ENVIRONMENTAL REGULATIONS AND LEGAL FRAMEWORK IN INDIA

1.1 ENVIRONMENT PROTECTION – FROM INDIAN CONSTITUTION PRESPECTIVE

a) The State's responsibility with regard to environmental protection has been laid down under Article 48-A of our Constitution, which reads as follows:

"The State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country".

 Environmental protection is a fundamental duty of every citizen of this country under Article 51-A(g) of our Constitution which reads as follows:

"It shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures."

- c) Article 21 of the Constitution is a fundamental right which reads as follows:
 "No person shall be deprived of his life or personal liberty except according to procedure established by law."
- d) Article 48-A of the Constitution comes under Directive Principles of State Policy and Article 51 A(g) of the Constitution comes under Fundamental Duties.
- e) The State's responsibility with regard to raising the level of nutrition and the standard of living and to improve public health has been laid down under Article 47 of the Constitution which reads as follows:

"The State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties and, in particular, the State shall endeavour to bring about prohibition of the consumption except for medicinal purposes of intoxicating drinks and of drugs which are injurious to health."

h) The 42nd amendment to the Constitution was brought about in the year 1974 makes it the responsibility of the State Government to protect and improve the environment and to safeguard the forests and wildlife of the country. The latter, under Fundamental Duties, makes it the fundamental duty of every citizen to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures.

1.2 The subjects related to environment in the seventh schedule of the Constitution:

Union List

Entries	
52	Industries.
53	Regulation and development of oil fields and mineral oil
	resources.
54	Regulation of mines and mineral development.
56	Regulation and development of inter-State rivers and river valleys.
57	Fishing and fisheries beyond territorial waters.

State List

Entries	
6	Public health and sanitation.
14	Agriculture, protection against pest and prevention of plant
	diseases.
18	Land, colonisation, etc.
21	Fisheries.
23	Regulation of mines and mineral development subject to the
	provisions of List-I.
24	Industries subject to the provisions of List-I.

Common or Concurrent List

Entries	
17A	Forests.
17B	Protection of wild animals and birds.
20	Economic and social planning.
20A	Population control and family planning

As conferred by Article 246(1), while the Union is supreme to make any law over the subjects enumerated in List I, the States, under Article 246 (3), enjoy competence to legislate on the entries contained in List II, and both the Union and the States under Article 246(2) have concurrent jurisdiction on entries contained in List III. In the event of a clash, the Union enjoys a primacy over States in that its legislation in the Union and the Concurrent List prevails over State legislations. Also, the Parliament has residuary powers to legislate on any matter not covered in the three Lists (Art. 248).

1.3 MANDATORY REQUIREMENTS - ENVIRONMENT

THE ELECTRICITY ACT, 2003

This Act seeks to create a framework for the power sector development by measures conducive to the industry. Electricity Act does not explicitly deal with environmental implications of activities related to power transmission. The applicable legal provisions under this Act are as follows: Section 68(1) - sanction from the Ministry of Power (MOP) is a mandatory requirement for taking up any new project. The sanction authorizes SJVN to plan and coordinate activities to commission new projects.

THE FOREST (CONSERVATION) ACT, 1980

This Act provides for the conservation of forests and regulating diversion of forestlands for non-forestry purposes. When projects falls within forestlands, prior clearance is required from relevant authorities under the Forest (Conservation) Act, 1980. State governments cannot de-reserve any forestland or authorise its use for any non-forest purposes without approval from the Central government. The flow chart for forest clearance as per this law is provided in **Appendix -I.**

The steps for forest clearance are briefly described below:

i) IDENTIFICATION OF FOREST AREA INVOLVED (LOCATION OF PROJECT)

Preliminary location of project is done by using tools such as the forest atlas and Survey of India maps. During route alignment, all possible efforts are made to avoid the forest area (like national park and sanctuaries) or to keep it to the barest minimum. Whenever it becomes unavoidable due to the geography of terrain or heavy cost involved in avoiding it, different alternative options are considered to minimize the requirement of forest area.

For selection of optimum proposal, the following criteria are taken into consideration:

a) any monument of cultural or historical importance is not affected by the project;

- b) the proposed alignment of the project line does not create any threat to the survival of any community with special reference to Tribal Community;
- c) the proposed alignment of the project does not affect any public utility services such as playgrounds, schools and other establishments;
- d) the alignment of the project does not pass through any sanctuaries, National Park, Biosphere reserves or ecosensitive zones; and
- e) the alignment of the project does not infringe with area of natural resources.

