ENVIRONMENTAL CLEARANCE

PARIVESH

(Pro-Active and Responsive Facilitation by Interactive, and Virtuous Environment Single-Window Hub)

Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To,

The Executive Engineer (Civil)
UJVN LTD
Executive Engineer (Civil), SBR Project
O/o GM(C-NP), UJVN Ltd,Ganga Bhawan, Yamuna Colony, Dehradun,Dehradun,Uttarakhand-248001

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/UK/RIV/130432/2019 dated 19 Jan 2021. The particulars of the environmental clearance granted to the project are as below.

1.	**EC Identification No.**	**EC25A003UK182103**
2.	**File No.**	J-12011/12/2015-IA.I
3.	**Project Type**	New
4.	**Category**	A
5.	**Project/Activity including Schedule No.**	1(c) River Valley projects
6.	**Name of Project**	Sirkari Bhyol Rupsiabagar HEP
7.	**Name of Company/Organization**	UJVN LTD
8.	**Location of Project**	Uttarakhand
9.	**TOR Date**	20 Jan 2016

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 03/10/2025

(e-signed)
Y P Singh
Scientist E
IA - (River Valley and Hydroelectric Projects sector)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please quote identification number in all future correspondence.

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F. No. J-12011/12/2015-IA.I
Government of India
Ministry of Environment, Forest & Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan
2nd floor, Vayu Wing,
Aliganj, Jor Bagh Road
New Delhi – 110003

Dated: 03rd October, 2025

To,

The General Manager (Civil)
SHP, UJVNL
UJJWAL, GMS Road, Maharani Bagh
Dehradun - 248 001, Uttarakhand
Email: - gmshp.ujvnl@gmail.com

Sub: Sirkari-Bhyol Rupsiabagar Hydro Electric Project of 120 MW as Run of River scheme in an area of 30 ha by M/s UJVN LTD in Tehsil Munsiyari, Pithoragarh District (Uttarakhand) – Environmental Clearance (EC) – reg.

Sir,

This is in reference to your online Proposal No. IA/UK/RIV/130432/2019 dated 19.01.2021 submitted to the Ministry for grant of Environmental Clearance to the project cited in the subject.

2. The proposal was considered by the Expert Appraisal Committee (EAC) for River Valley & Hydroelectric Projects in its 7th held on 25.02.2021, 10th meeting held on 15.04.2021, 33rd EAC meeting held on 29.8.2022 and 36th meeting held on 30.07.2025. The comments and observations of EAC on the project may be seen in the Minutes of the meeting which are available on the PARIVESH portal (https://parivesh.nic.in/#/ec-mom-list; MoM number - EC/MOM/EAC/889483/7/2025).

3. The brief about configuration of Proposed Project as submitted by the Project Proponent in Form-2 (Part A, B and C)/ EIA & EMP Reports / presented during 36th meeting held on 30.07.2025 are annexed to this EC as Annexure I.

4. The sectoral Expert Appraisal Committee after detailed deliberations in its 36th EAC meeting held on 30th July, 2025 recommended the proposal for grant of prior Environmental Clearance by the Ministry to Sirkari Bhyol Rupsiabagar Hydro Electric Project of 120 MW as Run of River scheme in an area of 30 ha in Tehsil Munsiyari, Pithoragarh District (Uttarakhand) by M/s UJVN Ltd., under the provisions of EIA Notification, 2006, as amended subject to compliance of applicable Standard EC conditions along with following specific environmental safeguards.

5. The MoEF&CC has examined the proposal in accordance with the provisions contained in the Environment Impact Assessment (EIA) Notification, 2006, as amended and based on recommendation of EAC, the Ministry, hereby accords approval for grant of Environmental

Clearance to the project for Sirkari-Bhyol Rupsiabagar Hydro Electric Project of 120 MW as Run of River scheme in an area of 30 ha by M/s UJVN LTD in Tehsil Munsiyari, Pithoragarh District (Uttarakhand), under the provisions of EIA Notification, 2006, as amended subject to compliance of the following Specific and Standard EC conditions for environmental safeguards.

A. Specific Environmental Safeguards

[A] Environmental management and Biodiversity conservation:

i. The Environmental Management Plan (EMP) shall be strictly adhered to as submitted in the EIA/EMP reports. 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 updated proportionately.
ii. The contract clause limiting the No. of vehicles used during excavation and transportation shall followed scrupulously and the same shall informed to the ministry.
iii. Ambient Air Quality Monitoring Stations for real time data to be installed at project site before commencement of the construction, shall be displayed at project site and its report to be submitted to IRO, MoEF&CC.
iv. No vehicle purchase shall be allowed from funds earmarked for implementation of Wildlife Conservation plan. Measures for minimizing the human–animal conflict specially for black bear and leopard be suitably incorporated in the wildlife conservation plan in consultation with State Forest Department.
v. Plantation of saplings shall be carried out as a part of the tree plantation campaign "Ek Ped Ma Ke Naam" and the details of the same shall be uploaded in the MeriLiFE Portal (https://merilife.nic.in).
vi. Biodiversity hotspots in the 10 km radius of the project site shall be identified and listed for their conservation and preservation through time bound action plan in consultation with WII/Expert Government Institute.
vii. Watershed development plan shall be prepared in consultation with ICAR institute/Expert Government Institute and implemented within 10 km radius of the project site in time-bound manner.

[B] Disaster Management:

i. Disposal of the excavated muck and its filling on the low-lying area with proper measures for the stabilization and greenery to minimize the impacts of the generated construction muck shall be taken up pari passu with construction work.
ii. Stabilization of muck disposal sites using biological and engineering measures shall be taken up immediately to ensure that muck does not roll down the slopes and does not pollute the natural streams and water bodies in surrounding area. The plantation on muck disposal site with local species for restoration of ecology and environment of the project site area shall be done as per instructions of the Forest Department.
iii. Necessary control measures such as water sprinkling arrangements, and construction of paved roads leading to muck disposal sites etc. shall be taken up on priority to arrest fugitive dust at all the construction sites.

iv. 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.
v. Sensor based/AI driven Early Warning System (EWS) shall be established.
vi. Disaster prone places/villages in 10 km upstream and downstream of the project shall be identified and proper disaster management practices shall be applied in such places to mitigate/minimize the impact of any unprecedented event.

