

**Design, Build and Commissioning of 7 MLD  
Common Effluent Treatment Plant (CETP) and  
0.5 MLD Package Sewage Treatment Plant (STP)  
at DPIA on EPC basis with 4 years Operation and  
Maintenance - Package B**

**VOLUME 1**

**PART 5 PARTICULAR CONDITIONS OF CONTRACT FOR  
OPERATION AND MAINTENANCE (O&M)**

**July 2026**



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# 1. GENERAL PROVISIONS

The contents of the document shall be read in conjunction with Volume 1-Part 4 Conditions of Contract. The conditions described in this document shall apply to Part 2 - Operation and Maintenance of the Works.

## 1.1 Definitions

- 1.1.1 In addition to the definitions as per Volume 1-Part 4 Conditions of Contract, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meaning hereinafter respectively assigned to them:
- 1.1.2 **“Clearance”** shall mean any consent, license, approval, permit, ruling, exemption or other authorisation of whatsoever nature which is required to be granted by any Competent Authority to undertake, implement, or operate the Facility
- 1.1.3 **“Competent Authority”** shall mean any agency, legislative, judicial or executive authority, department, ministry, public or statutory person, whether autonomous or not, of the Government of India or Government of Maharashtra or any other sub-division or instrumentality thereof.
- 1.1.4 **“Good Industry Practice”** In respect of the Contractor, its subcontractors, and all other such third-party agents of the Contractor, practices, methods, techniques and standards, as changed from time to time, that are generally accepted for use in international sewage and/or effluent treatment facility construction, development, operations and maintenance, taking into account conditions in India.
- 1.1.5 **“O&M Contract Period” or “O&M Period”**: The period as indicated in Part 2 Contract Data Sheet of Volume 1 Instructions to Bidders and Conditions of Contract.
- 1.1.6 **“Major Maintenance”** Any single item of maintenance, repairs or replacements for which the cost/expense equals or exceeds a sum of Rs. 5,00,000/- (Rupees Five Lakhs only) shall be considered as an item of Major Maintenance, Repair and Replacement.
- 1.1.7 **“Facility” or “Plants”** Shall collectively mean Sewage Treatment Plant and/or Common Effluent Treatment Plant designed and constructed in accordance with the provisions of Volume 2, Employers' Requirements, including any additions, modifications, alterations, replacement and repairs as may be made thereto from time to time.
- 1.1.8 **“Utility”** Utility means any and all utility services and installations whatsoever (including gas, water, sewer, roads, electricity, telephone, furniture, telecommunications, fax, photo copier, computer, etc.) and all piping, wiring, conduit and other fixtures of every kind whatsoever related thereto or used in connection therewith.
- 1.1.9 **“Service Fee”** Service Fee for rendering O & M services.
- 1.1.10 **“Fixed Payments”** Shall mean and include the Charges payable to the Contractor for the cost incurred by the Contractor for the operation and maintenance of the Plants, as per the provisions of the contract, and shall be **independent** of the influent sewage and/or

- wastewater flow to the plant. The fixed payments will be made by the Employer in accordance with the accepted Part 1-Price Schedule.
- 1.1.11 **“Variable Payments”** Shall mean and include the Charges payable to the Contractor towards the cost incurred by the Contractor for the operation and maintenance of the Plants, as per the provisions of the contract, and are **dependent** on the influent sewage and/or wastewater flow to the plant. The variable payments will be made by the Employer in accordance with the accepted Part 1-Price Schedule.
- 1.1.12 **“Billing Period”**: shall mean quarterly as per the agreed dates.
- 1.1.13 **“Wastewater”** shall mean sewage and/or Industrial Effluent with parameters as defined in the relevant section of Volume 2 Employer Requirements.
- 1.1.14 **“Treated Effluent” or “Product Water” or “Treated Wastewater”** Shall mean the effluent from the Facility obtained upon treatment/processing of Wastewater and which complies with the quality parameters for treated sewage or treated industrial effluent as applicable and defined in Volume 2 Employer Requirements.
- 1.1.15 **“Output standards”** Quality of treated water from Sewage Treatment Plant and/or Common Effluent Treatment Plant as applicable and as described in Volume 2 Employer’s Requirements
- 1.1.16 **“Liquidated Damages”** are not a penalty but damages payable by the Contractor for failing to meet the Output standards as per the tender requirements.
- 1.1.17 **“Power”** shall mean any energy in the form of electrical power or coal or diesel or solar energy or natural gas or LPG or any other form used for the operation of the plant.

## 1.2 Contractor’s Responsibilities

### 1.2.1 “Pre-Operations Stage (during Construction Period)”

Without limiting the Contractor's obligations during the O&M period, the Contractor shall,

- a) identify and acquire all Clearances required for the operation of the Facility and for the fulfilment of its obligations under the Conditions of Contract
- b) assist the Employer/Engineer-in-Charge in identifying the Clearances that are to be acquired necessarily by the Employer for the fulfilment of the obligations under the Conditions of Contract.
- c) Prepare and submit to the Engineer-in-Charge for approval, the O&M manual for the duration of the O&M period.
- d) Obtain the insurance as specified.
- e) Have obtained the Completion Certificate from the employer.
- f) Integration with utilities/services, including power, ICT, SCADA, roads, inlet water, outlet water, etc., as required by the employer.

### 1.2.2 **“Operations and Maintenance Stage”**

During the O&M and/or trial run and commissioning period, the Contractor shall,

- a) Be responsible for providing O&M Services.
- b) procure and maintain insurance as specified.
- c) be responsible for the security of the Facility and comply with all applicable laws and/or statutory requirements as may be applicable from time to time.
- d) plan, manage, coordinate and execute the treatment operations and other appurtenant works and their maintenance.
- e) be responsible for the routine as well as any capital replacement that may be required either to meet the agreed specifications or enhance the performance of the Facility.
- f) upkeep of the Facility.