To achieve this, selection of forest area involved is undertaken in close consultation with representatives from the State forest departments and the Department of Revenue. Minor alterations are made to avoid environmentally sensitive areas and settlements at execution stage.

Trees on such locations are felled but after stringing is complete and natural regeneration is allowed to specific heights and whenever required the tree plantation is taken.

ii) FORMULATION OF FOREST PROPOSAL

After finalization of forest area involved for project location SJVNL submits details in prescribed proforma to the respective DFO/ Nodal Officer (Forest) of concerned State Government. DFO/ Nodal Officer forwards the details to the concerned Divisional Forest Officer (DFO) / Conservator of Forest for formulation of forest proposal for processing of clearance under the Forest (Conservation) Act, 1980. The DFO then surveys the relevant forest area required for the construction of project under the possible alternatives. Forest authorities conduct a cost-benefit analysis to assess the loss of forest produce, loss to environment vis-à-vis benefits of project . Compensatory Afforestation (CA) scheme is prepared to compensate loss of vegetation and is the most important and integral part of the proposal. For CA, the forest authorities identify degraded forestland of twice the area of affected land. SJVNL provides undertaking/ certificate to meet the cost of compensatory afforestation and the Net Present Value of forestland diverted. The NPV rate varies from Rs. 5.8 to Rs. 9.2 lakh per hectare (as per MoEF Notification dt. 23.04.04) and is payable to the "Compensatory Afforestation Fund Management and Planning Authority" (CAMPA). If the forest is rich in wildlife, then the Chief Wildlife Warden also gets a detailed assessment report prepared including measures to protect the wildlife, which is submitted with the proposal.

iii) APPROVAL OF PROPOSAL

The proposal is submitted to the state forest department and then forwarded to the principal chief conservator of forests in the state and finally to the state secretariat. The State Government recommends the proposal for further processing and approval to a) Concerned Regional Office of the MoEF if the area involved is 40 hectare or less b) MoEF, New Delhi if the area is more than 40 hectare. The approval process is illustrated in **Appendix –II**.

To facilitate speedy approval of forest proposal involving lesser area, Ministry of Environment & Forests had established Regional Offices in each region for processing and approving these proposals . The MoEF approves the proposal in two stages. In principle or first stage approval is accorded with certain conditions depending upon the case. Second stage, or final approval is provided after the compliance report of the conditions stipulated in first Forest Proposal (FP) is received by MOEF,GOI from State Forest Department.

SJVNL follows all relevant guidelines including the directions of the Supreme Court in this regard from time to time.

ENVIRONMENTAL (PROTECTION) ACT, 1986

The Environment (Protection) Act, 1986 was introduced as an umbrella legislation that provides a holistic framework for the protection and improvement to the environment.

In terms of responsibilities, the Act and the associated Rules requires for obtaining environmental clearances for specific types of new / expansion projects (addressed under Environmental Impact Assessment Notification, 1994) and for submission of an environmental statement to the State Pollution Control Board annually. Environmental clearance is not applicable to hydro projects also.

SJVNL undertakes Environmental Impact Assessment for all projects as a standard management procedure as laid down in The Environment (Protection) Act, 1986 and also functions within permissible standards of ambient air quality and noise levels as prescribed by national laws and

international regulations. The Environmental Clearance procedure is at **Appendix-III.**

Other rules and regulations under the Environmental (Protection) Act, 1986 applicable to the operation of SJVNL are described below:

AIR (PREVENTION AND CONTROL OF POLLUTION) ACT 1981

The objective of this Act is to provide for the prevention, control and abatement of air pollution, for the establishment, with a view to carrying out the aforesaid purposes, of Boards, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connected therewith.

Decisions were taken at the United Nations Conference on the Human Environment held in Stockholm in June 1972, in which India participated, to take appropriate steps for the preservation of the natural resources of the earth which, among other things, includes the preservation of the quality of air and control of air pollution.

Therefore it is considered necessary to implement the decisions foresaid in so far as they relate to the preservation of the quality of air and control of air pollution.

