Government of India
Ministry of Environment & Forests

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

Dated 10th February, 2011

To

M/s Jindal Steel & Power Limited
Jindal Centre,
12, Bhikaji Cama Place
New Delhi – 110 066

Sub: Directions for the Show cause notice issued under Section 5 of the Environment (Protection) Act, 1986 for revocation of the environmental clearance in view of the non compliance to the conditions stipulated while according environmental clearance to the 6 MTPA Integrated Steel Plant and 1000 MW Captive Power Plant at Kerjang, Angul, Orissa by M/s Jindal Steel & Power Limited - regarding.

Whereas, environmental clearance for 6 MTPA Integrated Steel Plant and 1000 MW Captive Power Plant at Kerjang, Angul, Orissa was accorded to M/s Jindal Steel & Power Limited (JSPL) vide letter No. J-11011/365/2006-IA II (I) dated 22nd February, 2007 subject to stipulation of environmental safeguards; and,

2. Whereas, the Ministry while according prior environmental clearance stipulated the specific condition (xvi) : "no construction activity at the project site shall be initiated till the approval for the 168.232 ha forest land is obtained under the Forest (Conservation) Act, 1980 and subsequent amendments from the State/Central Government"; and,

3. Whereas the Divisional Forest Officer, Angul Division issued Show Cause notice on 6.7.2009 that the construction work like storage godown, roads, foundation for industrial activities like power plant, stockyard plant mill etc. have been undertaken on the non forest government land and you were directed to stop all the activities within the project area till forest clearance is obtained; and,

4. Whereas, a non-compliance was noted and a show cause notice was issued to M/s JSPL on 22nd November, 2010 as to why the aforesaid environmental clearance accorded on 22.2.2007 for 6 MPTA Integrated Steel Plant and 1000 MW Captive Power Plant should not be revoked;

5. Whereas, at the request of M/s JSPL, Ministry granted two weeks’ time with effect from 14th December, 2010 for submission of the information in response to the show cause notice issued;

6. Whereas, the personal hearing took place at 3.00 P.M. on 29th December, 2010, the Minutes of the hearing are enclosed at Annexure-I and as decided in the
meeting, certain additional documents sought have been submitted by M/s JSPL by 10th January, 2011; and

7. Whereina, information furnished by M/s JSPL vide letter dated 10th January, 2011 has been analyzed and following has been noted:

(i) The company will use coal gasification technology, which is for the first time in the country. The technology envisages use of indigenous non-coking coal.

(ii) Regarding captive coal based power plant, fuel linkages for four units of 135 MW has been obtained. Requirement for the balance two units will be met from the middling from washed coal of captive coal mine. It is further noted that COC of 5.2 will be attained. It is also noted that air cool condensers cannot be installed at this stage as selection of water cooled type condenser was done at the time of placement of order for main TG in 2008.

(iii) To conserve the water, dry quenching shall be carried in the coke oven plant.

(iv) To achieve particular emissions below 50 mg/m³, ESP will be installed.

(v) M/s JSPL has obtained permission on 5th October, 2007 from the Central Ground Water Authority (CGWA) to use the ground water. The District Level Committee on Ground Water has decided to give clearance for ground water withdrawal in its meeting held on 3rd December, 2010. Further, it is also noted that as the water withdrawal will be less than 1000 m³/per day, no permission is required for ground water withdrawal from the safe area. This area is in the safe category as specified by the CGWA. The company is not drawing any water from Derjiang dam.

(vi) As regards 100% fly ash utilization, it will be utilized in the company’s own cement plant, which is planned to be set up with capacity of 2 MTPA. Some of the fly ash will be used in brick manufacturing and back filling in the captive coal mine and abandoned coal mines and filling of low lying areas.

(vii) The land area for the plant has been optimized from 2160 ha to 2016 ha. About 33% of the plant area will be brought under green belt.

