



# एसजेवीएन लिमिटेड

मिनी-रत्न शिड्यूल 'A' पीएसयू  
निगमित पर्यावरण विभाग  
IS/ISO 9001:2015 Certified

कार्यालय,

कार्यकारी निदेशक,  
निगमित पर्यावरण विभाग,  
शक्ति सदन, शनान,  
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संख्या: SJVN/CHQ/ENV/27/ 108

दिनांक: 29/11/2021

सेवा में,

अतिरिक्त प्रधान मुख्य वन संरक्षक (सी),  
पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय,  
क्षेत्रीय कार्यालय (NCZ), 25, सुभाष रोड,  
देहरादून - 248001,  
ई-मेल: [moef.ddn@gmail.com](mailto:moef.ddn@gmail.com)

**Sub:** Six Monthly Monitoring Report on Compliance to Environmental Aspects (For period April, 2021 – September, 2021) i.r.o Naitwar Mori HEP (60 MW), Uttarakhand.

**Ref:** EC letter No. J-12011/16/2010/IA.I, June 16, 2016 (Issued by Ministry of Environment, Forest & Climate Change- GoI)

Sir,

Kind reference is invited to above referred endorsement vide which Naitwar Mori Hydroelectric Project (60 MW) of SJVN in Uttarkashi District (Uttarakhand) is granted Environment Clearance. Submission of six monthly compliance report is required by Environment Clearance. Further, it is desired vide notification dated 26.11.2018 to submit half yearly compliance reports in soft copies only.

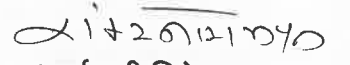
Therefore, Six Monthly Monitoring Report on compliance to Environmental Aspects (for the period ending September 2021) is submitted for your kind information, please.

संलग्नक: यथोपरि।

सधन्यवाद,

भवदीय,

एसजेवीएन लिमिटेड के लिए,

  
(कार्यकारी निदेशक)

प्रतिलिपि (केवल ईमेल के माध्यम से):

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- प्रभारी, केंद्रीय प्रदूषण नियंत्रण बोर्ड (सीपीसीबी), जोनल कार्यालय (उत्तर), पीआईसीयूपी भवन, विभूति खंड, गोमती नगर, लखनऊ - 226010 (यू.पी.). [mscb.cpcb@nic.in](mailto:mscb.cpcb@nic.in), [cpcb.lucknow@gmail.com](mailto:cpcb.lucknow@gmail.com)
- सदस्य सचिव, उत्तराखंड पर्यावरण संरक्षण और प्रदूषण नियंत्रण बोर्ड (UEPPCB), 29/20, नेमी रोड, देहरादून -248001 (उत्तराखंड). [spsubudhi@gmail.com](mailto:spsubudhi@gmail.com), [msukpcb@gmail.com](mailto:msukpcb@gmail.com)

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पंजीकृत एवं कॉर्पोरेट कार्यालय: एस जे वी एन लिमिटेड, शक्ति सदन, शनान, शिमला, हिमाचल प्रदेश-171006

**Six Monthly Monitoring Report on Compliance to Environmental Aspects (For Period Ending September, 2021)**

<b>A)</b>	<b>Name of Project</b>	Naitwar Mori HEP (60 MW)
	<b>Type of the Project</b>	Hydroelectric
	<b>Location</b>	PO Mori, Tehsil Mori, District Uttarkashi, Uttarakhand.
	<b>Contact Address</b>	
	<b>(a) Concerned Project Head</b>	Head of Project, PO Mori, Tehsil Mori, District Uttarkashi, Uttarakhand, PIN 249128 Contact No. 01373-234370
	<b>(b) Concerned Environment Division (Project)</b>	Head (Environment), PO Mori, Tehsil Mori, District Uttarkashi, Uttarakhand, PIN 249128 Contact No. 01373-234308
	<b>(c) Concerned Environment Division (Corporate)</b>	Head (Environment), SJVN Corporate Headquarters, Shanan, Shimla, HP, PIN 171006 Contact No. 0177-2660198
	<b>Environment Clearance</b>	J-12011/16/2010/IA.I dated 16.06.16 and corrigendum issued vide even no. dated 07.08.18

**PART – A: Specific Conditions**

<b>S.No.</b>	<b>Condition of Environment Clearance</b>	<b>Status</b>
i.	The following Catchment Area Treatment (CAT) Plan as proposed in the EIA/EMP report (Chapter – 1 in the EMP dated February, 2011) and mentioned vide letter no. SJVN/AGM/NMHEP/PEC/11-431 dated 02.09.2011 shall be strictly implemented in consultation with Uttarakhand Forest Department. Major works shall be completed before impounding. The financial allocation of Rs. 769 lakhs for CAT plan implementation shall not be diverted for any other purpose. As per plan, the area of CAT is 3995.28 ha.	The amount, i.e. Rs.12.9666 Crores against implementation of CAT plan has been deposited by SJVN in CAMPA fund.  In this regard, about Rs. 140.68 lakh and Rs. 185.34 lakh has been spent by Tons Forest Division and Govind Wild Life Sanctuary & NP, Purola respectively till date (total Rs. 326.02). <b>(Annexure-I)</b>
ii.	The R&R Benefits for the land losing households will be as per the National Rehabilitation and Resettlement Policy, 2010 of SJVNL as well as NRRP – 2007 whichever is higher. Adequate publicity of the compensation package of NRRP 2007/SJVNL R&R Policy 2010 shall be	R&R Plan of NMHEP is in line with the National Rehabilitation and Resettlement Policy (NRRP) – 2007.  R&R Plan of NMHEP was notified in the Official Gazette of Uttarakhand on 04.11.2017 and the same was published

	given in the affected villages. All R&R issues shall be completed before commissioning of the project.	in two daily newspapers in the local area before its implementation. Also, the same has been uploaded in the official website of District Uttarkashi. The copies of R&R Plan have also been provided in the office of SDM Purola, Tehsildar Mori, BDO Mori, Panchayat Pradhans and villagers.
iii.	A monitoring committee for R&R shall be constituted which must include representatives of project affected persons from SC/ST category and a women beneficiary.	The village-wise R&R/Grievance Redressal Committee has been constituted under the Chairmanship of ADM-cum-R&R Administrator, Uttarkashi comprising of SDM, BDO, SC/ST representative, Women representative, Panchayat Pradhan (representative of PAFs) and representatives of project management.
iv.	All the commitments made during the public hearing shall be fulfilled completely by the project proponent.	The commitments viz infrastructural development works, community development works, employment to the locals, hiring of local contractors, hiring of local vehicles, technical education to the local youth, merit scholarship schemes etc. made during public hearing have been included in R&R Plan of the project which being implemented through R&R administrator (i.e. ADM-Uttarkashi) appointed by Govt.
v.	Consolidation and compilation of the muck shall be carried out only in the designated muck dumping sites as submitted in the EIA/EMP Report & in the reply submitted in February, 2011. As per the proposed muck disposal plan, out of the 7,11,240 m <sup>3</sup> muck generated 30-40% will be utilized as construction material and remaining 4,29,583 m <sup>3</sup> will be dumped at the 2 designated disposal areas in 4.5 ha. The identified muck dumping sites shall be at-least 30 m horizontally away from high flood level (HFL).	Presently around 6.97 lakh M <sup>3</sup> of muck has been generated out of which around 2.62 lakh m <sup>3</sup> has been reutilized for development of construction material, roads and facility areas. Remaining 4.35 lakh m <sup>3</sup> of muck has been dumped in two dumping sites. These dumping sites are located 30 m horizontally away from HFL of river Tons.
vi.	A minimum environmental flow of 3.55 cumecs i.e. average river discharge in the 4 consecutive leanest months in the 90% dependable year shall be have to be maintained. However, 5.0 cumecs shall be maintained as environmental flow during September – October and March – April months. Monsoon flow shall be 30% of the total Monsoon discharge.	The minimum environment flow as specified herein shall be maintained during operation stage of the project.

