



एसजेवीएन लिमिटेड

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

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संख्या: SJVN/CHQ/ENV/F21/ 106

दिनांक: 23/11/2021

सेवा में,

सदस्य सचिव,

राज्य स्तरीय पर्यावरण प्रभाव आकलन प्राधिकरण,

पर्यावरण, विज्ञान और प्रौद्योगिकी विभाग, हिमाचल प्रदेश सरकार,

पर्यावरण भवन, यूएस क्लब के पास, शिमला - 171001

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Sub: Six Monthly Monitoring Report on Compliance to Environmental Aspects (For period April, 2021 - September, 2021) i.r.o Corporate Office Complex at Shanan, Shimla

Ref: Environment Clearance No. HPSEIAA/2011/90-3068, December 30, 2011

Sir,

Kind reference is invited to above referred endorsement vide which Corporate Office Complex of SJVN at Shanan, Shimla is granted Environment Clearance. Further, it is stipulated to submit six monthly status report on implementation of the conditions of Environment Clearance. Therefore, Six Monthly Monitoring Report on compliance to Environmental Aspects (for the period April, 2021-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):

1. 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

2. उप महानिदेशक वन (सी), पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, क्षेत्रीय कार्यालय (NCZ), 25, सुभाष रोड, देहरादून - 248001, ई-मेल: moef.ddn@gov.in

**Six Monthly Monitoring Report on Compliance to Environmental Aspects
(For Period Ending 30 September 2021)**

A)	Name of Project	SJVN Ltd. Corporate Office Complex
	Type of the Project	Office Building
	Location	Village Shanan, District Shimla, Himachal Pradesh
	Contact Address	
	(a) Concerned Project Head/HoD	Head of Department, CFM Department, SJVN Ltd. Corporate Headquarters, Shanan, Shimla-171006; Contact No. 0177-2660157
	(b) Concerned Environment Division (Corporate)	Head (Environment), SJVN Corporate Headquarters, Shanan, Shimla, HP, PIN 171006 Contact No. 0177-2660180

B)	<u>Condition imposed by the Ministry of Environment & Forests, GoI while granting Environment Clearance Vide letter no. HPSEIAA/2011/90-3068 dated 30/12/2011</u>	
S. No.	Conditions Imposed	Compliance Status
Part A Specific Conditions		
I-Construction Phase:		
1	“Consent to Establish” shall be obtained from H.P. State Pollution Control Board under Water (Prevention and Control of Pollution) Act 1974 and Air (Prevention and Control of Pollution) Act 1981 a copy of same shall be submitted to State Environment Impact Assessment Authority (SEIAA) before start of any construction work at the site.	Consent to Operate has been accorded by HPPCB dt. 31/07/2019 valid up to 31.03.2021 and further applied for renewal next three years. (Copy attached Annexure-1) . Also consent to Establish has been accorded by SPCB valid up to 31.03.20 and renewal for FY 2020- 21 and FY 2021-22 is under process. The requisite statutory fee for renewal for Consent to Establish has been deposited with HPPCB (Copy attached Annexure-1) .
2	Provisions shall be made for the housing of 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.	Provision for the housing of labor within the site with all necessary infrastructure and facilities was made by the Contractor in the form of temporary structures during the construction in SJVN.
3	All required sanitary and hygienic measures should be taken before, during and after the completion of project.	All required sanitary and hygienic measures have been taken care before, during and after the completion of project.

4	A First Aid Room will be provided in the project both during construction and operation phase of the project.	A First Aid Room has been provided during construction of office block. In operation phase, Medical room has been provided at ground floor of office building with facility of resident doctor.
5	Adequate drinking water, fuel and sanitary facilities should be provided for construction workers at the site. Provisions should be made for mobile toilets. The safe disposal of waste water and solid wastes generated during the construction activities should be ensured.	All the necessary action has been taken care during construction work.
6	All the topsoil excavated during construction activities should be stored for use in horticulture/landscape development within the project site.	All the top soil excavated during construction activities had been stored and utilized in horticulture/ landscape developments within the project site.
7	Disposal of muck including excavated material during construction phase should not create any adverse effects on the neighboring communities and disposed of taking the necessary precautions for general safety and health aspects of public, only in approved sites with the approval of competent authority.	<p>SJVN is disposing the muck on approved dumping site of MC for the construction of Guest House cum Parking Block and Auditorium Block. The permission for dumping of debris/C&D waste was granted to SJVN by MC, Shimla vide letter no-20- 2417 dated 14.09.2020 (Copy attached Annexure-2). At following approved dumping sites:</p> <ol style="list-style-type: none"> 1. Dumping site situated near SWM Project Bharyal Totu Shimla.
8	Soil and ground water samples shall be got tested from authorized agency to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.	The Construction of Office Complex does not employ usage of heavy metals and the chances of leaching into aquifer is negligible. However, the samples taken from site and ground water have been sent to NABL accredited laboratory. (Report Enclosed –Annexure 3)

