rules and orders made thereunder to

M/s. Simhapuri Energy Pvt. Ltd.,
Phase- I & II,
Thamennapatnam and Mommidi Villages,
Chilakur Mandal.
SPSR Nellore District-524412.

Email : gmoprs@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) Out lets for discharge of effluents:

Outlet No.	Outlet Description	Max Daily Discharge in KLD	Point of Disposal
1.	Cooling tower blow down (saline water)	64896	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 thickner)	96	
3.	RO rejects	2400	
4.	Service water	500	
5.	Boiler blow down	1392	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.
6.	DM Plant back wash	48	
7.	Domestic - Plant and colony	200	STP - Treated effluent shall be used for green belt development within the premises.

ii) Emissions from chimneys:

Chimney No.	Description of Chimney	Quantity of Emissions at peak flow (m ³ /hr)
1 & 2	Attached to 4 x 490 TPH CFBC boilers	1788408

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

M/s. Simhapuri Energy Pvt. Ltd., Thamennapatnam and Mommidi Villages, Chillakur (M), 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 RECYCLER OPTION:

S. No.	Name of the Hazardous Waste	Stream	Quantity of Hazardous waste	Disposal Option
1.	Spent Lubricating Oil	5.1 of Schedule - I	800 LPA	Authorised Reprocessors / Recyclers.

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

S.No	Products	Quantity
1.	Electric Power Generation (with imported coal of ash content < 11% and Sulphur content < 1.3%)	600 MW (Phase -I : 2 x 150 MW + Phase -II : 2 x 150 MW)

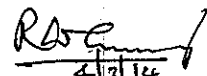
This order is subject to the provisions of 'the Acts' and the Rules' and orders made thereunder and further subject to the terms and conditions incorporated in the schedule A, B & C enclosed to this order.

This combined order of consent & Hazardous Waste Authorisation shall be valid for a period ending with the 30th day of November, 2014.

Sd/-
MEMBER SECRETARY

To
M/s. Simhapuri Energy Pvt. Ltd.,
Phase- I & II,
Thamennapatnam and Mommidi Villages,
Chilakur Mandal.
SPSR Nellore District-524412.

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


4/3/14
JOINT CHIEF ENVIRONMENTAL ENGINEER
(UNIT - IV)

SCHEDULE - A

1. The applicant shall make **applications online** for renewal of Consent (under Water and Air Acts) and Authorisation under HWM Rules **at least 120 days before the date of expiry of this order**, along with prescribed fee under Water and Air Acts for obtaining Consent & HW Authorisation of the Board and detailed compliance report.
2. 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 the Water(Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air(Prevention and Control of Pollution) Act, 1981.
3. All other conditions stipulated in the Schedule - A of the earlier combined CFO & HWA order **No Consent Order No: APPCB/VJA/NLR/162/HO/CFO-II/2012-4214**, dated **21.03.2012** remains same. The industry shall ensure consistent compliance of each condition of Schedule-A.
4. The industry may explore the possibility of tapping the solar energy for their energy requirements.

SCHEDULE - B

Special Conditions

1. The effluent discharged shall not contain constituents in excess of the tolerance limits mentioned below:

Outlet	Parameter	Limiting Standards
1, 2, 3 & 4	Colour and odour	
	Suspended solids	100 mg/l.
	Particulate size of suspended solids	a. Floatable solids, max. 3 mm b. Settable solids, max 850 microns.
	p ^H	6.5 to 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
	Phosphates	5.0 mg/l
	Sulphide	5.0 mg/l
Phenolic compounds	5.0 mg/l	
Radioactive materials a. Alpha emitter micro b. Beta emitter micro	10 ⁻⁷ curie/ml 10 ⁻⁶ 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	
5, 6 & 7	Colour and odour*	
	Suspended solids	100 mg/l
	p ^H	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
	Cyanide	0.2 mg/l
Radioactive materials a. Alpha emitter micro b. Beta emitter micro	10 ⁻⁸ curie/ml 10 ⁻⁷ curie/ml	

Bio assay test	90% survival of fish after 96 hours in 100% effluents
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* All efforts shall be made to remove colour and unpleasant odour as far as practicable.