### 1.2.3 **“Hazardous Substances/ Wastewater/Effluent Releases”**

1. The Contractor shall carry on its activities in the Facility in such a manner that untreated or raw Wastewater or hazardous substances shall not be released, or it shall not leak or spill onto the Site or elsewhere. The Contractor shall bear the cost of correcting any adverse consequences resulting from any such releases, leakage or spillage accidental or otherwise, and shall make and file any reports with respect thereto required under these Conditions of Contract for Operation and Maintenance and Applicable Laws.
2. The Contractor, after first notifying the Engineer-in-Charge, shall be responsible for fulfilling all notification or reporting requirements associated with any release of any substance into the environment (from the Facility or the Site) as required by Applicable Law or by any Legal Entitlement, including, but not limited to, the notification or reporting of releases of Hazardous Substances or Hazardous Waste. The Contractor shall prepare a memorandum evidencing such notification or reporting and provide copies thereof to the Engineer-in-Charge, along with any documents provided to the relevant regulatory agency regarding such release(s).

### 1.2.4 **“Disposal of Residue”**

#### 1. Residue Management

- i. The Contractor shall dispose of the residue at a pre-identified place with prior approval from the Engineer-in-Charge and make all necessary arrangements with the owner or operator of the disposal facility thereof for the disposal of all Residues. The contractor shall make the necessary arrangements for the transportation and disposal of any residual hazardous substances/sludges to the nearest authorised hazardous waste disposal facility, with the membership fee paid by the Employer.
- ii. The Contractor shall operate the Facility and treat Wastewater so as to minimise the production of Residue.

- iii. Except as otherwise provided in this sub clause, all costs and expense of Residue disposal shall be borne by the Contractor.
- iv. Contractor shall be allowed to treat the residue technically under the latest acceptable standards (National/International) so as to minimise its quantity or on any other economically viable pattern.

## 2. Disposal Requirements

The parties acknowledge that the Contractor may dispose of Residue at a disposal location. The use of such disposal location for such purpose shall be subject to the requirements for a Residue Disposal Facility hereunder:

### i. Transportation

In the event of a spill, leak or loss of Residue during transit, the Contractor shall immediately arrange for the clean-up and transportation of the material to a Residue Disposal facility at the Contractor's sole cost and expense, pay any resulting fines, assessments, penalties or damages resulting there from, and indemnify, defend and hold harmless the Engineer-in-Charge from all Loss-and-Expense.

### ii. Information

The Contractor shall keep and maintain such logs, records, manifests, bills of lading or other documents as the Engineer-in-Charge may deem to be necessary or appropriate to comply with Legal Entitlements and to monitor and confirm compliance by the Contractor and shall collect and promptly provide the Engineer-in-Charge with a copy of all weights and measures data and information relating to Residue quantities generated and disposed thereof.

1.2.5 **“Engineer-in-Charge's right to rectify”** The Engineer-in-Charge retains the right, at the risk and cost of Contractor, to perform any of the material obligations on default of the Contractor.

1.2.6 **“Handing/Taking Over”** Before expiry of contract period and nearing satisfactory completion of operation and maintenance, the Contractor will request in writing to the Engineer-in-Charge/Employer to make the final inspection of the permanent works for Handing Over.

The Contractor will hand over the Works and the Site to the Employer, subject to the condition that all equipment are in good operating condition (with exception of fair wear and tear), any necessary repairs to the civil, mechanical or electrical installations have been properly carried out, and any and all defects or damages arising from the design, workmanship, materials or operating and maintenance conditions have been remedied, as per Clause 1.5 [Completion of Operation and Maintenance Services]

The Engineer-in-Charge will conduct an inspection accordingly and bring any shortcomings to the Contractor's notice. After verification of satisfactory completion in all respects, the Engineer-in-Charge will issue a Taking Over Certificate to record the take-over of the permanent works/plants, etc.

### 1.3 O&M Duration

The duration of the Operation and Maintenance period would be as indicated in the Contract Data Sheet.

### 1.4 Operating Conditions

#### 1.4.1 “Non-Availability of Wastewater”

1. Throughout the Term of these Conditions of Contract for Operation and Maintenance, the Engineer-in-Charge shall supply Raw Sewage and Industrial Effluent for treatment in the respective facility.
2. In the event of non-availability of wastewater at the Facility, the responsibilities of the Contractor pertaining to the respective section of Works, viz., Sewage Treatment Plant and/or Common Effluent Treatment Plant, as applicable, shall stand suspended. During such period of suspension, the Engineer-in-Charge shall be liable to pay only the Fixed Service Charge to the Contractor for upkeep of the plant as mutually agreed.

#### 1.4.2 “Adverse Operating Conditions” In the event the Wastewater/industrial effluent quality deteriorates beyond the specifications provided, the following provision will be applicable:

- a) If the Wastewater/industrial effluent can still be treated to meet the Output Standards, the Contractor shall comply with such specifications. In the event it is not possible to meet the Output Standards, the Contractor shall, as soon as practically possible, inform the Employer. The Parties shall consult in good faith to arrive at mutually acceptable Alternative Output Standards, which shall be complied with by the Contractor until the Wastewater/industrial effluent quality is restored.
- b) The Liquidated Damages during the above Adverse Operating Period, if any, shall be recalculated using the Alternative Output Standards.
- c) The bidders shall provide a formula linking their O&M costs and functional guarantees to the incoming Wastewater quality differs more than  $\pm 15\%$  from the values as given above for a period of more than 30 days. This formula, as amended during negotiations, will be used to adjust O&M costs and the contractor's functional guarantees.

