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Expansion

F. No. J-11011/883/2008- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

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Dated 26th March, 2009

To, ✓
M/s Jayaswal Neco Industries Ltd.
Siltara Growth Centre, Siltara
Raipur - 493111, Chhattisgarh

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Subject : Renovation and Modernization (R&M) of existing Blast Furnace (600 m³ to 750 m³) to enhance Hot Metal / Pig Iron Production (6,50,000 TPA to 7,50,000 TPA) at Siltara Industrial Growth Centre, Raipur, Chhattisgarh by M/s Jayaswal Neco Industries Ltd. - Environment clearance reg.

Ref. : Your letter no. JNL-SPD/ENV/2008 dated 3rd November, 2008.

Sir,

This has reference to your letter no. JNL-SPD/ENV/2008 dated 3rd November, 2008 alongwith Form I, Pre-feasibility Report, EIA/EMP and related project documents and subsequent clarifications furnished by you vide your letters dated 22nd December, 2008 for environmental clearance on the above mentioned project.

2.0 The Ministry of Environment and Forests has examined the application. It is noted that proposal is for the renovation and modernization (R&M) of existing Blast Furnace (600 m³ to 750 m³) to enhance hot metal / pig iron production (6,50,000 TPA to 7,50,000 TPA) at Siltara Industrial Growth Centre, Raipur, Chhattisgarh by M/s Jayaswal Neco Industries Ltd. Total land acquired in notified Siltara Industrial area is 404 ha. No forest land is involved. No national park or wild life sanctuary is located within 15 km. of the site. Total cost of the project is Rs. 40.00 Crores.

3.0 The existing blast furnace (600 m³) was established in 1996 and has outlived its life, and therefore, has proposed to renovate and modernize the same to achieve 750 m³ capacity. Hot metal production will increase from 6,50,000 TPA to 7,50,000 TPA. Environment clearance has been accorded in 2004 for coke oven, SMS, sinter plant, rolling mill, oxygen plant and CPP. Environment clearance has also been accorded in October, 2008 for iron ore beneficiation and pellet plant, DRI plant, BF, sinter plant, coke oven, SMS, rolling mill, oxygen plant, cement unit and CPP. Following are the details of the existing (2004), expansion (October, 2008) and total capacity of the plant after proposed expansion:

| S.N. | Name of Unit | Existing Units (2004) | Proposed Expansion (2008) | Total Capacity |
|------|---------------------|--------------------------|------------------------------|-------------------------|
| 1 | Blast Furnace | 0.65 MTPA | 1.0 MTPA | 1.65 MTPA + 0.1 MTPA |
| 2 | Pellet Plant | -- | 2.5 MTPA | 2.5 MTPA |
| 3 | Sinter Plant | 0.8 MTPA | 2.0 MTPA | 2.8 MTPA |
| 4 | Coke oven | 0.268 MTPA | 0.60 MTPA | 0.868 MTPA |
| 5 | Oxygen Plant | 110 TPD | 400 TPD | 510 TPD |
| 6 | Steel Melting shop | 0.4 MTPA | 2.0 MTPA | 2.4 MTPA |
| 7 | Rolling Mill | 0.4 MTPA | 2.0 MTPA | 2.4 MTPA |
| 8 | Captive Power Plant | | | 107 MW |
| | BF gas | 14 MW | 30 MW | |
| | CO gas | 21 MW | CO + AFBC 42 MW | |

4.0 Efficient Gas Cleaning Plant and bag filters will be provided to blast furnace to achieve 100 mg/Nm^3 . BF gas including gases from coke oven will be used for power generation and in various re-heat furnaces within the steel plant complex. Pulse jet bag filters will be provided to raw material stock house to control fugitive emissions. Total water requirement from Kharoon River will be $162 \text{ m}^3/\text{hr}$. All the treated wastewater will be 100% reused for slag granulation, dust suppression and green belt development. The BF slag will be granulated and used in cement production in the cement-grinding unit at the site. Dust and slag will be used in sinter plant and cement plant. Iron ore fines and other iron bearing solid wastes will be used in pellet and sinter plant.

5.0 No public hearing/consultation meeting is required as per Section (iii), Stage (3), Para (i)(b) & 7(ii) of EIA Notification, 2006 due to location of the proposed plant in the notified Siltara industrial area and also expansion of the existing plant in the same campus as per Section 7 (ii).

6.0 The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September, 2006 as amended subsequently subject to strict compliance of the following specific and general conditions:

A. SPECIFIC CONDITIONS :

- i) All the standards prescribed for the coke oven plants shall be followed as per the latest guidelines. Proper and full utilization of coke oven gases in power plant using waste heat recovery steam generators shall be ensured and no flue gases shall be discharged into the air.
- ii) Efforts should be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks and sufficient air pollution control devices shall be provided to keep the emission levels below 100 mg/Nm^3 . Gas cleaning plant having dust catcher and bag filter alongwith stacks of adequate height as per CPCB guidelines shall be provided to blast furnace (BF) to control air emissions within 100 mg/Nm^3 . shall be provided to control emissions from the blast furnace (BF) and sinter plant.