(viii) M/s JSPL had signed an MoU with the State Government of Orissa on 3rd November, 2005 for setting up of 6 MTPA steel plant and captive power plant. The company has acquired about 1500 ha. of land and rehabilitated about 160 families besides setting up of vocational training institute which is in operation for the last three years. A number of CSR activities have been taken up which inter-alia include construction and renovation of Schools, organization of medical health camps, income generation schemes, distribution of solar lights and solar panels etc.

8. Whereina, in regard to the proposal for diversion of 168.232 ha. of forest land in Angul district, Orissa for the establishment of integrated steel plant by M/s JSPL was accorded Stage - I forest clearance in March, 2010 subject to fulfillment of
various conditions. Subsequently, the final clearance was accorded under Section 2 of the Forest (Conservation) Act, 1980 on 28th October, 2010.

9. Whereas, a circular has been issued by the Ministry on 6th January, 2011 revising para 4.4 of the Guidelines on Forest(Conservation) Act regarding projects involving forests as well as non-forest land. As per this circular, it has been decided that if a project involves forest as well as non-forest land, it is advisable that work should not be started on non-forest land till approval of the Central Government for release of forest land under the Act has been given.

10. Now, therefore, based on the response provided by M/s JSPL in response to the show cause issued by the Ministry vide letter dated 22nd November, 2010, personal hearing held on 29th December, 2010 and additional documents submitted by you and analysis made by the Ministry, the competent authority has approved that the following directions would be given in accordance with the Section 5 of the Environment(Protection) Act, 1986 read with Rule 4 of the Environment(Protection) Rule, 1986:

(I) M/s JSPL shall install the coal gasification technology using non-coking coal for the coke oven plant. The company shall adopt the dry quenching of coke to conserve water and mitigate pollution.

(II) The fly ash generated from various activities shall be used in the cement manufacturing, brick manufacturing and in back filling of mined out area after ascertaining its suitability through a scientific study. The company shall not use the fly ash in filling of low lying area as proposed in the information submitted.

(III) While also implementing CSR related programmes during the construction phase, the company shall earmark 2% of the net profit as CSR budget towards corporate social responsibility. Item-wise details of expenditure proposed on specific need based programmes identified towards this end with time bound execution schedules shall be prepared and submitted to the Ministry’s Regional Office at Bhubaneswar.

(IV) The company shall undertake continuous monitoring of ambient air quality and stack emissions in respect of PM_{10}, SO_{2}, NO_{x} and mercury. The monitored data shall be displayed on the company’s website as well as at important public places.

(V) The water conservation measures shall be adopted in the steel plant as well as the captive power plant by increasing the COC of 5.2. The drawal of water from the Derjung dam shall be avoided and rain harvesting measures shall be undertaken to recharge the ground water as well as use of the rain water harvested by constructing a water reservoir.

(VI) The energy conservation measures for integrated steel plant should be introduced with available best international practices and with details may be submitted to the Ministry in this regard.
11. The company shall comply with all the conditions stipulated vide letter of even No. dated 22nd February, 2007 and subsequently, in a letter dated 14th November, 2008.

12. In case of change in the scope of the project, the company shall inform the Ministry for necessary action.

13. In case of non-compliance of the above directions, the Ministry will be constrained to take necessary action under various provisions of the Environment (Protection) Act, 1986.

This issues with the approval of the Competent Authority.

(Dr. Nalini Bhat)
Scientist 'G'

Encl: As above

Copy to:

1. The Secretary (Environment), Government of Orissa, Bhubaneswar.
2. The Chairman, Orissa State Pollution Control Bhawan, A-118, Neelkanta Nagar, unit (viii), Bhubaneswar.
3. The Chairman, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi – 110 032.
5. Scientist ‘F’ (Monitoring Cell)/Monitoring File/Guard File
6. Website, MoEF.

