

# City of Caldwell

## Class Specification

<b>Class Title</b>	<b>WASTEWATER TREATMENT PLANT SUPERINTENDENT</b>
<b>Job Valuation Number</b>	<b>2290</b>
<b>FLSA Designation</b>	<b>Exempt</b>
<b>Pay Grade</b>	<b>Level 11</b>
<b>Effective Date</b>	<b>August 2020</b>

### General Statement of Duties

Plans, directs and reviews the daily operations of the City's Wastewater Treatment Plant, which includes the oversight of operations of the laboratory, collections, pre-treatment, biosolids, treatment operations, and maintenance; performs related work as required.

### Classification Summary

The principal function of an employee in this class is to plan, direct, and review the operations of the City's Wastewater Treatment Plant (WWTP); directing the daily operations of operations, laboratory, collections, pre-treatment, biosolids, and maintenance; and overseeing and directing daily operations to ensure compliance with the City's National Pollutant Discharge Elimination System (NPDES) Permit, Future Idaho Pollutant Discharge Elimination System (IPDES) Permits and applicable State quality control and certification standards. The work is performed under the general supervision of the Public Works Director. An employee in this class provides close supervision to the supervisory staff and general supervision to the non-supervisory staff at the WWTP. The nature of the work performed requires that an employee in this class establish and maintain effective working relationships with the Public Works Director, department managers, City officials and employees, business owners, contractors, other government agencies, and the general public. The principal duties of this class are performed in a general office environment and an outside environment.

### Examples of Work (Illustrative Only)

#### ESSENTIAL DUTIES AND RESPONSIBILITIES

- Plans, directs and reviews the operations of the City's Class IV WWTP;
- Directs operations of the laboratory, collections, pre-treatment, and maintenance;
- Acts as the Pretreatment Coordinator for the City unless another staff member is so

designated with the Approval of the Public Works Director;

- Directs operations of the WWTP including employee supervision, budget development in cooperation with the Public Works Director, expenditure review, and scheduling of assigned tasks;
- Oversees, directs, and retains responsibility for daily operation strategy and decisions for the physical and bacteriological/microbial operation of the plant;
- Interprets laboratory analysis for operational decision making purposes and required sampling to ensure compliance with NPDES/IPDES Permit and applicable State quality control and certification standards;
- Leads and supervises investigations and the enforcement activities related to illegal discharges subject to review and approval of the Public Works Director and maintains records of investigations and actions taken;
- Disseminates technical and/or specialized information to staff;
- Responds, assigns and coordinates on-call operations, call-outs and provides internal and interagency coordination;
- Facilitates, participates and coordinates with City's Fire Department's hazardous waste response team and Department of Environmental Quality;
- Reviews, evaluates, and ensures the timely submittal of permit applications, discharge reports (including discharge monitoring reports – DMR, incident reporting, etc.), facility modifications, and pretreatment systems;
- Establishes models and Standard Operating Procedures (SOPs) when appropriate;
- Researches compliance history of the facility;
- Evaluates compliance monitoring reports, spill prevention control and countermeasure plans, self-monitoring reports, and sampling reports for compliance;
- Prepares or assists with a variety of periodic and special reports, as well as technical reports, studies, cost analysis, and evaluation of wastewater treatment operations in order to fully comply with NPDES Permit plan, report, and monitoring requirements;
- Directs and ensures the timely and correct preparation of mandated and requested reports to the regulating entity (Environmental Protection Agency or Idaho Department of Environmental Quality) and the Public Works Director related to quality control and results of laboratory tests to ensure compliance and certification requirements, such as discharge monitoring, quality control and assurance reports, laboratory analysis worksheets, equipment maintenance and calibration records, inventory, and other reports;
- Ensures all appropriate reporting and action in instances of violation or excursion of the National Pollutant Discharge Elimination System (NPDES), IPDES Permit or other applicable regulation;
- Submits reports to appropriate agency or personnel as required including all periodic required regulatory reports;
- Evaluates and interprets effluent quality, biosolids quality, and makes appropriate operational decisions to ensure compliance with relevant regulation and standards (NPDES Permit, Biosolids Plan, etc). Openly and continuously teaches staff members principles behind such decisions to allow knowledge transfer, decision making with guidance and provide succession planning opportunities;
- Performs operational and maintenance tasks as occasion permits in the form of a working supervisor;
- Assists and advises the Public Works Director in the direction of consulting professionals

and vendors relative to plant and collection system planning, repairs, modifications, and improvements;