The effluents from **Outlet No. 1 to 4** shall be treated to the **marine discharge water standards** and effluents from **Outlet No. 5 to 7** shall be treated to the **onland for Irrigation standards** as stipulated under Schedule VI of Environment (Protection) Rules, 1986, notified by MoEF, Gol in vide G.S.R.422 (E), dt19.05.1993 and its amendments thereof.

2. The industry shall implement adequate measures to ensure compliance with discharge standards for environment pollutants and guidelines for discharge point for condenser cooling water as notified at S.No.B4 of Schedule - I of E(P), Rules, 1986 and amendments thereof.
3. The industry shall achieve and maintain compliance of the standards for discharge or emission of pollutants and other enactments as applicable and notified for thermal power plants under the Environmental (Protection) Rules, 1986 and amendments thereof.
4. The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below:

S.No.	Purpose	Quantity in KLD
1.	Cooling Water Including auxiliary cooling make up (saline water)	97800
2.	DM Plant back wash	48
3.	Boiler Feed	1440
4.	Plant Service	1506
5.	Clarifier Blow down	96
6.	RO Reject	2400
7.	Domestic- Plant and colony	126
	Total	103916

The industry shall maintain separate water meters for the above areas and maintain records.

5. 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.
6. The industry shall operate Sewage Treatment Plant (STP) and report the compliance to RO, Nellore.
7. There shall not be any discharges into canal systems, back waters, marshy areas. The discharges into sea shall be done only after treatment and meeting standards.
8. The industry shall submit a detailed water balance report with reasons for the difference in the inlet and water quantities of cooling towers to the Board within one month.
9. The industry shall provide separate water meters with necessary pipeline for assessing the quantity of water used for each of the purposes mentioned below.
 - a. Industrial cooling, boiler feed.
 - b. Domestic purposes.
 - c. Processing, whereby water gets polluted and pollutants are easily biodegradable.
 - d. Processing, whereby water gets polluted and pollutants are not easily biodegradable
10. Industry shall provide continuous online monitoring system for continuous monitoring of pollutants in waste water discharged.
11. 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.
12. The industry shall adopt closed circuit cooling system with natural 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.
13. The industry shall provide Rain Water Harvesting (RWH) structures within the plant site.

14. 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

15. 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
16. The industry shall comply with ambient air quality standards of PM₁₀ (Particulate Matter size less than 10 µm) - 100 µg/ m³; PM_{2.5}(Particulate Matter size less than 2.5 µm) - 60 µg/ m³; SO₂ - 80 µg/ m³; NO_x - 80 µg/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).

17. The industry shall not increase the capacity beyond the permitted capacity mentioned in this order, without obtaining CFE & CFO of the Board.
18. The industry shall use imported coal with ash content less than 11% and Sulphur less than 1.3%.
19. The industry shall not use any fuels other than those permitted in this order without prior consent from the Board. They shall maintain log registers on type of fuels & daily consumption etc., and shall furnish consolidated records to R.O., Nellore for every three months incorporating details of all coal consignments.
20. The industry shall provide & maintain interlocking facility between APC equipment (ESP) and fuel feeding system, so as that the feeding of the fuel will be stopped automatically in case of the ESP fails/ tripping's are occurred.
21. The industry shall submit action plan within one month for Ash Pond management and Fly Ash utilization including boiler bed ash.
22. The industry shall store the fly ash in silo only and dispose the same from time to time without storing it openly. The industry shall under take loading the fly ash directly into the trucks from ash silo.
23. 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.
24. 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 dt. 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.
25. 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.
26. 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.
27. The industry shall provide water sprinklers around ash ponds to control fugitive emissions generated from ash ponds before disposing ash to ash ponds.
28. Provision for flue gas Desulphurisation Plant shall be provided.
29. **The industry shall install and commission CAAQM station by March, 2014. Also, online stack monitoring systems shall be connected to PCB website by March, 2014 and report the compliance to RO-Nellore.**
30. Regular monitoring of ground level concentration of SO₂, NO_x, Hg, P_{M10} & PM_{2.5} shall be carried out in the impact and buffer zone and records shall be maintained. If at any stage these levels are found to exceed the prescribed limits, requisite restorative measures at source shall be implemented immediately. The location of the monitoring stations shall be fixed in

