RENEWAL OF CONSENT & AUTHORISATION ORDER

Consent Order No : APPCB/VSP/VSP/111/CFO/HO/2019-04/10/2019

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. Essar Steel India Ltd.,
Near Flyover, Scindia Road,
Visakhapatnam - 530 004
E-mail: satyaprasad.koduri@essar.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) Outlet for discharge of effluents:

<table>
<thead>
<tr>
<th>Outlet No.</th>
<th>Outlet Description</th>
<th>Max Daily Discharge KLD</th>
<th>Point of Disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Cooling tower Blow Down (480 KLD) + Boiler Blow Down Effluents (120 KLD) + Surplus water from slurry pipeline (8568 KLD)</td>
<td>9168</td>
<td>For recycling into process and surplus water if any, into Megadrigedda surplus water course.</td>
</tr>
<tr>
<td>2.</td>
<td>Domestic Effluents</td>
<td>12</td>
<td>Septic tank followed by soak pit.</td>
</tr>
</tbody>
</table>

ii) Emissions from chimneys:

<table>
<thead>
<tr>
<th>Chimney No.</th>
<th>Description of Chimney</th>
<th>Quantity of Emissions at peak flow nm3/hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) for Pelletisation Plant -I &amp; Pelletisation Plant -II</td>
<td>Attached to Indurating Furnace (LSHS based) of Plant-I and feed end of the indurating furnace of Plant-I &amp; II</td>
<td>10,76,100</td>
</tr>
<tr>
<td>1.</td>
<td>Attached to Indurating Furnace (LSHS based) of Plant-II</td>
<td>10,47,300</td>
</tr>
<tr>
<td>2.</td>
<td>Attached to Additive Grinding of Plant-I</td>
<td>34,200</td>
</tr>
<tr>
<td>3.</td>
<td>Attached to Discharge end of the Indurating Furnace of Plant-I</td>
<td>1,26,720</td>
</tr>
</tbody>
</table>
5. Attached to Hearth Layer Separation Bins of Plant-I & Plant-II  
   41,600

6. Attached to Discharge end of the Indurating Furnace of Plant-II  
   1,26,720

**b) for Captive Power Plant**

7. Attached to 125 TPH AFBC Boiler  
   1,22,000

8. Attached to Coal Crusher  
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9. Attached to 2 x 500 KVA D.G. Sets capacity.  
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**iii) HAZARDOUS WASTE AUTHORISATION (FORM - II) [See Rule 6 (2)]:**

M/s. Essar Steel Ltd., Near Flyover, Scindia Road, 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:**

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of the Hazardous waste</th>
<th>Stream</th>
<th>Quantity</th>
<th>Disposal Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Containers and Container Liners of HW and hazardous chemicals</td>
<td>33.1 of Schedule - I</td>
<td>120 No.'s/year</td>
<td>After complete detoxification, it shall be disposed of to outside agencies.</td>
</tr>
</tbody>
</table>

This consent order is valid for manufacture of the following products along with quantities indicated only:

<table>
<thead>
<tr>
<th>S.No</th>
<th>Product</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Iron Oxide Pellets (Pelletisation Plant - I)</td>
<td>11,000 TPD</td>
</tr>
<tr>
<td>2.</td>
<td>Iron Oxide Pellets (Pelletisation Plant - II)</td>
<td>12,333 TPD</td>
</tr>
<tr>
<td>3.</td>
<td>Net generation of electricity (Captive use)</td>
<td>25 MW</td>
</tr>
</tbody>
</table>

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 31st day of December, 2024.

**Digitally signed by Bandla Siva Sankar Prasad**

**Date: 2019.10.04**

**18:12:47 +05’30’’**

**BANDLA SIVA SANKARA PRASAD**

**CHAIRMAN**

To
M/s. Essar Steel India Ltd.,
Near Fly over, Scindia Road,
Visakhapatnam - 530 004
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 carry out 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.

