



REGD.POST WITH ACK.DUE

CONSENT ORDER FOR ESTABLISHMENT

Order.No. APPCB/VSP/108/HO/2005/

317

Dt. 9.05.2005

Sub: PCB - CFE - M/s. Rashtriya Ispat Nigam Ltd., (Visakhapatnam Steel Plant), Visakhapatnam - Consent for Establishment of the Board under Sec.25 of water (P&C of P) Act, 1974 and under Sec.21 of Air (P&C of P) Act 1981 - Issued - Reg.

- Ref:**
1. Industry's application through SWCC dt 15.2.2005
 2. R.O's inspection report dt.17.3.2005
 3. Public hearing conducted on on 28.3.2005 at RDO Office, Collectorate, Visakhapatnam.
 4. Presentation made before the Technical Committee on 30.3.2005
 5. T.O. Lr.dt.8.4.2005
 6. Industry's lr.dt.20.4.2005
 7. Presentation made before the Technical Committee on 28.4.2005
 8. CFE Clearance Committee meeting held on 3.5.2005

1. In the reference 2nd cited, an application was submitted to the Board seeking Consent for Establishment (CFE) for expansion of the existing production capacity to produce the following with installed capacities as mentioned below with an investment of Rs. 8211 Crores.

Products:-

S. No.	Product	Existing	After Expansion
1	Hot Metal	4.0 MMTPA	6.5 MMTPA
2	Liquid Steel Production	3.5 MMPTA	6.3 MMTPA
3	Salcable Steel	3.17 MMTPA	5.72 MMTPA
4	Power	235.0 MW	384.0 MW

The following new production units are proposed:

- 1) 1 x 60 TPH Steam Boiler
 - 2) 1 No. of BF Unit of capacity 2.5 MT - Hot Metal
 - 3) 1 No. of Sinter Machine of capacity 3.25 MT - Sinter burden
 - 4) 2 Nos. of LD Converters with steel refining facilities and continuous casters for production of additional 2.8 MT - Liquid steel
 - 5) 4 Nos. of new Rolling Mills, one of which would be Seamless Tube Mill for raising additional production of 2.35 MT rolled products.
 - 6) 2 Nos. of Lime Kilns each of rated capacity - 500 TPD.
2. As per the application, the above activity is located within the existing premises located at Gajuwaka (M), Visakhapatnam.
 3. The above site was inspected by the Environmental Engineer, Regional office, Visakhapatnam, A.P Pollution Control Board on 14.3.2005



4. The Board, after careful scrutiny of the application and verification report of Regional Officer, hereby issues **CONSENT FOR ESTABLISHMENT (Expansion)** to your unit / activity Under **Section 25 of Water (Prevention & Control of Pollution) Act 1974** and **Section 21 of Air (Prevention & Control of Pollution) Act, 1981** and the rules made there under. **This order is issued to manufacture the products as mentioned at para (1) only.**
5. This Consent Order now issued is subject to the conditions mentioned in **Schedule 'A'** and **Schedule 'B'**.
6. This order is issued from pollution control point of view only. **Zoning** and other regulations are not considered.

Encl: Schedule 'A'
Schedule 'B'

To
M/s. Rashtriya Ispat Nigam Ltd.,
(Visakhapatnam Steel Plant),
Gajuwaka (M), Visakhapatnam


MEMBER SECRETARY

SCHEDULE - A

1. There shall not be any perceptible odour outside the industry's premises.
2. Environmental Statement in form - V as per the provisions under Rule-14 of E (P) Act, 1996 and its amendments there of shall be submitted by 30th September of every year and this should also form a part of their annual report.
3. Progress on implementation of the project shall be reported to Board Office, Zonal Office and Regional Office, A.P. Pollution Control Board regularly.
4. Suitable automatic flow measuring devices and monitoring equipments shall be installed at appropriate points. Separate energy meters shall be provided for ETP and Air pollution Control equipments to record energy consumed.
5. All the rules and regulations notified by Ministry of Environment and Forests, Govt. of India in respect of noise pollution control measures shall be followed to avoid nuisance to public.
6. Consents for operation regularly from APPCB, as required Under Sec.25/26 of the Water (P&C of P) Act, 1974 and under sec. 21/22 of the Air (P&C of P) Act, 1981, for operation of the activity, before starting trial production. The Consent for Operation will be accorded only after ensuring compliance of all the conditions stipulated in this order.
7. Conditions issued by the Board in the consent order scrupulously be complied with and carried out. Legal action will be initiated as per the provisions of the relevant Acts in case of non-compliance of any conditions of the consent order.
8. Notwithstanding anything contained in this conditional letter or consent, the Board hereby reserves its right and power Under Sec.27(2) of Water (Prevention and Control of Pollution) Act, 1974 and Under Sec.21(4) of Air (Prevention and Control of Pollution) Act, 1981 to review any or all the conditions imposed herein and to make such alternation as deemed fit and stipulate any additional conditions for the purpose of the Act by the Board.
9. The consent of the Board shall be exhibited in the factory premises at a conspicuous place for the information of the inspecting officers of different departments.
10. Compensation is to be paid for any environmental damage caused by it, as fixed by the Collector and District Magistrate as civil liability.
11. Appropriate Rain Water Harvesting (RWH) structure (s) shall be established on the available up-stream portion of the plant site. The applicant can approach the State Ground Water Authority, local Municipal / Urban Development Authorities and even private consultants to procure suitable design for these structures. If there is no land available in the industry premises, RWH structures must be raised on the roofs of Administrative Blocks or such buildings where sudden leakages or moisture in the air would not affect the quality of the process or product.

