STAFF PROFESSIONAL ENGINEER
(SOLID WASTE)

DISTINGUISHING FEATURES OF THE CLASS: This is a professional, administrative and technical solid waste and civil engineering position which requires substantial supervision over design, construction, alterations and maintenance of the solid waste facility and gas collection network. An employee in this class is responsible for administration of the activities of the environmental engineering technicians, landfill gas extraction and collection systems, landfill engineering activities and related professional engineering work at a solid waste facility. The work is performed under general direction of the Solid Waste Manager. Direct supervision is exercised over the work of subordinates.

TYPICAL WORK ACTIVITIES: (Illustrative only)

- Develops and reviews plans and reports on the solid waste facility, the gas collection systems, and maintain environmental compliance with the applicable state and federal guidelines;
- Supervises daily gas field operations and environmental engineering technician’s daily activities and assignments;
- Oversees and coordinate required and emergency maintenance of the gas collection systems and tanks, the John Zink Bio Gas Flare, air compressors and air drying equipment, pumps and pump station, gas chromatograph, and SCADA system;
- Coordinates and directs all subcontractors and consulting engineers and their operations and services at the solid waste facility;
- Meets with regulators regarding facility operation and maintenance to ensure compliance;
- Ensures all required inspections and maintenance activities, and reports are completed in accordance with the required schedule;
- Assigns, supervises and checks the work of subordinates, including engineering technicians;
- Supervises and reviews the development and presentation of plans, specifications and bid proposal sheets for the purchases of materials, equipment and landfill improvement projects;
- Oversees, conducts, and updates environmental compliance plans and inspections;
- Prepares and edits Autodesk Civil 3D drawings and prepare cut/fill analysis using 3D surfaces for grading and closure plans;
- Directs investigations, estimates and the preparation of drawings and specification on proposed projects;
- Coordinates with the gas to energy facility operators and management a gas to energy facility onsite daily regarding their operation, maintenance, and manages outages accordingly;
- Plans and coordinates maintenance activities with the gas extraction and collection systems with the gas to energy facility to ensure smooth operations and to limit down time;
- Ensures adequate gas flows and quality of gas through analyzing data collected, ensure proper operation, and through recommendations for expansion and modifications to the system;
- Performs related work as required.
FULL PERFORMANCE KNOWLEDGE, SKILLS, ABILITIES AND PERSONAL CHARACTERISTICS:

- Comprehensive knowledge of the principles and practices of solid waste engineering;
- Comprehensive knowledge of the methods and procedures used in the development of solid waste projects;
- Thorough knowledge of modern engineering methods and techniques as relates to landfill construction activities, landfill gas collection systems, John Zink Bio-Gas Flares, landfill gas to energy facilities and general landfill facilities;
- Good knowledge of construction specifications, plans, estimates, codes, rules, regulations and scheduling relating to contractual public work construction;
- Proficiency with modern computing and engineering applications including AutoCAD Civil 3D, Microsoft Office, GPS Survey Instruments, SCADA Systems;
- Proficiency with operating and working with programmable logic controllers (PLCs) and variable-frequency drive (VFDs) in a landfill environment;
- Ability to organize, direct, and coordinate work activities;
- Ability to respond to landfill and gas collection network emergencies 24/7/365 as required;
- Ability to obtain cooperative assistance from subordinates and government and private organizations;
- Ability to plan, supervise and coordinate investigations along new lines for the improvement and development of an engineering program and overall landfill operations;
- Physical condition commensurate with the demands of the position.

MINIMUM QUALIFICATIONS:

(A) Graduation from a college or university whose engineering curriculum is accredited by the Accreditation Board for Engineering and Technology (ABET) with a Bachelor's Degree (or higher) in Civil Engineering or Civil Engineering Technology and seven (7) years of progressive engineering design and field experience in solid waste and/or geotechnical engineering with preference given to individuals with direct management experience of landfill gas collection systems, John Zink Bio-Gas Flares, and gas to energy facilities; AND

(B) Be a Certified Professional in Erosion and Sediment Control or In-Training Status with the ability to obtain the full certification within eighteen (18) months; AND

(C) 40 hour HAZWOPER, 10 Hour OSHA Construction Safety Course, Confined Space Entry, and Trench Excavation Safety training.
SPECIAL REQUIREMENTS:

Eligibility for a professional engineer’s license with current registration as a professional engineer in any state where licensure was obtained by means of written examination or the ability to obtain a New York State Professional Engineers License within eighteen (18) months of date of appointment. Persons registered in another state, if appointed to this position, must file a completed licensure application with the New York State Education Department within three (3) months of date of appointment and must secure a New York State license within eighteen (18) months in order to continue employment.