

No. J-12011/7/2009-IA.I (Vol-II)  
Government of India  
Ministry of Environment, Forest & Climate Change  
[IA.I - Division]

Indira Paryavaran Bhavan  
3rd Floor, Vayu Wing  
Jor Bagh Road  
New Delhi —110 003.

Dated: 10<sup>th</sup> July, 2017

To

The Chief Engineer  
M/s. Vishweshwaraya Jala Nigam Limited  
Government of Karnataka  
Upper Bhadra Project Zone  
Chitradurga – 577 501  
Karnataka

**Sub: Upper Bhadra Lift Irrigation Project in Chikkamagalur District of Karnataka by M/s. Vishweshwaraya Jala Nigam Limited, Government of Karnataka – Environmental Clearance (EC) for Expansion Project - regarding.**

Sir,

1. This has reference to your letter No. CEC/KNNL/UPBZ/Pak-2/TA-2/TS-1/MoEF/2016-17/2914 dated 8.12.2016, 20.12.2016 and 9.3.2017 on the above mentioned subject.
2. The Upper Bhadra Lift Irrigation Project (Stage-I) was accorded environmental clearance on 5.1.2010. The project neither involved submergence nor construction of new dams/weirs. The project involves lifting of water from Tunga river to Bhadra reservoirs in 2 stages. The dam has already been constructed for Bhadra reservoir and now, it is proposed to construct the canal from Bhadra reservoir to delivery chamber including 3 lifts and 6.90 km long tunnel and canal network. This canal would convey water to the drought-prone areas of Chikkamagalur and Chitradurga Districts utilizing 21.5 TMC of water to provide irrigation facility to 1,07,265 ha of dry land through gravity flow irrigation system. The project also involves filling up of 37 MI tanks to cater the needs of drinking water supply in Chitradurga, Tumakur and Kolar Districts. Considering the availability of water for the project and needs of the farmers of Davanagere and Tumakuru Districts, it was decided to provide irrigation facility to these Districts within the availability of water.
3. The expansion project (Stage-2) utilizes the same infrastructure of Stage-I to irrigate additional 1,18,250 ha of drought prone area and fill up additional 367 MI tanks in command area, thus improving water table and providing a major source of drinking water. Further, to achieve water conservation, the entire command (existing 1,07,265 ha + proposed 1,18,250 ha) area is proposed for drip irrigation system by utilizing 29.9 TMC of water. After tunneling, it is planned to irrigate an extent of 2,25,515 ha of irrigation (Stage-II) in the Districts of Chikkamagalur, Chitradurga, Tumakuru and Davanagere benefiting 787 villages.



4. The project envisages utilization of 29.9 TMC of water. Out of which, 19.04 TMC of water is required for irrigating 2,25,515 ha command area and remaining 10.86 TMC of water for filling up of MI tanks. Total land requirement for the project is 2114 ha and the land required is only for construction of main canals, tunnel and delivery chambers. The land will be acquired as per the Right to Fair Compensation and Transparency in Land Acquisition Act, 2014. For implementation of Stage-I of the project, 318.62 ha of forest land is required and Stage-I FC Clearance was obtained on 12.11.2015, 11.2.2016 & 4.3.2016. No forest land is required for implementation of Stage-II of the project. Total cost of the project is Rs. 12,340 crores.

5. The above referred proposal was considered by the Expert Appraisal Committee (EAC) for River Valley & Hydroelectric Projects in its meetings held on 30<sup>th</sup> December, 2016 and 2-3<sup>rd</sup> March, 2017. The comments and observations of EAC on the project may be seen in the Minutes of these meetings which are available on the web-site of this Ministry. The Public Hearings were conducted in all the 2 Districts viz. The public hearings were conducted in 2 Districts viz., Huliya village, Tumakuru District on 19.10.2016 & at Jagalur, Davanagere District on 8.11.2016 of Karnataka.

