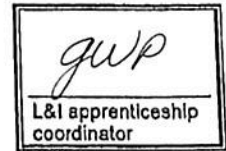


Received 11/18/19 Bellingham - gwp
Teri Gardner 11-26-19

Department of Labor & Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530



REQUEST FOR APPROVAL OF PROPOSED STANDARDS



TO: Washington State Apprenticeship & Training Council

FROM Brinderson LLC. - Industrial Pipefitter

NAME OF PROGRAM STANDARDS

Check appropriate box:



☒ Committee

☐ Plant

☐ OJT

OCCUPATION(S):	HOURS:	SOC #:
Industrial Pipefitter	10,000	47-2152.01

Authorized Signatures:

Chair: 	Approved by: Washington State Apprenticeship & Training Council
Secretary: 	Secretary of Council
Date: 9/18/19	Date: 11-7-19

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Teri Gardner 11-26-19



APPRENTICESHIP PROGRAM STANDARDS
adopted by

BRINDERSON LLC. – INDUSTRIAL PIPEFITTER

(sponsor name)

Occupational Objective(s):

SOC#

Term [WAC 296-05-015]

INDUSTRIAL PIPEFITTER

47-2152.01

10,000 HOURS



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:

Provisional Registration

Standards Last Amended

Permanent Registration

By: _____
Chair of Council

By: _____
Secretary of Council

BRINDERSON LLC – INDUSTRIAL PIPEFITTER

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 Brinderson LLC. Apprenticeship Standards have as their objective the training of Industrial Pipefitter skilled in all phases of the industry. The Sponsor recognizes that

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to accomplish this, there must be a well-developed on-the-job learning combined with related classroom instruction. This recognition has resulted in the development of these Standards of Apprenticeship.

They were developed in accordance with the basic standards recommended by the Washington State Apprenticeship and Training Council (WSATC), as a basis from which the Sponsor can work to establish an apprenticeship training program that meets the particular needs of the area.

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 Pierce, Skagit and Whatcom counties in facilities engaged in activities described by North American Industry Classification System 324110 or 325110.

II. MINIMUM QUALIFICATIONS:

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

Age:	Applicants shall be at least 18 years of age.
Education:	A high school diploma, General Educational Development (GED) equivalency or other high school equivalency credential is required.
Physical:	Applicants must be physically capable of performing the work of this trade with or without reasonable accommodations, and without posing a direct threat to the health and safety of the individual or others.
Testing:	Applicants must complete the Accuplacer Test (at the applicants expense). The minimum qualifying score is as follows: Arithmetic 67
Other:	Applicants must be a current employee of Brinderson LLC.

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

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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:

- 1. The company shall recruit applicants using a company-wide internal job posting announcing openings as they occur in the apprentice occupation. The posting will come in the form of an approved flyer or letter.**
- 2. Applicants must provide an official transcript(s) for high school and any post-high school education. Applicant must submit the GED certificate or other high school equivalency credential if applicable. Applicant must also submit proof of required minimum qualification age and Accuplacer Test score.**
- 3. Applicants must submit a DD-214 to verify military training and/or experience if they are a veteran and wish to receive consideration for such training/experience.**
- 4. The company shall select the apprentices from those employees in the company who answer the posting.**
- 5. Selection shall be based on past work history, a demonstrated learning ability, prior schooling or experience, and Committee interview panel.**
- 6. The Committee will notify applicants of the selection.**

B. Equal Employment Opportunity Plan:

It is the mission of Brinderson LLC. that the training of apprentices shall be without discrimination. Brinderson LLC. is committed to providing Equal Employment Opportunity (EEO) to all people regardless of race, color, national origin, sex, religion, sexual orientation, disability, veteran status, or as otherwise specified by law. The Brinderson LLC shall take the following affirmative actions:

- 1. Participate in workshops, if available, designed to familiarize all concerned with the apprenticeship system and current opportunities.**

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- 2. Cooperate with school boards, community colleges and vocational schools to develop programs, which prepare students for entrance into apprenticeship.**
- 3. Encourage women, minorities and veterans to meet apprenticeship minimum qualifications with the goal of developing their skills through apprenticeship.**
- 4. Grant credit for previous trade experience or trade-related courses for all applicants equally.**

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].

The term of apprenticeship shall be ten thousand (10,000) hours of reasonably continuous on the job training including the apprenticeship initial probationary period.

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 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.

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- 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.
- C. **The initial probationary period shall be the two thousand (2000) hours of the apprenticeship 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:

The ratio of apprentices to journey-level workers shall be one (1) apprentice to one (1) journey-level worker on each jobsite.

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

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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

Industrial Pipefitter

Step	Hour Range or competency step	Percentage of journey-level wage rate*
1	0000 – 2000 hours	55%
2	2001 – 3000 hours	60%
3	3001 – 4000 hours	65%
4	4001 – 5000 hours	70%
5	5001 – 6000 hours	75%
6	6001 – 7000 hours	80%
7	7001 – 8000 hours	85%
8	8001 – 9000 hours	90%
9	9001 – 10000 hours	95%

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. Industrial Pipefitter Approximate Hours/Competency Level

1. Safety – Equipment Maintenance, PPE, Safety Processes & Procedures.....800

- a. New Hire Training & Refreshers**
- b. Refinery Safety Orientation**
- c. CPR First Aid**
- d. Confined Space & Safety Watch**
- e. Refinery Environmental Health & Safety**
- f. High Hazard Training**

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g. Abnormal Operating Conditions

h. OSHA 10

2. Blinding and de-blinding piping system.....	1100
3. Fabricating, installing pipe spools, valves, flanges, and similar pipe & related equipment based on isometric drawings.....	2000
4. Flame cut pipe, bevel, clean, fit up preparation, for below and above ground installations	1800
5. Transport, receive, stage, categorize, various piping & associated equipment.....	1800
6. Hydrostatic/Pneumatic Testing.....	1100
7. Rigging.....	800
8. Worksite Management.....	600
a. Housekeeping and Cleanup	

Total Hours:

10,000

Included in the work process hours are the handling, rigging, setting, and erection of all related equipment, use and care of associated tools and operational skills.

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.