[C] Socio-economic:

i. Land acquired for the project shall be suitably compensated in accordance with the prevailing guidelines of the state government and provisions under Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.
ii. Solar panel be provided to the families living in rural areas within 10 km radius of project with annual maintenance.
iii. Bio-Gas plant shall be installed in the Project affected area for Utilizing Cattle waste (Cow Dung) into renewable source of fuel.
iv. School up to 12th Standard with smart classes shall be established and managed to provide free quality education for children from project affected villages/Tribal villages.
v. 50 bed multi-speciality hospital shall be established to cater the need of tribal population/locals. The tribal population within 10 km radius of the project shall be given free of cost medical facility.
vi. Skill development Centre shall be established within 10 km radius of the project and regular training programmes for development and promotion of traditional art/products of tribal/local population.
vii. An institutional mechanism to be developed to ensure the preference of jobs to PAFs and also a policy for preferential treatment for award of sundry works to the PAFs and their dependents.
viii. The compliance of above conditions shall be monitored by IRO, MoEF&CC and regularly site visit once in year. The compliance report of IRO shall be regularly submitted to MoEF&CC.

[D] Miscellaneous:

i. After 5 years of the commissioning of the project, a study shall be undertaken regarding impact of the project on the environment. The study shall be undertaken by an independent agency.
ii. PP should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis.
iii. PP shall procure construction material only from those Organizations 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.

B. Standard EC Conditions for River Valley and Hydroelectric projects

I. Statutory compliance:

i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
iii. 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)
iv. 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.
v. NOC shall be obtained from National Commission of Seismic Design Parameters (NCSDS) of CWC.
vi. 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. be taken up to arrest fugitive dust at all the construction sites.

III. Water quality monitoring and preservation

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

i. 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.

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 Cummulative 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 inventorized 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 prepared for both core and buffer zones 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.
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.
ii. Budget provisions made for the community and social development plan including community welfare schemes shall be implemented in toto.
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 stagnatedpools 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. Labour force to be engaged for construction works shall be examined throughly 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. 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

ii. 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 shareholders/ 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.

iii. 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.

iv. 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.

v. 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.

vi. 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.

vii. 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.

vii. 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).

viii. 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.

ix. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

x. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xi. 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.

xii. 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.

xiii. 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

C. General Condition:

i. The EC granted to the project is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/ construe to approvals/ consent/ permissions, etc. required to be obtained under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project.

ii. The project proponent shall prepare a site specific conservation plan and wildlife management plan in case of the presence of Schedule-1 species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approval. The

recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.

iii. No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.

iv. The energy source for lighting purpose shall be preferably LED based, or advance having preference in energy conservation and environment betterment.

v. The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.

vi. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

vii. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and to utilize the same for process requirements.

viii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.

ix. The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.

x. The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented.

xi. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.

xii. A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

xiii. The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.

xiv. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.

xv. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.

xvi. The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.

xvii. The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.

xviii. The project authorities 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 and the date of start of the project.

xix. This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

6. The Environmental Clearance to the aforementioned project is under provisions of EIA Notification, 2006, as amended. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

7. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

8. The above conditions will 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, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

9. The Project Proponent is under obligation to implement commitments made in the Environment Management Plan, which forms part of this EC.

10. The Validity of EC is upto 13 years to the start of production operations by the project or activity. Validity of EC becomes perpetual subject to the start of production operations by the project or activity on or before the In case the project proponent fails to start the production operations within the EC validity date, application for EC validity extension shall be submitted to the regulatory authority as per the provision contained in the Para 9.0 of EIA notification, 2006, as amended.

11. Concealing factual data or submission of false/ fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

12. **General Instructions:**

a. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed.

b. 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.

c. The project proponent shall have a well laid down environmental policy duly approved by the Board of Directors (in case of Company) or competent authority, duly prescribing 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.

d. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the project proponent (during construction phase) and authorized entity mandated with compliance of conditions (during operational phase) shall be prepared. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Six monthly progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report.

e. 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.

f. 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.

g. 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.

h. PP needs to comply the OM dated 24.07.2024 of MoEFCC, where it is stated that the plantation of saplings shall be carried out in the earmarked 33% greenbelt area as part of the tree plantation campaign " Ek Ped Ma ke Naam" (एक पेड़ माँ के नाम (and the details of the same shall be uploaded in the Meri Life portal (https://merilife.nic.in).

13. This issues with the approval of the Competent Authority

Yours faithfully,

3.10.2025

(Yogendra Pal Singh)
Scientist 'E'
Email id: yogendra78@nic.in
Tele: 011-20819364

Copy to:

1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi -110 001.
2. The Secretary, Ministry of Water Resources, RD & GR, Shram Shakti Bhawan, Rafi Marg, New Delhi - 110 001.
3. The Chief Engineer, Project Appraisal Directorate, Central Electricity Authority, Sewa Bhawan, R. K. Puram, New Delh-110066.
4. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-1100032.
5. The Principal Secretary (Environment), Government of Uttarakhand, Secretariat Compound, Subhash Road, Dehradun-248 001, Uttarakhand.
6. The Principal Chief Conservator of Forests, 85, Rajpur Road, Hathibarkala Salwala, Dehradun-248 001, Uttarakhand.
7. The Deputy Director General of Forest (Central), Ministry of Environment, Forest and Climate Change (MoEF&CC), Integrated Regional Office Dehradun, 25, Subhash Road, Dehradun–248 001, Uttarakhand.
8. The Member Secretary, Uttarakhand Environment Protection & Pollution Control Board, E-115, Nehru Colony, Hardwar Road, Dehradun, Uttarakhand.
9. Monitoring Division, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi
10. Guard File/Record File/Monitoring File/Website of MoEF&CC

Annexure-I

The details of the project: -

The Project Proponent and the accredited Consultant M/s. EQMS Global Pvt. Ltd. made a detailed presentation on the salient features of the project and informed that:

i. Sirkari Bhyol-Rupsiabagar HEP, conceived as R-O-R scheme across Goriganga, a tributary of Kali River (Sarda) in Munsiyari tehsil of Pithoragarh district of Uttarakhand, envisages utilization of gross head of about 357.83 m for annual power generation of 529.12 MU in a 90 % dependable year with 95% machine availability. The proposed barrage site on river Goriganga near is about 470m downstream of the confluence of River Goriganga with Jaulchidda gad near a place called Rargari Tok of village Sai Bhat with intake structure proposed on the right bank. An underground powerhouse (3X40 MW,) on the right bank of river near village Rupsiabagar has been proposed.

