APPRENTICESHIP PROGRAM STANDARDS
adopted by
LOTT CLEAN WATER ALLIANCE APPRENTICESHIP COMMITTEE
(sponsor name)

<table>
<thead>
<tr>
<th>Occupational Objective(s):</th>
<th>SOC#</th>
<th>Term [WAC 296-05-015]</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL SYSTEM TECHNICIAN</td>
<td>17-3023.02</td>
<td>6000 HOURS</td>
</tr>
<tr>
<td>MAINTENANCE TECHNICIAN</td>
<td>49-9041.00</td>
<td>6000 HOURS</td>
</tr>
<tr>
<td>WASTEWATER TREATMENT PLANT OPERATOR</td>
<td>51-8031.00</td>
<td>5000 HOURS</td>
</tr>
</tbody>
</table>

APPROVED BY
Washington State Apprenticeship and Training Council
REGISTERED WITH
Apprenticeship Section of Fraud Prevention and Labor Standards
Washington State Department Labor and Industries
Post Office Box 44530
Olympia, Washington 98504-4530

APPROVAL:
<table>
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<tr>
<th>N/A</th>
<th>JANUARY 17, 2019</th>
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<tbody>
<tr>
<td>Provisional Registration</td>
<td>Standards Last Amended</td>
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<td></td>
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<td>JANUARY 15, 1981</td>
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<tr>
<td>Permanent Registration</td>
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By: DAVE D’HONDT
Chair of Council
By: CHRIS BOWE
Secretary of Council
INTRODUCTION

This document is an apprenticeship program standard. Apprenticeship program standards govern how an apprenticeship works and have specific requirements. This document will explain the requirements.

The director of the Department of Labor and Industries (L&I) appoints the Washington State Apprenticeship and Training Council (WSATC) to regulate apprenticeship program standards. The director appoints and deputizes an assistant director to be known as the supervisor of apprenticeship who oversees administrative functions through the apprenticeship section at the department.

The WSATC is the sole regulatory body for apprenticeship standards in Washington. It approves, administers, and enforces apprenticeship standards, and recognizes apprentices when either registered with L&I’s apprenticeship section, or under the terms and conditions of a reciprocal agreement. WSATC also must approve any changes to apprenticeship program standards.

Apprenticeship programs have sponsors. A sponsor operates an apprenticeship program and declares their purpose and policy herein to establish an organized system of registered apprenticeship education and training. The sponsor recognizes WSATC authority to regulate and will submit a revision request to the WSATC when making changes to an apprenticeship program standard.

Apprenticeships are governed by federal law (29 U.S.C 50), federal regulations (29 CFR Part 29 & 30), state law (49.04 RCW) and administrative rules (WAC 296-05). These standards conform to all of the above and are read together with federal and state laws and rules

Standards are changed with WSATC approval. Changes are binding on apprentices, sponsors, training agents, and anyone else working under an agreement governed by the standards. Sponsors may have to maintain additional information as supplemental to these standards. When a standard is changed, sponsors are required to notify apprentices and training agents. If changes in federal or state law make any part of these standards illegal, the remaining parts are still valid and remain in force. Only the part made illegal by changes in law is invalid. L&I and the WSATC may cooperate to make corrections to the standards if necessary to administer the standards.

Sections of these standards identified as bold “insert text” fields are specific to the individual program standards and may be modified by a sponsor submitting a revised standard for approval by the WSATC. All other sections of these standards are boilerplate and may only be modified by the WSATC. See WAC 296-05-003 for the definitions necessary for use with these standards.

Sponsor Introductory Statement (Required):

The individuals selected for this program would work for the LOTT Clean Water Alliance (hereinafter referred to as the "LOTT") at the LOTT Alliance treatment facilities. The
program offers the apprentice on-the-job training in the operation and maintenance of wastewater treatment plants and reclaimed water production facilities; in a field of great demand for the foreseeable future. In return, the individuals must apply themselves to obtain necessary outside training as outlined, to assure successful completion of required certification exams.

I. GEOGRAPHIC AREA COVERED:

The sponsor must train inside the area covered by these standards. If the sponsor wants to train outside the area covered by these standards, the sponsor must enter a portability agreement with a sponsor outside the area, and provide evidence of such an agreement for compliance purposes. Portability agreements permit training agents to use apprentices outside the area covered by the standards. Portability agreements are governed by WAC 296-05-009.

The area covered by these Standards shall be Thurston County, Washington.

II. MINIMUM QUALIFICATIONS:

Minimum qualifications must be clearly stated and applied in a nondiscriminatory manner [WAC 296-05-015(17)].

Age: All applicants must be at least 18 years of age

Education: High school diploma or certificate of equivalency

Physical: Must be able to meet the requirements of the occupation

Testing: None

Other: Must possess a valid driver license and be able to obtain a valid Washington driver license within 30 days of employment.

III. CONDUCT OF PROGRAM UNDER WASHINGTON EQUAL EMPLOYMENT OPPORTUNITY PLAN:

Sponsors with five (5) or more apprentices must adopt an Equal Employment Opportunity (EEO) Plan and Selection Procedure (chapter 296-05 WAC and 29 CFR Part 30).

The recruitment, selection, employment and training of apprentices during their apprenticeship shall be without discrimination because of race, sex (including pregnancy and gender identity), sexual orientation, color, religion, national origin, age, genetic information, disability or as otherwise specified by law. The sponsor shall take positive action to provide
equal opportunity in apprenticeship and will operate the apprenticeship program as required by the rules of the Washington State Apprenticeship and Training Council and Title 29, Part 30 of the Code of Federal Regulations.