vii.	Continuous monitoring system for the flow rate measurement shall be installed and data be displaced at appropriate site for information of civil society and stakeholders. Six monthly results shall be submitted to the concerned Regional Office of the Ministry and SPCB	Shall be ensured during operation stage of the project.
viii.	The Fishery Conservation & Management Plan as proposed in the EMP & in the reply submitted in August, 2011 shall be implemented completely in consultation with the Fisheries Department, Government of Uttarakhand. As proposed, the construction of fish ladder shall also be taken up and allocated budget of Rs. 1.00 Crore shall not be diverted for any other purpose.	Vertical slot type fish pass design has been finalized based upon recommendation of CIFRI. Accordingly, the work for construction of Fish Ladder having the contract price of Rs. 1.93 crore has been awarded on 08.09.2021.
ix.	Real time telemetry and data acquisition system including all weather hydro meteorological stations shall be installed for in-flow monitoring and advance flood warning. Advance flood warning and advance communication systems shall be installed in consultation with the downstream authorities.	A hydro meteorological station has been set up at the SJVN Site Office near Barrage. It measures the ambient temperature, wind speed, relative humidity, wind direction, rainfall and dew point. Further, the procurement/installation of advance flood warning system (Early Warning System) at three location in the Catchment area is under process.
x.	As proposed in the EMP, the Compensatory Afforestation Programme on 79.76 ha of land with soil binding species @ 3000 plants/ha and broad leaved species @ 2000 plants/ha with the help of State Forest Department in the degraded forest area shall be strictly taken-up. The allocated grants of Rs.3.74 Crores shall not be diverted for any other purpose.	As part of diversion of forest land, compensatory afforestation over 80.00 ha of civil soyam and forest land has been proposed at a cost of Rs.1,84,24,160/-. The said amount has been deposited with Compensatory Afforestation Fund (CAF) Uttaranchal as part of compensatory levies for compliance to Stage – I Forest Clearance.  DFO, Tons Forest Division, Purola vide his letter No. 2307/3-2, dated 29.04.2021 has informed that all compensatory afforestation works have been completed on 80.00 hectare of land, 1 <sup>st</sup> year maintenance has been done. An amount of about Rs. 67.74 lakh have been spent so far against compensatory afforestation works ( <b>Annexure-I</b> ).
xi.	Greenbelt development along the approach roads, residential areas, office complex, barrage site and along the reservoir as proposed in the EIA/EMP with	2430 nos. of various species of tree/grass saplings like, <i>jackranda</i> , <i>gulmohar</i> , <i>alstonia</i> , <i>silver oak</i> , <i>kachnar</i> , <i>deodar</i> , <i>pomegranate</i> , <i>local bamboo</i> , etc. have

	50 different plant species shall be undertaken immediately and allocated grant of Rs. 44 lakhs shall not be diverted for any other purpose.	been planted in consultation with State Forest Department at appropriate locations in the project area. Plantation of remaining saplings is being taken up in synchronization with construction work.
xii.	The Biodiversity Conservation and Management Plan shall be taken-up strictly as outlined in the EIA/EMP report and implemented in consultation with the State Forest Department. The allocated grants of Rs. 43 lakhs shall not be diverted for any other purpose. A report of implementation shall be included in the six monthly compliance report to be submitted to the Ministry.	The detailed Biodiversity Conservation and Management Plan for Rs. 43.00 lakh has been prepared by CF Yamuna Circle, Dehradun & DFO, Tons Forest Division, Purola. Accordingly, SJVN has deposited Rs. 43.00 lakh to DFO Tons, Forest Division, Purola on 22.10.2019 for implementation.  DFO, Tons Forest Division, Purola vide his letter No. 2307/3-2, dated 29.04.2021 has informed that an amount of about Rs. 22.38 lakh have been spent so far against Biodiversity Conservation and Management Plan ( <b>Annexure-I</b> ).
xiii.	Equipment likely to generate high noise levels shall meet the ambient noise standards as notified under the Noise Pollution (Regulation and Control) Rules, 2000 as amended in 2010 under the Environment (Protection) Act, 1986 (EPA). For this necessary insulators etc. may be ensured.	Noise level data is got monitored by SJVN from Pollution Control Research Institute, BHEL, Haridwar from 20.06.2018 onwards. The noise level data is being submitted to Regional Office, MoEF&CC Dehradun as part of six-monthly monitoring report.  All high noise generating equipments have been provided with mufflers as per manufacture's specification.  Noise level data monitored on 29.06.2021 by SJVN from Pollution Control Research Institute, BHEL, Haridwar is attached as <b>Annexure-II</b> .
xiv.	Any other clearance from any other organization/department, if required shall be obtained before commencing the project.	Condition is being complied with.
xv.	As outlined in the report submitted dated 29.12.2011 for an amount of Rs.6.26 crores shall be spent for the Local Area Development in the project	The Rehabilitation and Resettlement Plan of NMHEP, consisting of infrastructural and community development works is being implemented through R&R Administrator i.e. ADM Uttarkashi who is appointed by Govt. of Uttarakhand.  In this regard, a budget of Rs.1445 lacs have been deposited with R&R Administrator, Uttarkashi out of which an

		<p>amount of Rs. 637.55 lacs have been incurred as follows:</p> <p>a) Rehabilitation grant – Rs.163.27 lacs</p> <p>b) Subsistence allowance – Rs.65.30 lacs</p> <p>c) Health care – Rs.54.03 lacs</p> <p>d) Educational facilities – Rs.12.61 Lacs</p> <p>e) Recreational Facilities – Rs.2.25 Lacs.</p> <p>f) Widow Pension: 24.33 Lacs</p> <p>g) Community Development activity - Rs.315.76 Lacs.</p> <p><b>(Annexure-III)</b></p>
xvi.	Two openings in the dam shall be kept to ensure environmental flow. One opening shall be for minimum environmental flow of 3.55 cumecs which will be un-gated and other will be gated which will be opened during the months when higher environmental flow of 5 cumecs is released. During the months of September – October and March – April, both the openings will discharge 5 cumecs.	Suitable provisions are being made in the Barrage structure to ensure environmental flow releases.
xvii.	Besides keeping environmental flows, fish hatcheries will be developed for stocking of fingerlings, both upstream and downstream of the dam site.	State Fisheries Department had been requested to provide a plan for development of fish hatcheries for stocking of fingerlings from 2009 onwards. In this regard, Director (Fisheries) vide letter dated 12.01.2018 and 23.03.19 and Asst. Director (Fisheries) vide letter no. 422 dated 27.10.2020 has communicated that they are in process of survey of land for Fish hatchery.
xviii.	Pension for elderly widows shall be increased to Rs.1500 per month	The provision of yearly pension @Rs.18,000/- per year (Rs. 1500/- pm) has been kept in the R&R Plan of NMHEP for the vulnerable group family head residing in the affected village. In this regard, 43 widow ladies have been covered under this provision and provided monthly pension of Rs. 1500/- pm w.e.f. Nov. 2017.
xix.	The public toilets (130 nos.) with septic tanks shall be provided and maintained in each of the affected villages. A sum of Rs.61 lakhs shall be kept separately for this purpose and shall not be diverted for any other purpose.	The list of beneficiaries for the construction of toilets in the Project Affected Villages have been finalized through BOD Mori and further submitted to ADM-cum-R&R Administrator, Uttarkashi.

