F. No. J-11011/809/2007- IA II (I)

Government of India Ministry of Environment and Forests (I.A. Division)

Paryavaran Bhawan CGO Complex, Lodhi Road New Delhi – 110 003

E-mail: pb.rastogi@nic.in Telefax: 011: 2436 7668 Dated 8th September, 2008

To,

M/s Jayaswals Neco Ltd. Siltara Growth Centre, Siltara Raipur, Chhattisgarh

E-mail: <u>sudhir.bhatt@ncco.com</u> / <u>sanjeev.munjal@necoindia.com</u>;

Fax No. 0771-5893320

Subject: Expansion of Integrated Steel Plant at Siltara Growth Centre, Siltara, Raipur,

Chhattishgarh by M/s Jayaswals Neco Ltd. - Environmental clearance req.

Ref. : Your letter no. JNL/SPD/ENV/2007/3008 dated, 14th June 2007.

Sir,

This has reference to your letter no. JNL/SPD/ENV/2007/3008 dated, 14th June 2007 alongwith Form I, Pre-feasibility Report, EIA/EMP and related project documents and subsequent clarifications furnished by you vide your letters dated 20th December, 2008, 22nd April, 2008, 4th July, 2008 and 18th July, 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 of M/s Jayaswals Neco Industries Ltd. is for the expansion of Integrated Steel Plant at Siltara Growth Centre, Siltara, Raipur, Chhattishgarh. Total land acquired is 404 ha. and expansion will be carried out at the existing site only. Total cost of the project is Rs. 3,797.00 Crores. Following items have been considered for the environmental clearance (without coal based sponge iron plant and captive power plant):

| Name of Units | Existing Units | Expansion units | Total Capacity |
|--|-----------------|-----------------|-----------------|
| Blast Furnace | 0.65 MTPA | 1 MTPA | 1.65 MTPA |
| Iron ore Beneficiation of Pellet Plant | | 2.5 MTPA | 2.5 MTPA |
| Sinter Plant | 0.8 (2400 TPD) | 2.0 (6000 TPD) | 2.8 (8400 TPD) |
| Coke Oven (Non-recovery) | 0.268 MTPA | 0.60 MTPÁ | 0.868 MTPA |
| Oxygen Plant | 110 TPD | 400 TPD | 510 TPD |
| Steel Melting Shop | 0.4 (1200 TPD) | 2.0 (6000 TPD) | 2.4 (7200 TPD) |
| Rolling Mill | 0.4 (1,200 TPD) | 2.0 (6,000 TPD) | 2.4 (7,200 TPD) |
| Cement Grinding unit | | 2.4 (7,200 TPD) | 2.4 MTPA |
| Captive power plant | 14 MW-BF gas | 30 MW-BF gas | 107 MW |
| | 21MW–CO gas | 42 MW- CO gas | |
| | 35 MW | 72 MW | |

2.0 Electrostatic precipitator (ESP), dust extraction system comprising of pulse jet type bag filter, fume extraction system with bag and stacks of adequate height will be provided to control

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emissions from different sources. Total water requirement from Kharun River will be 36,350 m3/day and permission for 8 MGD water is obtained from CSIDC/Water Resource Department and have to obtain permission for the additional water requirement. Effluent will be treated in ETP. Clarifier and thickener will be installed in Beneficiation and Pellet plant for water recovery and re-circulation. Treated wastewater for dust suppression, green belt development and various other project related activities. BF Slag will be granulated and used for cement making. Flue dust from pellet plant, sinter plant, beneficiation plant and SMS and sludge from BF will be reused in sinter plant. Coke breeze from coke oven plant will be used in sinter and pellet plant. SMS slag will be given for metal recovery or will be used in road making.

- 3.0 No public hearing/consultation is required due to location of the project in notified Siltara Industrial Area as per Section (iii), Stage (3), Para (i)(b) of EIA Notification 2006.
- 4.0 The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 27th January, 1994 as amended subsequently subject to strict compliance of the following specific and general conditions:

A. SPECIFIC CONDITIONS:

- i) No coal based sponge iron plant and captive power plant shall be installed as per the order of the State Govt. of Chhattisgarh and shall take prior approval from the State Govt. and Ministry as and when decided for the installation of the same.
- ii) Efforts shall be made to reduce RSPM levels in the ambient air and a time bound action plan shall be submitted. On-line stack monitoring facilities for all the stacks and sufficient air pollution control devices shall be provided to keep the emission levels below 100 mg/Nm³. In cement plant, limit of SPM shall be controlled within 50 mg/Nm³ by installing adequate air pollution control system.
- iii) 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.
- 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.
- v) Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. 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.
- vi) Electrostatic precipitator (ESP) shall be provided to Sinter plant, Pellet plant, Beneficiation plant, Power plant and Cement plant. Stacks of adequate height as per CPCB guidelines shall be provided to control emissions from the blast furnace (BF), Sinter Plant, Coke Oven, Steel melting shop (SMS), Rolling mill etc.
- vii) Dust extraction system comprising of pulse jet type bag filter shall be provided to Blast furnace, Cement grinding unit, Beneficiation plant and Pellet plant. Fume extraction system with bag filters shall be provided to Steel melting shop to control fugitive emissions. Suction hood with separator shall be provided to collect the dust particles.

- viii) Total requirement of the water from Kharun River shall not exceed 36,350 m³/day. Closed circuit system shall be adopted. All the wastewater shall be treated in effluent treatment plant (ETP) and treated wastewater including cooling tower blow down shall be used for dust suppression, slag granulation, green belt development and various other project related activities. Clarifier and thickener shall be installed in Beneficiation and Pellet plant for water recovery and re-circulation.
- ix) Continuous monitoring of Total Organic Compounds (TOC) shall be done at the outlet of ETP (BOD plant).
- x) Prior 'Permission' for the drawl of 36,350 m³/day water from Kharun River shall be obtained from the concerned department.
- xi) 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.
- xii) All the blast furnace (BF) slag shall be granulated in slag granulation plant and provided to cement manufacturers for further utilization. Flue dust from pellet plant, sinter plant, DRI and SMS and sludge from BF shall be reused in sinter plant. Flue dust from beneficiation plant and cement unit shall also be recycled. Coke breeze from coke oven plant shall be used in sinter and pellet plant. SMS slag shall be given for metal recovery or properly utilized. All the other solid / hazardous waste shall be properly utilized or disposed off in environment friendly manner. Waste oil and lubricant shall be sold to authorized recyclers.
- xiii) A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.
- xiv) Efforts shall be made to use low grade lime, more fly ash and solid waste in the cement manufacturing.
- xv) Proper utilization of fly ash shall be ensured as per Fly ash Notification, 1999 and subsequent amendment in 2003.
- xvi) As proposed, green belt shall be developed in an area of 133 ha (33 %) within and around the plant premises as per the CPCB guidelines in consultation with DFO.
- xvii) All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel plants shall be implemented.

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. 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.

- iv. 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.
- v. At least four ambient air quality-monitoring stations should 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.
- vi. 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 form time to time. The treated wastewater shall be utilized for plantation purpose.
- vii. 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).
- viii. Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.
- ix. 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.
- x. 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.
- xi. As proposed, Rs. 185.00 Crores. and Rs. 18.50 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 should not be diverted for any other purpose.

- xii. 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.
- 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.
- xiv. 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.
- 5.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- 6.0 The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- 7.0 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.
- 8.0 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