- iii) The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The State Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. On-line continuous monitoring system shall be installed in stacks to monitor SPM and interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit. Data on ambient air quality, stack emissions and fugitive emissions shall be regularly submitted to this Ministry including its Regional Office at Bhopal, Chhattisgarh Environment Conservation Board (CECB) and Central Pollution Control Board (CPCB) once in six months.
- iv) Gaseous emission levels including secondary fugitive emissions from blast furnace and sinter plant shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed. The emission standards issued by the Ministry in May, 2008 shall be followed. Fugitive emissions shall be regularly monitored and records maintained.
- v) Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product. All the raw materials including fly ash shall be transported in the closed containers only and shall not be overloaded. Vehicular emissions shall be regularly monitored and records kept.
- vi) Pulse jet bag filters will be provided to raw material stock house to control fugitive emissions. Dust extraction (DE) system to blast furnace, stock house, gas cleaning plant and sludge disposal system shall be provided. Dust suppression (DS) system to raw material handling area shall be provided. Covered conveyor shall be provided to the stock house, screen, feeder and discharging points. Fugitive emissions shall be regularly monitored and records maintained.
- vii) Total requirement of the water from Kharoon River shall not exceed 162 m³/hr. Dust laden water slurry from GCP shall be treated in ETP and re-circulated for scrubbing after clarification in thickener. Treated wastewater shall be 100% reused for slag granulation. Phenolic effluent from coke oven shall be treated in BOD plant and used for quenching of hot coke. All the wastewater from process and domestic sources shall be treated and recycled and reused for dust suppression and green belt development. No wastewater shall be discharged outside the premises and 'Zero' effluent discharge shall be ensured.
- viii) Prior permission for the drawl of 162 m³/hr water from Kharoon River from the concerned department should be obtained.
- ix) The water consumption shall not exceed 16 m³/Ton of Steel as per prescribed standard.
- x) Ground water monitoring around the solid waste disposal site / secured landfill (SLF) should be carried out regularly and report submitted to the Ministry's Regional Office at Bhopal, CPCB and CECB.

- xi) All the blast furnace (BF) slag shall be granulated and used in cement production in the cement-grinding unit at the site. Iron ore fines and other iron bearing solid wastes shall be used in pellet and sinter plant. All the other solid wastes including broken refractory mass shall be properly disposed off in environment-friendly manner. Oily waste shall be provided to authorized recyclers/reprocessors.
- xii) A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.
- xiii) Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office at Bhopal, CECB and CPCB.
- xiv) As proposed, green belt shall be developed in 33 % area within and around the plant premises to mitigate the effects of air emissions as per the CPCB guidelines in consultation with DFO.
- xv) All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Sector shall be strictly implemented.
- xvi) The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

B. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the Chhattisgarh Environment Conservation Board (CECB) and the State Government.
- ii. No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.
- iii. In plant control measures for checking fugitive emissions from all the vulnerable sources like spillage/raw materials/coal handlings etc. shall be provided. Further, specific measures like provision of dust suppression system consisting of water sprinkling, suction hoods, fans and bag filters etc. shall be installed at material transfer points, blast furnace, stock house and other enclosed raw material handling areas. Centralized de-dusting system i.e. collection of fugitive emissions through suction hood and subsequent treatment through bag filter or any other device and finally emitted through a stack of appropriately designed height conforming to the standards for induction furnaces existing in the industry and proposed induction and arc furnaces. Fugitive emissions shall be regularly monitored and records maintained.
- iv. At least four ambient air quality-monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO₂ and NO_x are anticipated in consultation with the CECB. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhopal and the CECB/CPCB once in six months.

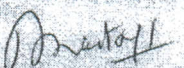
- v. Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.
- vi. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
- vii. Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.
- viii. The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.
- ix. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.
- x. As proposed, Rs. 5.00 Crores and Rs. 2.00 Crores shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhopal. The funds so provided shall not be diverted for any other purpose.
- xi. The Regional Office of this Ministry at Bhopal/CPCB/CECB will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.
- xii. The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the CECB and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office.
- xiii. Project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.

7.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

8.0 The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

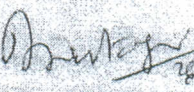
9.0 Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.

10.0 The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules


(Dr. P. B. Rastogi)
Director

Copy to:

1. The Secretary, Department of Environment, Govt. of Chhattisgarh, Chhattisgarh.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
3. The Chairman, Chhattisgarh Environment Conservation Board, Nanak Niwas, Civil Lines, Raipur, Chhattisgarh.
4. The Chief Conservator of Forests (Eastern), Regional Office (Western Zone), E-3/240, Arera Colony, Bhopal - 462 016, M.P.
5. Adviser (IA-II), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Guard file.
8. Record file.


(Dr. P. B. Rastogi)
Director