ii. The project shall encompass the following structures:
- A 12m high and 80 m long barrage, with 4 spillway bays and 1 auxiliary bay, located about 470m downstream of the confluence of River Goriganga with Jaulchhida Gad.
- Two reservoir intakes structures with bell mouth entries located just upstream of the barrage on the right bank which leads into 2 circular shape, 3m dia., 80m feeder tunnels
- Two underground Desilting chambers, each 10 m (W) x 12m (H) x 165 m (L).
- 2 circular shape, 3m dia., 66 m long connecting tunnels to HRT.
- 4.2m dia. and 1316.30m long Circular Shape Head Race Tunnel.
- 8 m diameter underground surge shaft with 2.3m diameter orifice.
- A steel lined pressure shaft of 3.4m dia. bifurcating for 3 branch penstocks of 2m dia.
- Underground Power House complex of 120 MW (3x40 MW) located on right bank.
- 4.2m diameter main tail race tunnel with normal tail water level of EL 1721.50m.

iii. The project proposal (168 MW) was considered by the Expert Appraisal Committee (Hydro River Valley Sector) in its meeting held during 26-27/10/2015 and Ministry granted Terms of References vide letter No.J-12011/12/2015-IA.I dated 20/01/2016. Extension of validity of Terms of Reference (ToR) was issued on 17/04/2020 and Amendment of ToR for Project (120MW) was approved on 13/10/2020.

iv. The geographical co-ordinate of the project are:

Reservoir Coordinates:
80° 13' 56.97" E 30° 11' 3.71" N
80° 14' 5" E 30° 11' 0.51" N
80° 13' 57.81" E 30° 11' 1.59" N
80° 13' 54.59" E 30° 11' 6.05" N

Intake Structure
80° 14' 3.92" E 30° 11' 0.07" N

Underground Powerhouse

80° 15' 0.03" E 30° 10' 20.05" N
80° 15' 0.89" E 30° 10' 19.45" N

v. The SirkariBhyol -Rupsiyabaar hydro Project envisages construction of a 12m high and 80 m long barrage, with 4 spillway bays and 1 auxiliary bay; two reservoir intakes structures; 2 circular shape, 3m dia., 80m feeder tunnels; 2 circular shape, 3m dia., 66 m long connecting tunnels to HRT; 4.2m dia and 1316.30m long Circular Shape Head Race Tunnel;8 m diameter underground surge shaft with 2.3m diameter orifice ; a steel lined pressure shaft of 3.4m dia. bifurcating for 3 branch penstocks of 2m dia.; Underground Powerhouse complex of 120 MW (3x40 MW) and a 4.2m diameter tail race tunnel

vi. **Land requirement:**
The total land requirement for SirkariBhyol-Rupsiabagar HEP works out to 29.997 hectares, which is comprised of 8.562 ha of Government land (civil soyam) and 21.435ha of forest land.

vii. **Demographic details in 10 km radius of project area:**
As per the Census of India 2011, the total population of 19 villages of study area comprising of 898 household aggregates to 3748 of which male population is 1914 and female population is 1834. The overall sex ratio is 966 females per thousand males. The cast wise composition of the total population of the project affected villages is made up of SC 715 (19.08%) and ST 1568(41.84%). Total literate population is 2556(77.244%) of which male and female literate population is 1471(89.16%) and 1085(65.08%) respectively. There is total 2559 (55.38%) workers of which 1387(89.06%) are male and 1172(65.08%) are female, which implies there is a gender gap of 24.08%. Study area villages have total 1923 workers with a work participation rate of 51.31%. The male and female work participation being 1068(55.80%) and 855(46.62%) respectively with an overall gender gap of 9.18% for work participation rate. The main workers are 1384 (36.92%), whereas the marginal workers are 1007 (14.39%). This implies that 48.69% of the population is comprised of non-workers. No private land shall be acquired from any project affected villages.

viii. **Water requirement:**
The quantity of water required during construction is estimated as 201.50 kld which shall be drawn from the river water can be pumped and stored in a tank at higher elevation. The drinking water (43.5 kld) shall be drawn from hill stream. Total water requirement shall be 245 kld.

ix. **Project Cost:**
The estimated project cost is Rs 941.96 crores. The total capital cost earmarked towards the environmental management plan is Rs50.44 crore and the Recurring cost (operation and maintenance) will be about Rs 1.3825 crore per annum.

x. **Project Benefit:**
Annual generation of 529.12 MU of energy in a 90 % dependable year; ; (ii) Against sale of 1% free power to be deposited with Local Area Development Fund annually and (iii) Employment opportunities to locals in project work. Permanent and temporary employment.

xi. **Environmental Sensitive area:**
There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance from the project site. River/ water bodyis flowing at 0.00 m from project in NS direction. The distance of project boundary from nearest Askot WLS is 21.4 km as certified by the competent authority.

xii. **MoU / any other clearance/ permission signed with State government:**

The DPR of the project was approved by Project Investment Board (PIB), Government of Uttarakhand on 31.12.2024. In principal approval for diversion of forest land for non-forestry use has been accorded vide MoEF letter no I/117349/2025 dated 23/06/2025.

xiii. **Resettlement and rehabilitation**: No R&R issue is involved.

xiv. **Schedule –I species:**

Bharal (*Pseudoisnayaur*)
Himalayan Tahr (*Hemitragusjemlahicus*)
Himalayan Wolf (*Canis chanco)*

xv. **Alternative Studies:**

Considering the geological conditions of all three alternative locations, we were studied. The first alternate was for a dam proposed about 1.8 km upstream of the confluence of Ralam Gad with Goriganga river and about 750m downstream of confluence of Jaulchhida Gad with Goriganga river.The material at this location was observed to be loose and prone to sliding.Beside this About 60 m upstream of dam axis at left bank of river Goriganga, two active landslides have been noticed. The second site waslocated about 600 m upstream of D1 axis location, and it lies in a narrow, and straight reach of the river. This axis was rejected for locating the barrage in view of the risks associated with the muck and debris carried by the Jaulchidda nallah situated in the immediate upstream of the axis. The third alternative is the proposedbarrage site (D2) on River Goriganga is located about 450m downstream of the confluence of river Goriganga with Jaulchhida Gad. This alternative-3 appeard to be most suitable for constructing the barrage of 12 m height on the permeable foundation and so adopted for further study.

