

**No. J-12011/04/2007-IA-I ( R )**  
Government of India  
Ministry of Environment, Forest & Climate Change  
(IA.I Division)

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

**Dated: 13<sup>th</sup> December, 2019**

To

The Office of Executive Engineer,  
Jamrani dam construction Division-I  
Damuvaduga-Kalhgodam,  
Distt Nainital, Uttarakhand

**Sub:** Jamrani Dam Multipurpose Project by Irrigation Department, Uttarakhand –Regarding Environmental Clearance.

Sir,

This has reference to your online proposal no. **IA/UK/RIV/80127/2006** and your letter No. 110/J.D.C.D-2/Environment Clearance dated 30.01.2019 on the above-mentioned subject.

2. The above referred proposal was considered by the Expert Appraisal Committee (EAC) for River Valley & Hydroelectric projects in its 27<sup>th</sup> meeting held on 23.09.2019. The comments and observations of EAC on the project may be seen in the Minutes of the meeting which are available on the web-site of this Ministry.

3. Jamrani Dam Multipurpose Project envisages construction of 480m long and 130.60 m high (above river bed level) roller compacted concrete gravity dam across the river Gola, a tributary of river Ramganga, a flashy seasonal river which originates in Kumaon Himalayas and flows through South Eastern Kumaon in the State of Uttarakhand, India. Jamrani MPP is proposed near village Jamrani, district Nainital, Uttarakhand 10 km upstream of existing Gola barrage which is located near Kathgodam. The catchment area at proposed dam site is 450 km<sup>2</sup>. The live storage created by project is proposed to be used for drinking water, irrigation & power generation. The live storage of the project about 142.72 MCM out of which 42.7 MCM will be utilized for meeting the requirement of drinking water to Haldwani city and an additional irrigation to 57,065 ha with an incidental hydro power generation of 14 MW installed capacity with estimated annual power generation of 64 MU out of which 57.74 MU would be available at bus bars. Construction of Jamrani dam was proposed to be constructed to provide augmentation storage for Gola barrage.

4. Total land required for the project is 475.19 ha, out of which forest land is 351.55 ha, private land is 89.68 and others is 33.96 ha. Project benefit besides additional irrigation area of 57,065 ha, 42.7 MCM for drinking water and annual power generation of 64 MU, includes pisciculture, attraction of tourism, recharge of groundwater in adjoining area, creation of employment among the local people, infrastructure development of the area, etc. After the

construction of Jamrani dam, employment opportunities and standard of living of the local people will be provided. Total cost of the project is Rs. 2584.10 crores.

5. Terms of Reference to the above project was issued on 23.04.2007 and the Public Hearing for the above mentioned project was held on 12.05.2008 in village Damuadunga, Tehsil Haldwani which is approximately 3 km away from the Kathgodam Railway Station. The meeting was presided by Upper collector, Nainital and Organized by Uttarakhand State Pollution Control Board, Dehradun.

6. EAC in the 35<sup>th</sup> meeting dated 19<sup>th</sup> Feb., 2010, had recommended Environmental Clearance. In absence of Forest Clearance for the diversion of forest land, EC of the Project was kept in abeyance till the Stage-I Forest Clearance (351.55 ha) for the project was obtained vide letter No. 8-36/2013-FC, dated 25.04.2018. After obtaining Forest Clearance, a request for reconsideration for grant of EC was made by the Project Proponent vide letter No. 681/PCH/R-13/E.I.A. dated 09.05.2018. The Ministry advised to upload the relevant documents for the EC application online for further reconsideration. Relevant documents were then uploaded online by the PP for consideration of grant Environmental Clearance. Proposal was then considered by the EAC in the 22<sup>nd</sup> meeting held on 27.02.2019. The EAC after detailed deliberations and considering all the facts of the project as presented by the PP, deferred the proposal and sought some additional information including one season baseline data. The Project Proponent (PP) submitted the additional information as sought by the EAC on 23.08.2019. Accordingly, proposal was considered in the 27<sup>th</sup> meeting held on 23.09.2019.

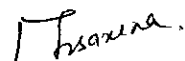
7. The Expert Appraisal Committee (EAC) in its 27<sup>th</sup> meeting held on 23.09.2019, after due consideration of the relevant documents submitted by the Project Proponent and clarifications furnished, have recommended for grant of Environmental Clearance for the project mentioned above. Accordingly, the Ministry of Environment, Forest and Climate Change hereby accords Environmental Clearance for the above project as per the provisions of Environmental Impact Assessment Notification, 2006 and as amended thereof, subject to compliance of the following conditions and as given in Annexure I (i.e. Standard EC conditions for River Valley and Hydroelectric projects):

