

No.J-12011/46/2004-IA-I
Government of India
Ministry of Environment & Forests

Paryavaran Bhawan,
C.G.O. Complex, Lodi Road,
New Delhi-110003

Dated: 31.03.2005

The Chairman & Managing Director,
National Hydroelectric Power Corporation Ltd.,
NHPC Office Complex,
Sector-33,
FARIDABAD – 121003
HARYANA

Subject: Teesta Low Dam Hydro Electric Project, Stage-IV (160 MW) in District Darjeeling, West Bengal – Environmental Clearance reg.

Sir,

This has reference to your letter No.NH/PD/Env.96/2988 dated 03.11.2004, 27.01.2005 & 08.02.2005, on the above subject.

2. The above-referred proposal was considered by the Expert Committee for River Valley & Hydroelectric projects at its meeting held on 09.12. 2004 & reconsidered on 09.02.2005. It has been notice that the proposed site is located near Kalijhora village of Darjeeling district, West Bengal for construction of a 30 m high concrete dam with a surface power house at left bank of river Teesta. Total land requirement is 614.16 hectare. Out of that 338.05 ha. is forest land. 275.69 ha. forest land is going to be submerge. Forest clearance has been issued on 12.01.2005. There are no archaeological sites/ monuments in the project area. No population will be submerged due to this project. However the project authority proposed the socioeconomic upliftment and safety of 11 families living downstream of the dam axis. Public hearing was held on 08.09.2004 at Kalijhora in Darjeeling district. The capital cost of the project is 998.36 Crores.

3. The Environmental Management Plan submitted by NHPC has been examined. The Ministry of Environment and Forests hereby accords environmental clearance as per the provisions of Impact Assessment Notification, 1994, subject to strict compliance of the terms and conditions as follows:

Part A: Specific Conditions

(i) Catchment Area Treatment Plan as has been proposed should be completed in four years. The plan is reproduced below:

Treatment Measures	Unit	1 st Year	2 nd Year	3 rd Year	4 th Year	Total
A. Biological Treatment						
Afforestation	ha	-	90.00	90.00	90.00	270.00
FW / fodder / broom grass plantation	ha	-	60.00	40.00	37.00	137.00
Pasture development	ha	-	80.00	55.00	45.00	180.00
Natural Regeneration	ha	-	120.00	130.00	130.00	380.00
Agro forestry	ha	-	50.00	50.00	45.00	145.00
Bamboo PI & soil binding sp.	ha	-	12.00	12.00	9.00	33.00
Medicinal plantation	ha	-	1.50	2.50	1.00	5.00
Sowing & broadcasting	ha	-	42.00	42.00	42.00	126.00
Vegetative fencing	km	-	20.00	14.00	3.00	37.00
Nursery creation	No	-	5.00	5.00	-	10.00
B. Engineering Treatment						
Sausage wall	cum	1250.00	1050.00	1500.00	1200.00	5000.00
Crete wall	cum	1275.00	1060.00	1445.00	1220.00	5000.00
Catch water drain	RMT	425.00	310.00	590.00	425.00	1750.00
Step drain	RMT	320.00	275.00	375.00	280.00	1250.00
Rubble masonry with Brest stone	cum	890.00	770.00	1005.00	835.00	3500.00
CC Wall 1:3:6	cum	60.00	55.00	92.00	37.00	244.00
CC Wall 1:2:4	cum	65.00	60.00	40.00	35.00	200.00
Plump Concrete 1:4:8	cum	90.00	70.00	75.00	55.00	290.00
Belly benching(Palisade)	RMT	2150.00	1870.00	1610.00	1370.00	7000.00

(ii) For the socioeconomic upliftment and safety of total 41 persons from 11 families living downstream of the dam axis should be rehabilitated as per R & R plan proposed in EMP report.

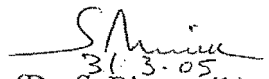
(iii) Though flow of Teesta river is very fast, but due to unforeseen situation the flow of river may slow down at certain points due to construction activities. This may give rise to breeding of mosquitoes. There are some malaria vectors which can breed in slow moving streams. This part of the river should be properly channelised so that no small pools and puddles are allowed to be formed.

- (iv) Tributaries to the Teesta river near Reang, form the preferred breeding sites for Mahaseer fish. To permit upstream migration of the fish for breeding a fish ladder has been proposed in the design of dam. For conservation of the migratory fishes Central Institute of Fisheries Education, Kolkata has suggested some measures in their report. These measures should be followed.
- (v) The Mahananda Wildlife Sanctuary is approximately 0.35 Km downstream from the project. For minimising disturbance to animals in Mahananda Sanctuary, only controlled blasting should be undertaken. The Biodiversity Conservation Plan for protection of Flora & Fauna proposed in EMP, should be followed in toto.
- (vi) Downstream of the dam, flood-zoning approach should be done. No settlement should be allowed within flood zone.
- (vii) For the Restoration of Dumping area, a proper care should be taken to avoid any spillover of muck into the riverbed and its flow into the river during the high discharge or flood or monsoon period. The area should be properly afforested with suitable plantation.

Part-B: General Conditions

- (i) Adequate free fuel arrangement should be made for the labour force engaged in the construction work at project cost so that indiscriminate felling of trees is prevented.
- (ii) Fuel depot may be opened at the site to provide the fuel (kerosene/wood/LPG). Medical facilities as well as recreational facilities should also be provided to the labourers.
- (iii) All the labourers to be engaged for construction works should be thoroughly examined by health personnel and adequately treated before issuing them work permit.
- (iv) A Monitoring Committee for R & R should be constituted which must include representatives of project-affected persons from ST category and a woman beneficiary.
- (v) Restoration of construction area including dumping site of excavated materials should be ensured by leveling, filling up of burrow pits, landscaping etc. The area should be properly treated with suitable plantation.
- (vi) Financial provision should be made in the total budget of the project for implementation of the above suggested safeguard measures.
- (vii) A Multidisciplinary committee should be constituted with representatives from various disciplines of forestry, ecology, wildlife, soil conservation, NGO etc. to oversee the effective implementation of the suggested safeguard measures.

- (viii) Six monthly monitoring reports should be submitted to the Ministry and its Regional Office, Shillong for review.
4. Officials from Regional Office MOEF, Bhubaneswar who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents / data by the project proponents during their inspection.
5. The responsibility of implementation of environmental safeguards rests fully with the NHPC & Government of West Bengal.
6. In case of change in the scope of the project, project would require a fresh appraisal.
7. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary and to take action including revoking of the clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time- bound and satisfactory manner.
8. This clearance letter is valid for a period of five years from the date of issue of this letter for commencement of construction work.
9. A copy of the clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom any suggestion/ representation has been received while processing the proposal.
10. State Pollution Control Board / Committee should display a copy of the clearance letter at the Regional Office, District Industries Center and Collector's office/ Tehsildar's office for 30 days.
11. 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](http://www.envfor.nic.in)


31.3.05
(Dr. S. Bhowmik)
Additional Director