A. Selection Procedures:

   Exempt per WAC 296-05-405(1)(a) for programs with fewer than five apprentices

B. Equal Employment Opportunity Plan:

   Exempt per WAC 296-05-405(1)(a) for programs with fewer than five apprentices

C. Discrimination Complaints:

   Any apprentice or applicant for apprenticeship who believes they have been discriminated against may file a complaint with the supervisor of apprenticeship (WAC 296-05-443).

IV. TERM OF APPRENTICESHIP:

The term of apprenticeship for an individual apprentice may be measured through the completion of the industry standard for on-the-job learning (at least two thousand hours) (time-based approach), the attainment of competency (competency-based approach), or a blend of the time-based and competency-based approaches (hybrid approach) [WAC 296-05-015].

Control Systems Technician and Maintenance Technician:

The term of apprenticeship shall not be less than 6000 hours of reasonably continuous employment.

Wastewater Treatment Plant Operator

The term of apprenticeship shall not be less than 5000 hours of reasonably continuous employment. Prior to becoming a journey-level worker, the apprentice must successfully complete the state exam for certification as a water pollution control plant operator for Group II Plants.

V. INITIAL PROBATIONARY PERIOD:

An initial probationary period applies to all apprentices, unless the apprentice has transferred from another program. During an initial probationary period, an apprentice can be discharged without appeal rights. An initial probationary period is stated in hours or competency steps of employment. The initial probationary period is not reduced by advanced credit or standing. During an initial probationary period, apprentices receive full credit for hours and
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competency steps toward completion of their apprenticeship. Transferred apprentices are not subject to additional initial probationary periods [WAC 296-05-003].

The initial probationary period is [WAC 296-05-015(22)]:

A. the period following the apprentice's registration into the program. An initial probationary period must not be longer than twenty percent of the term of the entire apprenticeship, or longer than a year from the date the apprenticeship is registered. The WSATC can grant exemptions for longer initial probationary periods if required by law.

B. the period in which the WSATC or the supervisor of apprenticeship may terminate an apprenticeship agreement at the written request by any affected party. The sponsor or the apprentice may terminate the agreement without a hearing or stated cause. An appeal process is not available to apprentices in their initial probationary period.

All apprentices employed in accordance with these Standards shall be subject to a probationary period of the first 1000 hours of employment.

VI. RATIO OF APPRENTICES TO JOURNEY LEVEL WORKERS

Supervision is the necessary education, assistance, and control provided by a journey-level employee on the same job site at least seventy-five percent of each working day, unless otherwise approved by the WSATC. Sponsors ensure apprentices are supervised by competent, qualified journey-level employees. Journey-level employees are responsible for the work apprentices perform, in order to promote the safety, health, and education of the apprentice.

A. The journey-level employee must be of the same apprenticeable occupation as the apprentice they are supervising unless otherwise allowed by the Revised Code of Washington (RCW) or the Washington Administrative Code (WAC) and approved by the WSATC.

B. The numeric ratio of apprentices to journey-level employees may not exceed one apprentice per journey-level worker [WAC 296-05-015(5)].

C. Apprentices will work the same hours as journey-level workers, except when such hours may interfere with related/supplemental instruction.

D. Any variance to the rules and/or policies stated in this section must be approved by the WSATC.

E. The ratio must be described in a specific and clear manner, as to the application in terms of job site, work group, department or plant:

1. In order to assure adequate supervision of all apprentices the following ratio will be observed: one (1) apprentice to one (1) journey-level worker per shift. Should
it become necessary to lay off an apprentice, he/she shall be offered reemployment before a new apprentice may be hired.

2. Journey-level workers approved for supervising the Apprentice Control Systems Technician:
   
a) Control Systems Technician  
b) Instrument/Electrical Technician  
c) Systems and Applications Specialist  
d) Industrial Electrician

VII. APPRENTICE WAGES AND WAGE PROGRESSION:

A. Apprentices must be paid at least Washington’s minimum wage, unless a local ordinance or a collective bargaining agreement require a higher wage. Apprentices must be paid according to a progressively increasing wage scale. The wage scale for apprentices is based on the specified journey-level wage for their occupation. Wage increases are based on hours worked or competencies attained. The sponsor determines wage increases. Sponsors must submit the journey-level wage at least annually or whenever changed to the department as an addendum to these standards. Journey-level wage reports may be submitted on a form provided by the department. Apprentices and others should contact the sponsor or the Department for the most recent Journey-level wage rate.

B. Sponsors can grant advanced standing, and grant a wage increase, when apprentices demonstrate abilities and mastery of their occupation. When advanced standing is granted, the sponsor notifies the employer/training agent of the wage increase the apprenticeship program standard requires.

C. Wage Progression Schedules

   Apprentices shall be paid according to the following percentages of the journey-level worker wage rate, plus all fringe benefits, based on the committee’s recommendation to advance.

