

EC Stage - VI

ISF

FROM : HINDALCO NEW DELHI

PHONE NO. : 91 11 3718378

DEC. 03 2001 03:43PM P2

No.J.13012/23/98-IA.II (T)
Government of India/Bharat Sarkar
Ministry of Environment and Forests
(Paryavaran Aur Van Mantralaya)

Paryavaran Bhavan
CGO Complex, Lodi Road,
New Delhi-110003.

November 28, 2001.

To

Ms N. Chainani,
Executive President,
(Corporate Affairs & Dev.),
Hindalco Industries Limited,
UCO Bank Building, 4th Floor,
Parliament Street,
New Delhi-11001.

Subject : 2x80 MW Renuagar Power Plant (Expansion of Stage-VI)
at Renuagar, Sonbhadra District, Uttar Pradesh of M/s
Hindalco Industries Limited - Environmental Clearance.

Madam,

The undersigned is directed to refer to your communications dated 19th March, 1st June, 29th August and 5th November, 2001 regarding the environmental clearance for the above mentioned project.

2. The proposal regarding expansion of the existing Renuagar Power Plant from its present capacity of 581.7 MW to 741.7 MW by addition of two units of 80 MW capacity each has been examined in the Ministry. It is noted that Stage-VI Units will be accommodated in the premises of existing power station and that the additional area requirement will be to the tune of 151.25 acres for disposal of fly ash from existing and proposed expansion units. Rihand Reservoir will remain source of water for the project and the promoters have committed that there will be no discharge of treated effluent

either into reservoir or outside the plant premises for irrigation purposes. Transportation of coal would be from the existing two aerial ropeways from Jhingardah Coal mines of Northern Coalfields Limited. It is also noted that public hearing for the project was conducted on 7th March, 2001 by U.P. Pollution Control Board and NOC was subsequently issued on 22nd March, 2001. The expansion project is expected to cost Rs.579.10 crores.

3. The project was considered in the Ministry on the basis of information submitted by Renuagar Power Division, Hindalco Industries Limited from time to time and environmental clearance is hereby accorded subject to implementation of following terms and conditions -

- i) All the conditions stipulated by Uttar Pradesh Pollution Control Board vide their letter No. G-19804/C-2/NOC/3227/2001 dated 22nd March, 2001 should be strictly implemented.
- ii) The expansion units (2x80 MW) should be installed in the space available in the premises of the existing power station and land acquisition for ash disposal should also be restricted to 151.25 acres at new ash disposal area.
- iii) A stack of height 130 mts should be provided with continuous monitoring system and it should be ensured that exit velocity is maintained at 20.3 m/sec and temperature at 130^o C as these have been used as input parameters for estimation of GLC values.
- iv) Electro-static Precipitator having efficiency of not less than 99.8% should be installed and it should be ensured that particulate emission would not exceed the prescribed limit of 100 mg/Nm³.
- v) Only make up water for the project should be drawn from Rihand Reservoir as per the permission given by U.P. Irrigation Department. Closed Circuit Cooling Towers should be provided for conservation of water. As committed, zero discharge of effluent should be adhered to and at no stage discharge of treated water would be permitted either into the reservoir or for irrigation outside the plant premises.

- vi) All effluents generated in various plant activities should be collected in the Central Effluent Treatment Plant/Central Monitoring Basin and treated to ensure adherence to specified standards of usage.
- vii) Coal for the project, as far as possible, from Jhingurdah Coal Mines of Northern Coalfields Limited should be used @ 1310 TPD for the expansion units. Fuel should be transported only through existing two aerial ropeways from Mine Head to the project site. In case of change of coal mine, details of fuel analysis and mode of transportation should be submitted to the Ministry for approval.
- viii) For maintaining the pollution load at existing levels and for its improvement and also to ensure that the expansion project involving installation of two units of 80 MW capacity each does not deteriorate existing environmental status, it should be ensured that revamping and upgradation programme for control of SPM, SO₂ and NO_x is undertaken and synchronized with commercial operation of the expansion units.
- ix) All recommendations made by the State Department of Environment, Government of U.P. vide their letter dated 21st July, 2001 along with the conditions stipulated in the report of the Committee constituted by the State Government to examine the expansion proposal should be strictly adhered to.
- x) Noise level should be limited to 75 dBA and regular maintenance of equipment be undertaken. For people working in the area of generator halls and other high noise areas, earplug should be provided.
- xi) For controlling fugitive dust, regular sprinkling of water in coal handling and other vulnerable areas of the plant should be ensured. In addition, use of Chem-jet for controlling fugitive dust at coal handling site should also be continued as reflected in the environmental management programme submitted to the Ministry.