(Dr. Nalini Bhat)
Scientist ‘G’
MINUTES OF THE HEARING HELD AT 3.00 P.M. ON 29.12.2010 IN ROOM NO. 403, 4<sup>th</sup> FLOOR IN THE MINISTRY OF ENVIRONMENT AND FORESTS ON THE CLARIFICATIONS FURNISHED IN RESPONSE TO THE SHOW CAUSE NOTICE DATED 22.11.2010 BY M/S JINDALS STEEL & POWER LIMITED (JSPL), FOR 6 MTPA INTEGRATED STEEL PLANT AND 1000 MW CAPTIVE POWER PLANT AT KERJANG, DIST. ANGUL, ODISHA.

The Ministry of Environment & Forests issued a show cause notice on 22<sup>nd</sup> November, 2010 to M/s Jindal Steel & Power Limited (JSPL) under Section 5 of the Environment (Protection) Act, 1986 for 6 MTPA Integrated Steel Plant and 1000 MW Captive Power Plant for non compliance to the conditions stipulated while according environmental clearance on 22<sup>nd</sup> February, 2007 by starting construction activity on the non forest Government Land.

2. M/s JSPL vide their letter No. JSPL/ANGUL/MOEF/2010 dated 07<sup>th</sup> December, 2010 requested the Ministry to grant one month time for furnishing the reply due to certain reasons. The Ministry vide letter dated 14<sup>th</sup> December, 2010 granted extension of two weeks time with effect from 14<sup>th</sup> December, 2010 including the personal hearing. They were asked to file the response by 22<sup>nd</sup> December, 2010 and hearing was fixed on 29<sup>th</sup> December, 2010.

3. The hearing took place at 3.00 pm on 29.12.2010. Dr. Nalini Bhat, Scientist ‘G’ heard the matter. Dr. P.L. Ahujarai, Scientist ‘F’, Dr. N.L.N.S Prasad, Scientist ‘F’, Regional office, Bhubaneswar, MoEF, Shri H.C Chaudhary, AIG (FC) and Shri Ramesh Motipalli, Scientist ‘C’ were also present during the hearing.

4. From M/s JSPL, the following officers attended the hearing:

(i) Shri S. K. Sharma, GM. (L&A)
(ii) Dr. J.K. Soni, AVP (Environment)
(iii) Shri Rajesh Kumar Jha, ED, JSPL
(iv) Shri R.S. Sharma, MD, JPL
(v) Shri Anand Goel, Joint M.D. JSPL
(vi) Shri Bharat Rohra, Ex. V.P, JPL
(vii) Shri Jagat Parija, Vice President, JSPL

5. Initiating the hearing, Dr. Nalini Bhat, Scientist ‘G’ informed the representatives of M/s JSPL that the purpose of the hearing is to discuss the issues in response to the show cause notice issued by the Ministry. M/s JSPL were informed that the above show cause notice was issued based on the representations received by MoEF. The Ministry has received submissions made by you and at your request personal hearing has been given. She further informed them that any additional document required will need to be provided by you. M/s JSPL were asked to give their reply/clarifications in form of presentation or oral submissions.

6. The response of M/s JSPL on the issues /clarifications include the following:

- The environmental clearance was accorded on 22<sup>nd</sup> February, 2007 and an amendment to the environmental clearance was issued on 14<sup>th</sup> November, 2008.
M/s JSPL informed that a MoU was signed with Orissa State Govt. on 3rd November, 2005 for the above project. As per the MoU, the plant was to be commissioned within a time period of six years.