   **Control Systems Technician and Maintenance Technician:**

<table>
<thead>
<tr>
<th>Step</th>
<th>Hour Range or competency step</th>
<th>Percentage of journey-level wage rate*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0000 – 1000 hours</td>
<td>75%</td>
</tr>
<tr>
<td>2</td>
<td>1001 – 2000 hours</td>
<td>79%</td>
</tr>
<tr>
<td>3</td>
<td>2001 – 3000 hours</td>
<td>83%</td>
</tr>
<tr>
<td>4</td>
<td>3001 – 4000 hours</td>
<td>87%</td>
</tr>
<tr>
<td>5</td>
<td>4001 - 5000 hours</td>
<td>91%</td>
</tr>
<tr>
<td>6</td>
<td>5001 - 6000 hours</td>
<td>95%</td>
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</tbody>
</table>
Wastewater Treatment Plant Operator:

<table>
<thead>
<tr>
<th>Step</th>
<th>Hour Range or competency step</th>
<th>Percentage of journey-level wage rate*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0000 – 1000 hours</td>
<td>75%</td>
</tr>
<tr>
<td>2</td>
<td>1001 – 2000 hours</td>
<td>80%</td>
</tr>
<tr>
<td>3</td>
<td>2001 – 3000 hours</td>
<td>85%</td>
</tr>
<tr>
<td>4</td>
<td>3001 – 4000 hours</td>
<td>90%</td>
</tr>
<tr>
<td>5</td>
<td>4001 - 5000 hours</td>
<td>95%</td>
</tr>
</tbody>
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VIII. WORK PROCESSES:

The apprentice shall receive on the job instruction and work experience as is necessary to become a qualified journey-level worker versed in the theory and practice of the occupation covered by these standards. The following is a condensed schedule of work experience, which every apprentice shall follow as closely as conditions will permit. The following work process descriptions pertain to the occupation being defined.

A. Wastewater Treatment Plant Operator

1. General ........................................................................................................................................200  
   a. Business Computer System  
   b. Meetings  
   c. Training  

2. Headworks ...................................................................................................................................300  
   a. Gates  
   b. Screens  
   c. Washer/Compactors  
   d. Grit Handling  
   e. Influent Pumping  
   f. Equalization Tanks  
   g. Scum  

3. Primary Treatment .......................................................................................................................300  
   a. Clarifiers  
   b. Sludge Pumping  
   c. PE gates  

4. Secondary & Tertiary Treatment .................................................................................................500  
   a. First Anoxic  
   b. First Aeration  
   c. Second Anoxic  
   d. Final Aeration
### LOTT Clean Water Alliance Apprenticeship Committee

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
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<tbody>
<tr>
<td>e.</td>
<td>Clarifiers</td>
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<tr>
<td>f.</td>
<td>RAS</td>
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<td>g.</td>
<td>WAS</td>
</tr>
<tr>
<td>h.</td>
<td>Methanol</td>
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5. Disinfection
   - a. UV system

6. Effluent Pumping
   - a. Effluent Pumps
   - b. Equalization Tanks

7. Class A Water Plant
   - a. Raw Water
   - b. Coagulation
   - c. Filtration
   - d. Disinfection
   - e. Finished Water Pumping

8. Solids Handling
   - a. Thickening
   - b. Anaerobic Digestion
   - c. Dewatering

9. Heat Loops & Co-generation
   - a. Low Heat Loop
   - b. High Heat Loop
   - c. Boilers
   - d. Co-Gen System
   - e. Flare

10. Maintenance
    - a. Care of buildings and grounds
    - b. Care of equipment
    - c. CMMS

11. Maintenance in-shop OJT
    - 80

12. Laboratory
    - a. Sampling
    - b. Field Analysis

13. Laboratory in-Lab OJT
    - 80

14. Electrical Systems
    - a. Commercial Power
    - 140
b. Generator Power  
c. UPS  
d. Co-Gen System

15. Instrumentation & DCS .......................................................................................................................... 320  
a. Field Analyzers  
b. MAX DCS system  
c. PLC systems

16. Electrical, Instrumentation & DCS OJT ............................................................................................ 80

17. MWPS, SRP & Ponds ............................................................................................................................. 500  
a. Screening  
b. Pumping  
c. MBR treatment  
d. Disinfection  
e. Class A water  
f. Instrumentation  
g. SCADA

18. Safety ..................................................................................................................................................... 200  
a. First Aid/CPR/AED  
b. Defensive Driving  
c. Lock-out/Tag-out  
d. Right to Know  
e. Forklift training

19. Support Systems ..................................................................................................................................... 100 
    a. HVAC & odor control systems  
    b. Water Systems  
    c. Air Systems  
    d. Gas Systems  
    e. Storm & Plant drains

TOTAL HOURS: 5000

B. Control Systems Technician

1. Wastewater Process/Facility Familiarization ...................................................................................... 240  
   a. Pretreatment: screening, grit removal, influent pumping, equalization  
   b. Primary Treatment: clarification/settling, scum removal, chains and flights, pumping  
   c. Secondary Treatment: anoxic/aeration zones, flow patterns, blowers, recirculation pumping  
   d. Secondary Clarifiers: RAS/WAS, scum skimmers
e. UV Disinfection  
f. Effluent Pumping  
g. Water Reclamation/Sand filter  
h. Dissolved air floatation tanks  
i. Digesters  
j. Centrifuge  
k. Methane Gas System  
l. Air Scrubbers  
m. Heat Recovery Systems  
n. Laboratory  
o. Administration  
p. Martin Way Satellite Reclamation Plant  
q. Hawks Prairie Recharge Basins  
r. Pump Stations  
s. Reclaimed Water Distribution  

