

21.06.2006 14:32

From: JSW Delhi 91-11-41455550

No. 6750 P. 1

*Chandray*

No. J-13011/10/2001-IA.II(T)  
**Government of India**  
**Ministry of Environment & Forests**

**By Speed Post**

Paryavaran Bhavan,  
C.G.O. Complex, Lodi Road,  
New Delhi-110003.  
Telefax. 2436 2434

Dated the 28<sup>th</sup> June, 2006

To  
The Senior Vice President,  
JSW Energy Ltd.,  
P.O. Torangallu,  
Bellary-583 123  
Karnataka.

**Sub: 2x130 MW Thermal Power Project at Torangallu, Bellary, Distt. Karnataka of M/s Jindal Power Company Ltd. – Change of Fuel.**

Sir,

The undersigned is directed to refer to your communication no. JSWEL/AUTH/3245 dated 12.12.2005 requesting this Ministry for change in fuel combination for the above-mentioned project.

2. On the basis of the information submitted, the proposal was considered by the Expert Committee for environmental appraisal of Thermal Power and Coal Mine Projects in its meeting held on 21<sup>st</sup>-22<sup>nd</sup> March, 2006. It has been decided to permit the change in the existing fuel ratio of 80:20 of coal and corex gas to 100% imported coal or any combination of imported coal and corex gas depending on the fuel availability subject to following conditions:-

- (i) No additional land shall be acquired for ash disposal.
- (ii) Sulphur content in coal to be used as fuel shall not exceed 0.6%.
- (iii) 100% ash utilization shall be done in accordance with the Notification S.O. 763(E) dated 14.9.1999 as amended subsequently on fly ash utilization. In case of emergency, ash disposal shall be done in the existing ash pond area. Keeping in view the higher quantity of ash likely to be generated, based on 100% use of coal as fuel, the ash utilization plan shall be prepared and submitted within 3 months.

Kind Attn: *Sh. R. R. Pillai, Plant*

- 2. *Sh. K. T. Krishnabeshika, Bilora*
- 3. *Sh. Raaj Kumar, Mumbai*


Total Pages: 2 Nos.

*1/2*

-2-

- (iv) Two stacks of 115 m height each shall be provided with On-line continuous monitoring system.
- (v) Particulate emission from the stack shall not exceed 100 mg/Nm<sup>3</sup> at any time falling which the plant shall be shut down.
- (vi) All other conditions stipulated vide letter no. J-11012/30/94-IA.II(I) dated 2<sup>nd</sup> August, 1996 and even numbered letter dated 20<sup>th</sup> August, 2004 shall be strictly implemented.

Yours faithfully,



(Dr. S.K. Aggarwal)  
Director

2/2

No. J-11012/30/94-IA.II(I)

*Environmental Approval*

*2 X 130 MW Power*

*Plant - JTPCL*

*For kind information for*

M. J. - JVSL

*[Signature]*

*6/8/96*

तार :

Telegram : PARYAVARAN,  
NEW DELHI

दूरभाष :

Telephone : 4364968

टेलिक्स (द्विभाषीय) :

Telex : (bi-lingual) : W-66185 DOE IN

FAX : 4360678

भारत सरकार

पर्यावरण एवं वन मंत्रालय

GOVERNMENT OF INDIA

MINISTRY OF ENVIRONMENT & FORESTS

पर्यावरण भवन सी. जी. ओ. कॉम्प्लेक्स

PARYAVARAN BHAVAN, C.G.O. COMPLEX

लोदी रोड, नई दिल्ली-110003

LODHI ROAD, NEW DELHI-110003

August 2, 1996

CITE - MOEF  
(Six Months Copy)

JINDAL TRACTEBEL POWER CO.  
BANGALORE  
RECEIVED  
8/8/96

OFFICE MEMORANDUM

Subject:- Setting up of an Integrated Steel Plant by JVSL -  
2 x 130 MW power plant instead of 2 x 120 MW CPP by JTPCL  
at Toranagallu - environmental clearance reg. *[Signature]*

....

