



SEWAGE PLANT SCOPE OF WORK

APPENDIX B: SCOPE OF WORK

1 Description of the service

1.1 Executive overview

Hire personnel to supply the services on a 24-hour basis for a period of 36 months (3 years): **Operation and management of the Sewage treatment plant at Hendrina Power Station**

Sewage Treatment Plants consists of North and South Plants including Oil and Grit plant and Pump Station

Employer's requirements for the service at the Sewage treatment and Wastewater Recovery plant

The scope of work covered in this contract is the operation of the sewage plant at Hendrina Power Station. The contractor shall provide labour, operational & management services, plant control, cleaning, as well as routine plant checks and reporting of defects.

Obligation of the Contractor

1. The plant shall be operated in accordance with Hendrina Power Station Water Use License conditions and the operating procedure.
2. The operators shall be classified in accordance with Regulation 2834.
3. The number, duties, training, qualifications and compulsory medical examination of the persons employed at the Water Care Works shall be in accordance with the requirements of the plant's registration certificate issued in accordance with Regulation 2834
4. The contractor shall ensure that the plant is clean at all times and conduct sewage plant monitoring analysis e.g. Cl₂, conductivity and pH.
5. The contractor shall ensure that full sewage plant analysis are done as per regulation 2834 and Hendrina water use licence are at the ISO 17025 accredited laboratory on weekly basis and send the report to the Eskom contract supervisor.
6. The contractor shall provide transport for all employees for home-work purposes, station meetings attendance and all other work-related activities.
7. The contractor shall ensure that statutory safety appointments are done as per OHS act.

Staff

1. The plant shall be manned 24 hours a day (on 8-hour shift cycles) and seven days a week.
2. Eskom Hendrina is currently running on 8-hour shift cycles of 4 shifts (A, B, C, and D)

3. The number, training, qualifications of all staff members employed at the sewage treatment, wastewater recovery plants shall be in accordance with regulation 2834

4. Class C type plant, number of operators to be present is as follows:

- **Site supervisor day shift only (1) – Class III operator**
- **Controller per shift (1) – Class II operator**
- **Controller per shift (2) – Class I operator**
- **Operator per shift @ WWR (1) - Class 0 operator**

5. Persons employed at the treatment works shall be registered as per Regulation 2834 and Eskom must be provided with proof (copies)

6. Employees shall be dedicated to the sewage treatment works.

7. All Controllers shall be trained in "Safe handling of chlorine " and a copy of their certificate must be submitted to Eskom. The certificate is only valid for one (1) year and must be renewed annually.

8 All employees must be issued with required personal protective equipment (PPE) and a copy with all the issued PPE must be handed to Eskom on an annually basis.

9. The staff working on the plant must be immunised and proof of immunisation must be provided to Eskom

10. The staff must undergo medical screening annually by registered medical practitioner and copies of the medical screening must be sent to the Eskom (Hendrina Power Station) medical practitioner.

11. The Contractor shall submit a daily plant status report to the Eskom representative on the plant conditions

12. Contractor shall operate and shall follow all works instructions and procedures provided.

13 The contractor must take note that plant procedures and works instruction can be change based on the plant needs and that should not impact the contractual expenses and performance

PLANTS

(A) Effluent

(i) The final effluent must be treated with Chlorine based product, which is supplied by the Employer

(ii) The plant shall be operated to meet the effluent standard stipulated in the licence/permit conditions

(iii) Full set of samples to be sent to an Accredited Laboratory for analyses in accordance with compliance to General Standard and Special Standard for Phosphate .

(iv) All waste products shall not be permitted to pollute surface or ground (compliance to DWS requirements Act of 1994)

(B) Plant and Surroundings

(i) The Contractor will operate the plant in accordance with Hendrina Power Station Water Use Licence conditions and operating procedures

(ii) The Contractor shall operate the plant in compliance to all Eskom Safety, Health, Environmental and Quality Policies (SHEQ)

(iii) All critical units at the Sewage plants shall be manned and supervised on 24-hour basis to ensure efficient operation by Contractor.