- Cost of the project is about Rs. 25,000 crores and would give direct employment to 6,000 persons and indirect employment to 18,000 persons.
- The total project area is 2,016 ha of which, 168.232 ha is forest land which is 8% of the total plant area. The forest area is in 33 patches which has been fenced.
- This is for the first time in the Country wherein State-of-the-art Eco-friendly technology is being installed in the plant which would result in very low CO₂ emissions. The gasifier technology for coal gasification is an advance technology from South Africa. The DRI would run on the gas generated from the coal gasification.
- Dry quenching is proposed for the coke oven plant. Firm coal linkage is available for CPP. The total CPP capacity is 1156 MW with a breakup of CFBC-1080 MW (8X135 MW), WHRB-62 MW and 14 MW from the TRT (Top Gas Recovery Turbine) i.e. power generated from potential energy/ pressure Energy.
- The land acquisition is in progress. By the year 2008 about 1,000 ha of land area was acquired and as on date about 1550 ha of area is in their possession and 450 ha of land area is yet to be acquired. Out of 663 ha of land area to be developed under green belt, as on date 50 ha of area has been brought under green belt. Entire 663 ha of area would be under green belt by the date of commissioning of the plant. The tentative period of commissioning would be in the year 2015.
- About 435 families are to be displaced from the project site. 165 families have been shifted at a distance of 3 km from the project site. The company has undertaken a number of CSR activities which involve community development, women empowerment programme by means of income generating programme, provision of sustainable livelihood and setting up of schools etc.

7. Specific to the show cause notice issued, M/s JSPL informed that they had applied for forest clearance in the year 2006 and the Forest Advisory Committee meeting took place in year 2008. The Stage-I Forest Clearance under the Forest (Conservation) Act, 1980 was obtained on March 30, 2010 and Stage-II Clearance under the Forest (Conservation) Act, 1980 has been obtained on October 28, 2010. The forest patches have not been touched at all.

8. The MoU signed with Orissa State Govt. had a condition that within 3 years, the land acquired has to be utilized. Engagement/employment of the land oustees is a big issue. There are 6 villages in the project site and a number of them on the periphery of the project site. A kuccha road has been laid in the non-forest land, to convey machinery which had arrived. Temporary constructions have been made to protect the machinery from being affected by the weather or from its parts being stolen. The kuccha road is also used by the villagers.

9. Additionally, M/s JSPL submitted that insertion of condition (xvi) in the environment clearance regarding "no construction activity at the project site shall be initiated till the approval for the 168.232 ha forest land is obtained under the Forest (Conservation) Act, 1980 and subsequent amendments from the State/Central Government" appears to be based on Clause 4.4 of Chapter 4 of the Handbook
issued by the Ministry. The interpretation of Clause 4.4 by M/s JSPL include the following:

(i) That the provisions of the Forest (Conservation) Act are not violated by starting construction works in non-forest land, and

(ii) That this clause is only intended to prevent the expenditure involved from proving “to be infructuous if diversion of forest land involved is not approved” as is also evident from plain reading of said Office Memorandum dated 02.12.2009 of the Ministry of Environment & Forests.

(iii) As there may be no violation of the Forest (Conservation) Act, 1980 as pointed out in Clause 4.4, and as it is intended to protect the expenditure from becoming infructuous and in view of the fact that the forest clearance has been given in regard to both Stages-I and II, it is submitted that no case for withdrawal of the environmental clearance arises.

10. The Regional Office of the MoEF at Bhubaneswar visited the site on 21st December, 2010. Certain observations have been made in the report. Further, one more representation has been received by the Ministry expressing concern regarding impact of drawl of water on the agriculture crops. Based on the submissions made by the proponent, observations made in the site inspection report and representations received, the following additional information / clarification was sought from M/s JSPL by 10th January 2011.

- Chronology of details of activities undertaken from February, 2007 to October, 2010 in the non forest land and proof that no activity was undertaken in the forest land.
- The activities undertaken shall also be shown on the location map.
- Clarification on the representation received by MoEF w.r.t. drawl of ground water and hence depriving the local people. A copy of the permission obtain for ground water drawl shall be submitted. Further, water is to be drawn from the Derjang Dam. Impact on the neighboring village due to drawl of water vis-à-vis mitigation measures shall be submitted.
- A detailed note on Water Conservation measures including installation of Air Cooled Condensers and COC more than 5 for the Captive Power Plant.
- Commitment for dry quenching in the coke oven plant
- Commitment / feasibility for control of Particulate emissions<50 mg/Nm³.
- Action plan for management of solid waste.
- The commitment regarding “that 663 ha of plant area will be covered under green belt before the operation of the plant.

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