2. Safety/Departmental Procedures  
a. Safety Rules and Regulations: equipment usage, personal protective equipment, records, health and safety manual  
b. Safety Procedures: obtaining aid, entering hazardous areas and confined spaces, driving, equipment lockout/tag-out  
c. Safety Hazards: housekeeping, electrical, chemical, gases  
d. Safety Training: first aid including CPR and AED, MSDS, fire extinguishers, safety meetings  
e. Forklift  
f. Emergency Response Board  
g. Rules/Procedures: timesheets, leave requests, call-in  

3. Use and Care of Hand and Power Tools  

4. Basic Electrical Systems and Electricity  
a. Electrical Codes and Regulations  
b. Electrical Safety and Protection  
c. Direct Current Fundamentals  
d. Alternating Current Fundamentals  
e. Single Phase Systems  
f. Three Phase Systems  
g. Transformers  
h. Motor Starters  
i. Solenoids  
j. Relays  
k. Electrical Troubleshooting  

5. Process Control Devices  
a. Valve Controller  
b. Pneumatics
c. Hydraulics

d. Motor Operated Valve Positioners/Actuators

e. Variable Frequency Drives

6. Electronics. ........................................................................................................400

a. Digital-Analog Signals

b. Solid State

c. 420 Milliamp Circuits

7. Electronic Testing Equipment. ........................................................................150

a. Multimeter

b. Optical Time Domain Reflectometer (OTDR)

c. Network Testing Equipment

d. Oscilloscope

e. Loop Simulator

f. Calibrators

8. Level Measurement/Instrumentation.................................................................150

a. Selection/Types (Ultrasonic, Bubbler, Radar, Pressure Differential, Manometers)

b. Transducers

c. Installation

d. Calibration

e. Maintenance

f. Troubleshooting

g. Repair/Replace

9. Pressure Measurement/Instrumentation.............................................................150

a. Selection/Types (Bellows, Bordon Tube Gauges)

b. Transducers

c. Installation

d. Calibration

e. Maintenance

f. Troubleshooting

g. Repair/Replace

10. Temperature Measurement/Instrumentation...................................................40

a. Selection/Types (Thermocouple, Thermistor, Resistance Temperature Detector)

b. Installation

c. Calibration

d. Maintenance

e. Troubleshooting

f. Repair/Replace
11. Flow Measurement/Instrumentation ................................................................. 150
   a. Selection/Types (Mag-meter, Parshall Flume, Differential Pressure, Orifice Plate, Venturi, Ultrasonic Flow Meter)
   b. Transducer
   c. Installation
   d. Calibration
   e. Maintenance
   f. Troubleshooting
   g. Repair/Replace

12. Miscellaneous Instrumentation and Analyzers .............................................. 400
   a. Selection/Types (Turbidity, pH, ORP, Dissolved Oxygen, Nutrients, Residual Chlorine, Suspended Solids, etc.)
   b. Installation
   c. Calibration
   d. Maintenance
   e. Troubleshooting
   f. Repair/Replace

13. Automatic Control Systems ........................................................................... 1000
   a. Programmable Logic Controllers
   b. Single Loop Controllers
   c. Distributed Control Systems
   d. Human-Machine Interfaces
   e. Installation
   f. Maintenance
   g. Troubleshooting
   h. Repair/Replace

14. Communications Equipment and Systems ..................................................... 1000
   a. Selection/Types (Bus Networking, PC Networking, Telemetry)
   b. Installation
   c. Maintenance
   d. Troubleshooting
   e. Cable Tester
   f. Repair/Replace

15. Computers, Peripherals, Software ................................................................ 1000
   a. Installation
   b. Troubleshooting
   c. Office and Business Applications
   d. Operating Systems (DOS, Windows, Unix, etc.)
   e. Databases (SQL Server)
   f. Client/Server
16. Research and Documentation .................................................................360
   a. Autocad
   b. Visio
   c. Equipment Manuals
   d. Equipment Research and Specification

17. Training User Groups ........................................................................150

Total Hours: 6000

C. Maintenance Technician

1. Wastewater Process/Facility Familiarization ...........................................150
   a. Pretreatment: screening, grit removal, influent pumping, equalization
   b. Primary Treatment: clarification/settling, scum removal, chains and flights, pumping
   c. Secondary Treatment: anoxic/aeration zones, flow patterns, blowers, recirculation pumping
   d. Secondary Clarifiers: RAS/WAS, scum skimmers
   e. UV Disinfection
   f. Effluent Pumping
   g. Water Reclamation/Sand filter
   h. Dissolved air floatation tanks
   i. Digesters
   j. Centrifuge
   k. Methane Gas System
   l. Air Scrubbers
   m. Heat Recovery Systems
   n. Laboratory
   o. Administration
   p. Martin Way Satellite Reclamation Plant
   q. Hawks Prairie Recharge Basins
   r. Pump Stations
   s. Reclaimed Water Distribution

2. Use and Care of Hand Tools .................................................................250
   a. Wrenches
   b. Drills, Taps, and Dies (metric and SAE)
   c. Saws, all types
   d. Files
   e. Hammers, all types
   f. Pry Bar
   g. Gear Pullers, screw and hydraulic
   h. Bearing Scraper
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i. Reamers
j. Squares, steel and combination
k. Rules and Tapes
l. Plane
m. Chisel and Bits
n. Pliers and Cutters
o. Level and Plumb Bob
p. Screw Drivers
q. Drifts, Punches
r. Silver and Soft Soldering
s. Burning and Heating
t. Packing Pullers
u. Gasket cutting

