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# **OVERALL PURPOSE OF JOB:**

This position is an entry level Wastewater Treatment Plant (WWTP) Operator position. As an Operator Trainee, the individual will learn to perform wastewater treatment process monitoring and control functions on any of three shifts for both the Clearwater Road (CwR) and Southwest (SW) WWTPs for Derry Township Municipal Authority. The Trainee will also learn to operate the sludge dewatering and drying operations and to transport the finished biosolids products. Additional duties include general facility maintenance, preventative equipment maintenance on all related plant facilities, equipment, vehicles, and property. Trainee may be assigned any variations of the above duties based on the acquisition of education, training, licenses, and experience.

# **ESSENTIAL FUNCTIONS OF JOB:** (other duties may be assigned)

1. Monitor plant processes, gauges, meters, recorders, display devices, and control panels to ensure efficient and effective plant operations.

#### **KEY MEASURES:**

- Perform physical plant round inspections of all processes and equipment at least once per shift.
- Perform computer plant round inspections of both facilities at least twice per shift.
- Perform complete initial plant round within a two and a half hour time frame.
- Adhere to standard operating procedures.
- Perform SW WWTP operational duties within a two hour time frame.
- Control computerized strategies and recognize problems via trend screens.
- Complete equipment trouble forms immediately and report problems or unusual observations according to their urgency to supervisors.
- 2. Perform plant process control based on the monitoring of processes, by reviewing lab results, performing calculations, and making required process adjustments.

# **KEY MEASURES:**

- Review daily process control and NPDES lab data and take appropriate actions to maintain target and NPDES parameters.
- Evaluate visual characteristics of plant processes and take appropriate actions as needed.
- Make chemical feed rate adjustments to optimize chemical usage.
- 3. Perform sludge processing activities that may include operation of the centrifuge, belt filter press, and dryer and transportation of biosolids.

#### **KEY MEASURES:**

- Make proper adjustments to the sludge dewatering operation to produce proper cake dryness and to optimize productivity.
- Make polymer feed adjustments to optimize usage.
- Perform pre-trip checks and maintain an accident and incident free driving record.
- Perform daily preventive maintenance on equipment as required.

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4. Receive, respond, take action, or re-direct incoming calls from customers, computer generated alarms, collections, lab services, and PA1 calls.

## **KEY MEASURES:**

- Accurately record all required information from incoming calls and alarms on the proper forms.
- Assess each situation and follow procedures for notification of on-call personnel.
- Interact with the public in a professional manner.
- 5. Maintain written records and enter all required data into computer system.

# **KEY MEASURES**:

- Maintain clear and legible log entries on activities and observations in the Daily Operation Log.
- Accurately perform computer data entry of meter readings and process control information.
- Accurately complete and file the Daily Operation Worksheet by noon each day.
- 6. Perform general maintenance and laborer duties to include preparation and painting, grounds keeping, cleaning pipes and equipment, flushing pipelines, UV cleaning, exercising of valves and pumps, snow removal, and all related plant janitorial work.

#### **KEY MEASURES:**

- Follow supervisory instruction to perform quality work.
- Maintain a steady work pace and complete assignments in a reasonable time.
- Complete weekly checklist within one week of receiving.
- Follow through on tasks and assignments and seek more work when completed.
- 7. Adhere to safety procedures, conduct safety checklist, attend required safety training, and participate on safety committee and/or in related safety initiatives to demonstrate commitment to a safe work environment.

#### **KEY MEASURES:**

- Attend required safety training.
- Wear proper personal protective equipment for related job assignments.
- Perform duties according to approved safety policies and procedures.
- Reduce or eliminate accidents.
- Perform monthly safety checklist duties.

# 8. OTHER DUTIES OF THE JOB:

- Receive and/or place all plant deliveries
- Perform back-up duties for maintenance, collections and lab services as required.
- Perform other duties as assigned or required.

### SUPERVISION GIVEN TO THE FOLLOWING DEPARTMENTS:

• This position does not supervise staff.

#### SUPERVISION RECEIVED FROM:

• Supervision is *typically* received from the Operator IV and Assistant Operations Supervisor.

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#### MENTAL DEMANDS TYPICAL OF THIS POSITION:

Ability to manage multiple projects/tasks, provide close attention to detail, utilize creativity, ability to travel, adapt to a constantly changing environment, predictable work schedule, work in a closely supervised environment, work closely with others, and maintain a high level of record keeping/routine paperwork.

#### PHYSICAL DEMANDS TYPICAL OF THIS POSITION:

# Constantly Incurred (More than 75% of time on job)

Visual acuity requirements including depth perception and discernment of colors.

