

**No. J-12011/44/2012-IA.I**  
Government of India  
Ministry of Environment, Forest & Climate Change  
[IA.I – Division]

Indira Paryavaran Bhavan  
3<sup>rd</sup> Floor, Vayu Wing  
Jor Bagh Road  
New Delhi – 110 003

**Dated: 8<sup>th</sup> May, 2015**

To

The Executive Engineer  
Water Resources Division  
Government of Chhattisgarh  
Kota, District-Bilaspur- 495001  
(Chhattisgarh)

**Sub: Arpa Bhaijhar Barrage Project in Bilaspur (Chhattisgarh) by Water Resources Department, Government of Chhattisgarh – For Environmental Clearance – reg.**

This has reference to your letter No. 3635 dated 20.2.2015 on the above mentioned subject.

2. The above referred proposal was considered by the Expert Appraisal (EAC) Committee for River Valley & Hydroelectric Power Projects (RV & HEP) at its meeting held on 26-27<sup>th</sup> February, 2015. The comments and observations of EAC of this project may be seen in the minutes of the meeting available on the web-site of this Ministry.

3. It is noted that the project envisages construction of 12.35 m high and 147 m long barrage across Arpa River near Bhaijhar village to provide irrigation facility in 25,000 ha of land benefitting 102 villages in Bilaspur District of Chhattisgarh. The project will have a live storage capacity of 16.409 MCM of water. The gross command area (GCA) is 31,570.95 ha and culturable command area (CCA) is 25,970.71 ha. The irrigable command area (IRA) is 25,000 ha. The total land requirement for project is 1890.09 ha out of which 442.35 ha is forest land, 377.35 ha is government/ revenue land & 1070.39 ha is private land. Total submergence area is 653.59 ha. The total catchment area up-to barrage site is 1693.86 Sq. km. The Stage-I forest clearance has been accorded on 12.12.2014 (F.No.8-29/2013-FC dated 12.12.2014). About 3 villages consisting of 4600 families are likely to be affected due to this project. The total cost of the project is about Rs.606.43 Crores and proposed to be completed in 3 years.

4. Public hearing for the project was conducted on 13.02.2015 at village Bhaijhar, Tehsil Kota in District Bilaspur of Chhattisgarh.

5. 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 grant of Environmental Clearance to the project. Accordingly, the Ministry of Environment and Forests hereby accords necessary

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environmental clearance to 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) Catchment Area Treatment (CAT) Plan as proposed in the EMP Report- 2015 (Chapter-11) shall be strictly implemented in consultation with Chhattisgarh State Forest Department. Major works shall be completed before impounding of reservoir. The financial allocation of Rs.21.33 Crores for CAT Plan implementation shall be fully utilized and not to be diverted for any other purpose.
- (ii) The project proponent has to prepare the R&R benefits & plan for PAFs as per the "Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013" which has come into effect since January, 2014.
- (iii) For the land losing households will be as per the National Rehabilitation and Resettlement Policy, 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. All R&R issues shall be completed before commissioning of the project.
- (iv) The implementation of R&R shall be closely monitored and is to be ensured that all project affected families (PAFs) get adequate & timely compensation before commissioning of the project.
- (v) A Monitoring Committee for R&R shall be constituted which must include representatives of project affected persons including from SC/ST community and at least a woman beneficiary.
- (vi) All the commitments made during the public hearing shall be fulfilled completely by the State Government in letter and spirit.
- (vii) 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.
- (viii) Conjunctive use of surface water shall be planned to check water logging as well as to increase productivity.
- (ix) 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.
- (x) The On Farm Development (OFD) works shall be completed and WUAs (Water User Associations) shall be made functional before commencement of irrigation.
- (xi) The proposed Compensatory Afforestation in 885 ha of area should be taken-up with State Forest Department. Biodiversity Conservation & Management Plan should also be implemented with State Forest Department. Allocated grant of Rs.44.36 Crores for this purpose shall be fully utilized and not to be diverted for any other purpose.
- (xii) The proposed green belt development in an area of 30 ha around various project appurtenances, colony & along the road sides in 2-3 rows with 22 different plant species in consultation with State Forest Department shall be strictly adhered to.