This has reference to letters No. JTPCL/MOEF/502 dated 22nd January, 1996, JTPCL/MOEF/673 dated 30th April, 1996, JTPCL/MOEF/69 dated 30th May, 1996, JTPCL/MOEF/719 dated 18th June, 1996 and JVSL/DLI/110/96 dated 25th June, 1996 from Chief Executive Officer, Jindal Tractebel Power Company Ltd. and Chief Resident Manager, Jindal Vijaynagar Steel Ltd. on the above subject.

2. The matter has been examined in the Ministry and environmental clearance accorded earlier to Jindal Vijaynagar Steel Ltd. for setting up a captive power plant of 2 x 120 MW is hereby transferred in favour of Jindal Tractebel Power Company Ltd. at marginally higher capacity of 2 x 130 MW using 75% corex gas and 25% imported coal containing maximum 0.4% sulphur and 15% ash subject to implementation of following conditions and environmental safeguards

1. The project authorities must strictly adhere to the stipulations made by the Karnataka Pollution Control Board and the State Government.
- ii. No expansion or modernisation of the plant should be carried out without prior approval of the Ministry of Environment and Forests.
- iii. Electro-static precipitators (ESPs) with operation efficiency not less than 99.8% should be provided. Particulate

...2/-

emissions should not exceed the limit of  $150 \text{ mg/Nm}^3$  at any time failing which the plant should be shut down.

- iv. Dust suppression and extraction devices should be installed in coal handling area to control fugitive emissions. ✓
- v. Close circuit cooling i.e. cooling towers should be provided and evaporation losses should not exceed 2%.
- vi. A time bound perspective plan for 100% utilisation of fly ash should be prepared and submitted to this Ministry for approval within six months.

The requirement of land for ash disposal should be based on ash utilisation plan. Ash pond area should be properly lined to avoid ground water contamination. →

- vii. Gaseous emissions and liquid effluent should conform to the standards prescribed by the concerned authorities from time to time.
- viii. Workers in the high noise areas should be provided with ear protection devices and noise levels should not go beyond 85 dB for 8 hours exposure in the work environment.
- ix. Three ambient air quality monitoring stations should be set up in the down wind direction as well as where maximum ground level concentration of SPM,  $\text{SO}_2$  and  $\text{NO}_x$  are anticipated in consultation with the State Pollution Control Board. Stack should be provided with continuous stack monitoring facilities.

Data on ambient air quality and stack emissions should be submitted to this Ministry once in six months and the State Pollution Control Board once in three months.

- x. Treated effluent quality should be regularly monitored along with the flow in consultation with State Pollution Control Board. Monitoring data should be submitted to this Ministry along with other reports on compliance status of the conditions of the clearance letter. Plans should be made to recycle and reuse the treated waste water to the extent possible especially for raising green belt and meeting cooling water

consultation with the local DFO/Agriculture Department using native plant species.

- xii. Necessary approvals from the Inspectorate of Factories, Fire Safety Inspector etc. should be obtained and copies of the approval letters be made available to this Ministry.
- xiii. The project authorities should set up laboratory facilities for collection and analysis of samples under supervision of competent technical personnel who will directly report to the Chief Executive.
- xiv. A separate Environmental Management Cell with suitably qualified people to carry out various functions should be set up under the control of Senior Executive who will directly report to the Chief Executive.
- xv. Funds earmarked for the environmental protection measures should be kept in a separate account and should not be diverted to any other purpose and year-wise expenditure should be reported to the Ministry.

3. The Ministry reserves the right to revoke the clearance if implementation of any of the conditions stipulated by the Ministry or any other competent authority is not satisfactory.

4. The above conditions may be modified or additional ones may be prescribed after examining the monitoring reports prepared by the project authorities from time to time.

5. The stipulated conditions will be monitored by the Regional Office of this Ministry located at Bangalore. A six monthly compliance status report should be submitted to them regularly.

6. Any other conditions or alteration in the existing conditions will be fully implemented by the project authorities within the specified time.