#### 1.4.3 “Ordinary/Routine Maintenance”

1. The Contractor shall maintain the facility in good working order and repair and in a neat, orderly condition, including the cleanup of litter and debris on daily basis or more frequently, if required, shall maintain a spare parts inventory necessary to performance maintenance required as per the O&M and shall maintain the aesthetic quality of the Facility as originally constructed and in accordance with the Employers' Requirements. The Contractor shall provide as well as make provisions for all labour, materials and equipment which are necessary for the normal operation and maintenance of the Facility and shall conduct the required predictive maintenance of the Facility consistent with the O&M Manual. The Contractor shall maintain

maintenance logs in accordance with the preventive maintenance plan set forth in the O&M Manual.

#### 1.4.4 **“Major Maintenance Repairs and Requirements”**

1. The Contractor shall be responsible for providing all Major Maintenance, Repairs and Replacement of the machinery, equipment, structures and improvements constituting the Facility during the O&M.
2. The Contractor shall submit a periodic statement outlining the scheduled Maintenance, Repairs and Replacements, whether routine or Major or otherwise, and the actual status of the Maintenance, Repairs and Replacements carried out by the Contractor up to that date, in order to prove compliance with the provisions of these Conditions of Contract, and the O&M Manual.
3. The Employer/Engineer-in-Charge and the Employer/Engineer-in-Charge's representative shall have the right to conduct inspections at any time in order to assure that the Facility is being properly maintained, repaired and replaced in accordance with these Conditions of Contract for O&M.
4. The Contractor shall at least semi-annually during each period when Major Maintenance, Repair and Replacement activities required hereunder are being carried out by the Contractor, at the Engineer-in-Charge's request, conduct a day-long "walk-through" of each component of the Facility when the Contractor shall demonstrate to the Engineer-in-Charge's inspectors that all Major Maintenance, Repair and Replacement activities required are in fact being carried out by him.
5. The Major Maintenance, Repair and Replacement plan set forth in the O&M Manual shall contain the basic principles under which the Contractor shall carry out its Major Maintenance, Repair and Replacement programme required by these Conditions of Contract. Such a plan shall also contain a detailed listing of Major Maintenance, Repair, and Replacement activities that would be required to be performed by the Company to achieve the standard of the overall Facility within its expected useful life.
6. The contractor shall make and complete all Major Maintenance, Repair and Replacement to the Facility which are necessary to achieve such standard of repair and replacement by performing all such listed activities within the time frame indicated in the O&M Manual.

#### 1.4.5 **“Additions/ Modifications to the Facility”**

1. Any additions to the Facility sought by the Employer beyond the scope of work over and above those required under this Contract, including but not limited to expansion of the Facility, shall be carried out by the Contractor at the expense of the Employer. Such expenses will cover the costs of any such additions, as well as a percentage fee for the Contractor to be agreed between the Contractor and the Employer. If no agreement can be reached, the Employer may appoint a third party to make additions/modifications to the facility. In such a case, the contractor shall be responsible for integrating the additions/modifications into the plant's operation and maintenance as per the contract.

## **1.5 Completion of Operations and Maintenance Services**

1.5.1 Upon expiry of the Operation and Maintenance Period, the Contractor shall hand over the Works to the Employer in good operating condition (fair wear and tear excepted) after complying with the following conditions:

1. All mechanical and electrical plants are fully functional and in good operating condition, suitable for the purposes for which they were intended;
2. All defects or damages which may have arisen from the design, workmanship, materials, or improper operating conditions or maintenance practices have been identified and remedied;
3. replacements are provided for all spare parts that were used/consumed during the Operations and Maintenance Period; all such replacements shall be new and manufacturer's original equipment only; and
4. executed all required work of amendment, reconstruction, repair and remedying defects or damage as may be instructed by the Employer or Engineer in Charge.

All such work shall be executed by the Contractor at his own cost before the facilities are handed over. In the event that the Contractor fails to carry out the necessary remedial works, the Engineer shall notify the Contractor accordingly, and proceed in accordance with the provisions of Vol 1 Part 4 Conditions of Contract Clause 6.12 [Remedial work].

The Contract shall not be considered completed until the Final Contract Completion Certificate has been signed by the Engineer and delivered to the Contractor, stating the date on which the Contractor has completed his operation and maintenance obligations to the satisfaction of the Engineer. The Final Contract Completion Certificate shall be given by the Engineer by the date 28 days after expiry of the Operation and Maintenance Period, or as soon after such date as the Contractor has completed his obligations. Any costs incurred by the Employer in doing so shall be recoverable from the Contractor and will become a debt due and payable by the Contractor to the Employer, and the Employer may, at its sole discretion, recover such amount by invoking the Contractor's bank guarantee provided as a Performance Security.

Only the Final Contract Completion Certificate shall be deemed to constitute final certification that the Contractor has satisfactorily fulfilled all of his obligations under the Contract.

## **2. PERFORMANCE SECURITY FOR O&M**

### **2.1.1 "Submission of Performance Guarantee"**

The Contractor shall, for the performance of its obligations hereunder during the Operation and Maintenance Period, provide to the Employer an irrevocable and unconditional guarantee from a Bank or Insurance Surety Bonds in the form set forth in Tender Forms within the time limit specified and for an amount equal to a percentage of the Contract Price as specified in the Contract Data Sheet.

### **2.1.2 "Validity of Performance Guarantee"**

The Performance Security shall be valid and enforceable till the end of the O&M Period. It shall be the contractor's responsibility to keep the performance Guarantee valid throughout the O&M period. The contractor shall extend the performance Guarantee, if applicable, at least 3 months prior to its expiry date. In case the contractor fails to revalidate the performance Guarantee in time, the Employer reserves the right to encash the performance Guarantee(s) without any notice to the contractor.