(C) Maintenance

(ii) Daily inspections shall be carried out on all plant units using check sheets as per plant routine

(i) The plant shall at all times comply with the requirements of the Occupational Health and Safety Act No 85 of 1993 and Safety Legal System Standard procedure (HSSMSM004).

(iii) The Contractor will report any deviations/defects with respect to plant and environment to the Employer's representative daily

(iv) Log all events /activities related to plant on each shift

(v) The Contractor will ensure that all Eskom assets and property are maintained in a good condition

(D) Environmental Management

(i) Environmental Management programmes shall be maintained by the Contractor to ensure that the objectives and targets are met at the Sewage plant. Compliance to the Environmental Management System (EMS) as per ISO 14001:2015 covers (Environmental policy & legislations; Risk assessments; Environmental training awareness; Contingency plans and setting of KPI's. Environmental Conservation Act of 1989 and Environmental waste management procedure (HSPPIN003)

(E) Safety

(i) The Contractor will supply his safety file and plan for ensuring compliance to all safety requirements of OHSA and Regulations.

(ii) The Contractor shall ensure that all employees are issued with the required personal protective equipment (PPE) and a copy with all the issued PPE must be kept in the safety file annually

(iii) The Contractor shall attend the compulsory monthly Partnership Managerial Safety meetings.

(iv) The Contractor shall ensure that Life Saving Rules are adhered to at all times

(v) The Contractor shall conduct plant safety inspections and have monthly safety meetings with its employees and records shall be kept in the safety file for as and when required by the employer.

(vi) The Contractor must ensure that the staff working on the plant undergoes a yearly medical screening and are immunised by registered medical practitioner and this responsibility lies with the Contractor. Copies of proof for both medicals to be kept on the safety file.

(vii) The Contractor shall perform job observations (SMAT) weekly and submit to Risk department on monthly basis and do risk assessments and toolbox talks daily.

(viii) The SHEQ personnel must keep the company's contract safety file updated for Audit purposes.

(F) Quality

(i) The Contractor will provide a quality assurance plan on how compliance with the statutory requirements will be monitored and ensured. This will include a quality control programme on chemical, physical and biological analysis and reporting.

(ii) Quality requirements to adhere to

(iii) Monthly full set of samples to be sent to an Accredited Laboratory for analyses in accordance with compliance to General Standard and Special Standard for Phosphate.

(iv) The plant shall be maintained according to the quality requirements adhering to the Quality procedure.

(G) Audits

(i) Audits covering various aspects of Environmental, Safety and Quality Operational and routine maintenance management of the plants shall be carried out to ensure compliance with statutory requirements and Eskom's policies, directives and procedures.

(H) Access Control

(i) Access to the plant shall be secured and controlled at all hours.

(ii) A register /log book for all persons visiting the plant shall be kept at the Sewage plant, adherence to the Limited Access Register control-LAR.

(I) Operations

(i) The Contractor shall operate the plant units and equipment's according to instructions in the procedures provided.

(ii) The Contractor will ensure that the number, training and qualifications of all staff employed at the Sewage plant shall be in accordance with Regulation 2834.

(iii) The Sewage plant shall be supervised and controlled by a suitably qualified and experienced Contractor who shall have under his control an adequate number of operators to ensure proper functioning of the works and processes at all times.

(iv) The plant Operators shall be in accordance with Regulation 2834 as per below for Sewage treatment works. Class C type plant

(vi) The Contractor will monitor / manage the plant on a 24hour basis to ensure efficient operation.

(vii) The Contractor will ensure full staffing as per regulation on continuous basis.

(viii) The Contractor will complete daily plant check sheets as supplied by the employer.

(xi) The Contractor will ensure job observations are conducted on all critical tasks by the supervisor

(J) Training

(i) Training shall remain the responsibility of the Contractor to develop its employees at no cost to the Employer

(ii) Training program / matrix to enhance employees as their development (provide training that forms part of the employees' duties)

(K) Availability of Staff

(i) The plant Controller / Contractor's site Manager/Supervisor must be in possession of a cell phone during the full contract period.

(ii) A list of names of contact persons and telephone numbers of the Contractor must be made available to the Employer's representative before contract start date.

(iii) The Contractor shall ensure that plant Controllers remain available at the Sewage plant for the duration of the shift.