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

☐ Supervised field trips

☒ Sponsor approved training seminars (specify) **Third party vendors, Equipment rental manufactures, Local agencies and Safety training providers**

☒ Sponsor approved online or distance learning courses (specify) **NCCER Connect, Vital Source, Biz Library, Pearson Construction Books**

☐ State Community/Technical college

☐ Private Technical/Vocational college

☒ Sponsor Provided (lab/classroom) **Integrity Safety, Brinderson LLC Facilities**

☐ Other (specify):

B. **(220)** Minimum RSI hours per year defined per the following [see WAC 296-05-015(6)]:

☐ Twelve-month period from date of registration.*

☒ Defined twelve-month school year: **(January)** through **(December)**.

☐ 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. Apprentices will be responsible for completing the prescribed curriculum within the designated RSI schedule. All courses exams are required to be completed with a 70% or better score.

2. Apprentices who do not complete the required hours of RSI during a given segment will have the term of that segment extended until the required number of hours of training are accrued. The Apprentice and Training coordinator will work together to establish a plan for making up incomplete courses.

3. The recommended term of apprenticeship will include no less than 220 hours of related instruction for each year of the apprenticeship. Apprentices agree to take such courses, as the Committee deems advisable. The Committee will secure the instructional aids and equipment it deems necessary to provide quality instruction.

4. All apprentices are required to attend RSI as scheduled.

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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:

A. A daily record of hours worked in each Work Processes category will be maintained by each apprentice. Apprentices will review their correctly completed and signed Work Process Reports weekly with their supervisor or designee. Apprentices will submit the Work Process Reports monthly to the Training Coordinator. The reports will be submitted on or before the 10th of the following month. Apprentices are encouraged to keep a hardcopy record of all Work Process Reports.

B. The apprentice's supervisor or designee will sign off the apprentice record of hours worked in each Work Process category every week.

C. It is the responsibility of the apprentice to keep an updated record of required safety training to work in the industry. Example (TWIC card, Site Orientations, and High Hazard Training).

D. During the term of apprenticeship, the apprentice shall be given such instruction during the OJT & RSI portions to develop the skills and knowledge necessary for advancement on the job and proficiency in their occupation.

E. The Classroom Policies and Procedures shall be adhered to at all times by the apprentice. Apprentices will receive a copy of Classroom Policies and Procedures on an annual basis. The apprentice must sign and acknowledge all classroom rules prior to starting RSI instruction.

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F. Apprentices must be in classroom with the required materials and be ready for class by the scheduled time of class.

G. Overtime hours worked shall be recorded as actual hours worked.

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:

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- a. When violations of these Standards by apprentices occur, they will be acted upon by the Apprenticeship Coordinator and/or the Committee as outlined below.**
- b. The Apprenticeship Coordinator will first and always attempt to resolve problems informally by communicating with all concerned parties.**
- c. If attendance is required at a Committee meeting, a notification will be sent to the apprentice and will contain the alleged violations.**
- d. If an apprentice fails to appear before the Committee when notified, the Committee may discipline the apprentice in their absence up to cancellation of apprenticeship agreement.**
- e. At the Committee meeting, the Committee will make its decision based solely upon the most credible evidence submitted at the meeting.**
- f. Apprentices will be notified in writing of the decision of the Committee.**
- g. Failure to attend RSI as scheduled may be cause for the apprentice to appear before the Committee and explain why they did not attend or complete all courses with a required passing score. The Committee will take appropriate disciplinary action and may cancel the apprenticeship agreement after due notice to the apprentice and opportunity for corrective action.**
- h. Apprentices who fail to submit their Work Process Reports on time for two (2) months within a year will be called before the Committee.**
- i. Apprentices who violate any Brinderson LLC facility Safety and Health policies, engage in behavior that disrupts related supplemental instruction, or returns from break having used alcohol or drugs, may be removed from class and will be reported as soon as possible to the Apprenticeship Coordinator or designee. The Apprenticeship Coordinator or designee will attempt to resolve the issue immediately or advance the issue to the Committee.**

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.**

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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

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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)

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- 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:

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- 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:

BRINDERSON LLC – INDUSTRIAL PIPEFITTER

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:

- a. Quorum: **SEE ABOVE**
- b. Program type administered by the committee: **Individual Non Joint**
- c. The employer representatives shall be:

Lou Hall – Chair
235 N. Hill Blvd.
Burlington, WA. 98233

Colby Weg
235 N. Hill Blvd.
Burlington, WA. 98233

Loree Collins – Alternate
235 N. Hill Blvd.
Burlington, WA. 98233

Alexandra McClendon - Alternate
235 N. Hill Blvd.
Burlington, WA. 98233

- d. The employee representatives shall be:

Bryan Barnwell
235 N. Hill Blvd.
Burlington, WA. 98233

Tyler Rooker – Secretary
235 N. Hill Blvd.
Burlington, WA. 98233

BRINDERSON LLC – INDUSTRIAL PIPEFITTER

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:

NA

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.

NONE

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.

**Mike Castillo
235 N. Hill Blvd.
Burlington, WA. 98233**

Teri Gardner 11-26-19

From which apprentices' wages rates are computed

From Brinderson LLC. - Industrial Pipefitter

Occupations	County(s)	Journey Level Wage Rate	Effective Date:
Industrial Pipefitter	Pierce, Skagit & Whatcom Counties	39.50	12/01/2019



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Teri Gardner 11-26-19

Brinderson LLC-Industrial Pipefitter Apprenticeship Committee

On 9/10/2019, Brinderson LLC sent out an announcement to our workforce, via letter during our weekly scheduled safety meeting indicating that we, Brinderson LLC were going to be starting an apprenticeship program for the Industrial Pipefitter an "apprentice able occupation". Development of this program would be necessary requirements of to meet Washington State's enacted Law described as "House Bill 1817" to provide a skilled and trained workforce for high hazard facilities.

As established by our standards of apprenticeship, the workforce was asked for any volunteers interested in serving as a committee member on our apprenticeship training committee. During that week, we received interest from volunteers. We asked the managers from each site to have the volunteers decide amongst themselves on the permanent member(s) who would serve on the committee and then to designate an alternate, and this was accomplished.

Separately, on 11/7/2019 in the first held Brinderson LLC-Industrial Pipefitter Apprenticeship Committee meeting the employee representatives nominated the individual that would serve as the Secretary of the newly formed committee.