		ADM-cum-R&R Administrator, Uttarkashi has further instructed Rural Works Dept. Uttarkashi for preparation of estimates. At present toilets are under construction etc.
xx.	System and facility for solid waste management shall also be provided in the project affected villages.	Project has provided waste collection bins in the PAV i.e. <i>Bainol, Gainchwan &amp; Naitwar</i> villages, amounting to around Rs. 1 lakh. Project had developed waste collection pits in Bainol Village (PAV) for an award amount of INR 58,000/-. Further, dustbins have been distributed in Project Affected Villages, Hospital, Tehsil Mori, Schools, Vendors of Mori Market, Forest Deptt. and SHO, Mori.
xxi.	Alternate sources for drinking water shall be provided to the affected villages and other villages in the vicinity, in case, natural springs are affected due to construction of the project. This shall be carried out in consultation with the State Irrigation and Public Health Department.	Noted. If it is technically established that the drinking water resources are dried up due to project works, the same shall be restored and water supply schemes shall be provided by SJVN on instructions of State Govt./Central Govt. through State Water Supply Dept. Nevertheless, drinking water supply schemes have already been provided in the Project Affected Villages viz. Bainol, Naitwar and Gainchwan gaon as a CSR initiative through SJVN foundation.
xxii.	For planting of trees and other biological measures, indigenous and among them endemic tree species should be preferred. Turfing may be done by perennial grasses in consultation with a Horticulturist. Proponents themselves may take this responsibility under the guidance of a scientist/expert in vegetative propagation and mass multiplication (tissues culture)	Construction work at project site commenced in March 2018 and work is in progress. Plantation and turfing activities depicted herein shall be undertaken in consultation with scientists/experts after completion of the construction activities of the Project.
xxiii.	A specialist in reproduction biology of fishes, CIFRI should study the viable and feasible alternatives on the blocked migratory movement of fish species like <i>Schizothorax richardsonii, Tor putitora, Tor tor</i> , etc. due to construction of the dam so that these species would not become locally extinct.	The said study has been undertaken by CIFRI, Kolkatta. The final study on " <i>Viable and Feasible Alternatives on the Blocked Migratory Movement of Fish Species</i> " i.r.o. of NMHEP has been submitted by CIFRI and same has been shared with MoEF&CC (HQ) and Regional Office, Dehradun on 12.11.2021 ( <b>Annexure-IV</b> ). The recommendations of study are being

		adopted by the project in the fish pass design.
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**PART – B: General Conditions**

(i.)	Adequate arrangement for providing free fuel like kerosene/wood/LPG shall be made at project cost for the labour engaged in the construction work so that indiscriminate felling of trees is prevented.	To avoid indiscriminate felling of trees, canteen facility is being provided by Contractors to the labour force engaged in construction activity of the project.
(ii)	Medical facilities as well as recreational facilities shall also be provided to the labourers.	Dispensary has been provided at Contractor facility. Further, First Aid kits along-with trained staff provided at Barrage, Adit-1 and Power house.
(iii)	All the labourers to be engaged for construction works shall be thoroughly examined by health personnel and adequately treated before issuing them work permit.	Being complied.
(iv)	No fugitive dust emissions should be observed at the construction sites. Water sprinkling arrangements shall be made to suppress the fugitive emissions.	All measures suggested in the EIA/EMP report including sprinkling of water are being undertaken at project site.
(vi)	Potable drinking water and proper sanitary facilities should be provided for the labour force and the local area people.	The provision mentioned for said activity in the EMP is being taken care by main contractor as part of the contract agreement. Drinking water supply schemes have already been provided in the Project Affected Villages viz. Bainol, Naitwar and Gainchwan gaon as a CSR initiative through SJVN foundation.
(vii)	Restoration of construction area including dumping site of excavated materials shall be ensured by leveling, filling up of burrow pits, landscaping etc. The area should be properly treated with suitable plantation.	Construction work at project site has started in March 2018 and work is in progress at various locations. Restoration of construction area and dumping sites shall be done after completion of project components and in synchronization with construction activities.
(viii)	Financial provision shall be made in the total budget of the project for implementation of the above suggested safeguard measures.	Financial provision of Rs. 32.48 Crores towards implementation of Environment Management Plan has been kept in the total budget of the project.
	Status on implementation of EMP?	Expenditure on EMP: INR 42.52 crores.

Budgetary provision on EMP for INR 32.48 crores shall be exclusively spent on the purpose.	Details on physical and financial progress on stipulated subheads of EMP is bulleted below,
<ul style="list-style-type: none"> <li>CAT Plan (INR 7.69 crores)</li> </ul> (Revised Cost: INR12.9666 crores)	Amount Deposited: INR 12.9666 crores. Utilization: State Forest Department has utilized approx. INR 326.02 lakhs for the development of nurseries ( <b>Annexure-I</b> ).
<ul style="list-style-type: none"> <li>R&amp;R Plan (INR 13 crores)</li> </ul> (Revised Cost: INR14.45 crores)	Amount Deposited with ADM, Uttarkashi: INR 14.45 crores.
<ul style="list-style-type: none"> <li>CA and NPV for Forest Land Transfer (INR 3.74 crores)</li> </ul>	Amount deposited Against CA: INR1,84,24,160/- Against NPV: INR 3,74,47,790/-
<ul style="list-style-type: none"> <li>Greenbelt, Landscape and Restoration Plan (INR 44 lakhs)</li> </ul>	<i>Expenditure done: INR 6.91 lakhs</i>
<ul style="list-style-type: none"> <li>Reservoir Rim Treatment Plan (INR 22.09 lakhs)</li> </ul>	Nil
<ul style="list-style-type: none"> <li>Fisheries Management Plan (Provision made in DPR) (INR 1 crores)</li> </ul>	Nil
<ul style="list-style-type: none"> <li>Water, Air and Noise Quality Management Plan (INR 20 lakhs)</li> </ul>	The provision mentioned for said activity in the EMP is being taken care by main contractor as part of the contract document No. II of IV, para 2.3.14.1- control of Air Pollution and para 2.3.14.2 – control of noise pollution.
<ul style="list-style-type: none"> <li>Muck Disposal Plan (INR 3.8780 crores)</li> </ul>	INR 8.86 crores.
<ul style="list-style-type: none"> <li>Health Management Plan (Provision made in R&amp;R) (INR 40 lakhs)</li> </ul>	INR 54.03 lakh (One Ambulance and miscellaneous medical aids provided to PHC Mori) under Health Management Plan of R&R provision.
<ul style="list-style-type: none"> <li>Dam Break Modelling &amp; Disaster Management Plan (INR 52.60 lakhs)</li> </ul>	Nil
<ul style="list-style-type: none"> <li>Environmental Awareness Plan (INR 9 lakhs)</li> </ul>	Expenditure done: INR 2.98 lakhs (approx.) Details: 1. INR 1 lakh spent on awareness (June 05, 2017, locality and forest officials at Mori; August, 2017, cleanliness drive at Mori; October, 2017, <i>swatchhhta</i> seva in schools and dust bin distribution in Mori Market.) 2. INR 98,000/- Jute carry bags distributed (PPR-246/19, February 07, 2019).