9	Any hazardous waste generated during construction phase should be disposed of as per applicable rules and norms with necessary approvals of the competent authority.	No such hazardous waste generated during construction phase.
10	Diesel generator sets during construction phase should have acoustic enclosures and should conform to Environment (Protection) Act, 1986 and Rules framed there under for air and noise emission standards. Low Sulphur diesel type should be used.	Acoustic Enclosures Diesel generators were used during construction phase.
11	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.	No underground tanks were required.
12	Vehicles/equipment deployed during construction phase should be in good conditions and should conform to applicable air and noise emission standards, should have vehicle pollution check certificate and should be operated only during non-peaking hours.	It is ensured that all the vehicles used for construction activities are having valid Pollution under Check (PUC) certificates. The vehicles without valid Pollution under Check (PUC) certificate are not permitted at project site.
13	Ambient noise levels should conform to residential standards both during day and night. Only limited necessary construction should be done during night time. Fortnightly monitoring of ambient air quality (SPM, SO ₂ and NO _x) and equivalent noise levels should be ensured during construction phase should be closely monitored during construction phase so as to conform to the stipulated standards fixed by the competent authority.	<ul style="list-style-type: none"> ▪ The silent type DG set with acoustic enclosures has been installed at project site. ▪ All vehicles entering to the site were with valid PUC certificate. ▪ All machinery used at the site were new and periodic maintenance of the machinery insured. ▪ Water sprinkling is carried out through tanker water regularly at site for dust suppression.
14	Storm water control and its re-uses for various applications as per guidelines.	Storm water from terraces and other open areas is collected through rainwater down take pipes connected to a Rain Water Harvesting System having a capacity of 50000 liters.

15	Boundary wall shall be constructed in such a manner as not to be obstructing the flow of storm water. Necessary arrangement shall be made for the drainage of surrounding area.	Weep holes are provided in the boundary wall to release hydrostatic pressure or water pressure on the wall.
16	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices and technologies available.	Water demand during construction was reduced by use of pre-mixed concrete, curing agents and other best practices referred.
17	Permission to draw ground water shall be obtained from the competent authority prior to construction/operation of the project.	Recommendation to draw ground water through 4 no. bore well is provided by I&PH, GoHP, copy of letter submitted to SEIAA/S&T Department, GoHP (Copy attached Annexure-4).
18	Opaque wall should meet perspective requirement as per Energy Conservation Building Code which is proposed to be mandatory for all air-conditioned spaces while it is aspirational for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.	Opaque wall meets the requirement as per Energy Conservation Building Code.
19	Regular supervision of the above and other measures for monitoring should be place all though the Construction phase, so as to avoid disturbance to the surroundings.	Being ensured through regular supervision.
20	The proponent shall be liable for action under the Environment (Protection) Act, 1986 for the violation of any provision of the said Act.	Noted.
II-Operational Phase:		
1	The installation of the Effluent Treatment Plant/ Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Director, Department of Environment, Science & Technology before the project is commissioned for operation. Treated effluent emanating from STP shall be recycled/reused to the maximum extent possible. Treatment of 100% grey water by decentralized treatment should be done. Discharge of unused treated effluent shall conform to the prescribed norms and standards. Necessary	STP based on MBBR technology is installed at Office Complex. The effectiveness of its functioning is ensured through Annual Maintenance Contract. Sampling report for one of the samples taken is annexed at Annexure-3 .