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The green belt development shall be taken along with the construction of barrage so that the rim is stabilized at the time of impounding. Allocated grant of Rs.18 lakhs shall be fully utilized and not to be diverted for any other purpose.

- (xiii) The fishery conservation and management plan as proposed in the EMP Report-2015 (Chapter-2) shall be implemented in consultation with Fisheries Department, Government of Chhattisgarh. The submergence area of 653.59 ha should be utilized for Pisci-culture/fishery development & fish hatchery existing in nearby area should be utilized for hatchling development. A budget of Rs. 3.94 Crores for this purpose shall be fully utilized and not to be diverted for any other purpose.
- (xiv) 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 smell pools and puddles are allowed to be formed. Even after taking precaution, due to unforeseen situations, breeding of mosquito and resultant malaria borne diseases can increase. If such a situation arises, it will be responsibility of the 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.
- (xv) Environmental flow is to be released as per extant norms i.e. 30% during monsoon season for downstream users. Six monthly results shall be submitted to the Regional Office of the Ministry and SPCB.
- (xvi) Longitudinal connectivity ensuring hydraulic compatibility at bed level is to be provided to ensure non-disruptive biota movement and sediment transportation. For this necessary feature may be incorporated in design of barrage.
- (xvii) E-flow release should be unregulated and the system is to be equipped with censor/suitable devise for facilitating real time monitoring.
- (xviii) Any other clearance from any other organization/department if required should be obtained.

### **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) 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.
6. 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.
7. The responsibility of implementation of environmental safeguards rests fully with the Water Resources Department, Government of Chhattisgarh and Government of Chhattisgarh.
8. The livelihood plan to be prepared, if found necessary in consultation with concerned state government departments. The Government of Chhattisgarh should submit compliance on this component & also while submitting six monthly compliance report.
9. 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 Chhattisgarh may also like to monitor implementation of EMP at regular intervals.
10. The Environmental Management Plan (EMP) shall be strictly adhered to and a sum of Rs. 394.72 Crores, the budgetary provisions for implementation of EMP shall be fully utilized and not to be diverted for any other purpose. In case of revision of the project cost 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 commissioning of the project.
14. 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.
15. 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.
16. 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>.

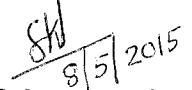


17. After 5 years of the commissioning of the Project, a study shall be undertaken regarding impact of the project on the environment and downstream ecology. The study shall be undertaken by an independent agency, decided in consultation with the Ministry.

18. 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.

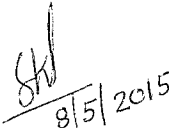
19. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days from the date of issue, as prescribed under Section-10 of the National Green Tribunal Act, 2010.

Yours faithfully,

  
(S. K. Srivastava)  
Scientist-E

Copy to:

1. The Secretary, Min.of Water Resources, Shram Shakti Bhawan, Rafi Marg, New Delhi 1.
2. The Principal Secretary (WRD), Government of Chhattisgarh, Mahanadi Bhawan ,Naya Raipur-492001
3. The Secretary, Department of Environment, Chhattisgarh, Mahanadi Bhawan, Naya Raipur-492001
4. The Engineer-in-Chief , Water Resources Department, Sihawa Bhavan, Civil line, Raipur -492001
5. The Chief Engineer, Project Appraisal Directorate, Central Water Commission, Sewa Bhawan, R.K. Puram, New Delhi-110066.
6. CCF, Regional Office (WR), Ministry of Environment & Forests, Kendriya Paryavaran Bhavan, Link Road No-3, Ravi Shankar Nagar, Bhopal – 462 016
7. Member Secretary, Chhattisgarh Environment Conservation Board, Commercial Complex Chhattisgarh Housing Board Colony, Kabir Nagar, Raipur (C.G.)
8. EI- Division, Ministry of Environment & Forests, New Delhi-110003.
9. NIIC Cell – request to upload on MoEF's website.
10. PS to JS (BS)/Scientist-E (SKS)/P. V. Subba Rao (Sci-C)
11. Guard file/Notice Board.

  
(S. K. Srivastava)  
Scientist-E

