

### Position Description

Job Title	Wastewater Treatment Plant Operator
Department	Public Works
<b>Employment Status</b>	Full Time
Exempt/Non Exempt Status	Non Exempt
Union	International Union of Operating Engineers, Local 150 Operators Unit
Date Approved/Revised	October 13, 2020

# **Scope of Work**

This position involves the performance of manual, semi-skilled and skilled tasks, technical and physical work in the operation, construction, maintenance, and improvement of the mechanical, electrical, chemical, and biological wastewater treatment equipment and systems associated with the Village's two wastewater treatment plants, lift stations the sanitary sewer collection system in compliance with regulations and standards. This position is responsible for the operation of excavation equipment, other specialized equipment and related tools and machinery.

### Supervision

Received	Public Works Manager - Wastewater , Lead Wastewater Treatment Plant Operator and other management personnel in the Public Works Department
Exercised	None

### **Essential Job Functions**

- Monitor the wastewater treatment process in accordance with all applicable laws and EPA regulations.
  Perform visual inspections of machinery, equipment, and control panels for defects and breakdowns,
  taking corrective actions where appropriate. Make necessary process control adjustments as directed
  by the Public Works Manager Wastewater, Lead Wastewater Operator and/or lab results. Report
  equipment malfunctions and process abnormalities. Adjusts various machinery and equipment to
  insure proper and efficient operation of the plant.
- Perform preventative and corrective maintenance tasks on equipment and machinery including greasing and changing oil. Repairing pumps, motors, compressors, aerators, and filters. Repair and maintain meters, gauges, gear reducers, and other plant equipment.

- Operate equipment and machinery used in the treatment process, including but not limited to, pumps, compressors, motors, and sludge dewatering equipment.
- Assists in the operation, maintenance and mechanical repair of plant equipment and facilities, including skilled mechanical and minor electrical work. Read and interpret meters and gauges; and regulate plant effluent.
- Keeps records on operations, maintenance and equipment servicing for the life of the equipment.
- Inspection, operation, maintenance and repair of sanitary sewers, structures and lift stations.
- Perform various tasks using a wide variety of manual and powered equipment including, but not limited to: backhoe, endloader, skidsteers, excavator, and sewer cleaning equipment, trailer jetter, shovels, T.V. inspection units, power saws, chipper, compressors, tampers, rakes, jackhammers, dump trucks, crane trucks, lawn mower, snow plow etc.
- Maintain and inspect sanitary sewer collection system using sewer jet, vacuum trucks, closed circuit
  televising equipment and other related items. Repair sanitary lines when blockage occurs using jetting
  machine and other tools. Inspect and maintain trunk sewer lines, manholes, river/creek basins, and
  other related areas. Repair yards and fences. Replace or repair catch basins, manholes, culverts,
  retaining walls, and broken/damaged sewer pipes.
- Respond to emergency situations such as sanitary sewer backups, flooding from rain events, emergency utility locations, etc. and support other City departments/divisions in the abatement of emergency situations.
- Monitor, clean, repair, replace, inspect, and maintain equipment such as filters, belts, gaskets, pumps, motors, blowers, valves, pipes, instruments and related equipment.
- Perform mathematical calculations to determine proper operating performance and load capacities for various equipment.
- Perform additional construction and maintenance tasks such as truck driving, excavating, maintaining public right-of-way including catch basins, storm sewers, water main, and sanitary sewers.
- Identify equipment needs for each assigned task with the ability to lift heavy equipment into vehicles and load and unload materials by hand or with the use of equipment.
- Perform snow and ice control duties as required, including plowing snow and spreading sand and salt, or any additional village wide programs.
- Install proper traffic channelization cones and protection devices to protect crew work operations on work sites.
- Perform general building and grounds activities such as sweeping, cleaning and painting of equipment as well as landscape maintenance.
- Enter data into systems through the use of a computer.
- Enter and work in permitted confined spaces.
- Maintains on-call availability for emergency situations or other abnormal facility situations outside of normal work shift.
- Maintains an awareness of worker safety guidelines and procedures and applies these in performing daily activities and tasks. Adhere to all departmental and Village safety policies.
- Take personal responsibility to provide exceptional customer service in order to promote and maintain
  a positive Village image, constructive working environment, and foster pride and professionalism in
  the workplace and community.

### Other Job Functions

- Contribute to a positive group environment by:
  - Complying with all safety policies, practices, and procedures, and reporting all unsafe activities to supervisor and/or Public Works Director.
  - o Participating in proactive team efforts to achieve departmental and Village-wide goals;
  - Assisting other co-workers on special projects as required; and
  - o Providing leadership to others through example and by sharing knowledge and skills.
- Ability and willingness to respond to emergencies twenty-four (24) hours a day, seven (7) days a week and carry a wireless communication device.
- Participation in scheduled weekend and holiday overtime activities.
- Performs related Public Works duties as assigned in a wide variety of weather conditions and exposure to the elements to include snow and ice control, water main repairs, sanitary sewer repairs, and other duties or additional village-wide programs.
- Assist with compiling all required data for monthly EPA reports, daily activity records, and equipment repair reports.
- Other duties as required or assigned.