Lou Hall

Chairperson



Received 11/18/19 Bellingham - GWK
**Apprenticeship Committee Representative
Qualification Information
Experience & Education History**

NAME OF PROGRAM/SPONSOR:	Brinderson LLC. - Industrial Pipefitter	<i>Teri Gardner 11-26-19</i>
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Committee Representative Name: Tyler Rooker
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POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)
Industrial Pipefitter	Brinderson	10/2015	Current
Carpenter A	PetroChem	01/2014	10/2015
Pipefitter	Imac	01/2011	01/2014
Carpenter Scaffold Builder	Brand	01/2008	01/2011
Carpenter Scaffold Builder	Brand		

Name and Location of Training and/or School	Month/Year Attended From To		Program of Study	Type of Certificate or Degree Awarded, if any
SWHS	2000	2004	General Studies	NA
Alger Learning Center	2019	2019	General Studies	High School Diploma

Sponsors may attach additional pages if necessary.



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**Apprenticeship Committee Representative
Qualification Information
Experience & Education History**

NAME OF PROGRAM/SPONSOR:	Brinderson LLC.-Industrial Pipefitter	<i>Teri Gardner 11-26-19</i>
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Committee Representative Name: Louis Hall
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POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)
Sr. Vice President	Aegion energy Services	12/17	7/19
Executive Vice President	Team Industrial	10/14	11/17
Sr. Vice President	TIMEC	11/92	9/14
Project Engineer	Kiewit Pacific	11/89	10/92
Field Engineer	Traylor Brothers	6/89	10/89

Name and Location of Training and/or School	Month/Year Attended From To	Program of Study	Type of Certificate or Degree Awarded, if any
Oregon State University	9/84 5/89	Construction Engineering	BS
Oregon State University	9/84 5/89	Business Administration	BS
St. Helens High School	9/80 5/84	General Education	Diploma

Enginner in Training
CA State Contractors License
Nevada State Contractors License

Sponsors may attach additional pages if necessary.



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**Apprenticeship Committee Representative
Qualification Information
Experience & Education History**

NAME OF PROGRAM/SPONSOR:	Brinderson, LLC- Industrial Pipefitter	<i>Teri Gardner 11-26-19</i>
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Committee Representative Name: Alexandra McClendon

POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)
Sr. Director, Human Resources	Aegion Energy Services	12/16	present
VP, Human Resources	Far West Restaurant Group	2/16	12/16
Human Resources Director	Amici's East Coast Pizzeria	7/12	2/16
Human Resources Director	Sacred Heart Schools, Atheron	8/09	7/12
Assistant VP, Human Resources	Sterlent Credit Union	8/07	8/08
Human Resources Manager	World Savings Bank	8/03	8/07

Name and Location of Training and/or School	Month/Year Attended From To	Program of Study	Type of Certificate or Degree Awarded, if any
University of California, Berkeley		US History	2002

Sponsors may attach additional pages if necessary.



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Apprenticeship Committee Representative Qualification Information Experience & Education History

NAME OF PROGRAM/SPONSOR:	Brinderson LLC.- Industrial Pipefitter	<i>Teri Gardner 11-26-19</i>
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Committee Representative Name: Loree Collins

POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)
Labor Relations Administrative Coordinator	Aegion Energy Services	05/2018	Present
Apprenticeship Program Coordinator	JV Industrial Companies	01/2016	05/2018
Apprenticeship Program Coordinator	IUOE Local 501 JATC	08/2015	11/2015
Administrative Assistant	Mount Saint Mary's University	02/2010	08/2015

Name and Location of Training and/or School	Month/Year Attended From To	Program of Study	Type of Certificate or Degree Awarded, if any
El Camino College	08/2017 06/2019	Paralegal Studies	AA
Mount Saint Mary's University	06/2013 12/2014	Business Administration	MBA
Mount Saint Mary's University	02/2009 05/2012	Business Administration	BS
Santa Monica College	08/2006 12/2008	Liberal Arts	AA

Notary Public
NCCER Master Trainer



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**Apprenticeship Committee Representative
Qualification Information
Experience & Education History**

NAME OF PROGRAM/SPONSOR:	Brinderson LLC.- Industrial Pipefitter	<i>Teri Gardner 11-26-19</i>
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Committee Representative Name: Colby Weg

POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)
Program Manager	Brinderson LLC	05/18	Current
Site Manager, Shell Puget Sound	Brinderson LLC	12/16	05/18
Site Project Manager, BPCP	Diamond B	05/13	12/16
Project Manager	Anvil Corporation	05/11	05/13
Mechanical Engineer	Anvil Corporation	05/05	05/11

Name and Location of Training and/or School	Month/Year Attended From To		Program of Study	Type of Certificate or Degree Awarded, if any
Montana State University	2001	2005	Mechanical Engineer	B.S.

Professional Engineer - Washington State

Sponsors may attach additional pages if necessary.



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**Apprenticeship Committee Representative
Qualification Information
Experience & Education History**

NAME OF PROGRAM/SPONSOR:	Brinderson LLC. - Industrial Pipefitter	<i>Teri Gardner 11-26-19</i>
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Committee Representative Name: Bryan Barnwell
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POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)
Piping General Foreman	Brinderson LLC	05/2019	10/2019
Project Control Piping	Matrix	01/2017	01/2018
Piping Production Coordinator	Matrix	01/2011	01/2017
Piping Foreman	Matrix	01/2003	12/2010

Name and Location of Training and/or School	Month/Year Attended From To	Program of Study	Type of Certificate or Degree Awarded, if any
Burlington High School	1997 2001	General Studies	NA

NCCER Industrial Pipefitter Journey Level Assessment 2005

Sponsors may attach additional pages if necessary.

Apprenticeship Related/Supplemental Instruction (RSI) Plan Review

Program Sponsor Brinderson LLC Industrial Pipefitter	
Skilled Occupational Objective Industrial Pipefitter	
Term/OJT Hours 10,000 Hours	Total RSI Hours 1096
Training Provider Brinderson LLC	

By the signature placed below, the **program sponsor** agrees to provide the prescribed RSI for each registered apprenticeship and assures that:

1. The RSI content and delivery method is and remains reasonably consistent with the latest occupational practices, improvements, and technical advances.
2. The RSI is coordinated with the on-the-job work experience.
3. The RSI is provided in safe and healthful work practices in compliance with WISHA and applicable federal and state regulations.

