

Schedule 9

EHS Standards

1.1 General

This schedule lays out the Environment, Health and Safety (EHS) Standards, including the environmental, social, labor, health and safety related and any other requirements, which the Concessionaire is required to comply with, in developing, operating and maintaining the Facilities and the Associated Infrastructure. Several activities associated with this Project may have an impact upon the environment, health and safety of the workers and local community.

The Concessionaire shall hence develop the EHS plan which shall adhere to various requirements stated under Applicable Laws, and the IFC Performance Standards (PS) - PS 1, PS 2, PS 3, PS 4, PS 6 and PS 8 at the minimum. The Concessionaire shall develop an EHS Plan during the Conditions Precedent Period, as per the requirements of Applicable Laws, the Concession Agreement and as per guidelines laid out in this Schedule.

Where environmental or social risks and impacts are identified, the Concessionaire shall be required to manage them through the EHS Plan in accordance with the Applicable Laws and the IFC guidelines for Environmental, Health and Safety available at <http://www.ifc.org/performancestandards> and IFC EHS guidelines [specifically General, Water and Sanitation, and Waste Management Facilities].

The EHS Plan shall be developed by the Concessionaire and submitted to the Project Engineer for review. The Project Engineer will provide its recommendation to the Jal Nigam on the EHS Plan, which will be approved by the Jal Nigam, as per requirements of the Concession Agreement. The EHS Plan will be applicable for both Construction and O&M Periods. This plan should be reference document for implementation, control and monitoring of environmental, occupational health and safety aspects of the project by the Concessionaire.

The Concessionaire shall comply with Applicable Laws, including all relevant statutory requirements of Government of India including, but not limited to the following -

- Air (Prevention and Control of Pollution) Act, 1981 amended 1987
- Water (Prevention and Control of Pollution) Act, 1974 amended 1988
- Water (Prevention and Control of Pollution) Rules, 1975
- The Environment (Protection) Act, 1986, amended 1991
- Environmental (Protection) Rules, 1986 (Amendments in 1999, 2001, 2002, 2002, 2002, 2003, 2004)
- Hazardous Waste (Management and Handling) Rules, 1989 amended 2000 and 2003
- Manufacture Storage and Import of Hazardous Chemicals Rules, 1989 amended 2000
- Chemical Accidents (Emergency Planning, Preparedness and Response) Rules, 1996
- Batteries (Management and Handling) Rules, 2001.
- The Petroleum Act, 1934
- The Petroleum Rules, 2002
- The Motor Vehicle Act, 1988
- The Central Motor Vehicle Rules, 1989

This being an STP project doesnot require an Environmental Clearance from Government of India however, the Concessionaire shall obtain necessary permission from Central/State Pollution Control Boards.

1.2 General EHS Guidelines

The Concessionaire needs to conduct an environmental and social assessment in co-ordination with government agencies and third parties as appropriate. The Concessionaire will also establish an overarching policy defining the environmental and social objectives and principles that guide the project to achieve sound environmental and social performance in line with Applicable Laws and the applicable IFC PS.

The Concessionaireshall establish and maintain a process for identifying the environmental and social risks and impacts of the Project and shall establish management programs that will describe mitigation and performance improvement measures and actions that address the identified environmental and social risks and impacts of the project.The Concessionaireshall establish procedures to monitor and measure the effectiveness of the management program, as well as compliance with any related legal and/or contractual obligations and regulatory requirements.

1.3 General EHS guidelines for labor and working conditions

The Concessionaire shall comply with the requirements given under the various laws and rules of State/ Central Government including the following:

- Public Liability Insurance Act, 1991 amended 1992
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- Factories Act, 1948
- Uttar Pradesh Factory Rules 1950
- Workmen's Compensation Act 1923
- Contract Labor (Regulation and Abolition) Act, 1970
- Minimum Wages Act, 1948
- Payment of Wages Act, 1936
- Equal Remuneration Act, 1979
- Child Labour (Prohibition and Regulation) Act, 1986
- Inter-State Migrant Workmen's (Regulation of Employment and Conditions of Service) Act, 1979
- The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and the Cess Act of 1996
- The Concessionaire should also abide by the Antiquities and Art Treasures Act 1972 and the Ancient Monuments and Archeological sites and Remain Act, 1958 (and its amendment) to protect the cultural heritage of the nation.

The Concessionaire shall develop/maintain written human resources (HR) policies and procedures in accordance with Applicable Laws and IFC PS requirements and ensure the relevant policies are available to all employees.