- I. The Environmental Management Plan (EMP), excluding Resettlement & Rehabilitation Plan cost, shall be strictly adhered to and a sum of Rs. 10669.23 lakhs (Capital cost: 10067.15 lakhs & annual Recurring cost: Rs. 95.81 lakhs) as the budgetary provisions for implementation of EMP, shall be fully utilized and not to be diverted to any other purpose. In case of revision of the project cost or due to price level change, the cost of EMP shall also be revised.
- II. The project proponent shall comply with the provisions contained in this Ministry's OM vide F. No. 22-65/2017-IA.III dated 1<sup>st</sup> May, 2018 regarding Corporate Environment Responsibility. Project proponent shall require to invest Rs 1292.68 lakhs for CER activities as submitted to the Ministry for Education, Health care, Infrastructure development, Sanitations and drinking water facilities, Skill Development and Training, Environment Enhancement. The entire activities under CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the Regional Office as a part of half-yearly compliance report and to the District Collector.
- III. The environmental clearance is valid for a period of 10 years from the date of issue of this letter for commissioning of the project.

- IV. 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.
- V. Any other clearances/permissions/approvals from any other organization/department, as applicable to the project shall be taken.
- VI. PP shall procure construction material only from those Govt./Pvt. Agencies/Corporations etc. that are having all valid legal/statutory clearances/permissions or necessary permission to be obtained for quarrying construction materials for the project as per the EIA Notification, 2006 and as amended thereof.
- VII. Solid waste generated, especially plastic waste, etc. should not be disposed of as landfill material. It should be treated with scientific approach and recycled. Use of single-use plastics may be discouraged.
- VIII. Wildlife Conservation plan for all Schedules I species shall be implemented with the approval of the Competent Authority.
- IX. Land acquired for the project shall be suitably compensated in accordance with the law of the land with the prevailing guidelines. Private land shall be acquired as per provisions of Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.
- X. Project is falling in the dudwa-lagga tiger corridor therefore "*No Objection Certificate*" shall be obtained from Nation Tiger Conservation Authority (NTCA).
- XI. Project is located at a distance of 6.28 Km from the Nandhaur wildlife sanctuary and final ESZ notification is **not notified** therefore clearance from Standing Committee of the National Board for Wildlife (SCNBWL) shall be obtained.

This issues with approval of the Competent Authority.

Yours faithfully

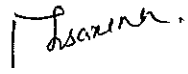


(Dr Mohit Saxena)  
Scientist C

**Copy to:**

1. The Secretary, Ministry of Power, Sharm Shakti Bhawan, Rafi Marg, New Delhi-110001
2. The Secretary, Ministry of Water Resources, RD & GR, Shram Shakti, Bhawan, Rafi Marg, New Delhi - 110 001.

3. The Principal Secretary (Irrigation & Power), Government of Uttarakhand, Dehradun-248 006.
4. The Chief Engineer, Project Appraisal Directorate, Central Water Commission, Sewa Bhawan, R.K. Puram, New Delhi-110 066.
5. The Dy. Director General of Forests, Ministry of Environment, Forest and Climate Change, Regional Office (NCZ), Subhash Road, Dehradun- 248 001.
6. The Member Secretary, Uttarakhand Environment Protection & Pollution Control Board, Paryavaran Bhawan, E-115, Nehru Colony, Dehradun.
7. NIC Cell - uploading in MoEFCC's website.
8. Sr. PPS to JS (GM)
9. Guard file.

  
(Dr Mohit Saxena)  
Scientist C

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**Standard EC Conditions for River Valley and Hydroelectric projects**

**I. Statutory compliance:**

- i. The project proponent shall obtain clearance from the National Board for Wildlife.
- ii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of Schedule-I species in the study area).
- iii. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- iv. NOC shall be obtained from National Commission of Seismic Design Parameters (NCSDS) of CWC.
- v. Necessary approval of CEA shall be obtained for those projects having the project cost more than Rs. 1,000 crores.

**II. Air quality monitoring and preservation**

- i. Regular monitoring of various environmental parameters viz., Water Quality, Ambient Air Quality and Noise levels as per the CPCB guidelines at designated locations shall be carried out on monthly basis and a detailed database of the same shall be prepared and recorded. This shall be used as a baseline data for post construction EIA / Monitoring purposes.
- ii. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed standards.
- iii. Necessary control measures such as water sprinkling arrangements, etc. bet taken up to arrest fugitive dust at all the construction sites.

**III. Water quality monitoring and preservation**

- M. Srinivas*
- i. Conjunctive use of surface water to be planned in the project to check water logging as well as to increase crops productivity. The field drains shall be connected with natural drainage system.