Mike Castillo

Printed Name of Program Sponsor

Signature of Program Sponsor

By the signature placed below, the **training provider** assures that:

1. The RSI will be conducted by instructors who meet the qualifications of "competent instructor" as described in WAC 296-05-003.
 - a. Has demonstrated a satisfactory employment performance in his/her occupation for a minimum of three years beyond the customary learning period for that occupation; and
 - b. Meets the State Board for Community and Technical Colleges requirements for a professional technical instructor (see WAC 131-16-080 through -094), or be a subject matter expert, which is an individual, such as a journey worker, who is recognized within the industry as having expertise in a specific occupation; and
 - c. 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 the related technical instruction.
2. If using alternative forms of instruction, such as correspondence, electronic media, or other self-study, such instruction is clearly defined.

Mike Castillo

Print Name Training Provider

Signature of Training Provider

Training Manager

Title of Training Provider

Brinderson LLC

Organization of Training Provider

If there are additional training providers, please provide information and signatures on the next page.

Additional Resources: Apprenticeship Related Supplemental Instruction (RSI) Plan Review Glossary of Term (F100-519-000) and Apprenticeship Related Supplemental Instruction (RSI) Plan Review Criteria (F100-521-000).

SBCTC Program Administrator has reviewed RSI plan and recommendations of the Trade Committee.

Click or tap here to enter text.

Print Name of SBCTC Program Administrator

Signature of SBCTC Program Administrator

Date

☒ SBCTC recommends approval

☐ SBCTC recommends return to sponsor

Additional Training Providers (if necessary)

Click or tap here to enter text.

Print Name Training Provider

Click or tap here to enter text.

Title of Training Provider

Click or tap here to enter text.

Print Name Training Provider

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Title of Training Provider

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Organization of Training Provider

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Organization of Training Provider

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Program Sponsor: Brinderson LLC Industrial Pipefitter	Skilled Occupational Objective: Industrial Pipefitter
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Note: The description of each element must be in sufficient detail to provide adequate information for review by the SBCTC and Review Committee. To add more elements, click on the plus sign that appears below the "Description of element/course" field.

Describe minimum hours of study per year in terms of (check one):

☐ 12-month period from date of registration.

☒ Defined 12-month school year.

☐ 2,000 hours of on-the-job training.

Element/Course: Brinderson Safety Orientation Year 1	42
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.	
Description of element/course: Brinderson Safety Orientation: Covers the following OSHA topics AES Values, Injury and Illness Prevention, GHS, Asbestos Awareness, Benzene Awareness, H2S, Hexavalent Chromium Awareness, Bloodborne Pathogens, Stop Work Authority, Fatigue Management, JHA, PPE, Hearing Conservation, Confined Space, Hot Work, Electrical Awareness, Excavation and Trenching, Fire Safety, Ladder Safety, LOTO, First Line Break and cutting and Portable Power Tools, Back Injury Prevention, Heat Related Illness, Hazard Communication Program, Respiratory Protection Program, Zero Accident Process, Scaffolding Awareness, Fall Prevention/Protection, Stretching Program, Oxy-Fuel Cutting Quarterly Focus Four Training: A yearlong safety initiative designed to improve safety culture by spotlighting four categories that have higher trending incident rates and generates an enhanced employee awareness through the integration of site materials and employee involvement. High Hazard Facility Training: Fundamentals of the Petroleum Refining Industry. Students will learn the basic safety principles associated with working in High Hazard Facilities. Students will learn about examples of specific interdependencies and relationships of trades for work being performed in the field.	

Element/Course: Abnormal Operating Conditions Year 1	Planned Hours: 6
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.	
Description of element/course: <i>In this course, apprentices will learn how to recognize, properly react to, and properly report AOC's that may occur during piping operations. This will include lessons on programs, procedures, safety equipment, and warning devices for practically every facet of piping operation.</i>	

Element/Course: Orientation to the Trade Year 1	Planned Hours: 5
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.	
Description of element/course: <i>Provides a comprehensive overview of work performed by the pipefitter, as well as pipefitter responsibilities, career opportunities, and safety principles associated with the pipefitting trade.</i>	

Element/Course: Introduction to Basic Safety Year 1	Planned Hours: 15
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.	
Description of element/course: <i>Presents basic safety concepts and explains the difference between regulatory compliance and best practices. Introduces OSHA and describes how accidents and their associated costs affect everyone on a job site. Describes the OSHA focus four hazards. Discusses the selection and use of appropriate personal</i>	

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protective equipment (PPE). Describes fire protection and prevention. Provides an overview of the hazards and safeguards associated with hot and cold weather work, walking and working surfaces, and tools.

Element/Course:	Basic Communication Skills	Year 1	Planned Hours:	8
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC				
Description of element/course: <i>Provides good techniques for effective communication on the job. Includes examples that emphasize the importance of both written and verbal communication skills. Describes the importance of reading skills in the construction industry and covers proper techniques to use in a variety of different written communication formats.</i>				

Element/Course:	Pipe Fitting Trade Math	Year 1	Planned Hours:	15
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Description of element/course: <i>Explains how to use ratios and proportions, solve basic algebra, area, volume, and circumference problems, and solve for right triangles using the Pythagorean theorem.</i>				

Element/Course:	Pipe Fitting Hand Tools	Year 1	Planned Hours:	20
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Description of element/course: <i>Covers general hand tool safety as well as procedures for selecting, inspecting, using, and maintaining hand tools used by pipefitters. Coverage includes pipe wrenches, pipe stands, pipe vises, levels, pipe fabrication tools, pipe bending tools, and pipe joining tools.</i>				

Element/Course:	Pipefitting Power Tools	Year 1	Planned Hours:	15
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Description of element/course: <i>Covers general power tool safety as well as procedures for selecting, inspecting, using, and maintaining power tools used by pipefitters. Provides guidelines for using electrical and pneumatic tools, including pipe threading machines.</i>				

Element/Course:	Oxy Fuel Cutting	Year 1	Planned Hours:	17
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Description of element/course: <i>Explains the safety requirements for oxyfuel cutting. Identifies oxyfuel cutting equipment and provides instructions for setting up, lighting, and using the equipment. Includes straight line cutting, piercing, beveling, washing, and gouging.</i>				

