

**No. J-21011/17/2007-IA-I**  
Ministry of Environment & Forests  
Government of India  
(IA-I Division)

Paryavan Bhavan  
CGO Complex, Lodi Road  
New Delhi - 110 003

Date: 16<sup>th</sup> January, 2013

To

The Executive Director (Planning)  
NHPC Ltd.,  
NHPC Office Complex, Sector -33,  
Faridabad -121003 (Haryana)

**Subject: Loktak Downstream HEP (66 MW) project in Tamenglong District of Manipur by M/s. NHPC Ltd- for Environmental Clearance - regarding.**

Sir,

This has reference to your letter no. NH/PD/Env.72/1837 dated 18.07.11 and subsequent letters dated 5.12.2011, 25.5.2012, 21.6.2012, 13.8.2012, 10.9.2012, 13.10.2012 and 15.10.2012 on the above mentioned subject.

2. It is noted that the project is proposed on the Leimatak River (a tributary of Irang River) near Tousang khunou village in Tamenglong District of Manipur. The project envisages construction of 28 m high barrage across Leimatak River to generate 66 MW of hydropower. This is run of-the river scheme. This project will utilize, the tail race discharge of powerhouse of the upstream commissioned Loktak 105 MW project along-with the inflow of the River Leimatak will be used for power generation. The total land requirement is 211.50 ha forest land, which is of four types viz. wet paddy fields, community land, Jhum land and unclassified forest land. Total submergence is about 62.50 ha of forest land. A surface powerhouse is proposed on left bank of river with 2 units of 33 MW each. A total of 705 families are likely to be affected due to loss of their right over 211.50 ha community and unclassified forest land. It was informed that there is no National Park /Wildlife Sanctuary /Biosphere Reserve/Historical Monuments/Religious places within the 10 Km radius of the project. The total project cost is reported as Rs.867.77 Crores, out of which Rs.79.99 Crores will be for EMP and project construction period as indicated as 78 months.

3. The project was considered by the Expert Appraisal Committee for River-Valley & Hydroelectric Projects in its meetings held on 11-12<sup>th</sup> November, 2011; 20-21<sup>st</sup> July, 2012 and 12-13<sup>th</sup> October, 2012. The Public Hearing for the Project was conducted on 7.6.2011 at Thangal village in Tamenlong District, Manipur.

4. The Expert Appraisal Committee (EAC), after due consideration of the relevant documents submitted by the project proponent and clarifications furnished in response to its observations, have recommended for grant of Environmental Clearance for the project mentioned above. Accordingly, the Ministry of Environment and Forests hereby accords necessary Environmental



Clearance for the above project as per the provisions of Environmental Impact Assessment Notification, 2006 and its amendment in 2009, subject to compliance of the following conditions:

**Part A: Specific Conditions**

- (i) The Catchment Area Treatment (CAT) plan, as proposed in EIA/EMP Report shall be undertaken in consultation with State Forest Department and major works shall be completed before impounding of reservoir. The year-wise details of CAT plan is as follows:

Treatment Measures	I Year	II Year	III Year	IV Year	V Year	VI Year	VII Year	Total
<b>Biological Measures</b>								
Afforestation (ha)	308.37	355.84	281.86	280.68	271.18	253.38	226.68	1978
Assisted Natural Regeneration(ha)	66.47	76.70	60.76	60.50	58.45	54.62	48.86	426
Pasture Improvement (ha)	87.61	101.10	80.08	79.74	77.05	71.99	64.40	562
NTFP Regeneration (ha)	107.66	124.23	98.40	97.99	94.68	88.46	79.14	691
Nursery Development	1	1	--	--	--	--	--	2
<b>Engineering Measures</b>								
Brushwood check dams (Nos)	98	45	52	52	48	40	32	367
DRSM check dams (Nos)	92	64	73	71	55	35	25	415
Wire Crates (ha)	91.75	105.88	83.87	83.52	80.69	75.39	67.45	589
Contour Bunding (ha)	144.45	166.69	132.03	131.48	127.03	118.69	106.19	927
Bench Terracing (ha)	126.46	145.93	115.59	115.11	111.21	103.91	92.96	811