xvi. **Baseline Environmental Scenario:**

Period	From February 2018 to December 2018 (Three seasons)
AAQ parameters at 6 locations (minimum & maximum)	PM_{10}: 18 to 40µg/m^3
	$PM_{2.5}$: 9.7 to 18.7µg/m^3
	SO_2: <5.0µg/m^3
	NOx: 6.2 to 9.7µg/m^3

Incremental GLC Level	PM_{10}: Max. GLC: 8.63µg/m^3
	$PM_{2.5}$: Max. GLC: 0.77µg/m^3
	SO_2: Max. GLC: 0.26µg/m^3
	NOx: Max. GLC:2.09µg/m^3
River water samples at 9 locations	pH: 7.32 to 8.04
	Dissolved Oxygen: 6.8 to8.9mg/l
	Total Dissolved Solids: 51to 102mg/l
	Total Hardness (as $CaCO_3$):30to68mg/l
	Total Alkalinity (as $CaCO_3$):22to56 mg/l
	Calcium (as Ca):10.4 to23.2 mg/l
	Magnesium (as Mg):1.0 to 4.9 mg/l
	Oil and Grease: 1mg/l
	Sulphate (as SO_4):2.2 to5.2 mg/l
	Nitrate (as Na):<0.1
	Chloride (as Cl):6.0 to14.0mg/l
	Iron (as Fe):0.06 to0.24mg/l
	Copper (as Cu): <0.05 mg/l
	Lead (as Pb): <0.01mg/l
	Cadmium (as Cd): <0.003mg/l
	Chromium (as Cr): <0.05mg/l
	Manganese (as Mn): <0.05mg/l
	Arsenic (as As): <0.01mg/l
	Mercury (as Hg): <0.001mg/l
Ground Water samples at 6 locations	pH: 7.28 to 7.46
	Total Dissolved Solids: 247to 327 mg/l
	Total Hardness (as $CaCO_3$):139to192mg/l
	Total Alkalinity (as $CaCO_3$): 94 to 172 mg/l
	Calcium (as Ca): 30.8 to 40.1mg/l
	Magnesium (as Mg): 15.1 to24.6 mg/l
	Oil and Grease: :<1mg/l
	Sulphate (as SO_4):3.9to 17.0 mg/l
	Nitrate (as Na):0.72 to 28.2 mg/l
	Chloride (as Cl):6.6 to 32 mg/l
	Iron (as Fe) : 0.09 to 0.18mg/l
	Copper (as Cu): <0.05 mg/l
	Lead (as Pb): <0.01mg/l
	Cadmium (as Cd): <0.003mg/l
	Chromium (as Cr): <0.05mg/l
	Manganese (as Mn): <0.05mg/l
	Arsenic (as As): <0.01mg/l
	Mercury (as Hg): <0.001mg/l
Noise levels Leq (Day & Night) at 6 locations	Residential Area Leq. (Day): 41.5 to 54.5 dB (A)
	Residential Area Leq. (Night): 36.6 to43.5 dB (A)
Soil Quality at 6 locations	Bulk density:1.28to1.47 gm/cc

	pH range: 6.66-to7.15
	Electrical conductivity (EC); 232.9to 286.2 µmhos/cm
	Calcium content: 698.1 to 732.4mg/kg;
	Sodium:207.6to 241.5 mg/kg
	Potassium: 164.1to 172.4 mg/kg;
	Nitrogen:287 to 301.2 mg/kg
	Phosphorous: 15.9 to 23.3 mg/kg;
	Cation Exchange Capacity (CEC):10.7 to 23.67meq/100gm
	Magnesium: 242 to 452mg/kg
	Organic Carbon:0.67 % to 0.85 %
Flora & Fauna	Schedule-I species observed in the study area: Bharal (*Pseudoisnayaur*) Himalayan Tahr (*Hemitragusjemlahicus*) Himalayan Wolf (*Canis chanco)*

xvii. **Details of Solid waste/ Hazardous waste generation/Muck and its management**

(a) Municipal Solid Waste (MSW) likely to be generated during construction and operation shall be 167.5 Ton/annum and 67.5 ton/annum respectively which shall be managed as per Solid Wastes Management Rules, 2016.
Hazardous waste: It inter alia includes burnt mobile oil and greases (6ton/annum) from vehicles and construction machinery and equipment which shall be handled and disposed through authorised dealer as per Hazardous and other Wastes (Management &Transboundary Movement) Rules,2016

(b) The total quantity of muck / debris, to be generated due to the project, shall be 8.59 lakh cum, of which 4.29 lakh cum shall be consumed on project work leaving 4.30 lakh cum, which with 40% swell factor shall amount to 6.01 lakh cum. Five muck disposal sites have been identified on d/s of barrage on right flank of the river. The muck disposal sites 1 and 2 shall have to be developed from below the ground level by providing 10 m high counterfort retaining walland the other three dump sites shall be developed by providing 6 m high R.R. Stone Masonry retaining wall. The retaining wall shall be kept at least 30m away from the point of intersection of HFL of the river with the hill slope.The muck pile shall be later covered with geo-Geo-coir textile properly held to the ground by steel wire U-nails and rehabilitated by afforestation of herbs and shrubs. The cost of Plan has been assessed as Rs.1262 lakh.

xviii. Public Hearing for the proposed project has been conducted by the State Pollution Control Board on 21.12.2020. The main issues raised were demand for a school and other issues related to employment, hiring vehicles of villagers, provision for free electricity, award of petty contracts for project works, construction of internal concrete paths, playgrounds in villages and reservation for wards of affected area for selection of trainees to ITI and also

in employment

xix. Status of Litigation Pending against the proposal, if any. No

xx. The salient features of the project are as under: -

- **EAC Meeting Details:**

EAC meeting/s	34th Meeting (River Valley Projects)
Date of Meeting/s	30.06.2025
Date of earlier EAC meetings	7th EAC Meeting held on 05.02.2021. 10th EAC meeting held on15.04.2021 33rd EAC meeting held on 29.08.2022