- ii. Remodelling of existing natural drains (link drains) and connecting them with irrigated land through constructed field drains, collector drains, etc. are to be ensured on priority basis.
- iii. Before impounding of the water, Cofferdams for both at the upstream and downstream are to be decommissioned as per EIA/EMP report so that once the project is commissioned; cofferdam should not create any adverse impact on water environment including the rock mass and muck used for the Cofferdam.
- iv. As the reservoir will be acting as balancing reservoir and there would be fluctuation of water level during peaking period, efforts be made to reduce impact on aquatic life including impacts during spawning period both at the upstream and downstream of the project
- v. Water depth sensors shall be installed at suitable locations to monitor e-flow. Hourly data to be collected and converted to discharge data. The Gauge and Discharge data in the form of Excel Sheet be submitted to the Regional Office, MoEF & CC and to the CWC on weekly basis.
- vi. Mixed irrigation shall be practised and necessary awareness be given to all the farmers and trained in the use of such systems. Proper crops selection shall be carried out for making irrigation facility more effective.
- vii. On Farm Development (OFD) works like landscaping, land levelling, drainage facilities, field irrigation channels and farm roads, etc. should be taken up in phased manner prior to the start of irrigation in the entire command area. The Command Area Development Plan should be strictly implemented as proposed in the EIA/EMP report

#### **IV. Noise monitoring and prevention**

- i. All the equipment likely to generate high noise shall be appropriately enclosed or inbuilt noise enclosures be provided so as to 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.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

#### **V. Catchment Area Treatment Plan**

Catchment Area Treatment (CAT) Plan as proposed in the EIA/EMP report shall be implemented in consultation with the State Forest Department and shall be implemented in synchronization with the construction of the project.

*M. Hazama*

## **VI. Waste management**

- i. Muck disposal be carried out only in the approved and earmarked sites. The dumping sites shall be located sufficiently away from the HFL of the river. Efforts be made to reuse the muck for construction and other filling purposes and balanced be disposed of at the designated disposal sites. Once the muck disposal sites are inactive, proper treatment measures like both engineering and biological measures be carried out so that sites are stabilized quickly.
- ii. Solid waste management should be planned in details. Land filling of plastic waste shall be avoided and instead be used for various purposes as envisaged in the EIA/EMP reports. Efforts be made to avoid one time use of plastics.

## **VII. Green Belt, EMP Cost, Fisheries and Wildlife Management**

- i. Based on the recommendation of Cumulative Impact Assessment and Carrying capacity study of river basin or as per the ToR conditions or minimum 15% of the average flow of four consecutive leanest months, whichever value is higher, shall be released as environmental flow.
- ii. Detailed information on species composition particular to fish species from previous study/literature be inventoried and proper management plan shall be prepared for insitu conservation in the streams, tributaries of river and the main river itself for which adequate budget provision be made and followed strictly.
- iii. Wildlife Conservation Plan approved by the Chief Wildlife Warden shall be implemented in consultation with the local State Forest Department.
- iv. To enrich the habitat of the project site, plantation shall be raised as envisaged in the EIA/EMP report. Plantation to be developed along the periphery of the reservoir in multi-layers with local indigenous species in consultation with the local State Forest Department.
- v. Compensatory afforestation programme shall be implemented as per the plan approved, if applicable.
- vi. Fish ladder/pass as envisaged in the EIA/EMP report shall be provided for migration of fishes. Regular monitoring of this facility be carried out to ensure its effectiveness.

## **VIII. Public hearing and Human health issues**

- i. Resettlement & Rehabilitation plan be implemented in consultation with the State Govt. as approved by the State Govt, if any.
- ii. Budget provisions made for the community and social development plan including community welfare schemes shall be implemented in toto.

*M. Srinivas*

- iii. Preventive measures viz. fuming and spraying of mosquito control shall be done in and around the labour colonies, affected villages, stagnated pools, etc. Provisions be made to not to create any stagnated pools to avoid creation of breeding grounds of the vector borne diseases.
- iv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- v. Labourforce to be engaged for construction works shall be examined thoroughly and adequately treated before issuing them work permit. Medical facilities shall be provided at the construction sites.
- vi. Early Warning Telemetric system shall be installed in the upper catchment area of the project for advance intimation of flood forecast.
- vii. Emergency preparedness plan be made for any eventuality of the dam failure and shall be implemented as per the Dam Break Analysis

#### **IX. Corporate Environment Responsibility**

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 01.05.2018, as applicable, regarding Corporate Environment Responsibility.
- ii. Skill mapping be undertaken for the youths of the affected project area and based on the skill mapping, necessary trainings to the youths be provided for their long time livelihood generation
- iii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholder's / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iv. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- v. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for



any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

- vi. Post EIA and SIA be prepared for the project through a third party and evaluation report be submitted to the Ministry after five years of commissioning of the project.
- vii. Multi-Disciplinary Committee (MDC) be constituted with experts from Ecology, Forestry, Wildlife, Sociology, Soil Conservation, Fisheries, NGO, etc. to oversee implementation of various environmental safeguards proposed in EIA/EMP report during construction of the project. The monitoring report of the Committee shall be uploaded in the website of the Company.
- viii. Formation of Water User Association/Co-operative be made involment of the whole community be ensured for discipline use of available water for irrigation purposes.

#### **X. Miscellaneous**

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by 5 prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

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*M. S. S. S. S.*