	measures should be made to mitigate the odour problem from STP.	
2	The solid waste generated should be properly collected and segregated. Wet garbage should be composted and dry/inert solid waste should be disposed of to the approved sites for land filling after recovering recyclable materials.	<p>1) Kitchen Bio-waste Composter of 250Kg/day capacity was installed for conversion of Solid waste to organic manure. The Organic manure is then used for horticulture work in SJVN Corporate office Complex.</p> <p>2) Office waste is disposed through Municipal Corporation.</p>
3	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. The proponent shall be required to use low Sulphur diesel. The location of the DG sets may be decided in consultation with the competent authority.	Two Nos. Diesel Generators Sets are using in SJVN Complex having capacity of 1010 kVA and 500kVA which are properly fitted inside the sound proof enclosures & DG sets are CPCB II compliant environment friendly and are placed at safe location.
4	Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.	Building is used during day time & noise restricted to the permissible levels to comply with the prevalent regulations and No Noise generated during Night time.
5	The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.	Till date a total of 3,749 plants have been planted in and around office complex. In additions to this, an area of 7780 sq. ft has been developed as green belt in the office complex using grassing. Further, plantation activities are being planned in

		a phased manner.
6	Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon periods.	Weep holes are provided in all compound walls in SJVN Corporate office Complex to release hydrostatic pressure or water pressure on the wall.
7	Rain water harvesting for roof run-off and surface run-off, as per plan submitted should be implemented. Before recharging the surface run off, pretreatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging should be kept at least 5 mtrs above the highest ground water table.	Rain water Harvesting System of 50 KLD is installed in SJVN Complex with VPMF technology (Variable Pore Micro Filtration).
8	The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.	Agreed. Extraction is minuscule. However, testing of sample/level is undergoing.
9	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized as per norms prescribed by the Competent Authority and no public space should be used for this purpose.	Agreed. The traffic circulation plan and the parking plan proposed are as per bye laws with further scope of additional parking for future requirement. Parking will be completely internalized and no public spaces will be utilized. Care is being taken to ensure that there is zero traffic congestion at the entry and exit point through Security at Main Gate.
10	Energy conservation measures like installation of CFLs/TFLs for the lighting the surrounding area/outside areas the building should be integral part of the project design and should be in place before project commissioning. Used CFLs/TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the possible extent.	<p>T-5 & LED Lamps are installed in SJVN Complex for Energy Conservation.</p> <p>The lights/Lamps will be disposed in line with E-Waste rules 2016.</p> <p>SJVN Limited has installed a roof top solar Photo Voltaic Plant of 120 kWp capacity to cater the power supply requirement in the building. The Power generated from solar PV plant is supplied directly to the distribution panels and consumed within the building and excess power is fed to the Grid.</p>

11	Adequate steps should be taken to prevent odour problem from solid waste processing site and STP.	STP System is running efficiently and same is ensured by executing AMC having preventive maintenance.
12	Sprinkling of water etc.be used for air pollution control during construction phase so as to avoid disturbance to the surroundings.	Sprinkling of water is being used for air pollution control. The test report of sample of ambient air is attached as Annexure-3 .

Part B

General Conditions:

Sr. No.	Conditions	Status
1	The environmental safe guards contained/given in the proposal for management of environmental pollution should be implemented in letter and spirit.	Proponent is committed to comply the EC conditions and required mitigation norms in letter and spirit.
2	Bimonthly environment monitoring reports should be submitted to the State Environment Impact Assessment Authority and Ministry of Environment & Forests Regional Office at Chandigarh.	Agreed.
3	Officials from the State Environment Impact Assessment Authority, Regional Office of MoEF, monitoring the implementation of environment, Science & Technology GoHP who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to the State Authority should be forwarded to the Regional Office of MoEF, Chandigarh.	Full Co-operation ensured.
4	In the case of any change (s) in the scope of the project, the project would require a fresh appraisal by this Authority.	Agreed.

5	The SEIAA reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safe guards and measures in a time bound and satisfactory manner.	Agreed.
6	All other statutory clearances shall be obtained, as applicable by the project proponents.	Agreed.
7	These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and Environment Impact Assessment Notification, 2006.	Noted
8	Environmental Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004 as may be applicable to this project.	Noted
9	Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.	No such appeal made/reported

Part C

Special Conditions:

S. No.	Conditions	Status
1	Construction shall be carried out strictly as per the norms prescribed by the State Government as regards the number of storey's and FAR.	Complied
2	Proponent shall make provision of a small dispensary in the area open to public as well or upgrade the nearest existing facility in consultation with State Government.	The office complex falls in urban area of Shimla town. There is an excellent medical facility in the nearby vicinity, Tenzin Hospital (Panthaghati) and Public Health Centre (Chotta Shimla). Further, there are numerous healthcare facilities/clinics within these limits and preferred by locals. Office Complex

		runs a medical facility in its complex catering official staff, contract staff, etc.
3	Roof Area at least to the extent of 60% should be used to harvest solar energy by installing efficient Solar Panels.	SJVN Limited has installed a roof top solar Photo Voltaic Plant of 120 kW capacity to cater the power supply requirement in the building. The Power generated from solar PV plant is supplied directly to the distribution panels and consumed within the building and excess power is fed to the Grid.
4	Before undertaking construction, proponent shall ensure availability of water from IPH department or M.C. Shimla.	Complied (Copy attached Annexure-4) .
5	The Project Proponent shall submit returns/details of recyclable wastes, and other solid wastes which shall be generated from the process to the Authority regularly.	<p>i) Solid waste generated from SJVN Corporate Head Quarters is converted in to manure by Bio-composting machine and the end product is used as a fertilizer in horticulture.</p> <p>ii) Old records generated from SJVN Corporate Head Quarters is recycled and reused in office building for which Spot Award has been given to M/s Jan Sewa Trust, Village- Katali, P.O. Jabali, Distt. Solan and recycled material is reused in the form of Folders, File Cover, Perforated Slip Pad, Coaster, Carry Bag & Envelop A4 size. The Certificate of Appreciation was also awarded to SJVN limited during the FY 2018-19 by Australia's Deputy High Commissioner to India, New Delhi for recycling of office waste paper and thereby conserving the natural resources (Copy attached as Annexure-5).</p> <p>iii) Agreement for disposal of Hazardous waste has been signed with M/s Enviro Engineers valid upto 31-03-2022 (Copy Attached as Annexure- 6).</p>

6	The Project Proponent shall obtain No Objection Certificate for ground water use/ installation of tube well from Central Ground Water Authority/IPH Department.	NOC Attached (Copy attached Annexure-4)
7	Proponent shall ensure the energy efficiency sheet by maximum possible use of renewable sources of energy. The solar lights, CFL, LED lights shall be used to reduce the requirement of the energy and shall apply all possible techniques to reduce the energy consumption.	Being Complied CFL & LED Lights installed in the building which are energy efficient. Energy Audit report of building is enclosed as Annexure-7.
8	Project Proponent shall ensure that there are proper arrangements for management of occupational health and safety in accordance with the law as required for machinery safety, personnel safety and health care, fire & explosion safety.	Ensured during construction phase. SJVN Corporate Office Complex has adopted Quality Management System during operation stage (Copy attached Annexure-8) and a Quality manual incorporating Risk Management.
9	The Project Proponents shall ensure that the planning of the proposed project is done in a manner that vehicular traffic flow in the public areas and roads is not restricted and dedicated parking for the complex users and visitors as well is provided.	Agreed. There will be no traffic congestion near the entry and exit points from the roads adjoining the project site. Parking will be fully internalized and no public space should be utilized.
10	The project Proponent shall obtain all the requisite approvals/clearance/NOCs as may be applicable to the Project from the competent authorities under different Acts/Rules/Regulation/Order/Directions etc.	Agreed. The construction has been started only after taking the NOC from Forest Deptt./Local bodies/Local Authorities. Consent to Establish and Consent to Operate has also been obtained from HSPCB; Copy of the same is enclosed Annexure-1

11	The construction material such as grit/bajri, sand shall be obtained from authorized dealers/suppliers only and no illegal mining etc. shall be caused.	Agreed. Construction material has been obtained from authorized dealers/suppliers only and no illegal mining etc. has been allowed.
12	The Project Proponent shall consult the local office of the Department of Forests or any other such authorized agency, university, institution for types of trees to be planted for development of the green belt around the Project site.	Agreed. A total of 3,749 plants have been planted in and around office complex. In additions to this, an area of 7780 sq. ft has been developed as green belt in the office complex using grassing.
13	Keeping in view the labour to be employed during the construction phase arrangements to maintain hygienic conditions in the labour camps such as temporary toilets, fuel facility etc. shall be made for which provision shall be made by the proponent.	Being Complied
14	The Sewage Treatment Plant shall be designed and installed based on MBBR technology concurrent with the construction of the project as per the requirement.	<p>1) STP of 90 KLD having approved technology patented by Thermax is installed.</p> <p>2) Effluent from STP is used for horticulture works of SJVN Corporate Office Complex.</p> <p>3) Effluent Parameters are monitored monthly through AMC from M/s Micromeg Enterprises Pvt. Ltd.</p>
15	The Municipal Solid Waste which shall be generated by the Project during the construction and operational stage shall be managed as per provisions of Municipal Solid Waste (Management & Handling) Rules, 2000 under Environment (Protection) Act, 1986. Promoters shall tie-up with local authority or shall make provisions of its own for solid waste.	<p>1) Kitchen Bio-waste Composter of 250 kg/day capacity was installed for conversion of Solid waste to organic manure. The Organic manure is then used for horticulture work in SJVN Corporate office Complex.</p> <p>2) Office waste is disposed through Municipal Corporation.</p>

