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
RENEWAL OF CONSENT & AUTHORISATION ORDER

Consent Order No : APPCB/VSP/VSP/19/HO/CFO/2020- 06/03/2020

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

M/s. Hinduja National Power Corporation Ltd.,
(Unit-I & II), Palavalasa (Village), T. Devada (Part),
Pedagantyada (Mandal),
Visakhapatnam District.

(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	Maximum Hourly discharge	Point of disposal
1.	Once through cooling (Sea water) + De-salination plant rejects	177251 m^3/hr	Shall be disposed into sea i.e. Bay of Bengal through marine outfall as per the recommendations of the MoEF&CC vide letter dated 01.10.2015.
2.	UF Reject & RO System reject - 40 m^3/hr Boiler Make Up, CPU Regeneration & other utilities - 55 m^3/hr + Dust suppression - 155 m^3/hr	270 m^3/hr	Shall be reused within the plant premises for dust suppression and greenbelt after treatment in CMB

	From Service Utilities & Coal Stock Piles – 20 m^3/hr		
3.	Domestic	75 m^3/day	After treatment in STP, the treated water shall be utilized for plantation and green belt in colony premises.

ii) Emissions from chimneys:

Chimney No.	Description of Chimney
1.	Attached to 2 x 1700 TPH Sub Critical Boilers
2.	Attached to 3 x 1.5 MW D.G.Sets

iii) HAZARDOUS WASTE AUTHORISATION (FORM – II) [See Rule 6 (2)]:

M/s. Hinduja National Power Corporation Ltd., Palavalasa (Village), T. Devada (P), Pedagantyada (Mandal), Visakhapatnam 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 the Hazardous waste	Stream	Quantity of Hazardous waste	Disposal Option
1.	Used / Waste Lubricating oil	5.1 of Schedule - I	30 KL/Annum	Shall be routed through APEMCL so as send to APPCB authorized Re-processors / Re- cyclers duly complying with manifest system.

This consent order is valid for power generation with quantities indicated below:

S. No.	Product	Quantity
1	**Electric Power generation**	**1040 MW (2 x 520 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 **28th day of February, 2023.**

VIVEK YADAV IAS, MS(VY), O/o MEMBER SECRETARY-APPCB

To
M/s. Hinduja National Power Corporation Ltd.,
Palavalasa (Village), T. Devada (P),

Pedagantyada (Mandal),
Visakhapatnam District.

Copy to:

1. The JCEE, Zonal Office **Visakhapatnam** for information and necessary action.
2. The Environmental Engineer Regional Office, **Visakhapatnam** 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. The industry should 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 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. 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.
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.
9. The industry may explore the possibility of tapping the solar energy for their energy requirements.

SCHEDULE - B

WATER POLLUTION:

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

Outlet	Parameter	Limiting Standards
1.	pH	6.50 – 8.50
	Temperature not more than 7°C higher than intake water as per MoEF Communication dated 20.04.1999.	
	Total Suspended Solids (at 103 – 105^{0} C)	100 mg/l
	Oil and Grease	20 mg/l
	Free chlorine	0.5 mg/l
	Phosphate as PO4	20 mg/l
	Chromium (Total)	0.2 mg/l
	Copper (Total)	1 mg/l
	Iron	1 mg/l
	Zinc	1 mg/l
3.	pH	6.50 – 8.50
	Oil and Grease	10 mg/l
	BOD (3 days at 27^{0}C)	30 mg/l
	Total Suspended Solids	<100 mg/l
	Fecal Coliform (FC) (Most Probable Number per 100 milliliter, MPN/100ml	<1000 MPN/100 ml