		3. INR 1 lakh spent on awareness programmes through M/s HIMCON (July 2019-March 2020).
	• Environmental Monitoring Plan (INR 36.50 lakhs)	INR 11.46 lakhs. Details: Monitoring being done by M/s Pollution Control Research Institute (BHEL), Haridwar. Latest monitoring done in March, 2021.
	The project proponent shall also submit six monthly compliance reports of the stipulated EC conditions (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF& CC and State Pollution Control Board. Both monitoring report and compliance report shall be up-loaded on the website of the Proponent.	Six-monthly compliance reports are being regularly submitted to MoEF&CC Regional Office (North-Central Zone), Dehradun, CPCB Zonal Office (North), Lucknow and Uttarakhand Environment Protection and Pollution Control Board, Dehradun and also uploaded on our website <a href="http://www.sjvn.nic.in">www.sjvn.nic.in</a> . Yes, latest six-monthly report submitted by project to MoEF&CC on May 26, 2021.
5.	The project proponent shall provide full cooperation and all required documents/data to the officials from concerned Regional Office of the Ministry who would be monitoring the implementation of environmental safeguards.	Full cooperation will be provided to officials from concerned Regional office of MoEF&CC during monitoring of the project.
6.	The responsibility of implementation of environmental safeguards rests fully with the M/s Satluj Jal Vidyut Nigam Ltd. And Government of Uttarakhand.	Noted
7.	Besides the above stated conditions, the project proponent and Government of Uttarakhand shall also implement all other environmental safeguards, as proposed in the EIA/EMP report and other reports from time to time.	All environmental safeguard measures proposed in the EIA/EMP report are being implemented.
8.	The Environmental Management Plan shall be strictly adhered to and a sum of Rs. 32.48 crores, the budgetary provisions for implementation of EMP shall not be diverted for any other purpose.	Financial provision of Rs. 32.48 Crores towards implementation of Environment Management Plan shall not be diverted for any other purpose. At present a total of Rs. 42.52 crores have been spent so far on implementation of EMP.
9.	Any change in the scope of the project shall be intimated to the Ministry and fresh approval if required, shall be taken from the Ministry.	There is no change in the scope of the project.
10.	The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary and to take action including	Noted

11.	This clearance letter is valid for a period of 10 years from the date of issue of this letter for commencement of construction work.	The major work for the project has been awarded on 05.12.17 and construction activities have commenced from March 2018 onwards.
12.	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban local body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the Proponent.	The condition has been complied with. The clearance letter is available on company website <a href="http://www.sjvn.nic.in">www.sjvn.nic.in</a> .
13.	A multi-disciplinary committee for monitoring the implementation of environmental safeguards during construction shall be constituted by the Proponent in consultation with the Ministry. The proponent shall suggest the members for approval of the Ministry. Proponent shall organize six monthly meetings of the Committee and submit the monitoring report to the Ministry.	A Multi-Disciplinary Committee for Naitwar Mori HE Project has been constituted vide MoEF&CC letter no. J-12011/16/2010-IA.I dated 09.07.2018. The 3 <sup>rd</sup> meeting of MDC was held on 21.08.2021.
14.	The proponent should advertise at least two local newspapers widely circulated in the region around the project. One of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance and copies of clearance letter area available with the State Pollution Control Board/Committee and may also be seen at Website of the Ministry of Environment, Forest Climate Change at <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a>	Complied
15.	After 5 years of the commissioning of the project, a study shall be undertaken regarding impact of the project on the environment and downstream ecology. The study shall be undertaken by an independent agency, decided in consultation with the Ministry.	Condition shall be complied during operation stage of the project.
16.	The proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitoring data (both in hard copies as well as e-mail) to the respective Regional office of	Six-monthly compliance reports are being regularly submitted to MoEF&CC Regional Office (North-Central Zone), Dehradun, CPCB Zonal Office (North), Lucknow and Uttarakhand Environment Protection and Pollution Control Board,

	MoEF&CC and Zonal office of CPCB and the SPCB.	Dehradun and also uploaded on our website <a href="http://www.sjvn.nic.in">www.sjvn.nic.in</a> .  The last compliance report for the period ending March 2021 was submitted on 26.05.2021  Environment Monitoring results carried out during the period of compliance are enclosed as <b>Annexure-V</b> .
17.	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if referred, within a period of 30 days from the date of issue, as prescribed under Section – 10 of the National Green Tribunal Act, 2010.	To the best of our knowledge, no such appeal has been made with National Green Tribunal against Environment Clearance issued to Naitwar Mori HE Project.

\*\*\*\*\*

Annexure-I

कार्यालय प्रभागीय वनाधिकारी, टौंस वन प्रभाग, पुरोला (उत्तरकाशी)

Email- dfo\_tons@yahoo.co.in Fax:- 01373- 223328

पत्रांक 2307 / 3-2 दिनांक, पुरोला, उत्तरकाशी 29/4/ 2021

सेवामें,

महाप्रबन्धक, (परियोजना प्रमुख)  
नैटवाड-मोरी जल विद्युत परियोजना,  
मोरी।।

विषय:-

नैटवाड-मोरी जल विद्युत परियोजना के अन्तर्गत विभिन्न कार्यों हेतु अवमुक्त धनराशि के सापेक्ष व्यय की प्रगति।

महोदय,

इस वन प्रभाग को नैटवाड-मोरी जल विद्युत परियोजना के अन्तर्गत विभिन्न कार्यों हेतु अवमुक्त धनराशि के सापेक्ष माह मार्च 2021 तक व्यय का विवरण निम्न प्रकार है।

क्र० सं०	कार्य का विवरण	माह मार्च 2021 तक कुल अवमुक्त धनराशि (लाख में)	माह मार्च 2021 तक कुल व्यय धनराशि (लाख में)	अभ्युक्ति
1	क्षतिपूरक वृक्षारोपण (80.00 है०)	67.74	67.74	अग्रिम मृदा कार्य, वृक्षारोपण कार्य तथा वर्ष 2020-21 में प्रथम वर्ष अनुरक्षण कार्य किया गया है।
2	कैंट प्लान (डी०पी०आर० में प्रस्तावित कार्य)	140.68	140.68	वर्ष 2019-20 व वर्ष 2020-21 में अवमुक्त धनराशि के सापेक्ष व्यय की जा चुकी है।
3	जैव विविधता (औषधीय पौधों का रोपण तथा विभिन्न जैव विविधता सम्बन्धी प्राक्कलनानुसार) कार्य	43.00	22.38	अवशेष धनराशि का नियमानुसार व्यय किया जायेगा
4	देवता रेंज के अन्तर्गत खनन क्षेत्र के आस-पास वृक्षारोपण 2000 पौध रोपित की गयी	1.89800	1.89800	सम्पूर्ण व्यय की जा चुकी है।

भवनीय

(सुबोध कुमार काला)  
प्रभागीय वनाधिकारी,

टौंस वन प्रभाग, पुरोला।



**प्रदूषण नियन्त्रण अनुसंधान संस्थान**  
 भारत हेवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार (उत्तराखण्ड) -249403  
**POLLUTION CONTROL RESEARCH INSTITUTE**  
 (A Govt. of India – UNDP / UNIDO Project)  
**BHARAT HEAVY ELECTRICALS LIMITED**  
**RANIPUR, HARIDWAR (U.K.) - 249 403**



ISO 9001-2008 OHSAS 18001-2007

(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

**TEST REPORT**  
**AMBIENT NOISE MONITORING**

Lab. Ref.: PCRI: Air & Noise: 2021-22 :082-086

Date: 06.08.2021

**A. GENERAL INFORMATION:**

1	Name and address of Plant	:	M/s SJVN Limited, Naitwar-Mori Hydro Electric Project, Mori, District- Uttarkashi, Uttarakhand
2	Work Order No.	:	20-0179-0-691
3	Date of sampling	:	29.06.2021
4	Instrument used	:	Sound Level Meter
5	Measurement carried out by	:	PCRI, B.H.E.L., Ranipur, Haridwar-U.K.