3. Use and Care of Power Tools .......................................................... 300
   a. Drill Press
   b. Chipping
   c. Portable Drills
   d. Power Hack Saw
   e. Hydraulic Press
   f. Grinder
   g. Band Saw
   h. Table Saw
   i. Jointer
   j. Bolt Threader
   k. Jack Hammer
   l. Stud Gun
   m. Pneumatic Impact Wrench

4. Precision Tools and Testing Equipment ............................................ 200
   a. Feeler gauges
   b. Dial Indicators/Calipers
   c. Micrometers, inside and outside
   d. Explosive Gas Meter

5. Rigging ............................................................................................ 50
   a. Slings
   b. Ladders
   c. Chain Blocks
   d. A-frames and Stiff Legs
   e. Screw and Hydraulic Jacks
   f. Overhead Cranes
   g. Crane/Ground Signals
6. Safety/Departmental Procedures ............................................................. 250
   a. Safety rules and Regulations: equipment usage, personal protective equipment, records, health and safety manual
   b. Safety Procedures: obtaining aid, entering hazardous areas and confined spaces, driving, equipment lockout/tag-out
   c. Safety Hazards: housekeeping, electrical, chemical, gases
   d. Safety Training: first aid including CPR and AED, MSDS, fire extinguishers, safety meetings
   e. Forklift
   f. Emergency Response Board
   g. Rules/Procedures: timesheets, leave requests, call-in

7. Layout/Project Planning ............................................................................ 250
   a. Layout of Simple Geometric Figures and Transitions
   b. Coordinating Work
   c. Procedures

8. Power Transmission Equipment ............................................................... 400
   a. Belts: “V” and Flat, Powerbands
   b. Chains: roller and silent
   c. Gear Reducers
   d. Sole Plates and Foundations
   e. Adjusting Gear Clearances, lash and thrust
   f. Coupling Alignment, laser and dial
   g. Rope Drive and rope splicing

9. Bearings .................................................................................................... 400
   a. Identification
   b. Plain and Antifriction
   c. Inspection
   d. Installing and Dismantling
   e. Roller and Taper
   f. Use of Bearing Heaters

10. Pumps ...................................................................................................... 600
    a. General Knowledge of Operation and Type
    b. Packing
    c. Dismantling, Parts Replacement, Reassembling
    d. Mechanical Seals
    e. Installation
    f. Troubleshooting
11. Equipment Installation ........................................................................................................400
   a. Layout
   b. Setting of equipment
   c. Leveling
   d. Alignment

12. Hydraulics/Pneumatics ....................................................................................................960
   a. Screw Compressors
   b. Single Valve Compressors
   c. Air Lines
   d. Compressor Rebuild
   e. Troubleshooting
   f. Codes and Regulations

13. Technical Reading ...........................................................................................................50
   a. Blueprints and schematics
   b. CAD drawings
   c. Technical manuals
   d. Research

14. Boilers (non-steam) .........................................................................................................500

15. Pipefitting .......................................................................................................................300
   a. Threaded
   b. Welded

16. HVAC ..............................................................................................................................200
   a. Refrigeration
   b. Sheet metal
   c. R22, R12
   d. Motor Vehicle Air Conditioning
   e. Universal License

17. Preventive Maintenance ..................................................................................................400
   a. Strategic Asset Management Program
   b. Computerized Maintenance Management System

18. Welding ............................................................................................................................300
   a. Tungsten Inert Gas (aluminum, stainless, pipe)
   b. Metal Inert Gas (mild steel to ⅜ inch with 045, all position)
   c. Shielded Metal Arc Welding (mild steel to ½ inch, 7018, all position)
   d. Acetylene Torch (cutting to 1 inch mild steel)
   e. Materials/metals
19. Computers ........................................................................................................................................40
   a. Mainsaver CMMS
   b. Email
   c. Internet

   Total Hours: 6000

IX. RELATED/SUPPLEMENTAL INSTRUCTION:

The apprentice must attend related/supplemental instruction (RSI). Time spent in RSI shall 
not be considered as hours of work and the apprentice is not required to be paid.

RSI must be provided in safe and healthy conditions as required by the Washington Industrial 
Safety and Health Act and applicable federal and state regulations.

Hours spent in RSI are reported to L&I each quarter. Reports must show which hours are 
unpaid and supervised by a competent instructor versus all other hours (paid and/or 
unsupervised) for industrial insurance purposes.

For purposes of coverage under the Industrial Insurance Act, the WSATC is an employer and 
the apprentice is an employee when an unpaid, supervised apprentice is injured while under 
the direction of a competent instructor and participating in RSI activities.

If apprentices do not attend required RSI, they may be subject to disciplinary action by the 
sponsor.

A. The methods of related/supplemental training must be indicated below (check those that 
apply):

   ( ) Supervised field trips

   (X) Sponsor approved training seminars (specify): WOW Conference, PNCWA 
       Conference & section meetings, WETRC classes, Linn-Benton Community College, 
       Clackamas Community College

   (X) Sponsor approved online or distance learning courses (specify): American Water 
       Works Association: Hydraulics, Plant to Tap; The Importance of Disinfection; 
       Pumplearning.org (Hydraulic Institute): Positive Displacement & Rotodynamic 
       (Centrifugal) Pumps. 
       California State University/Sacramento: Operation of Wastewater Treatment 
       Plants, Volume 1; Operation of Wastewater Treatment Plants, Volume 2; Advanced 
       Waste Treatment; Operation & Maintenance of Wastewater Collection Systems, 
       Volumes 1&2. National Technology Transfer: Basic Electrical and Control Circuits. 
       TPC Training System: Per RSI Plan
LOTT CLEAN WATER ALLIANCE APPRENTICESHIP COMMITTEE

(X) State Community/Technical college: South Puget Sound, Green River and Clover Park Community Colleges

( ) Private Technical/Vocational college

( ) Sponsor Provided (lab/classroom)

(X) Other (specify): Required LOTT Training

B. (See Below) Minimum RSI hours per year defined per the following [see WAC 296-05-015(6)]:

(X) Twelve-month period from date of registration.*

( ) Defined twelve-month school year: (insert month) through (insert month).