2. The industry water consumption shall not exceed the quantities mentioned below:

S.No	Purpose	Quantity (m^3/hr)
1.	Condenser & Auxiliary Cooling Water System	175580
2.	Ash water sump	2600
3.	Dust Suppression system	220
4.	For Desalination Plant feed	1600
	Total	**180000**
Details of specific consumption:		
4 A	**From Desalination Plant to Reservoir**	
4 A 1	From reservoir to UF/RO System	503
a)	RO Plant to Boiler Make Up, CPU Regeneration & other utilities	110
b)	Blow down Quenching	90
c)	Domestic Water	30
d)	HVAC & Ventilation	80
e)	Seal Water	75
f)	Service water	52
g)	APH & ESP Wash (As and when required)	6
h)	RO Plant to Clarifier	--
i)	UF, RO & EDI reject	70
4 A B	Water remain in recovery	11

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

3. The industry shall maintain water meters for recording consumption of Sea water and maintain proper records for daily water consumption and shall submit monthly reports to the RO, Visakhapatnam.
4. The industry shall install water meters at service water, domestic, ash water sumps **by 31.03.2020.**
5. The industry shall maintain flow meters 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.The industry shall recycle the ash pond and D.M. Plant effluent.
6. The run-off water from coal yard shall be treated to on land for irrigation standards before final disposal.
7. The industry shall discharge the cooling water into sea through a suitable sub-marine pipeline.
8. The industry shall monitor all ground water peizo wells and submit report to RO-Visakhapatnam every three months indicating trends.
9. The industry shall maintain proper arrangements for collection of seepage from ash pond and pumped back into the ash water system, so as to avoid ground water pollution in the surrounding area.
10. The industry shall treat the domestic effluents by adopting suitable technologies such as oxidation ponds aerated lagoons and discharge the treated effluents on the land for the irrigation/gardening.
11. The cooling water used in the once through system if treated with biocide will affect the Biota of the sea and fishing also, in the proximity of the discharge point. It should be controlled properly designed outfall into the sea.

AIR POLLUTION:

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

Chimney No.	Parameter	Emission Standards
1	Particulate matter	50 mg/Nm3
	SO2	200 mg/Nm3
	NOx	300 mg/Nm3
	Mercury	0.03 mg/Nm3

2. 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.
3. 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; NOx - 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).

4. The industry shall provide interlocking facility between APC equipment (ESP) and fuel feeding system, in such a way that the feeding of the fuel shall be stopped automatically, in case, the ESP fails/ tripping's are occurred within 3 months.

5. The industry shall rectify CAAQM station at Coal Handling plant made in working condition **by 10.04.2020.**
6. The industry shall maintain online Stack and ambient monitoring systems with connection to the Board's website.
7. The industry shall take necessary measures like Ammonia dosing to maintain ESPs attached to the Boilers so as to meet SPM standards all the time.
8. The industry maintain the data logging facility provided for storing online stack emission data properly, for retrieval as and when necessary. Industry shall submit monthly report to the RO Visakhapatnam.

GENERAL:

1. The industry shall not increase the capacity beyond the permitted capacity mentioned in this order.
2. The industry shall provide temperature indicator at marine out fall for assessing the temperature between the intake water and discharge water within three months.
3. The industry shall discharge off once through cooling effluents from Unit – 1 & 2 at a distance of 900 mts from the shoreline.
4. The industry shall install permanent mechanical sprinklers for suppression of dust on the haul roads in between the villages and report the compliance to RO-Visakhapatnam.
5. The industry shall comply with CPCB directions dated 05.02.2014 / 02.03.2015 and guidelines issued regarding online monitoring systems issued from time to time. The online monitoring system shall be calibrated periodically as per equipment suppliers manual / CPCB guidelines.
6. The industry shall maintain the following records and the same shall be made available to the Board Officials during the inspection.
    a. Daily power generation details.
    b. Quantity of Effluents generated and disposed.
    c. Log Books for pollution control systems.
    d. Daily Fly ash generated and disposed.
7. The industry shall dispose fly ash to cement / brick units and export, excess to ash pond.
8. The industry shall submit detailed action plan for fly ash utilization as per the Fly Ash Notification on MoEF to the Board to achieve 100% utilisation of fly ash.
9. The industry shall achieve 100 % of fly ash utilization within 3 months
10. The industry shall maintain water curtain in ash ponds as the fly ash is exposing to atmosphere and causing dust emissions during wind blow.
11. The industry shall establish a dedicated Environmental cell for continuous monitoring of plant environment to ensure compliance of CFO conditions.
12. Thick green belt shall be maintained by the industry covering an area of 33% of total area.
13. The industry shall not exceed of emissions standards at any point of time. In case the industry exceeds the standards in the CEMS data, environmental compensation will be levied.
14. The industry shall treat the cooling waste waters to the marine coastal standards and the domestic waste waters to the on land for irrigation standards stipulated