#### 2.1.3 **“Return of Performance Security”**

The Performance Security for the Operation and Maintenance Period shall be released to the Contractor within 30 days of the issue of the Final Contract Completion Certificate, following the taking over of the plant by the Employer as per Clause 1.2.6 [Handing/Taking Over].

Prior to making a claim under the Performance Security, the Employer shall, in every case, notify the Contractor stating the nature of the default for which the claim is to be made.

### **3. PAYMENTS**

#### 3.1.1 **“Price Variation Adjustment”**: The Fixed and Variable Payments to the Contractor during the O & M Period shall be adjusted for changes in cost as per the Conditions of Contract.

Payment on account of adjustment for changes in cost for the Fixed and Variable payments to the Contractor during the O & M Period shall be payable for delays only for which time extension has been granted in accordance with the Conditions of contract.

#### 3.1.2 **“Electricity and Water”**

1. Electricity and Water Charges shall be dealt with as per the Conditions of Contract.
2. The Engineer-in-Charge shall recover from the Contractor penalties levied by the Electric Supply Agency for reasons due to low power factor of electricity consumption and/or violations of the load conditions during the O&M period, if any. The Contractor shall also make good all the damages arising out of low power factor of electricity consumption and/or violations of any of the load conditions during the O &M period.

#### 3.1.3 **“Deleted”**

#### 3.1.4 **“Billing”**

Commencing with the first Billing Period of the O&M Period and for each Billing Period thereafter during the O&M Period, the Engineer-in-Charge shall pay the Contractor a Service Fee/payment for the services provided by the Contractor under the terms of these Conditions of Contract.

1. The Engineer-in-Charge shall pay the Contractor the Fixed Payment Charge, whether or not and irrespective of the extent to which the Engineer-in-Charge supplies Wastewater to the Contractor for treatment.

2. The Engineer-in-Charge shall pay the Contractor the Variable payments as per the quantity of raw sewage and/or Industrial Effluent treated to meet the Output Standards.
  3. The Engineer-in-Charge shall pay to the Contractor the accepted amounts, within seven (7) calendar days from the date of acceptance of the invoice.
  4. Engineer-in-Charge reserves its right to deduct dues to liquidated damages, if required, from this retention and shall not consider any interest over this retained amount, irrespective of period, circumstances and reasons thereof.
  5. Liquidated Damages per day for non-compliance of treated water standards during O&M for less than 95%tile compliance shall be equal to 0.01% of Contract Price for Part 2-Operation and Maintenance of the Works for each incremental increase in measured water quality parameters over 24 hours composite sampling beyond the stipulated requirements. The charges will be applied separately for each parameter. Applicable Increments: Turbidity - 0.3 NTU, all other parameters 1 mg/L.
  6. Liquidated Damages per day for Breakdown of Equipment during O&M for more than 3 days of critical equipment and/or more than 7 days of non-critical equipment will be equal to 0.01% of Contract Price for Part 2- Operation and Maintenance of the Works.
  7. The maximum amount of Liquidated Damages in a month for non-compliance of treated water standards during O&M and/or Breakdown of Equipment during O&M will be as indicated in the Contract Data Sheet.
- 3.1.5 **“Taxes”** The Contractor shall be responsible for paying all taxes associated with the carrying out of services. Notwithstanding the provisions of any Clause of these Conditions of Contract for Operation and Maintenance, the Engineer-in-Charge shall be entitled to withhold or deduct from payment to the Contractor any amount it is required by law to so withhold/deduct.

## **4. PERSONNEL FOR O&M**

### **4.1 Qualification Requirement**

The qualification for various staff shall be in accordance with Vol 2 Part-1 General Requirement clause 19.2.3 [Contractor's Resources]

### **4.2 Contractor's Personnel**

#### **4.2.1 “Contractor's Personnel”**

1. The Contractor shall appoint, on or before the date of start of the O&M period, a qualified, competent and experienced person to act as the Contractor's Representative, which appointment shall be subject to the approval of the Engineer-in-Charge and such approval shall not be unreasonably withheld or delayed.
2. The Contractor's Representative shall be authorised and empowered to act for and on behalf of the Contractor during the O&M Period. In all such matters, the Contractor shall be bound by the written communications, directions, requests and decisions given or made by the Contractor's Representative. The Contractor's

Representative shall not be entitled to amend the Contract on behalf of the Contractor.

3. The Contractor's Representative will direct and manage the Contractor's resources and have full responsibility for the operations, maintenance and administration of the Facility.
4. The Contractor shall identify, interview and hire a sufficient number of qualified and trained (and if required, licensed) personnel as per the technical schedule to perform its obligations during the O&M period.
5. All Contractor's personnel employed at the plant at any time during the O&M Period will be provided by the Contractor. The Engineer-in-Charge is not liable for personnel in any way and cannot be held responsible in the event of litigation of any sort between the Contractor and members of plant personnel or their representatives or non-performance of obligations due to any strike or other industrial action by the Contractor's workmen (including those of its subcontractors, suppliers, etc).
6. The Contractor undertakes to comply with applicable legislation and the code of labour law on matters of health, hygiene and safety, and shall assume responsibility for works required in the event of any change in applicable regulations and shall also require its subcontractors to comply with this clause.
7. The Contractor undertakes to provide the training that may be necessary from time to time to all the personnel employed in the facility, at its own cost and responsibility.
8. If the Contractor fails to provide the required personnel responsible for O&M of the Facility, the Fixed Service Charge payable for each year may be reduced at the Engineer-in-Charge's discretion.