( ) Two-thousand hours of on the job training.

*If no selection is indicated above, the WSATC will define RSI hours per twelve-month period from date of registration.

C. Additional Information:

1. Maintenance Technician-
   Must obtain at least one (1) certification from each of the two (2) areas below:
   (Certification can be attained at the approved RSI providers noted in section IX of these standards. The committee is committed to working with the apprentice to make sure certificate classes are available and accessible.

   a. Certification Area A:
      i. Refrigeration Recovery Certification (USEPA)
      ii. Cross-connection/Backflow Prevention Certification.

   b. Certification Area B:
      i. Tungsten Inert Gas Welding
      ii. Metal Inert Gad Welding
      iii. Shielded Metal Arc Welding

2. RSI Minimums per year: Twelve-month period from date of registration:
   a. Wastewater Treatment Plant Operator: 144 Minimum hours
   b. Control Systems Technician: 183 Minimum hours
   c. Maintenance Technician: 147 Minimum hours
X. **ADMINISTRATIVE/DISCIPLINARY PROCEDURES:**

A. **Administrative Procedures:**

   The sponsor may include in this section a summary and explanation of administrative actions performed at the request or on the behalf of the apprentice. Such actions may include but are not limited to:

   1. **Voluntary Suspension:** A temporary interruption in progress of an individual's apprenticeship agreement at the request of the apprentice and granted by the sponsor. The program sponsor shall review apprentices in suspended status at least once each year to determine if the suspension is still appropriate.

   2. **Advanced Standing or Credit:** The sponsor may provide for advanced standing or credit for demonstrated competency, acquired experience, training or education in or related to the occupation. All sponsors need to ensure a fair and equitable process is applied to all apprentices seeking advanced standing or credit per WAC 296-05-015(11).

   3. **Sponsor Procedures:**

      In case of failure on the part of any apprentice to fulfill his/her obligations as to school attendance or advancement, the Apprenticeship Committee shall have authority to suspend or revoke his/her Agreement. The apprentice agrees to abide by any such determination of said Committee.

      **Failure to maintain employment with LOTT Alliance will result in cancellation of the apprenticeship agreement.**

B. **Disciplinary Procedures**

   1. The obligations of the sponsor when taking disciplinary action are as follows:

      a. The sponsor shall be responsible for enacting reasonable policies and procedures and applying them consistently. The sponsor will inform all apprentices of their rights and responsibilities per these standards.

      b. The sponsor shall notify the apprentice of intent to take disciplinary action and reasons therefore 20 calendar days prior to taking such action. The reason(s) supporting the sponsor’s proposed action(s) must be sent in writing to the apprentice.

      c. The sponsor must clearly identify the potential outcomes of disciplinary action, which may include but are not limited to discipline, suspension or cancellation of the apprenticeship agreement.

      d. The decision/action of the sponsor will become effective immediately.
2. The sponsor may include in this section requirements and expectations of the apprentices and an explanation of disciplinary actions imposed for noncompliance. The sponsor has the following disciplinary procedures to adopt:

a. **Disciplinary Probation**: A time assessed when the apprentice's progress is not satisfactory. During this time the sponsor may withhold periodic wage advancements, suspend or cancel the apprenticeship agreement, or take further disciplinary action. A disciplinary probation may only be assessed after the initial probation is complete.

b. **Disciplinary Suspension**: A temporary interruption in the progress of an individual's apprenticeship agreement. Conditions will include not being allowed to participate in On-the-Job Training (OJT), go to Related Supplemental Instruction (RSI) classes or take part in any activity related to the Apprenticeship Program until such time as the sponsor takes further action. The program sponsor shall review apprentices in such status at least once each year.

c. **Cancellation**: Refers to the termination of an apprenticeship agreement at the request of the apprentice, supervisor, or sponsor. [WAC 296-05-003].

3. **Sponsor Disciplinary Procedures**:

   If the apprentice leaves the employment of LOTT prior to the completion of the program, LOTT may recover the costs of books & classes paid for by LOTT under the RSI program. Additionally, the apprentice agrees to work for LOTT at least as the term of apprenticeship after completion of the apprenticeship. If the Journey –level worker leaves the employment of LOTT prior to post-apprenticeship term, LOTT may recover the cost of books & classes on a pro-rated basis.

C. **Apprentice Complaint Procedures**:

   1. The apprentice must complete his/her initial probationary period in order to be eligible to file a complaint (WAC 296-05-105).

   2. Complaints involving matters covered by a collective bargaining agreement are not subject to the complaint procedures in this section.

   3. Complaints regarding non-disciplinary matters must be filed with the program sponsor within 30 calendar days from the date of the last occurrence. Complaints must be in writing.

   4. If the apprentice disagrees with the resolution of the complaint or wishes to contest the outcome of a disciplinary action by the program sponsor, the apprentice must file a written request for reconsideration with the program sponsor within 30 calendar
days from the date the apprentice received written notice of action by the program sponsor.