The HR policy/procedure shall clearly describe working conditions, terms of employments, management of worker relationship, and roles and responsibilities among the Concessionaire and the workers.

1.4 General EHS guidelines for safety

The Concessionaire shall comply with the requirements of applicable BIS Standards including, but not limited to the following:

IS 3696(Part 1):1987	Safety code of scaffolds and ladders: Part 1 Scaffolds
IS 3696(Part 2):1991	Safety code of scaffolds and ladders: Part 2 Ladders
IS 3764:1992	Code of safety for excavation work (first revision)
IS 4014(Part 2):1967	Code of practice for steel tubular scaffolding: Part 2 Safety regulations for scaffolding
IS 4081:1986	Safety code for blasting and related drilling operations (First Revision)
IS 4130:1991	Safety code for demolition of buildings (second revision)
IS 4138:1977	Safety code for working in compressed air (first revision)
IS 4756:1978	Safety code for tunneling work (first revision)
IS 4912:1978	Safety requirements for floor and wall openings, railings and toe boards (first revision)
IS 5121:1969	Safety code for piling and other deep foundations
IS 5916:1970	Safety code for construction involving use of hot bituminous materials
IS 7293:1974	Safety code for working with construction machinery
IS 7969:1975	Safety code for handling and storage of building materials
IS 8989:1978	Safety code for erection of concrete framed structures
IS 10067:1982	Material constants in building works
IS 10291:1982	Safety code for dress divers in civil engineering works
IS 13415:1992	Code of safety for protective barriers in and around
IS 13416(Part 1): 1992	Recommendations for preventive measures against hazards at workplaces: Part 1 Falling material hazards prevention
IS 13416(Part 2): 1992	Recommendations for preventive measures against hazards at workplaces: Part 2 Fall prevention
IS 13416(Part 3): 1994	Recommendations for preventive measures against hazards at workplaces: Part 3 Disposal of debris
IS 13416(Part 4): 1994	Recommendations for preventive measures against hazards at workplaces: Part 4 Timber structure
IS 13416(Part 5): 1994	Recommendations for preventive measures against hazards at workplaces: Part 5 Fire protection
IS 13430:1992	Code of practice for safety during additional construction and alteration to existing buildings
IS 15883 (Part 5)	Construction Project Management - Guidelines: Part 5 Health and Safety Management
IS: 11972-1987 -	Safety precautions to be taken when entering a sewerage system

In addition, as stated above and the IFC PS, IFC Guidance Note 2 for Labor and Working Conditions would also be applicable to the Project.

The Concession shall consider the following at a minimum while developing EHS Plan:

- Job- and task-specific hazard analysis and controls for all activities (including exposure to chemical, biological and pathological hazards);
- Provision of personal protection equipment (PPE), requirements for use of PPE, and enforcement of PPE use;
- Safety training for all personnel in their language, covering hazards and safety protocols of their jobs;
- Special training for specific hazards: open water, trenches, slippery walkways, working at heights, energized circuits, heavy equipment, entry into confined spaces, fires and explosions.
- Recording incident statistics, including total work hours, lost time incidents, major injuries, fatalities, near miss incidences etc.
- Adherence on the EHS Plan by sub-contractors.

1.5 General EHS Guidelines for Construction Period

- Concessionaire shall remove all waste material and debris from and around the work area and properly clean up the area at the end of each day before leaving the work site. Concessionaire shall take all necessary precautions not only for safe working of his own workmen but also deploy all precautions to ensure safety of structures, equipment and workmen of other agencies in and around his work site. The Concessionaire shall ensure that his workmen do not trespass into prohibited areas. Jal Nigam or the Project Engineer, on behalf of the Jal Nigam, shall have the right to inspect at any time, all items of machinery or equipment brought to site by the Concessionaire, his representatives or workmen and to prohibit the use on the site of any item, which in the opinion of the Jal Nigam is or may be detrimental to the safety of the site. The exercise of such right or the omission to exercise it in any particular case shall not absolve the Concessionaire or his representatives or workmen of their responsibility of adhering to the safe working practices.
- Concessionaire shall execute the work in a manner causing the least possible interference with the business of the Jal Nigam, or with the work of any other private entity who may be engaged on the premises and shall at all times co-operate with the other any other contractors working at Site or on adjoining property. Concessionaire shall obtain necessary permits from the Jal Nigam and any other relevant government agencies, as per Applicable Laws and requirements, before starting any work at site. The work permits are issued to prevent the Concessionaire from working in un-authorized areas and shall be valid for specific area for a stipulated period.
- Activities requiring permit to work shall be decided before starting the construction and shall be suitably documented in the project health and safety plan. Some of the activities which may require permit to work are:
 - Excavation
 - Entry into confined spaces
 - Electrical work (HV/LV)
 - Opening manholes, covers and grills
 - Blasting operation
 - Hot work