16	Water sprinkling techniques shall be used during the construction phase to minimize the dust in air.	Water sprinkling was carried out through water tanker regularly at site for dust suppression.
17	The DG sets shall be provided with proper exhaust muffler and stack height. DG set and other fugitive emission sources shall be more than 10-15 feet above room level. Norms prescribed for DG Sets in the Environment Protection Rules, 1986 shall be complied with.	DG sets has been provided with proper exhaust muffler and stack height and Norms prescribed for DG Sets in the Environment Protection Rules, 1986 are complied.
18	Institutional responsibility would vest with promoters for maintaining and operating the environmental services such as Sewage treatment Solid Waste, treatment and disposal.	Complied.
19	The muck generated during construction shall be disposed of in scientific only in the designated dumping sites manner by providing proper and adequate retaining structures.	SJVN is disposing the muck on approved dumping site of MC for the construction of Guest House cum Parking Block and Auditorium Block. The permission for dumping of debris/C&D waste was granted to SJVN by MC, Shimla vide Letter No.19- 3304 dated 19.10.19 and vide letter no-20-2417 dated 14.09.2020 (Copy attached Annexure-2) at following approved dumping sites: 1) Dumping site situated near SWM Project Bharyal Totu, Shimla.
20	Boundary wall shall be raised using plants/hedge species and concrete or iron structures should be avoided.	Complied
21	Visitors parking within premises shall be ensured and provision shall be made accordingly. Parking of visitors should not done on public road.	Provision for Stack Parking for approx. 200 cars has been provided in Proposed Guest House including Parking Block in SJVN Corporate Complex and the Construction work is in progress.
22	All designing shall be done based on IS-1893 (Zone-V) considering the seismicity of the project area.	SJVN Corporate Head Quarters was constructed based on IS-1893 considering the seismicity of the project area.

Additional conditions laid by the SEIAA in its 10th meeting held on 22nd November 2011 shall be strictly complied

1	The Proponents shall principally be responsible for creating a public utility like playground or parking as a part of their corporate social responsibility by utilizing all the debris and construction waste.	The debris/construction waste from the Office Complex was disposed at approved sites of Municipal Corporation (MC), Shimla, after remitting the dumping charges. These earmarked sites also caters to construction wastes from other construction sites from Shimla town. Hence, the sites may get restored by MC through its long-term development plans.
2	The proponents shall make adequate arrangement for the safe disposal of E-waste and CFLs.	Complied
3	The Proponents shall use stones/sloping roof to provide hill architectural façade to the complex.	Complied
4	The Proponents shall provide dual plumbing system in the building.	Provision of dual plumbing system has been made in SJVN Corporate Head Quarters
5	The Proponents shall submit data on environment/carbon footprint to Department of Environment, Science & Technology.	The Office Complex has been designed on Green building concept. This complex has installed solar techniques for water heating and feeding electricity. The kitchen waste is treated by composting unit and compost is used to feed complex greenbelt. Further, the liquid waste is treated with MBBR-STP with zero discharge. The residue is used as manure and liquid is used to water greenbelt. The complex has undergone Energy Audit. Hence, the Office Complex has very low environment footprint. SJVN Limited has installed a roof top solar Photo Voltaic Plant of 120 kW capacity to cater the power supply requirement in the building. The Power generated from solar PV plant is supplied directly to the distribution panels and consumed within the building and excess power is fed to the Grid. 40 KW solar water

		heating system also provided to cater heating water requirements at the complex.
6	The proponents shall submit six monthly status report on implementation of the conditions of environmental clearances, among others to the Department of Environment, Science & Technology.	Being Complied. Last six-monthly compliance report was submitted on 28.05.2021.