5. The program sponsor must reply, in writing, to the request for reconsideration within 30 calendar days from the date the program sponsor receives the request. The program sponsor must send a copy of the written reply to the apprentice within the 30 calendar days.

6. If the apprentice disagrees with the program sponsor’s decision, the apprentice may file an appeal with the Apprenticeship Program, (WAC 296-05-105). If the apprentice does not timely file an appeal, the decision of the program sponsor is final after 30 calendar days from the date the program sponsor mails the decision to the apprentice. See section “D” below.

D. Apprentice Complaint Review/Appeals Procedures:

1. If the apprentice disagrees with the program sponsor’s decision, the apprentice must submit a written appeal to L&I’s apprenticeship section within 30 calendar days from the date the decision is mailed by the program sponsor. Appeals must describe the subject matter in detail and include a copy of the program sponsor’s decision.

2. The L&I apprenticeship section will complete its investigation within 30 business days from the date the appeal is received and attempt to resolve the matter.

3. If the Apprenticeship section is unable to resolve the matter within 30 business days, the Apprenticeship section issues a written decision resolving the appeal.

4. If the apprentice or sponsor is dissatisfied with L&I’s decision, either party may request the WSATC review the decision. Requests for review to the WSATC must be in writing. Requests for review must be filed within 30 calendar days from the date the decision is mailed to the parties.

5. The WSATC will conduct an informal hearing to consider the request for review.

6. The WSATC will issue a written decision resolving the request for review. All parties will receive a copy of the WSATC’s written decision.

XI. SPONSOR – RESPONSIBILITIES AND GOVERNING STRUCTURE

The following is an overview of the requirements associated with administering an apprenticeship program. These provisions are to be used with the corresponding RCW and/or WAC. The sponsor is the policymaking and administrative body responsible for the operation and success of this apprenticeship program. The sponsor may assign an administrator or a committee to be responsible for day-to-day operations of the apprenticeship program. Administrators and/or committee members must be knowledgeable
in the process of apprenticeship and/or the application of chapter 49.04 RCW and chapter 296-05 WAC and these standards. If applicable, sponsors must develop procedures for:

A. Committee Operations (WAC 296-05-009): (Not applicable for Plant Programs)

Apprenticeship committees must be composed of an equal number of management and non-management representatives from a minimum of four to a maximum of twelve members. Committees must convene meetings at least three times per year attended by a quorum of committee members as defined in these approved standards.

B. Program Operations:

The sponsor will record and maintain records pertaining to the administration of the apprenticeship program and make them available to the WSATC or Department upon request. Records required by WAC 296-05-100 will be maintained for five (5) years; all other records will be maintained for three (3) years. Apprenticeship sponsors will submit required forms/reports to the Department of Labor and Industries through one of the two prescribed methods below:

Sponsors shall submit required forms/reports through assigned state apprenticeship consultant.

Or;

Sponsors shall submit required forms/reports through the Apprentice Registration and Tracking System (ARTS), accessed through Secure Access Washington (SAW).

Paper forms as well as ARTS external access forms are available from the sponsor’s assigned apprenticeship consultant or online at:

http://www.lni.wa.gov/TradesLicensing/Apprenticeship/FormPub/default.asp.

1. The following is a listing of forms/reports for the administration of apprenticeship programs and the time-frames in which they must be submitted:

   a. Apprenticeship Agreements – within first 30 days of employment
   b. Authorization of Signature forms - as necessary
   c. Approved Training Agent Agreements – within 30 days of sponsor action
   d. Minutes of Apprenticeship Committee Meetings – within 30 days of sponsor approval (not required for Plant program)
   e. Request for Change of Status - Apprenticeship/Training Agreement and Training Agents forms – within 30 days of action by sponsor.
   f. Journey Level Wage Rate – annually, or whenever changed as an addendum to section VII. Apprentice Wages and Wage Progression.
   g. Related Supplemental Instruction (RSI) Hours Reports (Quarterly):
      1st quarter: January through March, due by April 10
      2nd quarter: April through June, due by July 10
      3rd quarter: July through September, due by October 10
4th quarter: October through December, due by January 10

h. On-the-Job Work Hours Reports (bi-annual)
   1st half: January through June, by July 30
   2nd half: July through December, by January 31

2. The program sponsor will adopt, as necessary, local program rules or policies to administer the apprenticeship program in compliance with these standards. Requests for revision to these standards of apprenticeship must be submitted 45 calendar days prior to a quarterly WSATC meeting. The Department of Labor and Industries, Apprenticeship Section’s manager may administratively approve requests for revisions in the following areas of the standards:

   a. Program name
   b. Sponsor’s introductory statement
   c. Section III: Conduct of Program Under Washington Equal Employment Opportunity Plan
   d. Section VII: Apprentice Wages and Wage Progression
   e. Section IX: Related/Supplemental Instruction
   f. Section XI: Sponsor – Responsibilities and Governing Structure
   g. Section XII: Subcommittees
   h. Section XIII: Training Director/Coordinator

3. The sponsor will utilize competent instructors as defined in WAC 296-05-003 for RSI. Furthermore, the sponsor will ensure each instructor has training in teaching techniques and adult learning styles, which may occur before or within one year after the apprenticeship instructor has started to provide instruction.