6. The Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and clarification furnished in response to its observations, have recommended for grant of Environmental Clearance for the project mentioned above. Accordingly, the Ministry of Environment, Forest & Climate Change hereby accords necessary environmental clearance for the above project as per the provisions of Environment Impact Assessment Notification, 2006 and its subsequent amendment in 2009, subject to compliance of following conditions:

**Part - A. Specific Conditions:**

- i. The Catchment Area Treatment (CAT) Plan as has been proposed in the Chapter-8 of EMP (8.1 - CAT Plan; December, 2016) shall be implemented in consultation with the Karnataka State Forest Department. The allocated grant of Rs. 2936.50 lakhs for this purpose should be fully utilized and not be diverted for any other purpose. As per plan, the area of CAT is 15,000 ha.
- ii. The project involves acquisition of 2114 ha of land. The R&R benefits for the land losing will have to comply with The Right to Fair Compensation and Transparency in land acquisition, Rehabilitation & Resettlement Act, 2013 which has come into force on 1.1.2014. Adequate publicity of the compensation package should be circulated in the affected villages. All R&R issues shall be completed before commissioning of the project.
- iii. A Monitoring Committee for R&R shall be constituted which shall include representatives of project affected persons including representative from SC/ST category and a woman beneficiary.
- iv. All commitment made during the public hearing should be fulfilled completely by the project proponent and record maintained.

- v. The Command Area Development (CAD) Plan as proposed in the EIA/EMP report (December, 2016) report shall be strictly implemented.
- vi. Consolidation and compaction of the generated muck should be carried-out in the muck dumping sites. As proposed in the muck disposal plan, out of 2,88,61,973 m<sup>3</sup> muck generated, the entire to be utilized for service road & inspection paths, embankments, land leveling, filling trenches, construction material for CD works, road etc and restoration works for canal banks should be strictly adhered. The muck disposal sites shall be reclaimed/ restored with vegetation once capacity is utilized.
- vii. To enhance the environment of project site, greenbelt, as proposed in the EIA/EMP report (December, 2016) shall be developed. The proposed greenbelt development in all the areas of project with 32 different plant species shall be undertaken in consultation with State Horticulture Department, Government of Karnataka. The allocated grant of Rs. 1216 lakhs for this purpose should be fully utilized and not be diverted for any other purpose.
- viii. The proposed Agro-forestry development in the command area with 22.55 lakh saplings in consultation with State Forest Department, Government of Karnataka should strictly adhered. The allocated amount of Rs. 250.51 lakhs for this purpose should be fully utilized and not to be diverted for any other purpose.
- ix. The fishery development and management plan, as proposed in the EIA/EMP (December, 2016) for the conservation fish in river shall be developed. As proposed in the programme around 10 lakh fingerlings comprised of major carp shall be introduced in Krishna river above the project site & in and around the project site shall be implemented in consultation State Fisheries Department. The allocated grant of Rs. 30 lakhs should be utilized fully and not to be diverted for any other purpose.
- x. Water User Association's (WUAs) / Co-operative shall be formed and involvement of the whole community for disciplined use of available waters shall be ensured.
- xi. Conjunctive use of surface water shall be planned to check water logging as well as to increase productivity.
- xii. Water quality monitoring shall be carried out in the 5 km stretch in the upstream and downstream of lift points of Krishna River during construction phase for drinking water quality standards at suitable locations on bi-monthly basis and a copy of the test reports to be submitted to Regional Office, MoEF&CC, Bengaluru on six monthly basis. Further, aquatic ecology studies to assess the health of the aquatic biota to be conducted on a yearly basis during the period of construction.
- xiii. The equipment likely to generate high noise levels during the construction period or otherwise shall meet the ambient noise level standards as notified under the Noise Pollution (Regulation and Control) Rules, 2000, as amended in 2010 under the Environment Protection Act (EPA), 1986. Ambient Noise level monitoring shall be conducted on a monthly basis during the period of construction at suitable locations and copy of the test reports to be submitted to Regional Office, MoEF & CC, Bengaluru on six monthly basis.