**B. RESULTS OF NOISE MEASUREMENT:**

All measurement in dB (A)

Sl. No.	Location	Measured Values	Allowable Limit (Day Time) ** Leq.
1.	Barrage Site Office	71	<b>75 dB (A)</b>
2.	Near Stone Crusher	69	
3.	Near Sandra Range Quarry	60	
4.	Near Power House	68	
5.	Near Devta Range Quarry	61	

**Leq. :** Equivalent Sound Pressure Level

**\*\*Allowable Noise Level Limit:** The Noise Pollution (Regulation & Control) Rules,2000

Prepared by

(Ankur Mohan)  
Engineer (PCRI)

Approved by

( Shailendra Kumar )  
Sr. Manager (PCRI)

**Services Offered :** Monitoring of Air, Water, Noise & Solid Waste as per requirement of EP Act of CPCB & SPCB and providing Test reports, Environmental Impact Assessment, Environmental Audits reports

- Remarks :- (1) This report refers only to the particular sample/job submitted for testing.  
 (2) This report is not to be reproduced wholly or partly and can not be used as an evidence in the court of law and should not be used in any advertising media without our special permission in writing.  
 (3) Samples will be disposed off after one month from the date of issue of Test Certificate

## कार्यालय जिलाधिकारी, उत्तरकाशी

संख्या: 6145 /आठ-07

(2018-17)

दिनांक 27 जुलाई, 2021

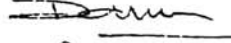
महाप्रबन्धक (परियोजना प्रमुख)  
एसजेवीएन लिमिटेड,  
नैटवा-मोरी जल विद्युत परियोजना, वैगोल  
जिला उत्तरकाशी।

विषय: नैटवाड-मोरी जल विद्युत परियोजना (80 मेगावाट) की पुनर्वास एवं पुनर्स्थापन योजना की तृतीय किरत अवमुक्त करने के सम्बन्ध में।

उपरोक्त विषयक आप विदित है कि नैटवाड-मोरी जल विद्युत परियोजना (80 मेगावाट) की पुनर्वास एवं पुनर्स्थापन योजना का कियान्वयन उत्तराखण्ड सरकार के निर्णयानुसार अधोद्वरताक्षरी के माध्यम से किया जा रहा है। कियान्वयन के दौरान सभी प्रभावित परिवारों को पुनर्वासन अनुदान एवं निर्वाह भत्ता निर्गत किया जा चुका है एवं योजना के अन्तर्गत अन्य प्राविधानों जैसे-छात्रवृत्ति योजना, तकनीकी शिक्षा योजना, विधवा पेंशन, बालिका जन्म अनुदान, बालिका विवाह अनुदान एवं अन्य सामुदायिक व ढांचागत कार्य को कियान्वित किया जा रहा है। उक्त कार्यों के कियान्वयन में कुल ₹0.6,34,52,388.00 करोड़ की धनराशि को निर्गत/आवंटित की जा चुकी है।


अतः उपरोक्त के क्रम में नैटवाड-मोरी जल विद्युत परियोजना के पुनर्वास एवं पुनर्स्थापन योजना की शेष बचत धनराशि ₹0 4,81,66,666/- (चार करोड़ इक्यासी लाख छियासठ हजार छः सौ छियासठ) तृतीय/अन्तिम किरत के रूप में निम्नलिखित बैंक खाते में शीघ्रातिशीघ्र अवमुक्त करवाना सुनिश्चित करें ताकि परियोजना प्रभावित क्षेत्र में पुनर्वास एवं पुनर्स्थापन योजना के तहत ढांचागत एवं सामुदायिक विकास कार्यों को योजनाबद्ध तरीके से निष्पादित किया जा सकें।

बैंक का नाम	: यूनियन बैंक,
बैंक शाखा	: उत्तरकाशी
खाते का नाम	: आर0 एण्ड आर0 एडमिनिस्ट्रेटर उत्तरकाशी।
खाता संख्या	: 601801010050152
आई0एफ0एस0सी0 कोड	: UBIN0560139

  
अपर जिलाधिकारी/  
पुनर्वास और पुनर्व्यवस्थापन प्रशासक  
उत्तरकाशी  
27/7/21

प्रतिलिपि: निम्नांकित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित:-

1. आयुक्त गढ़वाल मण्डल/पुनर्वासन और पुनर्व्यवस्थापन आयुक्त, पौड़ी।
2. जिलाधिकारी, उत्तरकाशी।

  
अपर जिलाधिकारी/  
पुनर्वास और पुनर्व्यवस्थापन प्रशासक  
उत्तरकाशी



एसजेवीएन लिमिटेड

(भारत सरकार एवं हिमाचल सरकार का संयुक्त उपक्रम)

मिनी पब्लिक एंड अनुसूची 'ए' पी.एस.यू.

**SJVN Limited**

(A Joint Venture of Govt. of India and Govt. of H.P.)

CIN : L40101HP1988GOI008409

Annexure-IV

**Head of Project (परियोजना प्रमुख)**

Naitwar-Mori Hydro Electric Project

(नेटवाड़-मोरी जल विद्युत परियोजना)

Mori, Distt.-Uttarkashi (Uttarakhand)-249128

☎ 01373-234370 Fax:-01373-234303

Email: nmjshep07@gmail.com

Website : www.sjvn.nic.in

No. SJVN/NM HEP/CGM/EC/21- 604-605

Dated: 12.11.2021

To,

Director- IA.I,  
Ministry of Environment, Forests & Climate Change,  
Room #303, 3<sup>rd</sup> Floor, Vayu Wing,  
Indira Paryavaran Bhawan, Jor Bagh, New Delhi-110003

Kind attention:- Dr. Y.P. Singh, Director- IA.I.

Subject: Naitwar –Mori Hydro Electric Project (60 MW) in Uttarkashi District of uttarakhand  
by M/s Satluj Jal Vidyut Nigam Ltd. (SJVN Limited)-regarding.

Ref: Environment Clearance No. J-12011/16/2010.IA.I, dated 16/06/2016

Sir,

This has reference to MoEF & CC, Govt. of India vide letter No. J-12011/16/2010.IA.I, dated 16/06/2016 vide which Environment Clearance to Naitwar –Mori Hydro Electric Project (60 MW) has been accorded. As mentioned in the EC letter at Sr. No.xxiii, Part-A Specific Conditions, stipulated below;

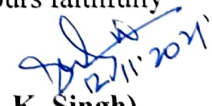
*A specialist in reproductive biology of fishes, CIFRI should study the viable and feasible alternatives on the blocked migratory movement of fish species like Schizothoraxrichardsonii, Tor putitora, Tor tor etc. due to construction of the dam so that these species would not become locally extinct.*

Accordingly, SJVN had engaged Central Inland Fisheries Research Institute (CIFRI), Barrackpore, Kolkata-700120 (W.B.) for the said study on 28.12.2018. After the study CIFRI has submitted the Final draft report to SJVN.