**WATER POLLUTION:**

1. The effluent discharged shall comply with the tolerance limits mentioned below:

<table>
<thead>
<tr>
<th>Outlet</th>
<th>Parameter No.</th>
<th>Limiting Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>pH</td>
<td>6.5 - 8.5</td>
</tr>
<tr>
<td></td>
<td>Suspended Solids</td>
<td>100.00 mg/l</td>
</tr>
</tbody>
</table>
The industry shall take steps to reduce water consumption to the extent possible and consumption shall NOT exceed the quantities mentioned below:

<table>
<thead>
<tr>
<th>S.No</th>
<th>Purpose</th>
<th>for Pelletisation Plant (Pellet Plant - I)</th>
<th>for Captive Power Plant</th>
<th>for Pelletisation Plant (Pellet Plant - II)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Process</td>
<td>2500 KLD</td>
<td></td>
<td>2500 KLD</td>
<td>5000 KLD</td>
</tr>
<tr>
<td>2.</td>
<td>Cooling (makeup)</td>
<td>600 KLD</td>
<td>3600 KLD</td>
<td>600 KLD</td>
<td>4800 KLD</td>
</tr>
<tr>
<td>3.</td>
<td>Gardening / Irrigation</td>
<td>330 KLD</td>
<td></td>
<td></td>
<td>330 KLD</td>
</tr>
<tr>
<td>4.</td>
<td>Boiler Feed</td>
<td>---</td>
<td>50 KLD</td>
<td></td>
<td>50 KLD</td>
</tr>
<tr>
<td>5.</td>
<td>Domestic</td>
<td>10 KLD</td>
<td>---</td>
<td>10 KLD</td>
<td>20 KLD</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3440 KLD</td>
<td>3650 KLD</td>
<td>3110 KLD</td>
<td>10,200 KLD</td>
</tr>
</tbody>
</table>

The industry shall submit detailed water balance and submit every months water consumption details for the above categories.

**AIR POLLUTION:**

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

<table>
<thead>
<tr>
<th>Chimney No.</th>
<th>Parameter</th>
<th>Emission Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 2</td>
<td>Particulate matter</td>
<td>50 mg/Nm³</td>
</tr>
<tr>
<td>3 to 8</td>
<td>Particulate matter</td>
<td>100 mg/Nm³</td>
</tr>
</tbody>
</table>

Industry shall submit emission monitoring reports of all stacks every month.


6. The industry should comply with ambient air quality standards of PM₁₀ (Particulate Matter size less than 10 microns) - 100 micro gram/m³; PM₂.₅ (Particulate Matter size less than 2.5 microns) - 60 micro gram/m³; SO₂ - 80 micro gram/m³; NOₓ - 80 micro gram/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).

**GENERAL:**

7. The industry shall restrict the coal stack piles height up to 6 m only.
8. The industry shall maintain wind breaking wall on two sides at the raw material storage areas at Bentonite and Lime storage area to a height of 2 meters more than the stacking heights.

9. The industry shall maintain wind breaking walls on North, North West and South side of the plant. The industry shall maintain the wind breaking walls intact.

10. The industry shall improve the house keeping at the pellets conveyor junction points and shall not store openly any dry iron ore fines in that area.

11. The industry shall not manufacture any product, other than those mentioned in this order, without CFE & CFO of the Board.

12. Log books of ESPs and Bag filters shall be maintained. Interlocking system shall be maintained.

13. The industry shall carryout the study on performance evaluation of efficiency of the ESP’s provided for the PP-1 and PP-2 through NABL/MoEF&CC accredited agency.

14. The industry shall ensure continuous operation of stack analysers and CAAQMs, connected to PCB website. Calibration shall be carried out regularly as required.

15. Housekeeping of the premises especially near the Junction Houses, Hearth layer separation area shall be improved and report compliance to RO-Visakhapatnam.

16. The industry shall use imported coal (sulphur content not to exceed 0.15% and ash content not to exceed 3 %) in the boiler. The industry shall use LSHS / Furnace Oil with a Sulphur content of 1.5% max.

17. The industry shall maintain green belt in an area of 47 acres all around the plant. The industry shall develop green belt all around the coal yard, additives storage facilities and other vacant places to act as Buffer zone to prevent dispersion of fugitive emissions.

18. The industry shall regularly carryout proximate analysis of the coal & LSHS being used and shall maintain records. Reports shall be submitted every 3 months to RO, Visakhapatnam.

19. The industry shall maintain bitumen / RCC topping of the internal roads and shall maintain the same to prevent dust nuisance due to movement of vehicles.

20. The industry shall adopt proper dust control measures at transfer points & junction boxes when the upstations get tripped.

21. The industry shall comply with the directions issued by the Board from time to time.

**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 not store hazardous waste for more than 90 days as per the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.

12. 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.

13. 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.

14. 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 MoEF&CC recognized and National Accreditation Board for Laboratory Testing (NABL) accredited third party.

Bandla Siva Sankar Prasad
CHAIRMAN

To
M/s. Essar Steel India Ltd.,
Near Fly over, Sindia Road, Visakhapatnam,
Visakhapatnam - 530 004