under Environmental (protection) Rules, 1986 as amended upto date, notified under Environment (Protection) Act,1986 by Ministry of Environment and Forest, Govt of India.

15. The industry shall maintain suitable control equipment facilities in the coal handling plant and dust suppression in all coal and material handling areas shall be achieved through appropriate methods.
16. The industry shall maintain duly compacted soil cover of requisite thickness as per norms for the ash ponds to avoid dust pollution and report the compliance to RO-Visakhapatnam.
17. All the conditions/recommendations stipulated by A.P. Coastal Zone Management Authority vide letter No. 245/Env/CZMA/2015 dated 06.07.2015 shall be complied with.
18. All the conditions stipulated in the CRZ clearance granted by this Ministry vide letter No. 11-58/2011-IA-III dated 3rd January, 2014 and subsequent amendment dated 17th March, 2015 shall remain unchanged.
19. The PP shall use multi diffuser in the outfall. As suggested by NCSCM, the thermal water release shall be release at 10 m depth from the 8 diffuser.
20. A monitoring system shall be deployed by the PP to assess the movement of thermal plume in and around the outfall coolant water jetty due to the occurrence of thermal plume oscillation in south-north direction during monsoon and also to monitor the impact of hot water discharge into the Sea and the flora and fauna. The PP shall comply with at the directions of APCZMA and take necessary corrective measures wherever required.
21. The PP shall take all necessary clearance from the concerned authorities viz-a-viz from the concerned State Pollution Control Board.
22. Care should be taken to ascertain minimal impact on the shoreline change due to construction of coastal structures. For this purpose, shoreline change shall be monitored using satellite imagery and by beach profile studies at regular intervals.
23. The industry shall comply with the conditions stipulated in MoEF&CC,GoI amendment in CRZ Clearance Order dated 01.10.2015.
24. The industry shall comply with the conditions stipulated in Amendment to the EC order dated 01.10.2015 regarding interim arrangement for the sea water intake and outfall system.

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. An application for the renewal of an authorisation shall be made as laid down under these Rules.
9. 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.

Specific Conditions:

10. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.
11. The industry shall comply with the provisions of HWM Rules, 2016 in terms of interstate transport of Hazardous Waste and manifest document prescribed Under Rule 18 and 19 of the HWM Rules, 2016.
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 transport the hazardous waste through vehicle fitted with GPS tracking system.
15. 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.
16. 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.

The industry shall submit Half yearly compliance reports to all the stipulated conditions in Environmental Clearance (EC), Consent for Establishment (CFE) and Consent for Operation (CFO) through website i.e., https://pcb.ap.gov.in by 1st of January and 1st July of every year. The first half yearly compliance reports shall be furnished by the industry and second half yearly compliance reports shall be the audited through NABL accredited third party.

VIVEK YADAV IAS,

MS(VY), O/o MEMBER SECRETARY-APPCB

To

M/s. Hinduja National Power Corporation Ltd.,
(Unit-I & II), Palavalasa (Village), T. Devada (P),
[illegible]ntyada (Mandal),
[illegible]tnam District.

Signature Not Verified

Digitally signed by VIVEK YADAV
Date: 2020.03.06 18:14:03 IST
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