In this context, a copy of the said study report is enclosed herewith for your kind information and perusal please.

Thanking you

Yours faithfully

  
(S. K. Singh)  
CGM/ HoP

**Encl: As above**

**Copy to:** Additional Principal Chief Conservator of Forests, Ministry of Environment, Forests & Climate Change, Regional Office (Central), 25, Subhas Road, Dehradun-248001 (Uttarakhand)a/w copy of the study report kind information and perusal please.



PCRI/051

प्रदूषण नियन्त्रण अनुसंधान संस्थान  
भारत हेवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार (उत्तराखण्ड) -249403  
**POLLUTION CONTROL RESEARCH INSTITUTE**

(A Govt. of India - UNDP / UNIDO Project)

**BHARAT HEAVY ELECTRICALS LIMITED****RANIPUR, HARIDWAR (U.K.) - 249 403**

(Approved Lab under Environment (Protection) Act, 1986; EIA Consultant by NABET, QCI)

**TEST REPORT**

**Lab Reference No:** TL210121 **Date:** 18.08.2021  
**Indentor:** M/s SJVN LIMITED, (A Joint Venture of Govt. of India 7 govt. of Himachal Pradesh), Naitwar-Mori Hydro Electric Project, Mori, Distt. Uttarkashi, Uttarakhand-249128  
**Customer's Ref. No.:** SJVN/NMHEP/LOA/Envr./2021-276  
**Work Order No.:** 21-0001-O-291  
**Sample Collected by:** PCRI Staff **Collection Date:** 03.07.2021  
**Sample/Job:** Water sample of upstream of TONES RIVER

PARAMETER	UNIT	OBTAINED VALUE
Ammonical Nitrogen	mg/L	ND
Free Ammonia	mg/L	ND
Arsenic	mg/L	ND
BOD <sub>3</sub> at 27°C	mg/L	ND
Cadmium	mg/L	ND
COD	mg/L	ND
Dissolved Phosphate	mg/L	2.82
Hexavalent Chromium	mg/L	ND
Chromium Total	mg/L	ND
Colour	Hazen	<5
Copper	mg/L	0.01
Cynide	mg/L	ND
Fluoride	mg/L	ND
Iron (as Fe)	mg/L	0.03
Lead	mg/L	ND
Manganese (as Mn)	mg/L	0.01
Mercury	mg/L	ND
Nickel	mg/L	0.01
Odour	-	Agreeable
Nitrate (as NO <sub>3</sub> )	mg/L	ND
Mineral Oil (Oil & Grease)	mg/L	ND
pH	-	8.3
Phenol	mg/L	ND
Residual Chlorine	mg/L	ND
Selenium	mg/L	ND
Sulphides	mg/L	ND
Temperature	°C	16.7
Total Kjeldal Nitrogen (TKN)	mg/L	ND
Total Dissolved Solids	mg/L	94
Total Suspended Solids	mg/L	122
Vanadium	mg/L	ND
Zinc	mg/L	0.02

ND-Not Detectable

*Avinash*  
18/8/21  
(Avinash Kumar)

Dy. Manager (PCRI)

अविनाश कुमार / Avinash Kumar

प्रबन्धक / Dy. Manager

**Remarks :-** (1) This report refers only to the particular sample/job submitted for testing.  
(2) This report is not to be reproduced wholly or partly and can not be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.  
(3) Samples will be disposed off after one month from the date of issue of Test Certificate.

Ranipur, Haridwar



प्रदूषण नियंत्रण अनुसंधान संस्थान  
भारत हेवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार (उत्तराखण्ड) -249403  
**POLLUTION CONTROL RESEARCH INSTITUTE**

(A Govt. of India - UNDP / UNIDO Project)

**BHARAT HEAVY ELECTRICALS LIMITED**

**RANIPUR, HARIDWAR (U.K.) - 249 403**

(Approved Lab under Environment (Protection) Act, 1986; EIA Consultant by NABET, QCI)

**TEST REPORT**

**Lab Reference No:**

TL210122

**Date:** 18.08.2021

**Indentor**

M/s SJVN LIMITED, (A Joint Venture of Govt. of India 7 govt. of Himachal Pradesh), Naitwar-Mori Hydro Electric Project, Mori, Distt. Uttarkashi, Uttarakhand-249128

**Customer's Ref. No.:**

SJVN/NMHEP/LOA/Env./2021-276

**Work Order No.:**

21-0001-O-291

**Sample Collected by:**

**PCRI Staff**

**Collection Date:** 03.07.2021

**Sample/Job:**

Water sample of downstream of TONES RIVER (after chibra gad)

PARAMETER	UNIT	OBTAINED VALUE
Ammonical Nitrogen	mg/L	ND
Free Ammonia	mg/L	ND
Arsenic	mg/L	ND
BOD <sub>3</sub> at 27°C	mg/L	ND
Cadmium	mg/L	ND
COD	mg/L	ND
Dissolved Phosphate	mg/L	3.89
Hexavalent Chromium	mg/L	ND
Chromium Total	mg/L	ND
Colour	Hazen	<5
Copper	mg/L	0.01
Cynide	mg/L	ND
Fluoride	mg/L	ND
Iron (as Fe)	mg/L	0.03
Lead	mg/L	ND
Manganese (as Mn)	mg/L	0.02
Mercury	mg/L	ND
Nickel	mg/L	ND
Odour	-	Agreeable
Nitrate (as NO <sub>3</sub> )	mg/L	ND
Mineral Oil (Oil & Grease)	mg/L	ND
pH	-	8.2
Phenol	mg/L	ND
Residual Chlorine	mg/L	ND
Selenium	mg/L	ND
Sulphides	mg/L	ND
Temperature	°C	16.8
Total Kjeldal Nitrogen (TKN)	mg/L	ND
Total Dissolved Solids	mg/L	100
Total Suspended Solids	mg/L	146
Vanadium	mg/L	ND
Zinc	mg/L	0.03

ND-Not Detectable

*Avinash*  
18/8/21

(Avinash Kumar)

Dy. Manager (PCRI)

अविनाश कुमार / Avinash Kumar

उप प्रबन्धक / Dy. Manager

Pollution Control Research Institute

प्रदूषण नियंत्रण अनुसंधान संस्थान

PCRI, Ranipur, Haridwar

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(3) Samples will be disposed off after one month from the date of issue of Test Certificate.