SCHEDULE - B

1. The Proponent shall submit the detailed time frame for rectifying the non-compliance of the items listed in the CREP. They shall submit the detailed program for compliance and its report to the Board within a period of three weeks. They shall also submit Quarterly Progress Report on each item covering various stages of action such as approval, financial sanctions, inviting tenders, award of work and progress of construction and finally the installation / operations of the systems.

2. The proponent shall furnish a Bank Guarantee equivalent to 15% of the estimated total cost of all corrective measures. This Bank Guarantee shall be submitted on or before 15.06.2005 to Regional Office, APPCB, Visakhapatnam and if the dates of implementation are non-complied, the Bank Guarantee shall be forfeited to the APPCB. In case of non-submission of Bank Guarantee within the stipulated time, Board will be constrained to revoke the CFE order.
3. The Proponent shall recycle the effluents by using combination of one or more measures as stated below:
 - i) Treat the effluent to the land application standards. Work out proper scheme for application of treated waste water.
 - ii) The Proponent shall utilize the advice / consultation of good Hydro- Geologist to identify aquifers for ground water recharge such that the discharged water would be recovered and recycled for the process in the Plant after ground in-filtration and purification.
 - iii) The proponent shall segregate highly polluting and low polluting treatable effluents and wherever possible, recycle them directly in processes such as rolling mill, cooling etc until the new expansion is completed it may be that the effluent is not totally recycled in that case the remaining effluent may be discharged through a marine outfall provided the treated effluent meets the standards prescribed in this regard. It is understood that the alignment and other details of the marine outfall are being worked out by the NIO on behalf of the project proponent.

The above measures are recommended in order to protect the interests of the Visakhapatnam city, which shares water supply from Yeleru Canal and are facing resources shortage of drinking water for meeting the domestic needs. Any quantity of water, that is saved by the RINL or recycled would automatically supplement availability of water to the city. Therefore, RINL shall give serious attention to prepare an Action Plan with time frame for total recycling of waste water and submit it to the APPCB with commitment to release the saved fresh water to Visakhapatnam for drinking water supply.

4. The existing total emission into the atmosphere from the Plant are 3.3 kg of particulates per ton of product, 1.9 kg of SO₂ per ton of product and 1.3 kg of Nox per ton of product. This is not acceptable in view of proximity of the bowl area of the city of Visakhapatnam and potential transport of the pollutants to the city. Therefore, the proponent shall take measures to reduce the emission of particulate to 1kg per ton of product, SO₂ to 0.75 kg per ton of product and Nox to 0.8 kg per ton of product after proposed expansion.
5. FLY ASH: The proposal of increasing the storage capacity of Fly Ash is not acceptable at all in view of the mandatory requirements since 1999 that an increased quantity of Fly Ash shall be utilized @ 10% per year. The plea of the Project Proponent that no Cement Plant is nearby is not convincing because there are alternative methods of utilization or disposal of Fly Ash, which they should pursue. Further, to reduce the burden of generation of Fly Ash at their premises, the Project Proponent shall use beneficiated coal for which, a time frame for starting this practice shall be submitted by them to the APPCB.
6. The proponent shall constitute a special Environmental Monitoring Committee under the Chairmanship of CMD, VSP to review the progress of implementation of various conditions stipulated by APPCB, MOE&F at quarterly intervals and shall submit report to Board. The committee should include Zonal Officer / Regional Officer of APPCB as a member.
7. The proponent shall make adequate budget for implementation and continuous operation of Environmental measures proposed.
8. The proponent shall submit the details of the locations of the proposed on-line Ambient Air