# Frequently Incurred (Between 25% - 75% of time on job) – ABILITY TO:

- Stand, walk, climb stairs
- Use both hands & both legs

- Communicate orally
- Hear conversation

# Occasionally Incurred (Less than 25% of time on job) - ABILITY TO:

- Sit, Stoop, kneel & Bend
- Perform Heavy Lifting (Max 65 Lbs.),
- Carry (~20 Lbs.)
- Push & Pull (~ 150 Lbs.)
- Pull hand over hand
- Use arms & legs to climb

- Perform repetitive wrist/hand twisting or pressure
- Reach to high or low level
- Engage simultaneous rapid mental/muscular coordination

#### WORKING CONDITIONS TYPICAL OF THIS POSITION:

# Frequently Incurred (Between 25% - 75% of time on job) – WORK:

- Inside and outside
- In varied temperature ( ~20°F to 100°F)
- With vehicles & machinery with moving parts
- Alone

# Occasionally Incurred (Less than 25% of time on job) – WORK:

- In heat over 100°F
- In excessive or frequent temperature changes
- In high humidity & wetness
- In dry & dusty atmospheric conditions
- Exposure to gases (Methane, acid)
- Exposure to chemicals (Muriatic acid, Ferric Chloride, Ferrous Chloride, HTH Chlorine, Sodium Hypochlorite, Sodium Hydroxide, Quick Lime CAO, Hydrated lime, Polymers (dry & emulsion), and grouts)
- Exposure to grease/oils (fuel oil, diesel, and gasoline)
- With ladders/scaffolding
- Below ground
- With hands in water
- Weekly more than 40 hours (may include possibility of three shifts)
- In areas exposed to vibration, irritants, toxic fumes, and dust (more than nuisance).

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### PERSONAL PROTECTIVE EQUIPMENT TYPICAL OF THIS POSITION:

*Constantly Incurred (More than 75% of time on job) -* Use of boots (steel toed).

# Occasionally Incurred (Less than 25% of time on job) - USE OF:

- Hardhat
- Respirator (tight fitting, filter face piece)
- Eye protection (safety glasses, goggles, and face shields)
- Hearing protection (plugs/muffs)
- Gloves (leather, rubber, and disposal latex).
- Protective coveralls

#### **DISCLAIMER:**

The following qualifications are general guidelines used by management to determine the skill level of the position in this job series. The experience, education, licenses and/or certification of external candidates will determine the skill level entered. Movement to skill levels within this job series is not automatically assigned

## **QUALIFICATIONS:**

## **OPERATOR TRAINEE**

License & Certification Requirements: - Hold Valid PA Driver's License

Education: - High School Diploma or General Education Degree preferred.

Experience and/or Training: - NONE required for this position.

#### **OPERATOR I**

**Education - High School Diploma or General Education Degree.** 

#### Experience/Training:

Six months to one year related experience/training.

Successful completion of Sacramento I Wastewater Course.

*License/Certification -* Must possess a valid PA Driver's License.

# Other Requirements

Satisfactory performance evaluation to show proficient knowledge of:

Plant equipment operation

Performance of routine duties at the Operator Trainee Level for the CwR WWTP.

Monitoring and operation of the CwR WWTP through Cimplicity and Win911 Programs.

Monitoring of the SW WWTP through Cimplicity and Win911 Programs

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# **OPERATOR II**

#### Education

High School Diploma or General Education Degree.

College level courses in mathematics, biology, and chemistry preferred.

# Experience/Training

Must meet Operator I requirements or equivalent.

Three years' experience in wastewater treatment.

Successful completion of Sacramento II Wastewater Course.

#### License/Certification

PA DEP A1 Wastewater Operator Certification.

Valid PA Class A, CDL Driver's License.

### Other Requirements

Proficiency in WIMS data entry skills.

Knowledge of plant equipment operation

Mastery of routine Operator I duties for the CwR and SW WWTPs.

# **OPERATOR III**

#### Education

High School Diploma or General Education Degree.

College level courses in mathematics, biology, and chemistry preferred.

# Experience/Training

Must meet Operator II requirements or equivalent.

Five years' experience in wastewater treatment.

Must satisfactorily complete DTMA in-house training on Activated Sludge Process Control.

# License/Certification

Must acquire PADEP Biosolids Certification.

# Other Requirements

Exhibit proficiency in:

Performing operations preventative maintenance duties.

Comprehensive knowledge of plant equipment operation

Performance of routine duties at the Operator II for the CwR and SW WWTPs

Requires responsibility of on-call duties.

Number of positions may be limited.

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To perform this job successfully, an individual must be able to perform each essential function satisfactorily. The requirements listed are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

I have read the above position description and fully understand the requirements set forth therein. I can perform the essential functions of the position with or without accommodation. I will perform all duties and responsibilities to the best of my ability.

Signature of Employee	Date	
Signature of Supervisor/HR Representative	 Date	