PCRI/051

प्रदूषण नियन्त्रण अनुसंधान संस्थान  
भारत हेवी इलेक्ट्रिकल्स लिमिटेड, रानीपुर, हरिद्वार (उत्तराखण्ड) -249403  
**POLLUTION CONTROL RESEARCH INSTITUTE**

(A Govt. of India - UNDP / UNIDO Project)

**BHARAT HEAVY ELECTRICALS LIMITED****RANIPUR, HARIDWAR (U.K.) - 249 403**

(Approved Lab under Environment (Protection) Act, 1986; EIA Consultant by NABET, QCI)

**TEST REPORT**

**Lab Reference No:** TL210123 **Date:** 18.08.2021  
**Indentor:** M/s SJVN LIMITED, (A Joint Venture of Govt. of India 7 govt. of Himachal Pradesh), Naitwar-Mori Hydro Electric Project, Mori, Distt. Uttarkashi, Uttarakhand-249128  
**Customer's Ref. No.:** SJVN/NMHEP/LOA/Envnt./2021-276  
**Work Order No.:** 21-0001-O-291  
**Sample Collected by:** PCRI Staff **Collection Date:** 03.07.2021  
**Sample/Job:** Water sample of TONES RIVER (before confluence to mia gad)

PARAMETER	UNIT	OBTAINED VALUE
Ammonical Nitrogen	mg/L	ND
Free Ammonia	mg/L	ND
Arsenic	mg/L	ND
BOD <sub>3</sub> at 27°C	mg/L	ND
Cadmium	mg/L	ND
COD	mg/L	ND
Dissolved Phosphate	mg/L	3.31
Hexavalent Chromium	mg/L	ND
Chromium Total	mg/L	ND
Colour	Hazen	<5
Copper	mg/L	0.01
Cynide	mg/L	ND
Fluoride	mg/L	ND
Iron (as Fe)	mg/L	0.04
Lead	mg/L	ND
Manganese (as Mn)	mg/L	0.02
Mercury	mg/L	ND
Nickel	mg/L	ND
Odour	-	Agreeable
Nitrate (as NO <sub>3</sub> )	mg/L	ND
Mineral Oil (Oil & Grease)	mg/L	ND
pH	-	8.0
Phenol	mg/L	ND
Residual Chlorine	mg/L	ND
Selenium	mg/L	ND
Sulphides	mg/L	ND
Temperature	°C	17.0
Total Kjeldal Nitrogen (TKN)	mg/L	ND
Total Dissolved Solids	mg/L	112
Total Suspended Solids	mg/L	164
Vanadium	mg/L	ND
Zinc	mg/L	0.02

ND-Not Detectable

*Avinash*  
18/8/21  
(Avinash Kumar)  
Dy. Manager (PCRI)  
अविनाश कुमार / Avinash Kumar  
उप प्रबंधक / Dy. Manager

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**POLLUTION CONTROL RESEARCH INSTITUTE**

(A Govt. of India - UNDP / UNIDO Project)

**BHARAT HEAVY ELECTRICALS LIMITED**

**RANIPUR, HARIDWAR (U.K.) - 249 403**

(Approved Lab under Environment (Protection) Act, 1986; EIA Consultant by NABET, QCI)

**TEST REPORT**

**Lab Reference No:**  
**Indentor**

TL210124

**Date :** 18.08.2021

M/s SJVN LIMITED, (A Joint Venture of Govt. of India 7 govt. of Himachal Pradesh), Naitwar-Mori Hydro Electric Project, Mori, Distt. Uttarkashi, Uttarakhand-249128

**Customer's Ref. No.:**

SJVN/NMHEP/LOA/Env./2021-276

**Work Order No.:**

21-0001-O-291

**Sample Collected by:**

**PCRI Staff**

**Collection Date:** 03.07.2021

**Sample/Job:**

Water sample of TONES RIVER (after confluence to mia gad)

PARAMETER	UNIT	OBTAINED VALUE
Ammonical Nitrogen	mg/L	ND
Free Ammonia	mg/L	ND
Arsenic	mg/L	ND
BOD <sub>3</sub> at 27°C	mg/L	ND
Cadmium	mg/L	ND
COD	mg/L	ND
Dissolved Phosphate	mg/L	ND
Hexavalent Chromium	mg/L	ND
Chromium Total	mg/L	ND
Colour	Hazen	<5
Copper	mg/L	0.01
Cynide	mg/L	ND
Fluoride	mg/L	ND
Iron (as Fe)	mg/L	0.02
Lead	mg/L	ND
Manganese (as Mn)	mg/L	0.01
Mercury	mg/L	ND
Nickel	mg/L	ND
Odour	-	Agreeable
Nitrate (as NO <sub>3</sub> )	mg/L	ND
Mineral Oil (Oil & Grease)	mg/L	ND
pH	-	8.0
Phenol	mg/L	ND
Residual Chlorine	mg/L	ND
Selenium	mg/L	ND
Sulphides	mg/L	ND
Temperature	°C	17.1
Total Kjeldal Nitrogen (TKN)	mg/L	ND
Total Dissolved Solids	mg/L	122
Total Suspended Solids	mg/L	96
Vanadium	mg/L	ND
Zinc	mg/L	0.02

ND-Not Detectable

*Avinash*  
18/8/21  
(Avinash Kumar)

Dy. Manager (PCRI)

अविनाश कुमार / Avinash Kumar

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PCRI/051

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**TEST REPORT**

**Lab Reference No:**  
**Indentor**

TL210125

**Date :** 18.08.2021

M/s SJVN LIMITED, (A Joint Venture of Govt. of India 7 govt. of Himachal Pradesh), Naitwar-Mori Hydro Electric Project, Mori, Distt. Uttarkashi, Uttarakhand-249128

**Customer's Ref. No.:**

SJVN/NMHEP/LOA/Env./2021-276

**Work Order No.:**

21-0001-O-291

**Sample Collected by:** PCRI Staff**Collection Date:** 03.07.2021**Sample/Job:**

Water sample of TONES RIVER (downstream to power house)

PARAMETER	UNIT	OBTAINED VALUE
Ammonical Nitrogen	mg/L	ND
Free Ammonia	mg/L	ND
Arsenic	mg/L	ND
BOD <sub>3</sub> at 27°C	mg/L	ND
Cadmium	mg/L	ND
COD	mg/L	ND
Dissolved Phosphate	mg/L	ND
Hexavalent Chromium	mg/L	ND
Chromium Total	mg/L	ND
Colour	Hazen	<5
Copper	mg/L	ND
Cynide	mg/L	ND
Fluoride	mg/L	ND
Iron (as Fe)	mg/L	0.02
Lead	mg/L	ND
Manganese (as Mn)	mg/L	ND
Mercury	mg/L	ND
Nickel	mg/L	ND
Odour	-	Agreeable
Nitrate (as NO <sub>3</sub> )	mg/L	ND
Mineral Oil (Oil & Grease)	mg/L	ND
pH	-	8.1
Phenol	mg/L	ND
Residual Chlorine	mg/L	ND
Selenium	mg/L	ND
Sulphides	mg/L	ND
Temperature	°C	17.4
Total Kjeldal Nitrogen (TKN)	mg/L	ND
Total Dissolved Solids	mg/L	112
Total Suspended Solids	mg/L	154
Vanadium	mg/L	ND
Zinc	mg/L	ND

ND-Not Detectable

*Avinash*  
18/8/21

(Avinash Kumar)

Dy. Manager (PCRI)

अविनाश कुमार / Avinash Kumar

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PCRI/051

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ISO 9001-2008 OHSAS 18001-2007

(Approved Lab under Environment (Protection) Act, 1986; EIA Consultancy by NABET, QCI)

**TEST REPORT**  
**AMBIENT AIR MONITORING**

Lab. Ref.: PCRI: Air & Noise: 2021-22 :077  
Date: 06-08-2021

**A. GENERAL INFORMATION:**

1.	Name and address of Plant	:	M/s SJVN Limited, Naitwar-Mori Hydro Electric Project, Mori, District- Uttarkashi (Uttarakhand)
2.	Work Order No.	:	20-0179-0-691
3.	Date of sampling	:	29.06.2021 to 30.06.2021
4.	Location of Sampling	:	Barrage Office ( Site)
5.	Method of Sampling	:	IS:5182, Part-II-2001, Part-IV-1999, Jacob & Hochheiser Modified (Na-Arsenite), NDIR and Gravimetric (PM10 Sampler)
6.	Duration of Sampling	:	24 Hours
7.	Sample collection by	:	PCRI, B.H.E.L., Ranipur, Haridwar-U.K.