- Provides comments and input on design documents for plant modifications, improvements, and upgrades;
- Suggests needed changes, improvements to the plant and collection system based on process, flow, and operator observations;
- Possesses knowledge in the use of a variety of field equipment probes, meters, such as pH, conductivity, spectrophotometer, turbidity meters, dissolved oxygen probes and other equipment. Teaches and assists staff members to become independently capable of operating such equipment; Teaches or provides other training relevant to equipment to be used by staff members;
- Ensures appropriate maintenance of process equipment, sampling equipment, pumps, motors, actuators, blowers, etc. at the plant and throughout the collection system.
- Assists the Public Works Director in systematically monitoring, managing, and assessing assets using technology enacted by the Public Works Director and City Council.
- Assumes responsibility for the budget development with the guidance and approval of the Public Works Director;
- Monitors and supervises ordering of supplies and administration for plant and field operations and maintenance for consistency with approved budgets;
- Trains, assigns, prioritizes, supervises, motivates, and evaluates the work of assigned employees. Is responsible for performance base pay program, the setting of goals, monitoring key result area (KRA) performance;
- Recommends promotion of employees demonstrating honesty, work ethic, qualifications, and capabilities appropriate to prospective positions;
- Directs, supervises and evaluates a variety of personnel actions including performance evaluations, training, reprimands, and disciplinary actions with the assistance and approval of the Public Works Director;
- Explains, demonstrates, and guides new and established employees concerning how to perform work tasks. Enables employees to perform these tasks as their proficiency improves.;
- Freely shares knowledge and understanding to lead and develop employees to be proficient operators and future candidates for leadership succession.
- Keeps immediate supervisor and designated others fully and accurately informed concerning work progress, including present and potential work problems and suggestions for new or improved ways of addressing such problems and credits staff members for ideas they generate;
- Attends approved meetings, conferences, workshops and training sessions and reviews publications and audio-visual materials to become and remain current on the principles, practices and new developments in assigned work areas including those necessary to fulfill continuing education or other license requirements;
- Responds to citizens' questions and comments in a courteous and timely manner;
- Creates and guides staff to embrace a culture of customer service toward the public and each other.
- Exemplifies and promotes appropriate respectful communication to subordinates, peers, and superiors.
- Communicates and coordinates regularly with appropriate others to maximize the

effectiveness and efficiency of interdepartmental operations and activities.

## **OTHER DUTIES AND RESPONSIBILITIES**

- Performs other related duties as assigned.

<b>Required Knowledge, Skills and Abilities</b>
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- Thorough knowledge of advanced principles, practices, and methods of wastewater treatment systems and treatment facility operations including Activated Sludge treatment, Biological Nutrient and Biological Phosphorus Removal processes, dual or multimedia filtration and backwash using air scouring of the fluidized bed, appropriate mass balance, appropriately balanced and aged mixed liquor suspended solids, wasting rates, surface overflow rates, biology residence time, and etc.;
- Thorough knowledge of and capability to manage appropriate digester health including temperature balancing, alkalinity balancing, feed rates, recovery, etc.;
- Thorough knowledge of recycled water and biosolids land application practices;
- Thorough knowledge of hazardous chemical handling and disposal requirements;
- Thorough knowledge of proper laboratory health and safety practices;
- Thorough knowledge of federal, state and local regulations, ordinances, permit requirements, and standards governing the pretreatment, collection, treatment, and disposal of wastewater, industrial, municipal, and construction stormwater discharges to surface waters including 40 Code of Federal Regulations (CFR) 503, Caldwell's Sewer Use ordinance (Chapter 4, Article 7) and Chapter 4 Article 5 of Caldwell City Code;
- Knowledge of laboratory procedures, Environmental Protection Agency (EPA) Approved Methods, process control only testing, and analysis including industrial as well as federal requirements, regulations, and requirements for reporting based on methods used.
- Knowledge and ability to teach methods and equipment used in such procedures;
- Thorough knowledge of principles and practices of supervision, training, leadership, motivation, teambuilding, and conflict resolution;
- Thorough knowledge of microbiological wastewater treatment processes, EPA/IDEQ/IDPES regulations and guidelines, any applicable EPA air quality regulations and reporting requirements, plant policies and procedures, ordinances, laws and regulations (Federal, State, and Local) governing wastewater treatment and discharge, and material safety data sheet (MSDS) guidelines;
- Ability to understand, interpret, and utilize regulatory and process control sample results to make appropriate operational decisions to maintain efficient plant operation and continual compliance with the City's NPDES Permit and future Idaho Pollution Discharge Elimination System (IPDDES) Permit.
- Thorough knowledge of appropriate safety practices and regulations associated with plant operations and plant processes including safe exposure limits, confined space safety, to treatment;
- Thorough knowledge of technical treatment plant equipment and machinery, along with their operation, routine maintenance requirements, and repair;
- Knowledge of basic municipal budget preparation, monitoring and expenditure control;