- Industrial radiography
- Work on plant, machinery and other power driven equipment.
- Working at height
- Working at night
- The Concessionaire may establish a permit to work system for any other hazardous activity which they feel need to be controlled administratively for safe execution.
- The Concessionaire shall be responsible for the following safety aspects -
 - Preventing injury to personnel, damage to plant and equipment and fire.
 - Instituting ways to improve existing work methods from safety point of view.
 - Legal and contractual requirements affecting safety, health, and welfare of his workmen
 - Provision and use of protective clothing and equipment and use of fire fighting equipment
 - Suitability of new and hired equipment from a safety viewpoint
 - Identifying potential hazards.
 - Changes in safety requirements and fire precautions
 - Carrying out site surveys to see that only safe work methods are in operation, health and safety requirements are being observed and welfare and first aid facilities are adequate and properly maintained.
 - Determining the cause of an accident or dangerous occurrence and recommend means of preventing recurrence.
 - Supervising the recording and analysis of information on injuries, damage and production loss.
 - Assess accident trends and review overall safety performance.
 - Ensure the following:
 - a. All electrical equipment's are securely earthed.
 - b. Standard access platforms and ladders are provided for inspection, operation and maintenance of equipment.
 - c. The equipment are periodically inspected for their condition, maintained properly and operated by trained personnel at design speeds and loads.

1.6 General EHS Guidelines for resource efficiency and pollution prevention

- During the project life-cycle, the Concessionaire will consider ambient conditions and apply technically and financially feasible resource efficiency and pollution prevention principles and techniques that are best suited to avoid, or where avoidance is not possible, minimize adverse impacts on human health and the environment. In addition the Concessionaire will consider alternatives and implement technically and financially feasible and cost-effective options to reduce project-related GHG emissions during the design and operation of the project.
- All fossils, coins, articles of value of antiquity, structures and other remains or things of geological or archaeological interest discovered on the site should be the property of the Government and should be dealt with as per provisions of the relevant legislation.
- Reasonable precautions should be taken to prevent workmen or any other persons from removing and damaging any such article or thing. Concessionaire should, immediately upon discovery thereof and before removal acquaint the Project Engineer and Jal Nigam of such discovery and carry out the instructions as given for dealing with the same, waiting which all work should be stopped.

- The direction from the Archaeological Survey of India (ASI) should be taken before instructing to recommence the work in the site.

1.7 General guideline for development of environmental and social management system (ESMS) as part of EHS

- Establish a baseline measurement for all environmental and social aspects considered relevant to the project, and applicable regulatory requirements/framework, which will serve as a reference for comparison to anticipated or existing project influenced impact.
- The EHS Plan will atleast include the following components:
 - an overarching policy that states the principles, including reference to applicable aspects of IFC PS and Good International Industry Practice (GIIP), to manage environmental and social risks and impacts in a structured way on an ongoing basis
 - organizational capacity and competency to implement the ESMS and process to build internal capacity on E&S matters;
 - process to identify the E&S risks and impacts associated to the project over the entire concession period. The assessment process shall be commensurate to the extent and magnitude of the activities;
 - management programs to define mitigation and performance improvement measures and actions that address identified E&S risks and impacts and define detailed timelines for implementation of specific measures. The programs shall consist of documented combination of operational procedures, practices, plans and relevant supporting documents. They shall also include detailed monitoring plans and procedures to undertake in case the results of monitoring indicates the need of mitigation actions;
 - A process to engage with affected communities around issues such as appropriate behavior in the event of an unplanned release beyond the plant boundaries due to irregular plant operation/accident, or during transportation of material to the plants as well as nuisances (e.g. odor, noise, traffic increases during construction) that may affect communities. The process shall also include a mechanism to receive and address grievances from affected communities.
- Review and identify for ameliorative action by Jal Nigam, any regulatory gaps, inconsistencies or inadequacies in the Concession Agreement that may impede or delay implementation of corrective actions or ability to maintain assured compliance at all times.
- Jal Nigam and Concessionaire shall jointly establish and implement a community / stakeholder engagement program inclusive of a comprehensive grievance redressal mechanism to ensure continued community support of the project and associated facilities through the life of the project.
- The cost of implementing E&S including monitoring of parameters shall be borne by the Concessionaire.