- **Project Details:**

Name of the Proposal	Sirkari Bhyol- Rupsiabagar HEP (120 MW) Tehsil Munsiyari, District Pithoragarh, Uttarakhand
Proposal No.	IA/UK/RIV/130432/2019)
Location (Including Coordinates)	Village Saibhat, Tehsil Munsiyari, District Pithoragarh, Uttarakhand. Barrage :30^{0}11'0.55" N, 80^{0}14'4.80" E
Company's Name	UJVN LTD, Dehradun
CIN no. of Company/user agency	U40101UR2001SGC025866
Accredited Consultant and certificate no.	EQMS India Pvt. Ltd., Delhi-110092. NABET/EIA//2225/RA 0303 valid up to 23rd November 2025
Project location (Coordinates /River/Reservoir)	Reservoir Coordinates: 80° 13' 56.97" E 30° 11' 3.71" N 80° 14' 5" E 30° 11' 0.51" N 80° 13' 57.81" E 30° 11' 1.59" N 80° 13' 54.59" E 30° 11' 6.05" N Intake Structure 80° 14' 3.92" E 30° 11' 0.07" N Underground Powerhouse 80° 15' 0.03" E 30° 10' 20.05" N 80° 15' 0.89" E 30° 10' 19.45" N
Inter- state issue involved	No
Proposed on River/ Reservoir	Goriganga River
Type of Hydro-electric project	R-O-R
Seismic zone	Zone V.

- **Category Details**

Category of the project	A

Capacity / Cultural command area (CCA)	120MW
Attracts the General Conditions (Yes/No)	No
Additional information (if any)	-

- **ToR/EC Details**

ToR Proposal No.	IA/UK/RIV/26993/2015
EAC meeting date	26/27th October2015
ToR Letter No.	J-12011/12/2015-IA-1, dated 20-1-2016 Amendment of ToRJ-12011/12/2015-IA.(R), dated 13-10-2020
ToR grant Date	Dated 20-1-2016; Dated 13-10-2020
Cost of project	Rs. 941.96 Crores
Total area of Project	29.997 ha
Height of Dam from River Bed (EL)	12m
Details of submergence area	The submergence area at FRL is 2.24 ha only and it is entirely in forest land.
District to provide irrigation facility (ifapplicable)	Not applicable
Details of tunnels on upper level & lower level and length of canal (if applicable)	2 circular shape, 3m dia., 80m feeder tunnels; 2 circular shape, 3m dia., 66 m long connecting tunnels to HRT 4.2m dia. and 1316.30m long circular Head Race Tunnel; 4.2m diameter tail race tunnel
No. of affected Village.	None
No. of Affected Families	None
Project Benefits	(i) Annual generation of 529.12 MU of energy in a 90 % dependable year; (ii) 12 % free power of total generation will be given to state, which will help in regular power supply in the area; (iii) Against sale of 1% free power to be deposited with Local Area Development Fund annually and (Iv) Employment opportunities to locals in project work. Permanent and temporary employment.
R&R details	Neither any private land nor any other asset shall be acquired for the project. Therefore, no Rehabilitation and Resettlement Plan has been formulated.
Catchment area/ Command area	Catchment area: 957 sq. km.
Types of Waste and quantity of generation during construction/Operation	MSW-167.4Ton/annum during construction and 67.5Ton/annum during operation

Material used for blasting and its composition as per DGMS standards	Ammonium Nitrate Fuel Oil (ANFO), a mixture of ammonium nitrate and fuel oil.
E-Flows for the Project	Environmental flow of 1.87 cumec, 6.42 cumec and 14.13 cumec respectively shall be released through barrage during lean months (November-February) non-monsoon – non-lean season (October, March to May) and during monsoon (June to September).
Is Projects earlier studied in Cumulative Impact assessment & Carrying Capacity studies (CIA&CC) for River in which project located. If yes, then E-flow with TOR /Recommendation by EAC as per CIA&CC study of River Basin. d) If not the E-Flows maintain criteria for sustaining river ecosystem.	Sirkari Bhyol-Rupsiayabagar HEP will be first project on river Goriganga Basin. As per MoEF&CC order dated February 2025 (File no. J11/114/2024-FC) first project in any river basin does not need CEIA& CCS study.
Details on provision of fish pass	Yes. As per ICAR (CIFRI) recommendations fish passage been included in the barrage design.
Project benefit including employment details (no of employee)	Benefits from project already stated atS.N.4(13)Permanent employment during operation and temporary employment.
Area of Compensatory Afforestation (CA) with tentative no of plantation.	60 ha area shall be planted with 60060 plants @1000 plants /ha
Previous EC details	None, as EC is yet to be granted
EC Compliance Report by R.O, MOEF&CC	Not applicable
No. of trees/saplings proposed in view of 'Ek Ped Maa Ke Naam' campaign	An area of 60.06 ha Civil Soyam land is proposed for Compensatory Afforestation scheme. As general guidelines 1000 tress can be planted on 1 hectare land. So, the number of trees shall be planted are 60060. Moreover, trees shall be planted in the catchment area treatment plan, Green Belt Development Plan

- **Electricity Generation Capacity**

Powerhouse Installed Capacity	120 MW

Generation of Electricity Annually	529.12 GWh
No. of Units	3x40 MW

- **Muck Management Details:**

No. of proposed disposal area/ (type ofland- Forest/Pvt land)	5 disposal sites- total area 8.6 ha (forest)
Cross section of proposed muck area, height of muck with slope.	Cross sections have been provided in Figure 10.11 through 10.15 of EIA/EMP report. Height of Muck pile varies from 16 m to28m and slope of muck profile shall be 35^0
Distance of muck disposal area(location), from muck generation sources (project area)/River, HFL of proposed muck disposal area.	Approximately 0.3 km to 1.0 km. The retaining wall shall be kept at least 30m away from the point of intersection of HFL of the river with the river bank slope.
Total Muck Disposal Area	8.6 ha which is entirely forest land
Estimate Muck to be generated	Muck to be generated: 8.59 lakh cum Consumed on work: 4.29 lakh cum Balance to be disposed:4.30 lakh cum
Transportation	By road
Monitoring mechanism for Muck Disposal	The project authorities shall erect a barrier to regulate to and fro movement of traffic from the muck piles site. Entry of all vehicles passing the barrier and the information regarding quantities of muck being transported shall be properly arrayed in a register in a transparent manner and shall be liable to be made public by the project authorities as and when required. Proper e-challan shall be issued.