9. The proponent shall provide online monitoring equipment for the stacks with recording facility at the Central Control Room and shall device in-house review mechanism on regular basis.
10. The proponent shall meet SPM limit of 50 mg/Nm³ from all the proposed stacks as per EMP in EIA.
11. The proponent shall comply all the norms notified by the MOE&F, GOI under E(P)Act, 1986 from time to time.
12. The proponent shall establish "Environmental Cell" with adequate number of trained persons for effective implementation of EMP.
13. The following rules and regulations notified by the MOE&F, GOI shall be implemented.
 - a) Hazardous waste (Management and Handling), Rules, 1989
 - b) Manufacture, storage and import of hazardous chemicals Rules, 1989.
14. The rules and regulations notified by Ministry of Law and Justice, GOI, regarding the Public liability insurance Act, 1991 shall be followed.
15. The proponent shall comply with CREP recommendations.
16. The recommendations / commitments made during the Public Hearing held 28.3.2005 at RDO Office, Collectorate, Visakhapatnam shall explicitly be followed from pollution control point of view.
17. The Proponent shall not undertake any activity that may have the potential of environmental degradation without obtaining Environmental Clearance from MOE&F, Govt. of India, as per MOE&F, Govt. of India Notification No.S.O.60 (E) dt.27.01.94 and the amendments issued thereof.
18. This Order is valid for a period of five years from the date of issue.
19. All other conditions stipulated by the Board in earlier CFE / CFO orders for the permitted activities shall be followed.


MEMBER SECRETARY

To,
M/s. Rashtriya Ispat Nigam Ltd.,
(Visakhapatnam Steel Plant),
Gajuwaka (M), Visakhapatnam

7/

No. J-11011/196 /2005 - IA II (I)
Government of India
Ministry of Environment & Forests

E mail: plahujarai@yahoo.com

Paryavaran Bhawan,
C.G.O. Complex, Lodi Road,
New Delhi - 110 003

Dated the August 11, 2005

1237
16/8/05

To
The Managing Director
M/s Rashtriya Ispat Nigam Limited
Visakhapatnam Steel plant
6th Floor, Prakashdeep Building
7, Tolstoy Marg, New Delhi-110001

DOO
12/8

Sub: Expansion of Hot metal (Steel Plant) from 4.0 to 6.5 million tonne per annum (MTPA) at Vishakapatnam, Andhra Pradesh by M/s Rashtriya Ispat Nigam Limited.

Sir,

This has reference to your letter no. EnMD/87/546 dated 28th May, 2005 along with application, EIA /EMP reports and related project documents and subsequent communications/clarifications furnished by you vide your letters dated 1st June, 2005 and 30th June, 2005 for environmental clearance on the above mentioned project. The Ministry of Environment and Forests has examined your application. It is noted that expansion proposal involves increase in the hot metal production from 4.0 Million Tons per Annum(MTPA) to 6.5 MTPA, liquid steel production from 3.5 to 6.3 MTPA, saleable steel from 3.17 to 5.72 MTPA coal chemicals from 0.18 MTPA to 0.23 MTPA and power generation from 235 MW to 384MW.

It is noted that company is in possession of 8827 ha. of land area. The expansion will be carried out within the existing plant premises for which 407 ha. of area is required. No additional land will be required. The project does not involve diversion of forest land and displacement of people. Additional water requirement of 13 MGD would be met from the Yeluru Reservoir for which the company has entered into bulk supply agreement with Visakha Industrial Water Supply Company and Government of Andhra Pradesh. It is noted that the specific water consumption for steel making is 4m³/tonne of the product by collection of treated waste water, leakage water recycling and reuse. Solid waste would be generated in the form of Blast furnace slag (6720TPD), steel melting shop slag (2700TPD), gas cleaning sludge (144TPD), dust extraction system dust (1700 TPD), mill scale(328TPD) and used refractory bricks (100TPD). Thus, total solid waste generation would be 11692 TPD. Besides, 2063 TPD of boiler ash will be generated of which 1463 TPD will be stored in the ash pond and 600 TPD would be the dry ash. To meet the coke requirement, 3 coke oven batteries are being operated and 4th coke oven battery is under construction, which will operate as an additional battery from January, 2007 onwards also pulverized coal injection will be implemented in all three blast furnaces. Public hearing of the project was held on 28.03.2005. The Andhra Pradesh Pollution Control Board has granted NOC on 09.05.2005. Total cost of the project is Rs. 8211 crores.