WATER (PREVENTION & CONTROL) ACT 1974

The objectives of the Water (Prevention and Control of Pollution) Act are to provide for the Prevention and Control of Water Pollution and the maintenance or restoration of the wholesomeness of water for the establishment, with a view to carrying out the purposes aforesaid, of Boards for the prevention and control of water pollution, for conferring on and assigning to such Boards powers and functions relating thereto and for matters connected therewith.

WILDLIFE PROTECTION ACT, 1972

According to the Wildlife Protection Act, 1972 "wildlife" includes any animal, bees, butterflies, crustacea, fish and moths; and aquatic or land vegetation which forms part of any habitat. In accordance with Wildlife (Protection) Amendment Act, 2002 "no alternation of boundaries / National Park / Sanctuary shall be made by the State Govt. except on recommendation of the National Board for Wildlife (NBWL)". Further, in terms of Supreme Court Order dated 13.11.2000 the State Govts have to seek prior permission of Supreme Court before submitting the proposal for diversion of forest land in National Park sanctuaries.

Whenever, any part of Wildlife Sanctuary / National Park is getting affected by a hydro project the forest proposal in respect of such project is entertained by MoEF, GOI only after permission of de-reservation / denotification of Wildlife Sanctuary /National Park has been accorded. After recommendation of Standing Committee of NBWL proposal for dereservation/ de-notification is ratified by Hon'ble Supreme Court.

THE BIOLOGICAL DIVERSITY ACT, 2002

The Ministry of Environment and Forests has enacted the Biological Diversity Act, 2002 under the United Nations Convention on Biological Diversity signed at Rio de Janeiro on the 5th day of June, 1992 of which India is also a party. This Act is to "provide for the conservation of biological diversity, sustainable use of its components, and fair and equitable sharing of the benefits arising out of the sued of biological resources, knowledge and for matters connected therewith or incidental thereto." As per the provision of act certain areas, which are rich in biodiversity and encompasses unique and representative ecosystems are identified and designated as biosphere reserve to facilitate its conservation. All restrictions applicable to protected areas like National Park & Sanctuaries are also applicable to these reserves. SJVNL abides by the provision of act wherever applicable and try avoiding these biosphere reserves while finalising the project infrastructure locations.

HAZARDOUS WASTES (MANAGEMENT AND HANDLING) AMENDMENT RULES, 2003

These Rules classify used mineral oil as hazardous waste under the Hazardous Waste (Management & Handling) Rules, 2003 that requires proper handling and disposal. Organisation will seek authorisation for disposal of hazardous waste from concerned State Pollution Control Boards (SPCB) as and when required.

OZONE DEPLETING SUBSTANCES (REGULATION AND CONTROL) RULES, 2000

MoEF vide its notification dt. 17th July, 2000 under the section of 6, 8 and 25 of the Environment (Protection) Act, 1986 has notified rules for regulation/ control of Ozone Depleting Substances (ODS) under Montreal Protocol. As per the notification certain control and regulation has been imposed on manufacturing, import, export, and use of these compounds.

Organisations as per provisions of notification shall is phase out all equipment, which uses these substances, and is aiming at CFC free organisation in near future.

1.4 OTHER ENVIRONMENT – RELATED LAWS

The Shore Nuisance (Bombay and Kolaba) Act, 1853

This is the earliest Act on the statue book concerning control of water pollution in India.

The Serais Act, 1867

The Act enjoined upon a keeper of Serai or an inn to keep a certain quality of water fit for consumption by "persons and animals using it" to the satisfaction of the District magistrate or his nominees. Failure for maintaining the standard entailed a liability of rupees twenty.

The North India Canal and Drainage Act, 1873

Certain offences have been listed under the Act contained in Section 70.

Obstruction in Fairways Act, 1881

Section 8 of the Act empowered the Central Government to make Rules to regulate or prohibit the throwing of rubbish in any fairway leading to a port causing or likely to give rise to a bank or shoal.

Indian Easements Act, 1882

Illustrations (f), (h) and (j) of Section 7 of the Act deal with pollution of waters.

The Indian Fisheries Act, 1897

The Indian Fisheries Act, 1897 contains seven sections. Section 5 of the Act prohibits destruction of fish by poisoning waters.

Indian Ports Act, 1908

Water pollution by oil has been regulated by the Indian Ports Act, 1908.