- **Land Area Breakup:**

Private land	0 ha
Government land	8.562 ha
Forest Land	21.435 ha
Total Land	29.997 ha
Submergence area/Reservoir area	2.24 ha
Additional information (if any)	

- **Presence of Environmentally Sensitive areas in the study area:**

Forest Land/ Protected Area/ Environmental Sensitivity Zone	**Yes/No**	**Details of Certificate/ letter/Remarks**
ReserveForest/Protected Forest Land.	Yes	-
National Park	No	The certificate from the Chief wildlife Warden, Uttarakhand, to the effect that all components of the proposed Sirkari Bhyol - Rupsiabagar HEP (120MW) are outside the Askot Wildlife Sanctuary (WLS) or any other WLS, has been issued vide letter No.3016/12-1, Dehradun, dated 31.3.2021.
Wildlife Sanctuary	No	
Archaeological sites monuments/historical temples etc	No	-
Additional information (if any)	-	-

- **Public Hearing (PH) Details:**

Advertisement for PH with date	24th/25th October 2020 in two Daily viz.,Hindustan Times" and Dainik Jagran.
Date of PH	21st December, 2020
Venue	Village LIlum, Tehsil Munsiyari, District Pithoragarh
Chaired by	ADM, Pithoragarh
Main issues raised during PH	The main issues raised was demand for a school and other issues were related to employment, hiring of vehicles of villagers, provision for free electricity, award of petty contracts for project works, construction of internal concrete paths, playgrounds in villages and reservation for wards of affected area for selection of trainees to ITI and also in employment.
No. of people attended	120

- **Brief of base line Environment:**

Period of baseline data collection/Sampling period.	Pre-monsoon, Monsoon and Post- monsoon, 2018.

Air, noise, water, land	**Air:** The maximum concentration for 3 seasons of PM_{10}, $PM_{2.5}$ NO_X and $SO_2$was found to be 45 $\mu g/m^3$, 20.6 $\mu g/m^3$,10 $\mu g/m^3$and <5 $\mu g/m^3$respectively and within the NAAQS prescribed by CPCB. **Noise:** The maximum L-equivalent noise levels for three seasons during day and night time recorded at barrage and powerhouse site were 67.9 dB(A) and 61.6 dB(A) respectively and exceed the prescribed limits. **Water:** The water is suitable for meeting drinking water requirements after conventional treatment and disinfection. All physical and general parameters of ground water were observed within the desirable limit at all sampling locations as per IS10500:2012, Second Edition. **Soil:** The soils are neutral in soil reactivity; medium in available nitrogen and phosphorus content, medium in potassium content. The soils have medium to high organic carbon content and have good SAR value (1 to 1.9).
Flora and Fauna of the project area,	Based on the primary survey of the specific sites flora under 62 families were found. Among these, 22 trees, 28 shrubs and 51 herbs 14 grasses and 3 sedges, 4 ferns, 3 bryophytes, 5 fungi and 4 lichen species were found. 21 mammalian species of which three (Bharal, Tahr, Himalayan and Wolf) belong to Schedule-1 of WPA, 1972; 63 bird species of which none belongs to Schedule-I; 9 species of herpetofauna were recorded /reported of which none belongs to Schedule-I, under WPA. 1972.
Aquatic ecology, etc.	ICAR (CIFRI) carried out the survey for investigation on fish diversity in the project area. 2 types of fish species were recorded namely *Schizothoraxrichardsonii* (Snow trout) and *Naziritorchelynoides* (Dark mahaseer) during the summer season in the river stretch.
Brief description on hydrology and water assessment as per the approved pre-DPR	The 10-daily flow series at barrage site has been approved by the CWC, New Delhi, vide letter No. CWC No.01/UTT/60/2014/Hyd (N)/131-33, dated 21.02.2017. Based on run off series of 32 years (1977-78 to 2014-15) yield for 50%, 75% and 90% dependability has been assessed as 1285 MCM, 1170 MCM and 993 MCM respectively. SPF of

	2501 cumecs has been recommended by CWC for the planning and design purpose.
Additional detail (If any)	

- **Court case details: NIL**

- **Status of other statutory clearances:**

Particulars	Letter no. and date
Status of Stage- I FC	In principal approval accorded vide MoEF letter no I/117349/2025 dated 23/06/2025.
Approval of Central Water Commission	Hydrological aspects of projects were approved by the C.W.C, New Delhi, vide letter No. 1/UTT/60/2014/Hyd (N)/131-33, dated, 21.02. 2017.
Approval of Central Electricity Authority	CEA, New Delhi, accorded approval to power potential study vide letter No:207/1/2014/HPA/846, dated, 21.7.2017.
Additional detail (If any)	-
Is FRA (2006) done for FC-I	Yes, FRA done on 07.03.2022.

- **Details of the EMP:**

S. N.	Activities	Capital cost (Rs Crore)	Annual recurring cost (Rs lakh)
1.	Catchment Area Treatment Plan	21.99	00.00
2.	Compensatory Afforestation Scheme	6.07	00.00
3.	Wildlife and Bio-diversity Management plan	0.39	15.00
4.	Resettlement & Rehabilitation Plan	0.00	0.00
5.	Green Belt Development Plan	0.17	2.00
6.	Reservoir Rim Treatment Plan	2.52	0.00
7.	Fisheries Management Plan	0.00	0.00
8.	Muck Management Plan	12.02	15.00
9	Restoration Plan for Quarry Sites & landscaping	0.54	4.00
10.	Disaster Management Plan	0.23	0.50
11.	Water, Air and Noise Management Plan	0.20	4.00
12.	Public Health Delivery Plan	0.09	32.00
13.	Labour Management Plan	0.13	10.50
14.	Sanitation and Solid Waste Management Plan	1.25	12.50

15.	Local Area Development Plan	4.00	10.00
16.	Environmental Safeguards During Const.	0.50	7.50
17.	Energy Conservation Measures	0.18	8.00
18.	Environmental Monitoring Plan	0.16	17.25
Grand Total		**50.44**	**138.25**