Element/Course:	Ladders and Scaffolds	Year 1	Planned Hours:	10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Description of element/course: <i>Covers hazards and safety procedures governing the use of stepladders, extension ladders, fixed scaffolds, and rolling scaffolds. Includes general procedures for scaffold assembly and use.</i>				

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Element/Course: Motorized Equipment	Year 1	Planned Hours: 11
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.		
Description of element/course: <i>Explains the safety factors, operator maintenance, and operating procedures associated with motorized equipment used on job sites, including electrical generators, air compressors, aerial lifts, pumps, forklifts.</i>		

Element/Course: Piping Systems	Year 1	Planned Hours: 5
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.		
Description of element/course: <i>Introduces chemical, compressed air, fuel oil, steam, and water systems. Explains how to identify piping systems according to color codes.</i>		

Element/Course: Fasteners and Anchors	Year 1	Planned Hours: 5
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.		
Description of element/course: <i>Covers the hardware and systems used by an industrial pipefitter. Describes various types of anchors and supports, their applications, and how to install them safely.</i>		

Element/Course: Introduction to Material Handling	Year 1	Planned Hours: 6
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.		
Description of element/course: <i>This module describes the hazards associated with handling materials and provides techniques to avoid both injury and property damage. Common material-handling equipment is also introduced.</i>		

Element/Course: Basic Rigging and Signal Person	Year 1	Planned Hours: 8
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.		
Description of element/course: <i>This course is designed to provide the attendee with the BASIC knowledge and skills to identify unsafe conditions while using rigging hardware with wire rope, chain, and synthetic slings. Signal person helping the operator avoid side loading, power line safety, and most important – where a signal person must position themselves to ensure adequate personal safety and communications with the equipment operator.</i>		

Element/Course: Introduction to Construction Drawings	Year 1	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.		
Description of element/course: <i>Introduces the basic elements of construction drawings. The common components of drawings are presented, as well as the most common drawing types. The use of drawing scales and how to measure drawings is also covered.</i>		

Element/Course: Welding Basics	Year 1	Planned Hours: 20
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.		
Description of element/course: <i>This course describes the different welding and cutting processes and related equipment. Includes filler metals and their applications. Covers joint designs and the codes that govern welding practices.</i>		

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Element/Course:	Brinderson Safety Orientation (Annual OSHA)	Year 2	Planned Hours:	10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
<i>Covers the following OSHA topics AES Values, Injury and Illness Prevention, GHS, Asbestos Awareness, Benzene Awareness, H2S, Hexavalent Chromium Awareness, Bloodborne Pathogens, Stop Work Authority, Fatigue Management, JHA, PPE, Hearing Conservation, Confined Space, Hot Work, Electrical Awareness, Excavation and Trenching, Fire Safety, Ladder Safety, LOTO, First Line Break and cutting and Portable Power Tools, Back Injury Prevention, Heat Related Illness, Hazard Communication Program, Respiratory Protection Program, Zero Accident Process, Scaffolding Awareness, Fall Prevention/Protection, Stretching Program, Oxy-Fuel Cutting</i>				

Element/Course:	Focus Four Safety Training	Year 2	Planned Hours:	2
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
<i>A safety initiative designed to improve safety culture by spotlighting four categories that have trending incident rates and generating an enhanced employee awareness through the integration of weekly and monthly safety briefs with employee involvement. These topics will vary on different industries topics related to OSHA safety topics.</i>				

Element/Course:	Crane Safety Awareness	Year 2	Planned Hours:	15
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Description of element/course: <i>Introduces various safety aspects of mobile crane operation, including equipment inspection, site hazard identification, and required personal protection equipment. Discusses how to work with site plans and specifications.</i>				

Element/Course:	Welding Safety	Year 2	Planned Hours:	4
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Description of element/course: <i>This course covers safety equipment, protective clothing, and procedures applicable to the cutting and welding of metals.</i>				

Element/Course:	Identifying/Installing Valves	Year 2	Planned Hours:	20
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Description of element/course: <i>Identifies and provides installation methods for different types of valves. Also covers valve storage and handling.</i>				

Element/Course:	Reading Welding Detail Drawings	Year 2	Planned Hours:	15
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Description of element/course: <i>Identifies and explains welding detail drawings. Describes lines, fills, object views, and dimensioning on drawings. Explains how to use notes on drawings and the bill of materials. Explains how to sketch and draw basic welding drawings.</i>				

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Element/Course: Welding Quality	Year 2	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study		
Provided by: Brinderson LLC.		
Description of element/course: <i>Identifies the codes that govern welding, identifies and explains weld imperfections and causes. Describes non-destructive examination practices, visual inspection criteria, welder qualification tests, and the importance of quality workmanship.</i>		

Element/Course: Introduction to Piping Components	Year 2	Planned Hours: 5
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study		
Provided by: Brinderson LLC.		
Description of element/course: <i>This course introduces the fundamental theories and practical application of piping systems with focus on system setup, maintenance, and repair. Topics include compressed air, fuel oil, steam, chemical and water systems. Explains how to identify piping systems according to color codes.</i>		

Element/Course: Base Material Preparation	Year 2	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study		
Provided by: Brinderson LLC.		
Description of element/course: <i>Describes how to clean and prepare all types of base metals for cutting or welding. Identifies and explains joint design and base metal preparation for all welding tasks.</i>		

Element/Course: Drawings and Detail Sheets	Year 2	Planned Hours: 15
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study		
Provided by: Brinderson LLC.		
Description of element/course: <i>Introduces the trainee to plot plans, structural draw elevation drawings, as-built drawings, equidrawings, P&IDs, isometric drawings, spool sheets, and datasheets.</i>		

Element/Course: Socket Weld Pipe Fabrication	Year 2	Planned Hours: 25
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study		
Provided by: Brinderson LLC.		
Description of element/course: <i>Describes the materials used in socket weld piping systems. Explains how to determine pipe lengths between socket weld fittings, prepare the pipe and fittings for fit-up, and fabricate socket weld fittings.</i>		