- xii) With 39% average ash content, ash generation for the expansion project should not exceed 3.2 lakh tonnes per annum. As per MOEF Notification of September, 1999, 100% ash utilization should be ensured within 9 years of commissioning of the plant. The use of ash disposal area accordingly should be restricted to 151.25 acres. A greenbelt of 100 m on Eastern side and 50 m on Southern side should be developed covering an area of 36 acres. Ash storage area should be limited to only 70 acres. For avoiding contamination of ground water, ash disposal area should be covered with LDPE lining.
- xiii) Detailed Socio-economic survey should be undertaken for the additional area proposed to be acquired for ash disposal. The resettlement plan should be got approved from District Collector and submitted to the Ministry within six months. As submitted in the EIA report, there should be no displacement of people due to the acquisition of land.
- xiv) A detailed scheme for afforestation programme covering an area of 49.5 ha including 14.50 ha around the new ash dyke should be submitted to the Ministry clearly indicating width of greenbelt along the plant boundary, ash disposal area, internal roads etc. A norm of 1500-2000 trees per ha should be followed for afforestation programme. Financial allocation of Rs.38.16 lakhs should be included in the budget of the project for this purpose. Detailed proposal in this regard should be submitted to the Ministry within 3 months. For ensuring good quality of plants of specified species, a nursery should be created in consultation with State Forest Department and National Botanical Research Institute, Lucknow.
- xv) Hindalco Industries Limited should establish special Environmental Cell at site for this project for consultation on day to day basis during project planning and implementation of the project. As submitted dated 5th November, 2001, experts should be consulted for specific issues.
- xvi) Regular monitoring for SPM, SO₂ and NO_x around the power plant may be carried out and records maintained. Monitoring

Stations should be established in consultation with the State Pollution Control Board.

- xvii) The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned, informing that the project has been accorded environmental clearance and copies of clearance letters 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://www.envfor.nic.in>.

The Advertisement should be made within 7 days from the date of issue of the clearance letter and a copy of the same should be forwarded to the Regional Office.

- xviii) A monitoring Committee should be constituted for reviewing the compliance of various safeguard measures by involving recognised local NGOs, Pollution Control Board, Institutions, Experts etc.
- xix) The Project Authorities should 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 start of land development work.
- xx) Full cooperation should be extended to the Scientists/Officers from the Regional Office of the Ministry at Lucknow/the CPCB/the SPCB who would be monitoring the compliance of environmental status. Complete set of impact assessment report and the Management Plans should be forwarded to the Regional Office for their use during monitoring.

4. The Ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry.

5. In case of any deviation or alteration in the project proposed from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the conditions imposed and to add additional environmental protection measures required, if any.

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PHONE NO. : 91 11 3718370

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6. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 1989, the Public Liability Insurance Act, 1991, the Impact Assessment Notification of January, 1994 and its amendments.

N. Bhat
(Nalini Bhat)
Director

Copy to :-

1. The Secretary, Ministry of Power, Shram Shakti Bhavan, Rafi Marg, New Delhi.
2. The Secretary (Environment), Government of Uttar Pradesh, Lucknow.
3. The Chairman, Central electricity Authority, Sewa Bhavan, R.K. Puram, New Delhi.
4. The Chairman, U.P. Pollution Control Board, Lucknow with the request to display a copy of the clearance letter at the regional office, district industries center and collector's office/tehsildar's office for 30 days.
5. The Chairman, Central Pollution Control Board, East Arjun Nagar, Delhi-110032.
6. Chief Conservator of Forests, Regional Office, Lucknow.
7. The Chairman, Singrauli Area Development Authority (SADA), Lucknow.
8. Guard file.

(Nalini Bhat)
Director