7. 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 Liability Act, 1991 along with their amendments from time to time.

The Secretary  
Ministry of Power

(K.K. Jain)  
Jt. Director

Copy to :

1. Chief Executive Officer, Jindal Tractebel Power Company Ltd., India Executive Centre, 20-Palace Road, Bangalore. (4)
2. Secretary, Ministry of Steel, Udyog Bhavan, New Delhi.
3. Chairman, Karnataka Pollution Control Board, No. 25, 6th, 7th & 8th floor, Public Utility Building, Bangalore.
4. Chief Conservator of Forests, Regional Office, Kendriya Sadan, 4th floor, E&F Wing, 17th Main Road, II-Block, Koramangala, Bangalore.
5. Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi
6. Guard file
7. Monitoring file
8. Record file

Please send a set of documents (EIA report etc.) to addressee no. 4 under intimation to this Ministry.

*[Handwritten signature]*  
578996

*[Handwritten signature]*  
(K.K. Jain)  
Jt. Director

PAGES 5 No.  
Including First Page

No. J-11012/30/94-IA.11(I)

दूरभाष :  
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फैक्स : 4360578

ATTN. OF DR. S.K. GUPTA  
President & Jt. M.D., JVSL  
Regards  
7.3.95  
(Dr. LALIT DOGRA)

भारत सरकार  
पर्यावरण एवं वन मंत्रालय  
GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT & FORESTS  
पर्यावरण भवन, सी. सी. ओ. कॉम्प्लेक्स  
PARYAVARAN BHAVAN, C.O.O. COMPLEX  
लोदी रोड, नई दिल्ली-110003  
LODI ROAD, NEW DELHI-110003

March 6, 1995

OFFICE MEMORANDUM

Subject:- Setting up of an Integrated Steel Plant (1.25 MTPA - HR coils and 49,000 TPA cold pigs) including 240 MW (2 x 120) captive power plant by Jindal Vijayanagar Steel Ltd. (JVSL) at Toranagally - environmental clearance req.

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This has reference to your letter No. JVSL/KSPCB/132 dated 29th June, 1994 and subsequent letters No. JVSL/PROJ/12/715 dated 9th January, 1995 and 1st February, 1995 from Senior Vice President (Engineering), Jindal Vijayanagar Steel Ltd., Bangalore.

2. The project proposal has been examined and environmental clearance is accorded subject to implementation of the following conditions and environmental safeguards :-

- i. The project authorities must strictly adhere to the stipulations made by the Karnataka Pollution Control Board and the State Government.
- ii. No further expansion or modification of the plant including power plant should be carried out without prior approval of this Ministry.
- iii. The off gases from Correx plant should be cleaned in venturi scrubbers before being sent to the power plant. Electrostatic Precipitators (ESPs) with operation efficiency of not less than 99.8 per cent should be provided so as to limit the emissions of particulates below 150 mg/Nm<sup>3</sup> under any circumstances falling which the plant should be shut down.

(Cyclone separators, scrubbers, bag filters etc.) should be provided for removing particulate matter from gas streams so as to limit the emissions well below the prescribed limit of  $150 \text{ mg/Nm}^3$ .

- iv. The gaseous emissions from the various process units should conform to the standards prescribed by the concerned authorities, from time to time. At no time, the emissions should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should be put out of operation immediately and should not be restarted until the control measures are rectified to achieve the desired efficiency.
- v. At least four ambient air quality monitoring stations should be set up in the down wind direction as well as where maximum ground level concentrations of SPM, SO<sub>2</sub> and NO<sub>x</sub> are anticipated in consultation with the State Pollution Control Board. Sampling port holes for collection of samples should be provided in the stacks as per the Central Pollution Control Board guidelines.

Data on ambient air quality and stack emissions should be submitted to this Ministry once in six months and to the State Pollution Control Board once in three months along with its statistics analysis and interpretation.