- xiv. The On Farm Development (OFD) works shall be completed and WUAs (Water User Associations) shall be made functional before commencement of irrigation.
- xv. Occurrence of stagnant pools/slow moving water channels during construction and operation of the project providing breeding source for vector mosquitoes and other parasites. The river should be properly channelized so that no small pools and puddles are allowed to be formed. Even after taking precaution, due to un-foreseen situations, breeding of mosquito and resultant malaria or mosquito borne diseases can increase. If such a situation arises, It will be the responsibility of project authorities to take all steps i.e. residual insecticidal spray in all the project area and surrounding 3 km area keeping the flight range of mosquitoes in consideration.
- xvi. Periodical soil health shall be tested in command area during operation phase to ensure the maintenance of the soil fertility.
- xvii. Any other clearance from any other organization/department if required should be obtained.
- xviii. Solid waste management should be planned out in detail. Land filling of plastic waste shall be avoided and instead proposal for various uses be identified.
- xix. Skill mapping of the human resources available around the project area is to be undertaken and on the basis of the data generated, various options of their livelihood be prepared keeping in view of the market need.

**Part - B. General Conditions:**

- i. Adequate arrangements for providing free fuel like 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 and on monthly basis, ambient air quality to be monitored during the period of construction.
- 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. Environmental parameters shall be monitored and six monthly monitoring reports shall be submitted to the concerned Regional Office of the Ministry, Bengaluru.

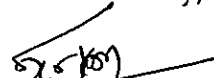
7. The Project Proponent shall provide full cooperation and all required documents / data to the Officials from concerned Regional Office of the Ministry, Bengaluru who would be monitoring the implementation of environmental safeguards.
8. The responsibility of implementation of environmental safeguards and carrying out environmental monitoring rests fully with M/s. Vishweshwaraya Jala Nigama Limited, Government of Karnataka.
9. Besides the above stated conditions, the Project Proponent shall also implement all environmental safeguards, as proposed in the EIA/EMP report and other reports from time to time. The Regional Office of the Ministry, Bengaluru shall monitor implementation of EMP at regular intervals.
10. The Environmental Management Plan (EMP) shall be strictly adhered to. The total cost of implementation of mitigation measures as per EMP is Rs 43,080.01 lakhs during construction phase and 219.68 lakhs during operation phase. In case of revision of the project cost or due to price level change, the cost of EMP shall also be updated proportionately.
11. In case of change in the scope of the project, the same shall be intimated to the Ministry and fresh approval, if required, shall be taken from the Ministry.
12. 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.
13. This clearance letter is valid for a period of 10 years from the date of issue of this letter for completion of the project.
14. Based on the site visit of the project RO, MoEF & CC, Bangalore on 16-19<sup>th</sup> February, 2017, a certified copy of the point-wise EC conditions of the project was issued. The status of compliance conditions is reported to be satisfactory.
15. 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.
16. 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.
17. 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, Forest & Climate Change at <http://www.moef.nic.in>.

18. 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.

19. The project proponent shall also submit six monthly reports on the status of compliance of stipulated EC conditions including the results of monthly monitored data (both in hard copies as well as by email) to the respective Regional Office of MoEF & CC, Bengaluru.

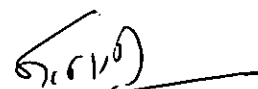
20. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days from the date of issue, as prescribed under Section-16 of the National Green Tribunal Act, 2010.

Yours faithfully,

  
(S. Kerketta)  
Director

**Copy to:**

1. The Secretary, Ministry of Water Resources, RD & GR, Shram Shakti, Bhawan, Rafi Marg, New Delhi 1.
2. The Principal Secretary (WRD), Government of Karnataka, Vidhana Soudha, Bengaluru-560 001.
3. The Secretary, Department of Ecology and Environment, Government of Karnataka, Floor, 4<sup>th</sup> Gate, M.S Building, Bengaluru -560 001
4. The Chief Engineer, Project Appraisal Directorate, Central Water Commission, Sewa Bhawan, R.K. Puram, New Delhi-110066.
5. The Addl. PCCF (Central), Regional Office (SR), Ministry of Environment, Forest & Climate Change, Kendriya Sadan, E&F Block, Koramangala, Bengaluru-560 034
6. The Member Secretary, Karnataka State Pollution Control Board, Parisara Bhawan, Church Street, Bengaluru — 560 001.
7. PPS to JS (GB)/Director (SKK)/Scientist-C(SP)
8. NIC Cell — with a request for uploading in MoEF & CC's website.
9. Guard file/Notice Board.

  
(S. Kerketta)  
Director