- (ii) The details of land holding of the project affected persons whose land is being acquired shall be submitted to this Ministry including Regional Office. The R&R benefits for the land losing households will be as per the National Rehabilitation and Resettlement Policy, 2007 (NRRP-2007) or as per the State Rehabilitation and Resettlement Policy, whichever is more beneficial to project affected persons (PAFs). Adequate publicity of the compensation package of NRRP 2007 shall be given in the affected villages.
- (iii) A Monitoring Committee for R&R shall be constituted which must include representatives of project affected persons including from SC/ST category and a woman beneficiary.
- (iv) All the commitment made during the public hearing shall be fulfilled completely by the developer.
- (v) Dumping and consolidation/compilation of the muck shall be carried out only in the designated muck dumping sites as submitted in the EIA/EMP report. As per the proposed muck disposal plan given in your EIA/EMP, out of the 10 lakh m<sup>3</sup> of muck to be generated 3.44 lakh m<sup>3</sup> will be utilized for construction purpose and remaining 6.26 lakh m<sup>3</sup> will be

dumped at 3 designated disposal sites in an allocated area of 49 ha. The dumping sites shall be at least 30 m horizontally away from the high flood level (HFL) of the river.

- (vi) A minimum environmental flow of 4.47 cumec shall be maintained throughout the year. For monsoon months (June-September), environmental flow will be 10 cumec shall be maintained for sustenance of the aquatic life in the downstream. Continuous monitoring system for the flow measurement shall be installed and data be displaced at appropriate site for civil society and stake holders. Six monthly results shall be submitted to the Regional Office of the Ministry and SPCB.
- (viii) To enhance the environment of project site, greenbelt, as proposed in the EIA/EMP Report, shall be developed. The proposed greenbelt along the periphery of reservoir shall be undertaken in 2 layers covering a total area of 97.73 ha. The same shall be strictly adhered and the allocated budget of Rs.35.03 lakhs shall be fully utilized and not to be diverted to any other purpose.
- (ix) The Biodiversity Conservation and Wildlife Management Plan shall be taken-up as outlined in the EMP and as submitted vide letter no. NH/ PD/ Env. 72/ 2932(a) dated 15.10.2012 and implemented in consultation with the State Forest Department without any diversion of funds. The proposed budget of Rs.644 lakhs (vide letter no.NH/PD/Env.72/2932(a) dated 15.10.2012) for this purpose shall be fully utilized and not to be diverted for any other purpose. A report of implementation shall be included in the sixth monthly progress and compliance report to be submitted to the Ministry including its Regional Office.
- (x) Equipment likely to generate high noise levels shall meet the ambient noise standards as notified under the Noise Pollution (Regulation and Control) Rules, 2000, as amended in 2010 under the Environment Protection Act (EPA), 1986. For this necessary insulation arrangements etc., to be ensured.
- (xi) A provision of 1.5% of the total project cost (i.e. Rs. 1300 lakhs) earmarked towards the Community and Social Development Plan (Local Area Development) as submitted vide letter no. NH/PD/Env.72/2932 (a) dated 15.10.12 shall be fully utilized for this purpose and not to be diverted for any other purpose. In addition, a grant of Rs. 406.70 lakhs earmarked for Public health delivery system; Rs. 65.50 lakhs for Fuel provision for local community and Rs. 334 lakhs for Restoration of construction areas shall also be duly utilized and not be diverted for any other purpose.
- (xii) LADA activities may be undertaken by M/s. NHPC Ltd to enhance delivery mechanism for operational point of view.

#### **Part B: General Conditions**

- (i) Adequate arrangements for providing free fuel like kerosene/wood/LPG shall be made at the project cost for the labour engaged in the construction work so that indiscriminate felling of trees is prevented.
- (ii) Medical facilities as well as recreational facilities shall also be provided to the labourers.
- (iii) The labourers to be engaged for construction works shall be thoroughly examined by health personnel and adequately treated before issuing them work permit.