**B. RESULTS OF AMBIENT AIR MONITORING:**

Sl. No.	Parameter	Unit	Obtained Value	Allowable Limit**
1.	Particulate Matter less than 10 µm or PM <sub>10</sub>	µg/m <sup>3</sup>	49	100
2.	Particulate Matter less than 2.5 µm or PM <sub>2.5</sub>	µg/m <sup>3</sup>	26	60
3.	Sulphur Dioxide ( SO <sub>2</sub> )	µg/m <sup>3</sup>	BDL	80
4.	Nitrogen Dioxide ( NO <sub>2</sub> )	µg/m <sup>3</sup>	8	80
5.	Carbon Monoxide ( CO )	mg/m <sup>3</sup>	0.18	4
6.	Lead ( Pb )	µg/m <sup>3</sup>	BDL	1
7.	Ammonia ( NH <sub>3</sub> )	µg/m <sup>3</sup>	BDL	400
8.	Ozone ( O <sub>3</sub> )	µg/m <sup>3</sup>	37	180
9.	Benzene ( C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	BDL	5
10.	Benzo(a)pyrene ( BaP )	ng/m <sup>3</sup>	BDL	1
11.	Arsenic ( As )	ng/m <sup>3</sup>	BDL	6
12.	Nickel ( Ni )	ng/m <sup>3</sup>	BDL	20

BDL: Below Detectable Limit,

\*\*:National Ambient Air Quality Standards as per CPCB Notification N. Delhi, the 18 Nov. 2009

Prepared by

(Ankur Mohan)  
Engineer (PCRI)

Approved by

( Shailendra Kumar )  
Sr. Manager (PCRI)

**Services Offered :** Monitoring of Air, Water, Noise & Solid Waste as per requirement of EP Act of CPCB & SPCB and providing Test reports, Environmental Impact Assessment, Environmental Audits reports

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ISO 9001-2008 OHSAS 18001-2007

**TEST REPORT**  
**AMBIENT AIR MONITORING**

Lab. Ref.: PCRI: Air & Noise: 2021-22 :078  
Date: 06.08.2021

**A. GENERAL INFORMATION:**

1.	Name and address of Plant	:	M/s SJVN Limited, Naitwar-Mori Hydro Electric Project, Mori, District- Uttarkashi (Uttarakhand)
2.	Work Order No.	:	20-0179-0-691
3.	Date of sampling	:	29.06.2021 to 30.06.2021
4.	Location of Sampling	:	Near Stone Crusher ( Site)
5.	Method of Sampling	:	IS:5182, Part-II-2001, Part-IV-1999, Jacob & Hochheiser Modified (Na-Arsenite), NDIR and Gravimetric (PM10 Sampler)
6.	Duration of Sampling	:	24 Hours
7.	Sample collection by	:	PCRI, B.H.E.L., Ranipur, Haridwar-U.K.

**B. RESULTS OF AMBIENT AIR MONITORING:**

Sl. No.	Parameter	Unit	Measured Values	Allowable Limit**
1.	Particulate Matter less than 10 µm or PM <sub>10</sub>	µg/m <sup>3</sup>	52	100
2.	Particulate Matter less than 2.5 µm or PM <sub>2.5</sub>	µg/m <sup>3</sup>	29	60
3.	Sulphur Dioxide ( SO <sub>2</sub> )	µg/m <sup>3</sup>	BDL	80
4.	Nitrogen Dioxide ( NO <sub>2</sub> )	µg/m <sup>3</sup>	9	80
5.	Carbon Monoxide ( CO )	mg/m <sup>3</sup>	0.3	4
6.	Lead ( Pb )	µg/m <sup>3</sup>	BDL	1
7.	Ammonia ( NH <sub>3</sub> )	µg/m <sup>3</sup>	BDL	400
8.	Ozone ( O <sub>3</sub> )	µg/m <sup>3</sup>	41	180
9.	Benzene ( C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	BDL	5
10.	Benzo(a)pyrene ( BaP )	ng/m <sup>3</sup>	BDL	1
11.	Arsenic ( As )	ng/m <sup>3</sup>	BDL	6
12.	Nickel ( Ni )	ng/m <sup>3</sup>	BDL	20

BDL: Below Detectable Limit,

\*\* : National Ambient Air Quality Standards as per CPCB Notification N. Delhi, the 18 Nov. 2009

Prepared by

(Ankur Mohan)  
Engineer (PCRI)

Approved by

( Shailendra Kumar )  
Sr. Manager (PCRI)

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**TEST REPORT**  
**AMBIENT AIR MONITORING**

Lab. Ref.:PCRI: Air & Noise: 2021-22 :079  
Date: 06.08.2021

**A. GENERAL INFORMATION:**

1.	Name and address of Plant	:	M/s SJVN Limited, Naitwar-Mori Hydro Electric Project, Mori, District- Uttarkashi (Uttarakhand)
2.	Work Order No.	:	20-0179-O-691
3.	Date of sampling	:	29.06.2021 to 30.06.2021
4.	Location of Sampling	:	Near Power House Office(Site)
5.	Method of Sampling	:	IS:5182, Part-II-2001, Part-IV-1999, Jacob & Hochheiser Modified (Na-Arsenite), NDIR and Gravimetric (PM10 Sampler)
6.	Duration of Sampling	:	24 Hours
7.	Sample collection by	:	PCRI, B.H.E.L., Ranipur, Haridwar-U.K.

**B. RESULTS OF AMBIENT AIR MONITORING:**

Sl. No.	Parameter	Unit	Measured Values	Allowable Limit**
1.	Particulate Matter less than 10 µm or PM <sub>10</sub>	µg/m <sup>3</sup>	47	100
2.	Particulate Matter less than 2.5 µm or PM <sub>2.5</sub>	µg/m <sup>3</sup>	26	60
3.	Sulphur Dioxide ( SO <sub>2</sub> )	µg/m <sup>3</sup>	BDL	80
4.	Nitrogen Dioxide ( NO <sub>2</sub> )	µg/m <sup>3</sup>	8	80
5.	Carbon Monoxide ( CO )	mg/m <sup>3</sup>	0.21	4
6.	Lead ( Pb )	µg/m <sup>3</sup>	BDL	1
7.	Ammonia ( NH <sub>3</sub> )	µg/m <sup>3</sup>	BDL	400
8.	Ozone ( O <sub>3</sub> )	µg/m <sup>3</sup>	39	180
9.	Benzene ( C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	BDL	5
10.	Benzo(a)pyrene ( BaP )	ng/m <sup>3</sup>	BDL	1
11.	Arsenic ( As )	ng/m <sup>3</sup>	BDL	6
12.	Nickel ( Ni )	ng/m <sup>3</sup>	BDL	20

BDL: Below Detectable Limit,

\*\* :National Ambient Air Quality Standards as per CPCB Notification N. Delhi, the 18 Nov. 2009

Prepared by

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