#### **4.3 Engineer-in-Charge's Personnel**

##### **4.3.1 "Engineer-in-Charge's Personnel"**

1. The Engineer-in-Charge shall appoint on or before the date of start of the O&M period, which may be changed from time to time, the Engineer-in-Charge's Representative and notify the Contractor of such appointment.
2. The Engineer-in-Charge's Representative shall have authority to act on behalf of the Engineer-in-Charge in relation to all matters concerning the scope of work during the O&M Period, save to the extent of any limitation on such authority of which the Engineer-in-Charge has given the Contractor notice. In no event shall the Engineer-in-Charge's Representative have any authority to relieve the Contractor of any obligation or liability or to amend this Contract.
3. The Contractor undertakes to train 4 persons nominated every year by the Engineer-in-Charge to effectively carry on the O&M of the facility during a period of emergency/Force Majeure.
4. The Contractor also undertakes to provide training to the personnel nominated by the Engineer-in-Charge to take over the operation & maintenance of the Facility at the time of expiry of the O&M Period.

## 5. ENGINEER-IN-CHARGE'S RIGHTS

### 5.1 “Inspection”

1. The Engineer-in-Charge may periodically check the operation of the Facility or designate an organisation of its choice to carry out inspections of the Facility to satisfy itself that the Contractor is performing its obligations with due diligence, at its own cost.
2. Any assistance required for such inspection of the Facility shall be provided by the Contractor.
3. The Engineer-in-Charge may also inspect at any time the works being operated and maintained.

### 5.2 “Audit”

1. Engineer-in-Charge may conduct a technical audit of the Facility and perform an analysis of inspection it deems necessary. Before any such inspection, the Engineer-in-Charge shall give the Contractor three days' prior written notice. The Contractor shall, at the Contractor's sole expense, provide all assistance to the Engineer-in-Charge to complete these inspections. Such audits may cover all or any of the obligations of the Contractor without limitation, as follows:
  - a) Verification of the system capacity, save for normal wear and tear, during the O&M Period.
  - b) Verification of the performance standards and useful life of the individual assets of the Facility, save for normal wear and tear, during the O&M Period.
  - c) Verification of the capacity of the Facility to meet Output Standards during the residual life of the Facility, save for normal deterioration expected during such residual life.
  - d) Sampling, testing and verification of the Output

### 5.3 “Visits”

1. At the end of each twelve-month period, or at the initiative of the Engineer-in-Charge, a visit shall be organised, so that both Contractor and the Engineer-in-Charge can check the condition of the installations at the Facility.
2. A report shall be drawn up to record the opinions of both parties. The Engineer-in-Charge reserves the right to call in equipment manufacturers or specialised technicians for these visits.
3. These visits shall provide an opportunity for examining maintenance programmes, operating procedures and improvements requiring additional investments.

### 5.4 “Sub Contracts”

1. The Contractor shall not delegate its responsibilities nor subcontract any part of the services to be provided by it without prior written consent of the Engineer-in-Charge. If the Contractor subcontracts its responsibilities or subcontracts any part of the

O&M with due approval from the Engineer-in-Charge, the Contractor shall not be relieved from any liability or obligation under this Contract and the Contractor shall continue to be responsible for the act, defaults or negligence of any sub-contractor, as fully as if it were the acts, defaults or negligence of the Contractor, its officers, employees or agents.

2. The period of validity of any contractual commitment for the provision of service or material, or personnel to the facility or any subcontract entered into by the Contractor with any party shall not extend beyond the expiry of the Contract.

## 6. EMERGENCIES

### 6.1 "Action"

1. In the event of an emergency endangering life or property, the Contractor shall take such action as may be reasonable and necessary to prevent, avoid or mitigate injury, damage, or loss and shall, as soon as possible, report any such incidents, including the Contractor's response thereof, to the Engineer-in-Charge's Representative.

### 6.2 "Expenditure"

1. The Contractor shall utilise its personnel to take such action as may be reasonable and necessary in the event of an emergency. Notwithstanding anything to the contrary in this Conditions of Contract for Operation and Maintenance, the Contractor may incur any expenditure or take any other measure, which the Contractor deems to be necessary (in accordance with Good Industry Practices) in the case of emergencies affecting the Facilities or the Operation of the Facilities to counteract the effects where the Contractor considers immediate action is required to safeguards lives or property (and provided that any communication with the news media made by the Contractor shall provide enough information to satisfy immediate public concern).

### 6.3 "Notification"

1. In the event of an emergency, the Contractor shall notify the Engineer-in-Charge's Representative of the emergency, the expenditure made, and the actions taken.

## 7. FORCE MAJEURE

As defined in Clause 14 of Volume 1 Part 4 - Conditions of Contract. The conditions described in this document shall apply to the Operation and Maintenance part of the Works.

### "Exceptions"

The following conditions shall not, however, constitute a "Force Majeure Event"

- a) late delivery of plant, machinery, equipment, materials, spare parts or consumables for the Facility.
- b) any delay in the performance of any of the Contractor's subcontractors.

- c) insufficiency of funds or high inflation.

#### 7.1 **“Notice”**

1. The Affected Party shall give notice to the other Party of the Force Majeure Event as soon as is reasonably practicable, but not later than twenty-one (21) days after the date on which the Affected Party knew or should reasonably have known of the commencement of the Force Majeure Event. Notice shall, inter alia, specify the
  - a) the nature of such Force Majeure Event;
  - b) the date and time when the Affected Party was materially and adversely affected by the Force Majeure Event;
  - c) the material adverse effect of such Force Majeure Event on the Affected party;
  - d) the measures which the Affected Party has taken or proposes to take, to alleviate the impact of those Force Majeure Events and/or mitigate the damage;
  - e) an estimate of the period of time that the Affected party shall be unable to perform its obligations and/or continue to be materially, adversely affected by the Force Majeure Event; and
  - f) any other relevant information as may be necessary.

