

F. No. J-11011/302/2011-IA-II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

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Dated: 6th June, 2013

To,

The President (Project)
M/s Jayaswal Neco Industries Limited
Siltara Growth Centre,
Raipur - 493111
Chhattisgarh

Fax: 07721-264279

E-mail: rk.sikri@necoindia.com

Sub: Proposed Integrated Steel Plant (Iron ore Beneficiation & Pellet Plant-1.2 MTPA; DRI Plant - 0.6 MTPA; Blast Furnace - 0.4 MTPA; SMS-Steel Billets- 0.7 MTPA; Rolling Mill - 0.65 MTPA; Coke Oven- 0.2 MTPA; Sinter Plant - 0.4 MTPA; Oxygen Plant- 400 TPD) along with 100 MW Captive Power Plant [25MW – FBC based power plant, 4x12.5MW – WHRB and Turbine, 13MW using BF gas and 12 MW using Coke Oven Gas] at villages Dagori, Ameri Akberi and Udgaon, Tehsil Bilha, Dist Bilaspur, Chhattisgarh by M/s Jayaswal Neco Industries Limited - regarding **Environmental Clearance**

Sir,

This has reference to your letter no. Nil dated 17.9.2012 along with copies of EIA/EMP report and subsequent communications dated 13.12.2012 and 21.1.2013 seeking environment clearance under the provisions of EIA Notification, 2006. The Terms of Reference (ToR) for the project cited above was accorded by the Ministry vide letter of even no dated 16.8.2011.

2. The Ministry of Environment and Forests has examined the application for the above project. It is noted that M/s Jayaswal Neco Industries Limited have proposed for Integrated Steel Plant and Captive Power Plant (100 MW) at Villages Dagori, Ameri Akberi and Udgaon, Tehsil Bilha, District Bilaspur, Chhattisgarh. The total project area is 207 ha (511.50 acres) of which 8.83 ha is Govt. Land, 10.11 ha is Tribal land and 188.06 ha is Private land. Additional 1.6 ha land shall be required for the railway line from Dagori station to site and 2 ha land shall be required to lay the water pipeline from Shivnath River Anicut (proposed at Ghogra Village) to site. No forest land is involved. 58.75 ha land has been purchased directly from the land owners. Green belt will be developed in 33% of the total area i.e. 72.6 ha. Rehabilitation of project affected persons will be done as per the Policy of Chhattisgarh Government. Preference will be given to land losers for employment in the project. No National Park/Wildlife Sanctuary is located within 10 km radius of the project site. River Maniari and River Shivnath flow at a distance of 3 km and 3.5 km respectively from the project site. Devrani Jethani Temple, which is protected under the State Archaeological Act, 1976 is located at 3 km from project site. The project cost is Rs. 3,800 Crores and the cost towards Environmental Management Plan (EMP) is Rs. 255 Crores. Rs. 7 Crores is earmarked for the conservation of Devrani Jethani Temple.

3. The details of various units and products are as follows:

S.No.	Name of the Unit	Capacity	Products
1.	Iron ore Beneficiation and Pellet Plant	1.2 MTPA	Iron ore pellets
2.	Blast Furnace	0.4 MTPA	Hot metal/ Pig iron
3.	DRI Plant	0.6 MTPA	Sponge iron
4.	Coke Oven (non-recovery type)	0.2 MTPA	Metallurgical Coke
5.	Sinter Plant	0.4 MTPA	Sinter
6.	Steel Melting Shop	0.7 MTPA	Steel
7.	Rolling Mill	0.65 MTPA	Steel Products
8.	Oxygen Plant	400 TPD	Oxygen
9.	Captive Power Plant	100 MW [25MW – FBC based power plant, 4x12.5MW – WHRB and Turbine, 13MW using BF gas and 12 MW using Coke Oven Gas]	Electricity

4. Iron ore, coal, middlings, dolomite, lime stone, ferro alloys, bentonite, lime/dolime will be used as raw materials. Iron ore fines will be sourced by rail transport from Metalbodli and Chota Dongar iron ore mines located in Narayanpur and Kanker respectively. The coal will be sourced by rail transport from Gare Pelma mines, Raigarh and e-auction. The sulphur content in the coal would be 0.38%. Coal fines, middlings and dolochar will be used in the FBC boiler with calorific value of 4200 kcal/kg, 3300 kcal/kg and 2200 kcal/kg respectively. The sulphur content in the coal fines, middlings and dolochar shall be 0.5%. The ash content in the coal fines, middlings and dolochar shall be 40%, 50% and 60% respectively.

5. It is noted that the Electro Static Precipitator (ESP) & Bag filters will be provided to control point emissions. Secondary dedusting systems will be provided at all points to control fugitive dust emission. The approach road from National Highway to the project site will be strengthened. The pollution control equipment will have efficiency of 99.9% and the outlet particulate matter emission will be restricted to less than 50 mg/Nm³.

6. The total water requirement is 825 m³/h (19,800 m³/day) and will be sourced from Shivnath River and transported to the site by pipelines. Permission to draw 7 MCM (approx 20000 KLD) has been obtained from the Water Resources Department, Government of Chhattisgarh. The wastewater from all sources would be segregated, treated and reused/recycled. The treated wastewater will be reused within the plant premises. No ground water shall be used.

7. It is noted that the blast furnace slag and the power plant ash will be used in the cement plant. The iron bearing solid wastes will be reused in the Sinter plant.

8. The steel plants are listed at S. No. 3(a) in primary metallurgical industry under Category 'A' of the Schedule of EIA Notification, 2006 and appraised by the Expert Appraisal Committee (Industry) of MoEF.