- consultation with the Regional Officer of the Board. Consolidated daily reports shall be submitted to the concerned Regional Officer on monthly basis.
31. The industry shall maintain the following records and the same shall be made available to the Board Officials during the inspection.
 - a. Daily power generated and exported.
 - b. Log book for pollution control systems including details of ESP/Bag filter trippings.
 - c. Coal consignment data with analysis reports of ash and sulphur content.
 - d. Fly ash and bottom ash generation and disposal details.
 32. 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.
 33. 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.
 34. Adequate safety measures shall be provided in the plant area to check / minimize spontaneous fires in coal yard, especially during summer season.
 35. The following rules and regulations notified by the MoE&F, GoI shall be implemented.
 - a) Hazardous waste (Management, Handling and Transboundary) Rules, 2008.
 - b) Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.
 - c) Fly ash notification S.O.2804 (E), dt. 3.11.2009.
 - d) Batteries (Management & Handling) Rules, 2010.
 36. The industry shall comply with all the conditions stipulated in the CFE orders 01.07.2008, 18.06.2011 and 08.12.2011.
 37. The industry shall comply with all the conditions stipulated in EC order dated 03.07.2008 & 01.01.2010.
 38. The industry shall comply with all the conditions stipulated in CRZ Clearance dated 23.07.2009.
 39. 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.
 40. This order is issued subject to any other order or further orders to be passed by the Board and Hon'ble High Court of A.P, Hyderabad in the W.P.No. 14305 of 2011 and W.P.No. 20114 of 2011.
 41. The conditions stipulated are without prejudice to the rights and contentions of this Board in any Hon'ble Court of Law.

SCHEDULE – C

[see rule 5(4)]

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

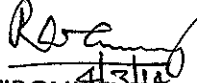
1. The industry shall give top priority for waste minimization and cleaner production practices.
2. The industry shall not store hazardous waste for more than 90 days as per the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and amendments thereof.
3. The industry shall store Used / Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal.
4. The industry shall not dispose Waste oils to the traders and the same shall be disposed to the authorized Reprocessors/ Recyclers.
5. The industry shall dispose Used Lead Acid Batteries to the manufacturers / dealers on buyback basis.
6. The industry shall take necessary practical steps for prevention of oil spillages and carry over of oil from the premises.
7. The industry shall maintain 6 copy manifest system for transportation of waste generated and a copy shall be submitted to Board Office and concerned Regional Office.
8. The industry shall maintain good house keeping & maintain proper records for Hazardous Wastes stated in Authorisation.
9. The industry shall maintain proper records for Hazardous 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 22(2) of the Hazardous Wastes (Management, Handling & Transboundary Movement) Rules, 2008 and amendments thereof.

10. The industry shall submit the condition wise compliance report of the conditions stipulated in Schedule A, B & C of this Order on half yearly basis to Board Office, Hyderabad and concerned Regional Office.
11. The industry shall dispose of e-waste to the authorised recyclers only.

Sd/-
MEMBER SECRETARY

To
M/s. Simhapuri Energy Pvt. Ltd.,
Phase- I & II,
Thamennapatnam and Mommidi Villages,
Chilakur Mandal.
SPSR Nellore District-524412.

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



JOINT CHIEF ENVIRONMENTAL ENGINEER
(UNIT - IV)