Failure by the Affected Party to give notice to the other Party within the time period specified above shall not prevent the Affected Party from giving such notice at a later time, provided, however, that in such case the Affected Party shall not be eligible for the remedies as envisaged in Clause 1.9.5 [“Consequences of Force Majeure”].

#### 7.2 **“Reporting”**

For so long as the Affected Party continues to claim to be affected by the Force Majeure Event, it shall provide the other Party with regular (and not less than monthly) written reports containing:

- a) the information called for by Clause 1.9.1 [Notice] here above; and
- b) such other information as the other Party may reasonably request.

The Affected Party shall also provide to the other Party reasonable facilities, including site inspection for obtaining further information about the Force Majeure Event or circumstance alleged to constitute a Force Majeure Event.

#### 7.3 **“Obligation to Perform”**

1. From the date of expiry of the Force Majeure period, the obligations of the Affected Party under this Contract shall no longer be suspended.
2. Provided that the performance of the Contractor's obligations and liabilities shall, for the Force Majeure period, be governed by Clause 1.9.4 [Mitigation Responsibility]
3. Nothing in Clause 1.9.4 [Mitigation Responsibility] shall affect the Contractor's obligation to make any payments in respect of liabilities incurred prior to the occurrence of any Force Majeure Event.

#### 7.4 **“Mitigation Responsibility”**

1. Upon the occurrence of the Force Majeure Event and during the substance of the Force Majeure period, both the Parties shall engage in good faith consultations and shall use all reasonable endeavours to alleviate the material adverse effect of such Force Majeure, including, without limitation, arriving at Alternative Output Standards.
2. The Affected Party shall use the insurance proceeds to mitigate the impact of the Force Majeure Event.

#### 7.5 **“Consequences of Force Majeure”**

1. Provided that the Affected Party has at all times since the occurrence of the Force Majeure Event complied with the obligations of Clause 1.9.4 [Mitigation Responsibility] during the Force Majeure Period continues to comply with the same, the Affected Party shall be entitled to the following relief:
  - a) In the event the Contractor is the Affected Party, the Output Standards shall remain suspended and alternative Output Standards shall be in effect during the Force Majeure period.
  - b) Time period for the performance of obligations of the Affected Party to the extent they are affected by the Force Majeure Event shall be extended on a day for a day basis for the Political Force Majeure period or natural/Other Force Majeure Period, as the case may be.
2. The occurrence of a Force Majeure Event shall not be considered as a sufficient reason for the extension of the O & M Period.

## 8. **SUSPENSION**

#### 8.1.1 **“Right for Suspension”**

1. During the O&M Period, the Engineer-in-Charge is entitled to suspend, with 21 days' notice in writing, the operations at the Facility.
2. Notwithstanding the above, the Engineer-in-Charge is entitled to suspend the operations at the Facility with immediate effect for reasons attributable to the default of the Contractor as per Clause 9.1.1 [“Contractor's Default”].

#### 8.1.2 **“Contractor's Responsibilities During Suspension”**

1. During the period of Suspension, the Contractor shall
  - a) protect and secure the Facilities against any deterioration or damage:
  - b) Place no further subcontracts in relation to the services; and
  - c) Suspend, on the most favourable terms reasonably available to the Contractor, all subcontracts and agreements for the provision of goods and services to the extent affected by Suspension.

#### 8.1.3 **“Compensation for Suspension”**

1. During the period of Suspension, the Contractor shall be eligible to receive:  
The Fixed Service Charge and cost of inventory holding (such as consumables) which have been paid for by the Contractor, provided such Suspension is not due to reasons attributable to the default of the Contractor as per Clause 9.1.1 ["Contractor's Default"].
2. In the event such Suspension is attributable to the default of the Contractor as per Clause 9.1.1 ["Contractor's Default"], no compensation shall be payable to the Contractor.
3. In the event the operations at the Facility have been suspended due to reasons attributable to the default of the Contractor as per Clause 9.1.1 ["Contractor's Default"], the Contractor shall bear the expenses for undertaking the remedial measures to correct the deterioration of the Facility and achieve the Output Standards.

#### 8.1.4 "Resumption of Operations"

1. The Engineer-in-Charge may decide to terminate the Suspension by issuing a notice in writing.
2. The Contractor, as soon as is reasonably practicable after the receipt of such notice, shall resume operations at the Facility and make its best efforts to achieve the Output Standards.
3. In the event it is not possible to achieve the Output Standards immediately on resumption (or) if the Facility has deteriorated due to reasons not attributable to the non-performance of the Contractor's obligations under Clause 8.1.2 [Contractor's Responsibilities during Suspension], the Parties shall consult in good faith.
  - a) To determine the extent of deterioration, if any, of any or all parts of the Facility and measures to correct such deterioration.
  - b) To determine the lead time that is required for the Contractor to achieve the Output Standards, and the measures required to achieve the Output Standards.

## 9. TERMINATION

#### 9.1.1 "Contractor's Default"

The Engineer-in-Charge shall be entitled to terminate this Contract for the following attributable to the Contractor, unless arising as a result of a Force Majeure Event, or the Engineer-in-Charge's default defined in Clause 9.1.2 ["Engineer-in-Charge's Default"].

- a) non-performance of material obligations or failure to perform material obligations under this Contract;
- b) Sustained inability for a continuous period beyond lead time to meet Output Standards following resumption of suspended operations at the Facility as per Clause 8.1.4 ["Resumption of Operations"]
- c) If the cumulative Liquidated Damages in a year exceed the Maximum Liquidated Damages;

- d) Repudiation of this Contract by the Contractor or the evidencing of an intention by the Contractor not to be bound by the terms of this Contract;
- e) The contractor is ordered to be wound up by a court or files a petition for voluntary winding up except for the purpose of amalgamation or reconstruction provided that such amalgamation or reconstruction does not adversely affect the ability of the amalgamated or reconstructed entity to perform its obligations under this unconditional responsibility for the performance of the Contractor's obligations and the technical financial and operating capability of the successor is satisfactory to the Engineer-in-Charge.
- f) The Contractor abandons the operation of the Facility.
- g) Under conditions expressly mentioned in any Clause of these Conditions of Contract for Operation and Maintenance.