- **ADS details:**

S. N.	ADS Point	Reply
A- Point-wise replies to additional details sought by EAC in its 7th meeting dated 25.2.2021		
(I)	Approved pre-DPR chapters on hydrology and Power Potential studies be submitted to the Ministry before EAC meeting along with the status of DPR approval.	Copy of approved pre-DPR chapters on Hydrology and Power Potential studies have been submitted online and the status of DPR approval/clearances from various directorates is elucidated
(II)	Development of HEP from upstream and downstream of the project should be mentioned along the details sketch (FRL, longitudinal distance/free flowing area etc).	Two Hydro-electric Projects viz., Mapang-Bogdiyar (200MW) and Bogdiyar-Sirkaribhyol (146MW), proposed on the upstream of Sirkari Bhyol Rupsiabagar HEP, have been cancelled by the Government of Uttarakhand & the DPR of the Rupsiyabagar-Kharsiyabara (260 MW), located on downstream is under revision. Thus, presently, Sirkari Bhyol-Rupsiyabagar HEP (120 MW), is the only project in advance stage in Goriganga sub basin.
(iii)	The methodology and study period of Fish sampling/ Flora and fauna should be submitted.	Methodology adopted for aquatic ecology has been described in section 3.3.3.3 of EIA report. Methodology adopted for fish sampling has been described in section 3.9.6.5 of EIA report. Primary catch survey was conducted in the main stem of Goriganga and its tributaries in project area viz., Ralam Gad and Pitti gad, during Pre-monsoon, monsoon and post-monsoon, 2018, with the help of local fishermen using cast net. No species of fish were recorded in the project area. • Previous studies/references viz., "Studies on Ichthyofaunal Diversity with special reference to Monthly and Seasonal

		variations of Fish Landings in glacial fed mountainous Goriganga River of Kumaun Himalaya, Uttarakhand, India" (Kumar A., Research Journal of Animal, Veterinary and Fishery Science, Vol. 2(4), 1-12, April 2014), was reviewed. • The State Fishery Department was also consulted to get previous fisheries records and their availability in different stretches of Goriganga river located in project area and downstream. The Assistant Director Fisheries, Pithoragarh, vide letter No.185/10-Matsya Niyamawali/2020-21, dated 1.9.2020, certified that there is no fauna present in the project zone of SBR HEP. • Fisheries data were also gathered from the ongoing CEIA Study of Goriganga sub-basin being caused by UJVN by engaging WAPCOS, which also reveals that no species of fishes were recorded in the project area and on its u/s.
(iv)	Conservation plan for Schedule I shall be prepared and submitted to the Chief Wildlife Warden for approval	Letter of Approval of Conservation Plan by CWLW, Uttarakhand No, 3017/12-1, Dehradun, dated 31.3.2021 has been submitted.
(v)	The minimum observed flow in the river to be compared with the proposed e-flow. What arrangements are proposed for real time monitoring of the compliance of the e-flow releases.	As per observed discharge data observed at G&D site at Rargiri (near barrage) for Year 2015-16 to 2019 20, the minimum observed discharge is 8.32 cumec in first ten daily of February 2020. This is compatible with the minimum discharge of 8.2 cumec corresponding to 90% dependable year (1987-88) and is also more than the minimum e-flow requirement of 1.83 cumecs computed based on 20% of average flow in four consecutive leanest months in 90% dependable year (1987-88) derived from CWC approved flow series of 37 years (1977 78 to 2014-15). Arrangements proposed for real-time monitoring of the e-flow releases: • The e-flow during lean season and non-lean, non-monsoon period shall be

		released through under sluice bay and measured by setting up a calibrated open channel flow meter to be fitted at the end of d/s pier of under sluice and at two intake structures to measure the discharge entering intake. • During monsoon period the e-flow shall also be released through other bays where calibrated open channel flow meter to be fitted at the end of d/s training walls and an online monitoring system shall be installed at control room to ensure the e flow monitoring as per direction of MoEF&CC. • Compliance details, as per EC conditions, shall be submitted on a regular basis to UEP&PCB and Regional office MoEF&CC.
(vi)	Environment Cost Benefits Analysis should be revised considering the cost of negative/positive impacts on all ecological entities in the region rather than focusing on the cost of impacts on human beings	• The Environment Cost - benefit analysis (ECBA) has been carried out by considering impacts to various environmental entities like physical, ecological and social environment by reducing numerous complex physical, ecological and social-economic variables of environment to easy, quantifiable components of costs and benefits. • The focus has not been only on the cost of impacts on human beings but includes impacts due to project., loss of forest land and the vegetal cover over it, of loss of eco-system services due to diversion of forests, loss of animal husbandry productivity, loss of fodder, habitat fragmentation, loss of soil moisture, loss due to land degradation. • Besides these, the impacts due to increase in fugitive dust particles, impairment of quality of water, increased noise levels during construction, have also been considered in the analysis. • As per revised analysis submitted now, the Total Environment Cost and Total

		Environment Benefits are Rs 4356.10 lakhs and Rs 22098.69 lakhs respectively, thus the benefits from the project clearly outweigh the cost to environment. Considering the benefits during the useful life of project, the Environment Benefit Cost Ratio has been assessed as 200.03 :1.
(vii)	Air and water analysis results may be re-checked and updated in EIA report.	• Baseline data for air quality for three seasons, as enumerated in Table 3.8 through 3.10, has been rechecked and no anomaly/discrepancy has been observed. • Factually, during presentation against contents of slide No.19, it was pointed out how such a low concentration value was measured in case of SO2. It was clarified that the 24-hourly maximum concentration value was not a measured value, but a predicted value of concentration for the pollutant and the word predicted has not been stated in the title of Table 4.3. The omission has been rectified now. • As regards water quality analysis results in respect of BOD, its value ranged between 0.4 to 0.9mg/l and were less than 2mg/l and satisfy CPCB Water Quality Criteria i.e., Designated-Best Use Criteria (DBU) for Class A water. • In respect of the query raised, during presentation, related to the Effluent Discharge Standard (GSR1265(E), dated 13.10. 2017) it is stated that the effluent discharge through STP shall conform to the Standard, according to which the BOD concentration should not exceed 20 mg/l, the standard set for Metro cities and all state capitals. The concentration does not exceed 30mg/l for areas/regions other than mentioned. Since the project area falls neither under any metro city nor under state capital, the limiting concentration shall be 30mg/l.