Element/Course: Butt Weld Pipe Fabrication	Year 2	Planned Hours: 37
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study		
Provided by: Brinderson LLC.		
Description of element/course: <i>Describes the materials used in butt weld piping systems. Explains how to determine pipe lengths between butt weld fittings, prepare the pipe and fittings for fit-up, and fabricate butt weld fittings. Also describes how to select and install backing rings, fabricate channel iron welding jigs, and use and care for welding clamps.</i>		

Element/Course: Threaded Pipe Fabrication	Year 2	Planned Hours: 15
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study		
Provided by: Brinderson LLC.		
Description of element/course: <i>Describes the materials used in threaded piping systems. Explains how to determine pipe lengths between threaded pipe fittings, prepare the pipe and fittings for fit-up, and assemble the piping system.</i>		

Received 12/31/19 Bellingham - GWP

Element/Course:	Mobile Construction Cranes	Year 2	Planned Hours:	10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.				
Description of element/course: <i>Identifies and describes common lifting equipment and construction cranes. Describes using crane manuals, performing recordkeeping, and following safety requirements. Describes ANSI signals for cranes. Provides procedures for assembling and disassembling construction cranes</i>				

Element/Course:	Advanced Rigging	Year 2	Planned Hours:	20
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.				
Description of element/course: <i>Explains how load weight and center of gravity affect lifting and crane stability. Load calculations for multi-crane lifts are presented, along with the application of equalizer beams. The movement of loads up an inclined plane and the line pull required are examined in detail. The module concludes with guidance in the rigging and handling of rebar bundles.</i>				

Element/Course:	Plasma Arc Cutting	Year 2	Planned Hours:	7
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.				
Description of element/course: <i>Explains plasma arc cutting equipment and safe work area preparation. Identifies correct amperage, gas pressures, and flow rates. Covers plasma-arc cutting methods for piercing, slotting, squaring, and beveling metals. Explains how to store equipment and clean the work area.</i>				

Element/Course:	Brinderson Safety Orientation (Annual OSHA)	Year 3	Planned Hours:	10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.				
<i>Covers the following OSHA topics AES Values, Injury and Illness Prevention, GHS, Asbestos Awareness, Benzene Awareness, H2S, Hexavalent Chromium Awareness, Bloodborne Pathogens, Stop Work Authority, Fatigue Management, JHA, PPE, Hearing Conservation, Confined Space, Hot Work, Electrical Awareness, Excavation and Trenching, Fire Safety, Ladder Safety, LOTO, First Line Break and cutting and Portable Power Tools, Back Injury Prevention, Heat Related Illness, Hazard Communication Program, Respiratory Protection Program, Zero Accident Process, Scaffolding Awareness, Fall Prevention/Protection, Stretching Program, Oxy-Fuel Cutting.</i>				

Element/Course:	Focus Four Safety Training	Year 3	Planned Hours:	2
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.				
<i>A safety initiative designed to improve safety culture by spotlighting four categories that have trending incident rates and generating an enhanced employee awareness through the integration of weekly and monthly safety briefs with employee involvement. These topics will vary on different industries topics related to OSHA safety topics.</i>				

Element/Course:	Basic First Aid/CPR	Year 3	Planned Hours:	5
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.				
Description of element/course: <i>First Aid with CPR and AED course provides first responders with training in basic first aid procedures, including the first aid skills recommended by OSHA, CPR, and AED.</i>				

Received 12/31/19 Bellingham - JWP

Element/Course:	Excavations Awareness	Year 3	Planned Hours:	15
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.				
Description of element/course: <i>Explains the use of shoring materials per OSHA standards and covers shoring systems, installing a hydraulic vertical shore, determining the overall fall of a sewer line, setting the grade and elevation of a trench, and backfilling.</i>				

Element/Course:	Excavation and Trenching Competent Person	Year 3	Planned Hours:	8
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.				
Description of element/course: <i>The Excavation & Trenching Competent Person training is geared towards information on Excavation and Trenching safety and to encourage the competent person to THINK and ANALYZE the safety of the work crew pertaining to excavations, trenching and sloping techniques, protective systems and soils classification with an introduction to confined space entry safety.</i>				

Element/Course:	Underground Pipe Installation	Year 3	Planned Hours:	20
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.				
Description of element/course: <i>Explains pipe installation procedures and guidelines, including the procedures for cast iron, ductile iron, concrete, carbon steel, fiberglass and thermoplastic pipe. Includes an introduction to horizontal directional drilling for pipe installation.</i>				

Element/Course:	Standards and Specification	Year 3	Planned Hours:	12
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.				
Description of element/course: <i>Explains how to read and interpret pipefitting standards, codes, and specifications. Describes how to identify pipe and components according to specifications.</i>				

Element/Course:	Introduction to Above Ground Piping	Year 3	Planned Hours:	23
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.				
Description of element/course: <i>Identifies various types of pipe, flanges, gaskets, and bolts. Includes step-by-step procedures for installing pipe sleeves and floor penetrations.</i>				

Element/Course:	Field Routing and Vessel Trim	Year 3	Planned Hours:	16
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.				
Description of element/course: <i>Explains how to secure the work area and determine field run specifications, load weights for erection equipment, and support needs. Covers how to erect vessel trim.</i>				

Element/Course:	Pipe Hangers and Support	Year 3	Planned Hours:	25
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.				
Description of element/course:				

Received 12/31/19 Bellingham - JWK

Explains how to identify, select, and install pipe hangers and supports, including spring can supports.

Element/Course:	Testing Piping Systems and Equipment	Year 3	Planned Hours:	20
Mode of Instruction (check all that apply)				
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Description of element/course:				
Explains how to perform pretests, service flow tests, head pressure tests, hydrostatic tests, and steam blow tests.				

Element/Course:	Advanced Trade Math	Year 3	Planned Hours:	20
Mode of Instruction (check all that apply)				
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Description of element/course:				
Discusses the use of equivalent and conversion tables. Explains how to use right angle trigonometry to calculate take-outs.				

Element/Course:	Load Charts	Year 3	Planned Hours:	20
Mode of Instruction (check all that apply)				
<input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Description of element/course:				
Discusses the importance of load charts and charts that apply to different configurations. Includes on-rubber, on-outrigger, jib, and deduction charts, as well as range diagrams and operational notes. Covers parts of line and capacity calculations.				