### 9.1.2 “Engineer-in-Charge's Default”

The Contractor shall be entitled to terminate this Contract due to the following reasons attributable to the Engineer-in-Charge (unless arising as a result of Force Majeure Event, or Contractor's Default as defined in Clause 9.1.1).

- a) If the payments due to the Contractor are delayed without notice for a period of 49 days from the date on which it became due, i.e. 140 days from the receipt of the invoice as per Clause 3.1.4 [Billing].
- b) Repudiation of this Contract by the Engineer-in-Charge or the evidencing of an intention by the Engineer-in-Charge not to be bound by the terms of this Contract.
- c) Commission of a material breach of a material provision of this Contract.
- d) Dissolution of the Engineer-in-Charge or occurrence of any structural changes within the present constitution of the Engineer-in-Charge which have a material adverse effect of the rights and obligations of the Contractor under this Contract, or the transfer of the Engineer-in-Charge's undertaking and statutory powers or any material part thereof, unless such dissolution or structural change or transfer is in connection with privatization or order restructuring of all or any substantial part of the Engineer-in-Charge, and the Engineer-in-Charge's successor is able to perform the Engineer-in-Charge's obligations under this Contract, provided that
  - i. The undertaking and statutory powers of the Engineer-in-Charge are transferred to the Engineer-in-Charge's successor, and such entity has the powers to continue as Engineer-in-Charge; and
  - ii. The Engineer-in-Charge's successor has assumed in writing the responsibility for performance of the Engineer-in-Charge's obligations hereunder.
- e) Under conditions expressly mentioned in any Clause of these Conditions of Contract for Operation and Maintenance.

Notwithstanding the provisions above, any event for which specific redressal has been provided elsewhere in this Contract shall not constitute the Engineer-in-Charge's Default.

### 9.1.3 “Termination due to FM”

1. Either party shall be entitled to terminate this Contract if a Force Majeure Event is continuously in effect for a period of more than seven months.

### 9.1.4 “Termination due to Suspension”

1. The Contractor is entitled to terminate this contract if a Suspension of operations at the Facility is in effect for a continuous period of nine months, provided that such Suspension is not due to the default of the Contractor.

### 9.1.5 “Exercising the Right to Terminate”

1. Any right to terminate this Contract shall be exercised by either Party within three months from the date on which the right arises.

#### 9.1.6 **“Termination Procedure”**

In the event of a Contractor's Default or Engineer-in-Charge's Default ("Event of Default"), the termination procedure as set out in this Clause shall apply.

##### 1. NOTICE OF INTENT TO TERMINATE

- a) The Notice of Intent to Terminate shall specify with reasonable detail the defaults committed by the defaulting Party.

##### 2. REMEDY PERIOD

- b) Following the service of the Notice of Intent to Terminate, the defaulting Party shall have a period of 56 days ("Remedy Period") to cure the Event of Default pursuant to which the Notice of Intent to Terminate was issued.
- c) During the Remedy period, the defaulting party may continue to undertake efforts to cure the default, and the non-defaulting Party shall not, by act or omission, impede or otherwise interfere with the defaulting Party's endeavour to remedy the Event of Default.
- d) During the Remedy Period, both the Parties shall, save as otherwise provided in this Clause, continue to perform their respective obligations.

##### 3. WITHDRAWAL OF NOTICE OF INTENT TO TERMINATE

If, during the Remedy Period, the defaulting Party remedies the default to the satisfaction of the non-defaulting party or the non-defaulting Party is satisfied with steps taken or proposed to be taken by the defaulting Party or the Event of Default giving rise to the Notice of Intent to Terminate has ceased to exist, the non-defaulting Party shall withdraw the Notice of Intent to Terminate in writing.

##### 4. TERMINATION NOTICE

Upon the expiry of the Remedy Period, unless the Parties have otherwise agreed to, or the Event of Default giving rise to the Notice of Intent to Terminate has ceased to exist or the default has been rectified or remedied by the defaulting party, the non-defaulting Party may terminate this Contract by giving a 42-day written notice ("Termination Notice") to the defaulting Party. Upon the expiry of such notice period ("Termination Notice"), this Contract shall stand terminated.

#### 9.1.7 **“Effects upon Termination”**

##### 1. SUCCESSOR TO THE CONTRACTOR

- a) Upon the issue of the Termination Notice by the Engineer-in-Charge, the Contractor, shall use its best efforts to facilitate the appointment and commencement of duties of any person or organization to be appointed by the Engineer-in-Charge to operate the Facility (Successor Operator) so as not to disrupt the normal operation and maintenance of the Facility and shall provide full access to the Facility and all relevant information, data and records relating thereto by the Successor Operator and its representatives and accede to all

reasonable requests made by such persons in connection with preparing for taking over the operation and maintenance of the Facility.

- b) Promptly after Termination/ the Contractor shall deliver to and shall, with effect from Termination Date, hold on trust for and to the order of the Engineer-in-Charge (if so required by the Engineer-in-Charge by written notice) to the Successor Operator all property in its possession or under its control owned by the Engineer-in-Charge or leased or licensed to the Engineer-in-Charge.
- c) The Contractor, if required so by the Engineer-in-Charge, and to the extent allowed by such Contracts, shall transfer to the Successor Operator, as from the Termination Date, its rights as the Contractor under all contracts entered into by it in the performance of its obligations under this Contract relating to the operation and maintenance of the Facility. Pending such transfer, the Contractor shall hold its rights and interest thereunder for the account and to the order of the Successor Operator, provided that the Engineer-in-Charge shall indemnify the Contractor for all liabilities incurred by the Contractor under these contracts as a result of their continuation and performance by the Engineer-in-Charge, or as the case may be, by the Successor Operator.
- d) Immediately upon the receipt of Termination Notice, the designated key personnel of the Engineer-in-Charge shall be associated with the operations and shall be trained by relevant personnel of the Contractor at the Facility to facilitate smooth transfer to the Engineer-in-Charge/Successor Operator.