- (iv) Water sprinkling arrangements shall be made to suppress the fugitive emissions.
  - (v) Potable drinking water and proper sanitary facilities shall be provided for the labour force.
  - (vi) Restoration of construction area including dumping sites of excavated materials shall be ensured by leveling, filling up of borrow pits, landscaping etc. The area should be properly treated with suitable plantation.
  - (vii) A Multi-Disciplinary Committee (MDC) to monitor environmental safeguards during the construction phase shall be constituted by the project proponent in consultation with the Ministry as early as possible. The proponent shall suggest the members and their profile for approval of the Ministry. The project proponent shall organize six monthly meetings of the committee and submit the monitoring report to the Ministry.
  - (viii) Environmental parameters shall be monitored and six monthly monitoring reports shall be submitted to the concerned Regional Office of the Ministry and to Ministry of Environment and Forests, New Delhi for their review.
  - (ix) Disaster Management Plan shall be prepared in consultation with the District Authorities and early warning telemetric system shall be installed.
5. The Project Proponent shall provide full cooperation and all required documents / data to the Officials from concerned Regional Office of the Ministry who would be monitoring the implementation of environmental safeguards.
6. The responsibility of implementation of environmental safeguards rests fully with the M/s. NHPC Ltd and Government of Manipur
7. Besides the above stated conditions, the Project Proponent shall also implement all other environmental safeguards, as proposed in the EIA/EMP report and other reports from time to time. The Government of Manipur may also like to monitor implementation of EMP at regular intervals.
8. The Environmental Management Plan (EMP) shall be strictly adhered to and a sum of Rs. 79.99 Crores, the budgetary provisions for implementation of EMP shall be fully utilized and not to be diverted for any other purpose.
9. In case of change in the scope of the project shall be intimated to the Ministry and fresh approval, if required, shall be taken from the Ministry.
10. 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.
11. This clearance letter is valid for a period of 10 years from the date of issue of this letter for commencement of construction work.
12. A copy of the clearance letter shall be marked to concerned Panchayat/Zilla Parishad/Municipal Corporation, Urban local body and local NGO, if any, from whom any suggestion/representations were received while processing the proposal. The clearance letter shall also be put on website by the project proponent.



13. State Pollution Control Board / Committee shall display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's / Tehsildar's Office for 30 days.
14. 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 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.moef.nic.in>.
15. After 5 years of the commissioning of the Project, a study shall be undertaken regarding impact of the project on the environment and downstream ecology. The study shall be undertaken by an independent agency, decided in consultation with the Ministry.
16. The project proponent shall also submit six monthly reports on the status of compliance of stipulated EC conditions including the results of monitored data (both in hard copies as well as by email) including the respective Regional Office of MOEF and Zonal Office of CPCB and SPCB.
17. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days from the date of issue, as prescribed under Section-10 of the National Green Tribunal Act, 2010.

Yours faithfully,



(B. B. Barman)  
Director

**Copy to:**

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi -1.
2. The Advisor (Power), Planning Commission, Yojna Bhawan, New Delhi -1.
3. The Principal Secretary (Power), Government of Manipur, Imphal-795001
4. The Principal Secretary (Forests & Environment), Government of Manipur, Imphal-795001
5. The Chief Engineer, Project Appraisal Directorate, Central Electricity Authority, Sewa Bhawan, R. K. Puram, New Delhi -110 066.
6. The Additional PCCF, Regional Office (NEZ), Ministry of Environment & Forests, Law-U-Sib, Lumbatngen, Near MTC Workshop, Shillong- 793 021, Meghalaya.
7. The Member Secretary, Manipur Pollution Control Board, Lamphelpat, Near Imphal West DC, Office Complex, Imphal-795 004, Manipur
8. EI-Division, Ministry of Environment & Forests, New Delhi -110003.
9. Guard File.



(B. B. Barman)  
Director