Element/Course:	Lift Planning I	Year 3	Planned Hours:	10
Mode of Instruction (check all that apply)				
<input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Description of element/course:				
Discusses lift plan implementation, including reference information, calculations, single- and multiple-crane lifting, critical lifts, and engineering considerations.				

Element/Course:	Motorized Equipment II	Year 3	Planned Hours:	10
Mode of Instruction (check all that apply)				
<input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Description of element/course:				
Covers the applications and safety requirements of drain cleaners, manlifts, and cable lifts.				

Element/Course:	Brinderson Safety Orientation (Annual OSHA)	Year 4	Planned Hours:	10
Mode of Instruction (check all that apply)				
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Covers the following OSHA topics AES Values, Injury and Illness Prevention, GHS, Asbestos Awareness, Benzene Awareness, H2S, Hexavalent Chromium Awareness, Bloodborne Pathogens, Stop Work Authority, Fatigue Management, JHA, PPE, Hearing Conservation, Confined Space, Hot Work, Electrical Awareness, Excavation and Trenching, Fire Safety, Ladder Safety, LOTO, First Line Break and cutting and Portable Power Tools, Back Injury Prevention, Heat Related Illness, Hazard Communication Program, Respiratory Protection Program, Zero Accident Process, Scaffolding Awareness, Fall Prevention/Protection, Stretching Program, Oxy-Fuel Cutting				

Element/Course:	High Hazard Facility Training	Year 4	Planned Hours:	20
Mode of Instruction (check all that apply)				
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study				

Received 12/31/19 Bellingham - JWP

Provided by: Brinderson LLC.

Fundamentals of the Petroleum Refining Industry. Students will learn the basic safety principles associated with working in High Hazard Facilities. Students will learn about examples of specific interdependencies and relationships of trades for work being performed in the field.

Element/Course: Focus Four Safety Training

Year 4

Planned Hours: 2

Mode of Instruction (check all that apply)

☒ Classroom ☐ Lab ☐ Online ☐ Self-Study

Provided by: Brinderson LLC.

A safety initiative designed to improve safety culture by spotlighting four categories that have trending incident rates and generating an enhanced employee awareness through the integration of weekly and monthly safety briefs with employee involvement. These topics will vary on different industries topics related to OSHA safety topics.

Element/Course: Abnormal Operating Conditions

Year 4

Planned Hours: 6

Mode of Instruction (check all that apply)

☒ Classroom ☐ Lab ☒ Online ☐ Self-Study

Provided by: Brinderson LLC.

Description of element/course:

In this course, apprentices will learn how to recognize, properly react to, and properly report AOC's that may occur during piping operations. This will include lessons on programs, procedures, safety equipment, and warning devices for practically every facet of piping operation.

Element/Course: Lift Planning II

Year 4

Planned Hours: 10

Mode of Instruction (check all that apply)

☒ Classroom ☐ Lab ☒ Online ☐ Self-Study

Provided by: Brinderson LLC.

Description of element/course:

Discusses the importance of load charts and charts that apply to different configurations. Includes on-rubber, on-outrigger, jib, and deduction charts, as well as range diagrams and operational notes. Covers parts of line and capacity calculations.

Element/Course: SMAW-Open Root Pipe Welds

Year 4

Planned Hours: 40

Mode of Instruction (check all that apply)

☒ Classroom ☒ Lab ☒ Online ☐ Self-Study

Provided by: Brinderson LLC.

Description of element/course:

Explains how to set up SMAW equipment for open-root V-groove welds and explains how to prepare for and make open-root V-groove welds on carbon steel pipe. Provides procedures for making open-root V-groove welds with SMAW equipment on pipe in the 1G-ROTATED, 2G, 5G, and 6G positions.

Element/Course: FCAW-Pipe

Year 4

Planned Hours: 48

Mode of Instruction (check all that apply)

☒ Classroom ☒ Lab ☒ Online ☐ Self-Study

Provided by: Brinderson LLC.

Description of element/course:

Explains how to set up FCAW equipment for open-root V-groove welds, and explains how to prepare for and make open-root V-groove welds on carbon steel pipe. Provides procedures for making open-root V-groove welds with FCAW equipment on pipe in the 1G-ROTATED, 2G, 5G, and 6G positions.

Element/Course: Stress Relieving and Aligning

Year 4

Planned Hours: 10

Mode of Instruction (check all that apply)

☒ Classroom ☒ Lab ☒ Online ☐ Self-Study

Provided by: Brinderson LLC.

Description of element/course:

Teaches the nature of inaccuracy, misalignment and pipe strain, and addresses the methods of correcting them. Includes methods of effective communication to reduce these errors.

Received 12/31/19 Bellingham - JWP

Element/Course: Special Piping	Year 4	Planned Hours: 24
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study		
Provided by: Brinderson LLC.		
Description of element/course: <i>Introduces copper and plastic pipe and tubing. Addresses brazing, soldering, and the differences between the two methods. Also describes the methods of assembling plastic pipe and tubing, compression and flared fittings, and joining methods for grooved and compression formed fittings.</i>		

Element/Course: Demolition	Year 4	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study		
Provided by: Brinderson LLC.		
Description of element/course: <i>In this course apprentices will learn the demolition procedures that apply to pipe and piping system in a refinery, to include underground and above ground piping, pipe to vessels, and instrumentation. The apprentices will also learn about and practice using various tools needed for dismantling of pipe and equipment.</i>		

Element/Course: GTAW-Carbon Steel Pipe	Year 4	Planned Hours: 40
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study		
Provided by: Brinderson LLC.		
Description of element/course: <i>Explains how to set up GTAW equipment for open-root V-groove welds, and explains how to prepare for and make open-root V-groove welds on carbon steel pipe. Provides procedures for making open-root V-groove welds with GTAW equipment on pipe in the 2G, 5G, and 6G positions.</i>		