2.0. 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:

3333
11/8/05

Office of the Director, (OP) NIGAM
No. 17b
V.S.P. K

Copy to (E) → EDCW
ED (PCT)
12/8/05

12/8
"Important"

Copy to: 1) GM (E&E)
For n.a 2) DGM (EnMD) k
Also to: 22 Gms & all Gms.
A

-2-

A. SPECIFIC CONDITIONS

- i. 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. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- ii. As reflected in the EIA/Environmental Management Plan report, the company shall undertake water conservation measures by adopting closed loop water recirculation system, recycling of direct contaminating cooling water through cooling tower, use of cooling tower blow down and slag granulation and dust suppression. The wastewater from gas cleaning plant, rolling mill, power plant, cooling tower blow down shall be treated in wastewater treatment plants. The coke oven effluent shall not increase 2880m³/d. Existing effluent treatment plant shall be upgraded to treat the coke oven effluent and treated effluent shall comply with the prescribed standards. The company shall make efforts to maximize the reuse of the treated effluent. The surplus treated waste water shall be stored in the holding pond for use in the lean period. The overflow shall be discharged through a marine outfall into the sea. The discharge point shall be decided in consultation with the National Institute of Oceanography, Goa. Further, a marine ecological study shall be carried out to study the impact of discharge of excess treated waste water on the marine water quality. The domestic wastewater after treatment in STP shall be used for rolling mill and steel melt shop for cooling purpose.
- iii. In plant control measures for checking fugitive emissions from spillage/ raw materials handling shall be provided. Further specific measures like provisions of dust extraction and dust suppression system for raw material handling, water sprinkling system at the stock yards shall be provided. The company shall provide dry fogging system for crushing and screening plant, material and transfer points etc. Data on fugitive emissions shall be regularly monitored and records maintained.
- iv. The company shall strictly comply with the standards notified under the Environment (Protection) Act, 1986 vide GSR.631(E) dated 31st October, 1997 to control the fugitive VOC emissions from the doors, lids and oftakes of the coke oven batteries.
- v. The company shall provide dust suppression system by bag filters and ESP to control the particulate emissions within 50mg/m³. Cast house fume extraction system shall be based on ESP/bag filters. The company shall install low NOx burners to control the NOx emissions.
- vi. As per the solid waste management plan submitted to the Ministry, the company shall enhance efforts for reuse of solid wastes. The BF slag shall be sold to the cement industries. The slag from the steel melting shop shall be partly reused and partly dumped within the plant premises. The sludge, dust extraction dust, mill scales and used refractory bricks shall be 100% recycled. The dry fly ash shall be utilized for brick making and ash from the pond will be used for land reclamation. The hazardous wastes generated in the tar sludge, benzol muck, MBC sludge shall be charged along with coal into the coke oven batteries. The spent oil shall be sold to the authorized reprocessors.

-3-

- vii. The company shall develop green belt in 34 ha. of the plant area in addition to the 3426 ha. of plant area already afforested. Selection of plant species is as per the Central Pollution Control Board guidelines.
- viii. The company shall undertake rainwater harvesting measures to recharge the ground water.
- ix. Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.
- x. Recommendations made in the Charter on Corporate Responsibility for Environment Protection shall be implemented.

B. GENERAL CONDITIONS:

- i. The project authorities must strictly adhere to the stipulations made by the Andhra Pradesh Pollution Control 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 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 State Pollution Control Board. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bangalore and the State Pollution Control Board/Central Pollution Control Board once in six months.
- iv. Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1983 and 31st December, 1983 or as amended from time to time. The treated wastewater should be utilized for make up, plantation etc.
- 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 Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).
- vi. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the Environmental Impact Assessment Notification, 1994 / Environmental Management Plan 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.
- vii. The project authorities will provide requisite funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purposes.

-4-

- viii. The Regional Office of this Ministry at Bangalore/Central Pollution Control Board/State Pollution Control Board will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation should be submitted to them regularly.
- ix. 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 State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at <http://envfor.nic.in>. This should 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.
- x. The 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.

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


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

5.0. The above conditions will 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 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules


(Dr. P. L. Ahujara)
Director

Copy to :-

1. The Secretary, State Deptt. of Environment, Government of Andhra Pradesh, Mantralaya, Hyderabad.
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
3. The Chairman, Andhra Pradesh State Pollution Control Board, 2nd Floor, HUDA Complex, Maltrivaram, S.R.Nagar, Hyderabad- 500 038.
4. The Chief Conservator of Forests (Central), Regional Office (SZ), Kendriya Sadan, IVth Floor, E&F Wing, 17th Main Road, Koramangala, Bangalore-560034.
5. JS(CCI-I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi- 110003.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi- 110003.
7. Guard file.
8. Record file.
9. Monitoring file.


(Dr. P. L. Ahujara)
Director