- vi. In-plant control measures for checking fugitive emissions should be provided. Data on fugitive emissions should be regularly collected and maintain
- vii. Liquid effluents including cooling water emanating from CPP and other sources as also the waste water from the ash pond area should be properly treated to conform to the standards stipulated by the State Pollution Control Board/prescribed under the Environment (Protection) Act, 1986.
- viii. A guard pond of adequate holding capacity should be provided to cope-up with the effluent generated



during the process disturbances/EFP malfunctioning. The contributing unit should be immediately shut down and should not be restarted until the control measures are rectified to attain the desired efficiency.

ix. Efforts should be made to recycle and reuse the treated liquid effluent to the extent possible specially for raising green belt and meeting cooling water requirement. There should not be any discharge from the complex.

x. Influent and effluent quality monitoring stations should be set up along with flow measuring devices in consultation with the State Pollution Control Board. Regular monitoring should be carried out for the relevant parameters. Monitored data along with its statistical analysis and interpretation in the form of report should be submitted to this Ministry once in six months and to the State Pollution Control Board once in three months.

xi. A perspective plan for 100% utilisation of slag and fly ash should be prepared and submitted to this Ministry for approval within six months. The project authorities in their own interest should also have a long term tie-up for the solid waste (slag and fly ash) with the user industry.

The requirement of land for ash disposal should be based on ash utilisation plan. Ash pond area should be properly lined to avoid ground water contamination.

xii. Noise levels in the compressor rooms, oxygen plant, furnaces, rolling mills etc. should be exceeded 85 d

Workers engaged in the noisy work places should be provided with protection devices like ear muffs etc. A monitoring report on noise pollution should be made available to this Ministry once in six months and to the State Pollution Control Board once in three months.

xiii. A detailed Risk Analysis of the proposed storages within the plant premises based on maximum credible accident analysis should be done and report submitted.

to this Ministry along with on-site and off-site emergency preparedness plans required under the Rules 13 and 14 of the Management, Storage and Import of Hazardous Chemicals Rules, 1989.

- xiv. Necessary measures for prevention and control of fire and explosion hazards should be taken. Approval of the Chief Explosives Directorate should also be obtained, if necessary.
  - ✓xv. A green belt preferably of 100 m width and adequate density should be raised all around the plant complex in consultation with the professional organisation and local D.F.O. using native plant species.
  - xvi. Periodic medical check up of the workers especially with respect to the respiratory diseases such as pneumoconiosis etc. should be done and records maintained and occupational health status intimated to this Ministry once in a year.
  - xvii. A comprehensive EIA study should be carried out based on post expansion scenario and 15 copies of the report be submitted to this Ministry at an early date.
  - xviii. The project authorities should set up laboratory facilities for collection and analysis of samples under supervision of the competent technical personnel, who will directly report to the Chief Executive.
  - xix. A separate Environmental Management Cell with suitably qualified people to carry out various functions should be set up under the control of Senior Executive, who will report directly to the Head of the organisation.
  - xx. The funds earmarked for the environmental protection measures should not be diverted for other purposes. Its break-up and year-wise expenditure should be reported to this Ministry.
3. This Ministry or any competent authority may stipulate any further condition(s) on receiving comprehensive EIA and other reports from the project authorities.

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

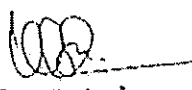
5. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Air (Prevention & Control of Pollution) Act, 1981; the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

(K.K. Jain)  
Jt. Director

The Secretary  
Ministry of Steel  
Udyog Bhavan  
New Delhi

Copy to :

1. The Chairman, Jindal Vijayanagar Steel Ltd., 23/2, Vittal Mallya Road, Bangalore-560 001.
2. The Chairman, Karnataka Pollution Control Board, No. 25, 6th, 7th and 8th floor, Public Utility Bldg., .G. Road, Bangalore-560 001.
3. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi
4. The Chief Conservator of Forests, Regional Office, No. 463, 1st Main, III rd Block, IIIrd Stage, Basaveswara Nagar, Bangalore-560 079.
5. The Director, Regional Offices, M/o Env. & Forests
6. Guard file
7. Monitoring file
8. Record file.

  
(K.K. Jain)  
Jt. Director