- Ability to plan and manage a routine maintenance program for the numerous processes and equipment elements at the plant and in the collection system to maintain long equipment life/service cycle and the ability to train staff to do the same.
- Ability to plan, organize, direct, and review the operations and activities of the wastewater treatment facility and collection system;
- Ability to assist in developing and implementing goals, objectives, policies, and priorities for the plant;
- Ability to manage and direct an 18.5 million gallon per day (MGD) Class IV wastewater treatment facility and appurtenant collection system assure compliance with NPDES Permit, IDEQ, and the future IPDES quality control and certification standards;
- Ability to analyze and interpret federal and state permits and regulations pertaining to wastewater treatment operations;
- Ability to develop standard operating procedures for operations, regulatory and process control sampling, chemical testing and analysis;
- Ability to read, write and provide critical review of technical reports and prepare correspondence and other written materials;
- Mechanical aptitude and ability to appraise situations accurately and to adopt an efficient course of action;
- Ability to analyze complex operational and administrative problems, evaluate alternatives and recommend or implement effective courses of action;
- Ability to oversee, teach, and participate in the preparation of EPA NPDES Permit and State IPDES required reports including Discharge Monitoring Reports (DMRs), Annual Pretreatment reports, Biosolids Management reports and to do the same with required plans and SOPs required under regulations or permits including the Quality Assurance Plan, Emergency Response Plan, ;
- Ability to communicate well with others, both orally and in writing, using both technical and non-technical language;
- Ability to understand and follow oral and/or written policies, procedures and instructions;
- Ability to operate or quickly learn to operate a personal computer using standard or customized software applications appropriate to assigned tasks;
- Ability to use, understand, and to teach the use and understanding of the Supervisory Control and Data Acquisition System (SCADA) within the plant campus and at remote collection system locations and lift stations.
- Ability to use logical and creative thought processes to develop solutions according to written specifications and/or oral instructions;
- Ability to establish and maintain effective working relationships with other Departments, City employees, developers, contractors, engineers, property owners, and the public;
- Ability to perform a wide variety of duties and responsibilities with accuracy and speed under the pressure of time-sensitive deadlines;
- Ability and willingness to quickly learn and put to use new skills and knowledge brought about by rapidly changing regulation, information, and technology;
- Ability to perform all work duties and activities in accordance with City policies, procedures and safety practices;
- Integrity, ingenuity, and inventiveness in the performance of assigned tasks.

### **Acceptable Experience and Training**

- Graduation from an accredited college or university with a four year degree in a scientific or environmental related field; and
- Six (6) years of progressively responsible experience performing the above or closely related tasks; and
- A minimum of four (4) years experience related to daily on-site charge; or
- Any equivalent combination of experience, training and education, which provides the knowledge, skills, and abilities necessary to perform the work.

### **Required Special Qualifications**

- Possession a current and valid driver's license;
- Possession of or ability to obtain a Class A or B Idaho Commercial Driver's License
- Possession of an Idaho Class IV Wastewater Treatment License; and/or
- Possession of an Idaho Class IV Wastewater Collections License;
- Ability to obtain whichever of the previous two licenses that may not be held at the time of hire;
- Must complete all required Continuing Education Units to maintain licensing each year;
- Subject to a background check.

### **Essential Physical Abilities**

- Sufficient clarity of speech and hearing or other communication capabilities, with or without reasonable accommodation, which permits the employee to communicate effectively and deliver public presentations;
- Sufficient vision or other powers of observation, with or without reasonable accommodation, which permits the employee to recognize and ensure the quality control of chemicals and hazardous materials;
- Sufficient manual dexterity with or without reasonable accommodation, which permits the employee to operate computerized equipment and equipment related to the operations of the WWTP;
- Sufficient personal mobility and physical reflexes, with or without reasonable accommodation, which permits the employee to work on high ladders and in manholes including work performed in trenches and rough terrain.

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_  
Public Works Director