## **Requirements of Work**

The knowledge equivalent of graduation from a standard vocational high school program; or an equivalent combination of training (GED) and experience.

combination of training (GED) and experience.	
Knowledge of	<ul> <li>Knowledge of the principles, practices and methods used in wastewater treatment plant operations and collection systems.</li> <li>Working knowledge of the laws, rules, and ordinances governing wastewater systems.</li> <li>Knowledge of the operation, methods, practices, tools, and materials used in the mechanical maintenance and repair of pumps, blowers, valves, and related equipment. Basic principles and practices of mechanical, electrical and hydraulic systems.</li> <li>General knowledge of sewer maintenance and repair methods, procedures and techniques.</li> <li>Working knowledge of the operation and maintenance of all pertinent machinery, equipment, and tools.</li> <li>General knowledge of all applicable safety procedures and precautions. Ability to enforce said standards as required.</li> <li>Operation and routine maintenance of wastewater treatment equipment and sanitary sewers.</li> <li>Traffic regulations, laws, ordinances, and rules.</li> </ul>
Ability to	<ul> <li>Ability to understand and follow verbal and written instructions and communicate effectively, both orally and in writing.</li> <li>Work independently in the absence of supervision.</li> <li>Learn, understand, and apply pertinent laws, rules, and regulations.</li> </ul>

	<ul> <li>Establish and maintain effective working relationships with peers, management, regulatory agencys/officials, other government units and general public.</li> <li>Understand and follow moderately complex oral and written instructions and diagrams.</li> </ul>
	<ul> <li>Critically analyze process problems and use sound judgement in arriving at an effective and appropriate solution.</li> </ul>
	<ul> <li>Keep accurate records and prepare routine reports from such records.</li> </ul>
	<ul> <li>Work with raw sewerage and chemicals using protective equipment.</li> </ul>
Skill in	<ul> <li>Using basic repair tools and procedures and operating/controlling the actions of equipment, machinery, tools and/or materials used in performing job functions.</li> </ul>

### **Necessary Special Requirements**

- High school diploma or equivalent.
- Minimum of three (3) years of experience in the public works and/or construction industry.
- Possession of at least a Class IV Waste Water Treatment Plant Operator's Certificate (as issued or recognized by the Illinois EPA), or receipt of one within twelve (12) months of commencing employment or transfer into position.
- Possess and maintain a valid Illinois Motor Vehicle Operator's License.
- Possess a current and valid Illinois commercial (CDL) motor vehicle operator's license, with appropriate endorsements, or receipt of one within six (6) months of commencing employment.
- Pass a work related physical proficiency test and pre-employment physical examination and drug and alcohol screen.
- Any equivalent combination of experience and education that provides the required knowledge, skills and abilities.
- National Incident Management System (NIMS) training as required.

# **Physical/Environmental Demands**

#### **Standard**

- Physical ability to sit, stand, walk, climb, balance, stoop, kneel, crouch, crawl and smell.
- Physical ability to reach items with arms and hands and manual dexterity and fine motor skills sufficient to perform all essential and additional job functions and basic requirements listed above.
- Physical ability to see close, at a distance, and with peripheral vision as well as adjust vision focus and distinguish objects and colors.
- Physical ability to hear ordinary conversation, such as questions from residents as well as other sounds, including the back-up alarm on trucks or other equipment, radio-dispatched calls and/or signals, and calls for help from a co-worker, etc.

#### **Position Specific**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions. Extensive medium heavy physical activity performing strenuous daily activity at loud to very loud noise levels in an indoor treatment plant and outdoor

environment exposed to changing conditions such as extreme heat and cold, high winds, rain or snow storms, flood conditions, etc., including:

- Physical working conditions which may provide exposure to air contaminates such as dust, fumes, smoke and disagreeable odors. Ability to smell sewer gases, Nicor/natural gas problems and other hazardous odors.
- Physical working conditions may provide exposure to vibration while inspection of, working on or operating a piece of equipment.
- Physical working conditions that may provide exposure to low levels of illumination and/or awkward working space. Ability to see and accurately read fine print in low lighting conditions, such as gauges.
- Physical working conditions that may provide exposure to a variety of grades, elevations, heights, underground, working surfaces and traffic conditions.
- Physical working conditions that may provide exposure to energized electrical circuits, natural gas
  conduits, and other noxious or hazardous substances. The risk in working with chlorine, hydrogen
  sulfide gas and methane gas in confined spaces is such that it requires reasonably close attention
  to details to prevent accidents or injuries.
- Physical activity involving sitting, standing, walking, balancing, bending, crouching, crawling, climbing, kneeling, pushing, pulling, reaching, rotating, squatting, stepping, stooping, twisting and/or working in very awkward positions frequently.
- While performing the duties of this job, the employee frequently is required to stand and talk or hear; use hands and fingers to handle, feel, or operate objects, tools, or controls and reach with hands and arms. Includes physical activity involving reaching with hands and arms for an extended period. Hand-eye coordination is necessary to operate various pieces of equipment. While performing the duties of this job, the employee often uses heavy power assisted tools and/or works in awkward positions.
- Physical activity involving lifting, moving and replacing heavy objects and using heavy tools or equipment weighing up to 50 pounds, such as utility manhole covers, pumps, motors, etc. The employee must occasionally lift and/or move more than 50 pounds and occasionally up to 100 pounds.
- Specific vision abilities required by this job include close vision and the ability to adjust focus.
   Because of color coding of pipes and electrical cable throughout the wastewater plant, incumbent's vision must not be distorted by color blindness.
- Primary functions require the employee to be fully ambulatory and possess physical dexterity to work in a field environment.
- Physical working conditions that may require work with manholes and/or confined spaces.