C. Management of Apprentices:

1. Each apprentice (and, if under 18 years of age, the parent or guardian) will sign an apprenticeship agreement with the sponsor, who will then register the agreement with the Department before the apprentice attends RSI classes, or within the first 30 days of employment as an apprentice. For the purposes of industrial insurance coverage and prevailing wage exemption under RCW 39.12.021, the effective date of registration will be the date the agreement is received by the Department.

2. The sponsor must notify the Department within 30 days of all requests for disposition or modification to apprentice agreements, which may include:

   a) Certificate of completion
   b) Additional credit
   c) Suspension (i.e. military service or other)
   d) Reinstatement
   e) Cancellation
   f) Corrections
   g) Step Upgrades
   h) Probation Completion date
i) Other (i.e., name changes, address)
j) Training Agent Cancellation

3. The sponsor commits to rotate apprentices in the various processes of the skilled occupation to ensure the apprentice is trained to be a competent journey-level worker.

4. The sponsor shall periodically review and evaluate apprentices before advancement to the apprentice's next wage progression period. The evidence of such advancement will be the record of the apprentice's progress on the job and during related/supplemental instruction.

5. The sponsor has the obligation and responsibility to provide, insofar as possible, reasonably continuous employment for all apprentices in the program. The sponsor may arrange to transfer an apprentice from one training agent to another or to another program when the sponsor is unable to provide reasonably continuous employment, or they are unable to provide apprentices the diversity of experience necessary for training and experience in the various work processes as stated in these standards. The new training agent will assume all the terms and conditions of these standards. If, for any reason, a layoff of an apprentice occurs, the apprenticeship agreement will remain in effect unless canceled by the sponsor.

6. An apprentice who is unable to perform the on-the-job portion of apprenticeship training may, if the apprentice so requests and the sponsor approves, participate in related/supplemental instruction, subject to the apprentice obtaining and providing to the sponsor written requested document/s for such participation. However, time spent will not be applied toward the on-the-job portion of apprenticeship training.

7. The sponsor shall hear and decide all complaints of violations of apprenticeship agreements.

8. Upon successful completion of apprenticeship, as provided in these standards, and passing the examination that the sponsor may require, the sponsor will recommend the WSATC award a Certificate of Completion of Apprenticeship. The sponsor will make an official presentation to the apprentice who has successfully completed his/her term of apprenticeship.

D. Training Agent Management:

1. The sponsor shall offer training opportunities for apprentices by ensuring reasonable and equal working and training conditions are applied uniformly to all apprentices. The sponsor shall provide training at an equivalent cost to that paid by other employers and apprentices participating in the program. The sponsor shall not require an employer to sign a collective bargaining agreement as a condition of participation.
2. The sponsor must determine whether an employer can adequately furnish proper on-the-job training to an apprentice in accordance with these standards. The sponsor must also require any employer requesting approved training status to complete an approved training agent agreement and to comply with all federal and state apprenticeship laws, and these standards.

3. The sponsor will submit training agent agreements to the Department with a copy of the agreement and/or the list of approved training agents within thirty calendar days from the effective date. Additionally, the sponsor must submit rescinded training agent agreements to the Department within thirty calendar days of said action.

E. Committee governance (if applicable): (see WAC 296-05-009)

1. Apprenticeship committees shall elect a chairperson and a secretary who shall be from opposite interest groups, i.e., chairperson-employers; secretary-employees, or vice versa. If the committee does not indicate its definition of quorum, the interpretation will be “50% plus 1” of the approved committee members. The sponsor must also provide the following information:

The Apprenticeship Committee shall be composed of three (3) members representing the employers and three (3) members representing the employees. At least two of the members representing the employees shall be journey-level Wastewater Treatment Plant Operators. The members of the Committee shall be selected by the groups they represent.

   a. Quorum: A quorum shall consist of at least two (2) employer members and two (2) employee members.

   b. Program type administered by the committee: INDIVIDUAL JOINT

   c. The employer representatives shall be:

      Laurie Pierce, Chair
      500 North Adams
      Olympia, WA 98501
      Mark Petrie
      500 Adams Street NE
      Olympia, WA 98506

      Erin Michael
      500 Adams Street NE
      Olympia, WA 98501

   d. The employee representatives shall be:

      Shawn Redmond, Secretary
      500 North Adams
      Olympia, WA 98501
      Andy Hopwood
      500 North Adams
      Olympia, WA 98501
F. Plant programs

For plant programs the WSATC or the Department designee will act as the apprentice representative. Plant programs shall designate an administrator(s) knowledgeable in the process of apprenticeship and/or the application of chapter 49.04 RCW and chapter 296-05 WAC and these standards.

The designated administrator(s) for this program is/are as follows:

N/A

XII. SUBCOMMITTEE:

Subcommittee(s) approved by the Department, represented equally from management and non-management, may also be established under these standards, and are subject to the main committee. All actions of the subcommittee(s) must be reviewed by the main committee. Subcommittees authorized to upgrade apprentices and/or conduct disciplinary actions must be structured according to the same requirements for main committees.

CONTROL SYSTEMS TECHNICIAN & MAINTENANCE TECHNICIAN:

Employer rep: Laurie Pierce, Chair
500 North Adams
Olympia, WA 98501

Employee rep: Shawn Redmond, Secretary
500 North Adams
Olympia, WA 98501

XIII. TRAINING DIRECTOR/COORDINATOR:

The sponsor may employ a person(s) as a full or part-time training coordinator(s)/training director(s). This person(s) will assume responsibilities and authority for the operation of the program as are delegated by the sponsor.

NONE