## 2. CO-OPERATION FOLLOWING TERMINATION

The Contractor will, upon the Termination of this Contract, co-operate with the Engineer-in-Charge and the Successor Operator and comply with reasonable requests thereof, including the execution of documents and other actions, provided the Engineer-in-Charge bears any reasonable costs incurred by the Contractor relating thereto.

## 3. PASSING OF RISK

Until the Termination Date, the Facility shall remain at the sole risk of the Contractor, and the Contractor shall be solely responsible for any loss of or damage caused to or suffered by the Contractor for any reasons whatsoever to whole or any part of the facility, unless such loss or damage caused to or suffered by the Contractor is due to any act of default or omission or negligence on the part of the Engineer-in-Charge.

# 10. CLAIMS, DISPUTE AND ARBITRATION

As per Clause 15 of Volume 1, Part 4

# 11. INSURANCE

- 1. The Contractor shall, without limiting its or the Employer's obligations and responsibilities, ensure

- a) The Works together with materials and Plant for incorporation therein, to the full replacement cost (term "cost" in this context shall include profit)
  - b) The Contractor's Equipment and other things brought onto the Site by the Contractor, for a sum sufficient to provide for their replacement at the Site.
2. The insurance detailed above shall be in the joint names, first beneficiary being the Engineer-in-Charge, shall cover the Engineer-in-Charge and the Contractor against all loss or damage from whatsoever cause arising, from the start of the operation and maintenance in respect of the Facility or any Section or part thereof, as the case may be.
3. Any amount not insured or not recovered from the insurers shall be borne by the Contractor in accordance with their responsibilities.
4. The Engineer-in-Charge shall not be liable for or in respect of any damage or compensation payable to any workman or other person in the employment of the Contractor or any Subcontractor, other than death or injury resulting from any act or default of the Engineer-in-Charge, its agents or servants. The Contractor shall indemnify and keep indemnified the Engineer-in-Charge against all such damages and compensation.
5. The Contractor shall insure against such liability and shall continue such insurance during the whole of the time that any persons are employed by the Contractor on the Facility provided that, in respect of any persons employed by any Subcontractor, the Contractor's obligations to insure as aforesaid under this sub-clause shall be satisfied if the Subcontractor shall have insured against the liability in respect of such persons in such manner that the Engineer-in-Charge is indemnified under the policy, but the contractor shall require such Subcontractor to produce to the Engineer-in-Charge, when required, such policy of insurance and receipt for the payment of the current premium.
6. In the event that the Contractor fails to comply with conditions imposed by the insurance policies effected pursuant to the Contract, Engineer-in-Charge stands indemnified by the Contractor against all losses arising from such failure according to the Contract conditions.

## **12. INTELLECTUAL PROPERTY**

1. All Intellectual Property conceived, originated, devised, developed or created by the Contractor or Engineer-in-Charge, specifically for the Facility or the carrying out of the obligations under this Contract, shall vest in the Engineer-in-Charge as sole beneficial owner and shall be disclosed to the Engineer-in-Charge upon its (the Intellectual Properties) coming into existence.
2. Source code for computer programmes and associated documentation, storage media shall be made available to the Engineer-in-Charge by the Contractor free of cost.

3. Any Intellectual Property of the Engineer-in-Charge that is required in connection with the performance of the obligations of the Contractor shall be made available to the Contractor free of charge for the purpose of this Contract alone.
4. The Contractor shall, at its own cost and expense, ensure availability at all times during the Term of this Conditions of Contract for Operation and Maintenance, of any proprietary spares/consumables/equipment that it may have sourced for purposes of ensuring proper functioning of the facility as per this Conditions of Contract for Operation and Maintenance.
5. The Contractor shall, at its own cost and expense, ensure availability of such proprietary spares/consumables/equipment for a fixed period (to be decided after discussion with selected bidder) after Termination/Forced Termination of the Term Notwithstanding the provisions of this or any other Clause, failure to ensure such availability shall construe default, by Contractor and shall entitle Engineer-in-Charge to invoke the Performance Guarantee provided by Contractor.
6. Prior to concluding any Contract with any third parties relating to the supply of materials specifically created by third parties for the purposes of this Facility, the Contractor shall request such third party to grant licenses to each of the Contractor and the Engineer-in-Charge with rights to sub-license any Successor Operator in relation to all Intellectual Property which may arise in connection herewith. If that third party refuses to grant such licenses, the Contractor shall refer that matter to the Engineer-in-Charge and shall act in accordance with the Engineer-in-Charge's instructions as to the terms on which such Contract may be concluded.
7. The Contractor shall, as far as practicable, use its best efforts
  - a) To procure that Intellectual Property owned or developed by third parties and utilised by the Contractor in connection with the performance of its obligations under the Contract for the conversion of Wastewater to treated effluent from the facility and otherwise for the Facility, but for no other purpose on reasonable terms.
  - b) To ensure that no Intellectual Property of a Third Party is otherwise used in the performance of the Contractor's obligations under this Contract without the approval of the Engineer-in-Charge.
8. On termination of Contract for Operation and Maintenance, the Contractor shall transfer all such Intellectual Property whatsoever to the Engineer-in-Charge and /or to the Successor Operator at the discretion of the Engineer-in-Charge.