(vii)	Certificate from the CWLW that all the components of the project are outside the Askot Wildlife Sanctuary (WLS) or any other WLS.	Certificate from CWLW, Uttarakhand No, 3016/12-1, Dehradun, dated 31.3.2021 has been submitted.
(ix)	Sketches showing the arrangement of the proposed de-silting arrangement of the quarry water to be provided by the PP.	For intercept sediment laden runoff from rock quarry settling tank/sediment trap of dimension 9.3m x 2.7m x1.8m has been proposed. It shall be constructed by excavation and lining sides and bottom with 10cm thick cement concrete and with one baffle wall and an outlet discharging into connecting drain. Sketch was submitted.
(x)	For the muck disposal arrangement, it should be certified that a proper slope stability analysis of the dumped muck pile has been done and the requisite engineering measures evolved accordingly	Submitted the undertaking
B-Point-wise replies to additional details sought by EAC in 10th meeting dated 15.4.2021		
(I)	Approval of CWC on Pre-DPR chapter of hydrology.	Copy of approval of CWC on pre-DPR chapter of Hydrology are submitted as Annexure-1 (A) through 1(C). Monthly water availability at SirkariBhyol - Rupsiabagar diversion site vide letter no.1/UTT/60/2014/Hyd(N)/131-33 dated 21.02 2017 (Annexure-1A). Water availability series (10 Daily discharge) has been approved by CWC vide letter no.1/UTT/60/2014/Hyd(N)/367-69 dated 10.03 2017 (Annexure-1B). Design flood has been approved by CWC vide letter no. 1/UTT/60/2014/Hyd(N)/303-305 dated13.04.2017 (Annexure-1C).
(II)	The study report on the extent of the occurrence of glaciers and glacial lakes within the study area and their contribution to the river flow and the risk assessment of Glacier Lake Outburst Floods (GLOfs) in consultation CWC.	Glacial Lake Outburst Frood, "GLOF" Study of Sirkari Bhyol-Rupsiabagar HEP (120 MW), Uttarakhand was entrusted to R.S. Envirolink Technologies Pvt. Ltd., Gurgaon. They conducted the **study,** and the report was submitted to the CWC vide letter No. 980/UJVNL/03/D (P/ GM(CDH&NP)/SBR, dated

		14.12.2021(Annexure-2A). The CWC vide letter No. 6/11/2021/FE&SA/50-54, dated 7.2.2022 (Annexure-2B) intimated that report was generally found to be in order within the conditions/criterion, assumptions and imitations of the model parameters adopted in the study.
(iii)	Fish sampling methodology, sampling location and area covered during sampling required to be revalidated from scientific references. Fish occurrence and requirement of fish pass needs to be examined in consultation with CIFRI.	Revalidation of fishery survey of Goriganga at project site of Sirkari- Bhyol Rupsiabagar Hydro Electric **Project,** District Pithoragarh, Uttarakhand was conducted through Centre for Interdisciplinary Studies of Mountain & Hill Environment (CISMHE) University of Delhi, during October 2021 (Annexure-3).
(iv)	The downstream of the project area is a known habitat for cold-water fishes like snow trout and endemic catfishes, the e-flow requirement in the downstream should be revised or the CWC recommended e-flows for trout zone should be adopted.	The three-regime e-flow requirement {Lean season 1.87 cumec (20%); Monsoon season 14.13 cumec (30%) and non-monsoon - non-lean season 6.42cumec (25%) does not warrant any revision.
(v)	As the project area is known for **conservation of** significant wildlife such as Musk deer, Snow leopard, Himalayan Black bear etc., the wildlife conservation plan requires revision in terms of dominant wildlife species of the region and a specific conservation plan for the same in the consultation with Expert from State govt and other reputed Central Govt. agencies. Purchase of Vehicles from the budget of the Wildlife Conservation Plan is not allowed.	In line with the queries raised by the EAC members, the Wildlife and Biodiversity Conservation& Management plan was prepared in consultation with **the Forest** Department and submitted to Divisional Forest Officer Pithoragarh. The latter vide his office letter no 5214/12-I dated 22.04.2021 recommended the revised Wildlife and Biodiversity Conservation & Management plan for approval by the competent authority i.e., Chief Wildlife Warden, Uttarakhand (Annexure-4A). The latter has approved the Wildlife and Biodiversity Conservation & Management plan vide Letter No.246/12-1, Dehradun, dated 24.7.2021 which is enclosed as Annexure-4B.
(vi)	Sketches showing the arrangement of the proposed de-silting arrangement of the quarrying water should be	The sketch showing the arrangement of the proposed de-silting arrangement of the quarrying water Is enclosed as Annexure-5.

	prepared correctly and be submitted.	
C-Point-wise replies to additional details sought (ADS) by EAC in 33rd meeting date 29.8.2022		
(i)	The EAC was not in agreement with data generated during the study regarding non-occurrence of fish species in the study area. There are numerous studies which reported the presence of various cold-water fishes in the region. The EAC opined that fishes are the best bio indicator for illustrating the ecological health of any aquatic ecosystem including rivers. It was noted that as per previous recommendations of the EAC fish occurrence and requirement of fish pass had to be examined in consultation with CIFRI. But it was conducted through some other institute during October 2021. It was also noted that a representation has been received mentioning the issues regarding eco vulnerability of the region viz. frequent occurrence of extreme climate events resulting in flooding, landslides and then related life and property losses in Gori River Basin as the basin already exists 7 large Hydro Power Projects (HPP's) in Gori Ganga River basin and 1 medium scale HPP (proposed).	As per EAC suggestions the Fish Survey was conducted by the ICAR (CIFRI), Barrackpore. During the survey conducted in May 2023, two types of fish species were recorded namely *Schizothoraxrichardsonii* (Snow trout) and *Naziritorchelynoides* (Dark mahaseer) during the summer season in the river stretch. As per the CIFRI survey and suggestions of report, the provision of fish passage has been incorporated in barrage design. Sirkari Bhyol-Rupsiayabagar HEP will be first project on river Goriganga Basin. As per MoEF&CC order dated February 2025 (File no. J11/114/2024-FC) first project in any river basin does not need CEIA& CCS study. Forest proposal of Sirkaribhyol-Rupsiabagar HEP has been discussed in the 4th Meeting of Forest Advisory Committee (FAC) held on May 26, 2025, and. Forest Conservation Division, MoEF&CC vide letter no I/117349/2025 dated 23/06/2025 forwarded the In Principle approval of Central government for the project.

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