9. The proposal was considered by the Reconstituted Expert Appraisal Committee (Industry) in its 3rd meeting held during 3-5th December, 2012. The proposal further reconsidered by the Reconstituted Expert Appraisal Committee (Industry) in its 5rd meeting held during 31st January, 2013 to 1st February, 2013 and 7th meeting held during 4-5th April, 2013. The Committee recommended the proposal for environmental clearance subject to stipulation of specific conditions along with other environmental conditions. Public Hearing / Public Consultation meeting was conducted by the Chhattisgarh Environment Conservation Board on 29th June, 2012.

10. Based on the information submitted by you, presentation made by you and your consultant, M/s. EMTRC Consultants Private Limited, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September 2006 subject to strict compliance of the following Specific and General conditions:

A. SPECIFIC CONDITIONS :

- i. Rehabilitation and Resettlement (R & R) Plan shall be prepared and submitted to the State Government of Chhattisgarh. This shall be implemented as per the R & R Policy of the State Government of Chhattisgarh. All the recommendations mentioned in the R & R Plan shall be strictly followed including suitable employment and other facilities to all the oustees. Compensation paid in any case shall not be less than the norms prescribed under National Resettlement and Rehabilitation Policy, 2007.
- ii. Average sulphur and ash content used in the coal fines, middlings and dolochar used in the FBC boilers shall not exceed 0.5% and 45% respectively. If there are variations in these parameters, Ministry shall be intimated to make suitable amendments in the specific conditions.
- iii. On-line ambient air quality monitoring and continuous stack monitoring facilities for all the stacks should be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), and bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm³ by installing energy efficient technology.
- iv. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 should be followed.
- v. Gaseous emission levels including secondary fugitive emissions from all the sources should be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB should be followed.
- vi. Dust suppression system and bag filters shall be installed to control the fugitive dust emissions at conveyor and transfer points, product handling, loading and unloading points.
- vii. Hot gases from the DRI kiln shall be passed through Dust Settling Chamber (DSC) to remove coarse solids and After Burning Chamber (ABC) to burn CO completely and used in Waste Heat Recovery Boiler (WHRB). The gas then shall be cleaned in ESP before dispersion out into the atmosphere through ID fan and stack. ESP shall be installed to control the particulate emissions from the WHRB.
- viii. Total make up water requirement shall not exceed 19,800 m³/ day. The water consumption shall not exceed as per the standard prescribed for the sponge iron

plants and steel plants. Rain water harvesting structure will be created in 13 ha area for storage of 2.5 MCM rainwater that will be used in lean season.

- ix. Efforts shall further be made to use maximum water from the rain water harvesting sources. If needed, capacity of the reservoir should be enhanced to meet the maximum water requirement. Only balance water requirement should be met from other sources. Use of air cooled condensers shall be explored and closed circuit cooling system shall be provided to reduce water consumption and water requirement shall be modified accordingly.
- x. All the effluent should be treated and used for ash handling, dust suppression and green belt development. No effluent shall be discharged and 'zero' discharge shall be adopted. Sanitary sewage should be treated in septic tank followed by soak pit. The cooling tower blow down shall be recycled for slag granulation.
- xi. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the E(P) Act whichever are more stringent. Leachate study for the effluent generated and analysis should also be regularly carried out and report submitted to the Ministry's Regional Office at Bhopal, SPCB and CPCB.
- xii. All the char from DRI plant shall be utilized in FBC boiler of power plant and no char shall be disposed off anywhere else. FBC boiler shall be installed simultaneously along with the DRI plant to ensure full utilization of char from the beginning.
- xiii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 and subsequent amendment in 2003 and 2009. All the fly ash should be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding should be submitted to the Ministry's Regional Office at Bhopal.
- xiv. Risk and Disaster Management Plan along with the mitigation measures should be prepared and a copy submitted to the Ministry's Regional Office at Bhopal, SPCB and CPCB within 3 months of issue of environment clearance letter.
- xv. A detailed study on chemical composition of coal used particularly heavy metal and radio activity contents shall be carried out through a reputed institute and report shall be submitted to Regional Office of the Ministry at Bhopal. Only after ascertaining its radioactive level shall fly ash be supplied for utilization in cement manufacturing.
- xvi. As proposed, green belt shall be developed in 33 % of plant area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- xvii. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Sponge Iron Plants and Steel Plants should be implemented.
- xviii. At least 5 % of the total cost of the project should be earmarked towards the Enterprise Social Commitment (ESC) based on locals need and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhopal. Implementation of such program should be ensured accordingly in a time bound manner.

- xix. The Company shall submit within three months their policy towards Corporate Environment Responsibility which should inter-alia address (i) Standard operating process/ procedure to bring into focus any infringement/deviation/violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- xx. All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 29th June, 2012 shall be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Bhopal.
- xxi. Provision shall be made for the housing of 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 and the State Government.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
- iii. At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM₁₀, SO₂ and NO_x are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhopal and the SPCB/CPCB once in six months.
- iv. 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.
- v. 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).
- vi. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vii. The company shall develop rain water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.
- viii. 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.

- ix. Requisite funds 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.
 - x. A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.
 - xi. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF at Bhopal. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
 - xii. The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhopal / CPCB / SPCB shall monitor the stipulated conditions.
 - xiii. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEF at Bhopal by e-mail.
 - xiv. 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 SPCB 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 at Bhopal.
 - xv. 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.
11. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

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

13. 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, Handling and Transboundary Movement) Rules, 2008 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.


(Dr.V.P.Upadhyay)
Director(S)

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, Madhya Pradesh.
5. Monitoring Cell, Ministry of Environment & Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Guard file / Record file.


(Dr.V.P.Upadhyay)
Director(S)