The Indian Forest Act, 1927

Section 26(i) of the Act makes it punishable if any person, who, in contravention of the rules made by the State Government, poisons water of a forest area. The State Government has been empowered under Section 32(f) to make rules relating to poisoning of water in forests.

The Damodar Valley Corporation Act, 1948

The Act overnment the Corporation to make regulations with the previous sanction of the Central Government for preventing "pollution of water".

The Factories Act, 1948

Factories Act, 1948 is a social welfare legislation intend to secure health, safety and welfare of the workers employed in factories. Hiowever, some of the provisions of this Act are concerned with prevention of water pollution.

The Mines Act, 1952

Chapter V of the Act deals with provisions regarding health and Safety of the employees. Section 19(i) Government upon arrangement for the quality of water for drinking purposes.

The River Boards Act, 1956

The Act provides for the creation of River Boards for regulation and development of interstate rivers and river valleys. One of the functions of the Board is to advise to the Government concerned on "prevention of pollution of the waters of the interstate rivers".

The Merchant Shipping Act, 1958

The International Convention for the Prevention of Pollution of the Sea by Oil, 1954 is the first treaty for the reduction of oil pollution of the sea. In order to give effect to this Convention, the Merchant Shipping Act regulates and controls the discharge of oil or oil mixture by an Indian tanker or ship within any of the prohibited zones or by a foreign tanker or other ship within the prohibited zone adjoining the territories of India. Further, there is a prohibition for discharging any oil anywhere at sea from an Indian ship.

1.5 LEGAL AND REGULATORY FRAMEWORK FOR HYDRO PROJECTS.

- 1.5.1 The principal Environmental Regulatory Agency in India is the Ministry of Environment and Forests (MOEF). MOEF formulates environmental policies and accords environmental clearance for the projects. The State Pollution Control Board (SPCB) accords 'No Objection Certificate' (NOC) and 'Consent for Establishment and Operation' for the projects.
- 1.5.2 The project features entail a Environmental Impact Assessment Study to be conducted which is a pre-requisite for obtaining environmental clearance from Ministry of Environment & Forests, Government of India..
- 1.5.3 Environmental Impact Assessment (EIA) is an important management tool for ensuring optimal use of natural resources for sustainable development, and was introduced in India initially for River Valley Projects in 1978-79. The scope of the EIA has been enhanced to cover other developmental sectors such as industries, mining schemes, energy, etc. To facilitate project proponents in collection of environmental data and formulation of environmental management plans, it is now mandatory under the Environment (Protection) Act, 1986, for different categories of developmental activities involving investment beyond certain thresholds.

The notification was issued on 27th January 1994 and was amended on 4th May 1994. This, it is hoped would provide an opportunity both for the project proponents and Government to assess the impact of the concerned project on the environment before it actually comes into play

1.5.4 The EIA study document fulfills the requirements for environmental clearance from various agencies at the state level. These include State Pollution Control Board and Committee of Experts working under the aegis of Department of Science & Technology, State Governments.

1.6 SJVN'S INITIATIVE:

The regulatory framework and policy both at the central and state level for environmental and social issues applicable to the HYDRO Power Projects is also application to SJVN. In addition, SJVNL has also taken into consideration the requirements of multilateral funding agencies while finalising the Environment Policy. SJVNL sees its responsibilities under the present legal framework as two fold as under: mandatory requirements under the law and the guidelines of funding agencies; and prescriptive requirements that influence management procedures addressing environmental and social issues

undertakes all its activities within mandatory requirements SJVNL under the National law and the guidelines of funding agencies, and requirements that determine the prescriptive management procedures for addressing environmental and social issues. Mandatory environmental requirements for SJVNL at a national level include: Land Acquisition Procedures under Land Acquisition Act, 1894. Forest clearances under the Forest (Conservation) Act, 1980; specifically Environmental clearances under Environment (Protection) Act. 1986. During the operations of the projects regulations like Hazardous Wastes (Management and Handling) Amendment Rules, 2003 regarding disposal of used transformer oil and Ozone Depleting Substances (Regulation and Control) rules, 2000 putting restriction on use of ozone depleting substances come into force and require voluntary enforcement and funding agencies requirements some time. The Forest & Environment Clearances procedure have been detailed in the Annexure -I to III of this document.