Element/Course: Brinderson Safety Orientation (Annual OSHA)	Year 5	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study		
Provided by: Brinderson LLC.		
Covers the following OSHA topics AES Values, Injury and Illness Prevention, GHS, Asbestos Awareness, Benzene Awareness, H2S, Hexavalent Chromium Awareness, Bloodborne Pathogens, Stop Work Authority, Fatigue Management, JHA, PPE, Hearing Conservation, Confined Space, Hot Work, Electrical Awareness, Excavation and Trenching, Fire Safety, Ladder Safety, LOTO, First Line Break and cutting and Portable Power Tools, Back Injury Prevention, Heat Related Illness, Hazard Communication Program, Respiratory Protection Program, Zero Accident Process, Scaffolding Awareness, Fall Prevention/Protection, Stretching Program, Oxy-Fuel Cutting		

Element/Course: Basic First Aid/CPR	Year 5	Planned Hours: 5
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study		
Provided by: Brinderson LLC.		
Description of element/course: <i>First Aid with CPR and AED course provides first responders with training in basic first aid procedures, including the first aid skills recommended by OSHA, CPR, and AED.</i>		

Element/Course: OSHA 10	Year 5	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study		
Provided by: Brinderson LLC.		
This course teaches to recognition, avoidance, abatement and prevention of safety and health hazards in the workplace. Identify common struck-by hazards. Identify types of electrocution hazards. Identify ways to select appropriate PPE and lifesaving equipment.		

Received 12/31/19 Bellingham - JWP

Element/Course: Steam Traps	Year 5	Planned Hours: 16
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.		
Description of element/course: <i>Describes the types of traps, their functions and advantages, and the basic methods of troubleshooting steam traps.</i>		

Element/Course: In-Line Specialties	Year 5	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.		
Description of element/course: <i>Describes the various devices that appear in pipelines, including bleed rings, ball and expansion joints, steam traps, drip legs, desuperheaters, and measuring devices for temperature, level, flow rate, and pressure.</i>		

Element/Course: Hot Taps	Year 5	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.		
Description of element/course: <i>Teaches the hot tap technique for attaching fittings to the pipeline. Includes line stopping, freeze stopping, and adding connections to the line.</i>		

Element/Course: Maintaining Valves	Year 5	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.		
Description of element/course: <i>Discusses the safest ways to maintain valves. Teaches how to replace packing and o-rings, as well as how to open and close a valve's bonnet. Introduces general trouble shooting and maintenance of several types of valves.</i>		

Element/Course: Advanced Blueprint Reading	Year 5	Planned Hours: 50
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.		
Description of element/course: <i>Explains how to derive necessary construction information from P&IDs, general arrangement drawings, ISOs, and spool sheets. Includes nine 11 x 17 blueprints.</i>		

Element/Course: Advanced Pipe Fabrication I	Year 5	Planned Hours: 48
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.		
Description of element/course: <i>Covers the skills needed to layout and fabricate mitered bends, laterals, wyes, and ninety-degree intersections with tables of ordinates or by calculating ordinates with a calculator. These skills are necessary when specialty bends and intersections are required.</i>		

Element/Course: Intro to Supervisory and Your Role as a Leader	Year 5	Planned Hours: 25
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Brinderson LLC.		
Description of element/course:		

Received 12/31/19 Bellingham - JWP

Describes the skills that must be learned for the craftsperson who plans to move into leadership roles. Introduces human resource criteria and concepts for the first time in the series. Your Role as a Leader Aegion's philosophy and training approach to leadership development.

Element/Course:	Fundamentals of Crew Leadership	Year 5	Planned Hours:	18
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Description of element/course: <i>While this module has been designed to assist the recently promoted crew leader, it is beneficial for anyone in management. The course covers basic leadership skills and explains different leadership styles, communication, delegating, and problem solving. Job-site safety and the crew leader's role in safety are also discussed. This edition goes into detail on project planning, scheduling, and estimating with new performance tasks to assist the learning process</i>				

Element/Course:	Effective Communication Techniques	Year 5	Planned Hours:	10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study				
Provided by: Brinderson LLC.				
Description of element/course: <i>Describe the one-on-one Communication Model. List and effectively utilize the three communication channels. Use active listening skills to increase your understanding of others and improve your leadership skills. Describe your DiSC® style, its strengths and challenges. Use people reading skills to recognize others' DiSC® styles. Select appropriate strategies for building more effective workplace relationships in the workplace</i>				

Brinderson Classroom Policies and Procedures

Industrial Pipefitter

I. Apprentice Responsibilities

- a. Apprentices will be responsible for completing the prescribed curriculum within the designated RSI schedule. All course exams are required to be completed with a 70% or better score.
- b. Apprentices who do not complete the required hours of RSI during a given segment will have the term of that segment extended until the required number of hours of training are accrued. The Apprentice and Training Coordinator will work together to establish a plan for making up incomplete courses.
- c. The recommended term of apprenticeship will include no less than 168 hours of related instruction for each year of the apprenticeship. Apprentices agree to take such courses as the Committee deems advisable. The Committee will secure the instructional aids and equipment it deems necessary to provide quality instruction.
- d. All apprentices are required to attend RSI as scheduled.
- e. It is the responsibility of the apprentice to keep an updated record of required safety training to work in the industry, example (TWIC card, Site Orientations, and High Hazard Training).
- f. Apprentices must be in the classroom with the required materials and ready for class by the scheduled start time of class.
- g. All Apprentices are required to sign-in at the front desk before the beginning of classroom instruction, printing legibly and using his/her full legal name.

II. Classroom Policies

I. Attendance

- a. Absenteeism and being late will or leaving early not be tolerated. All apprentices will work with the Training Coordinator or designee to make up any missing assignments or instruction. Class attendance and tardiness will be tracked and kept on record for each apprentice attending classroom instruction and subject to disciplinary action.

II. Cell Phones/Electronics

- a. The use of the Training Center office phone is prohibited without authorization from a facility staff member.
- b. Apprentices should not receive any personal phone calls at the facility office. Cell phones should be turned off during class time and out of sight. Cell phone calls can be made during break time.

III. Break Time

- a. There should be no talking or gathering in the Training Center halls while other classes are still in session.
- b. Apprentices must be considerate of others in class and give the students the courtesy of a quiet learning environment.
- c. No apprentice should be in the halls during class sessions except for coming from or going to the labs.
- d. One 15-minute break during the scheduled class session will be provided.

IV. Conduct and Behavior

- a. Your conduct is considered to be an expression of your character and willingness to learn. Acceptable conduct is also an expectation of performance.
- b. Apprentices are required to abide by Brinderson's Code of Conduct policy.
- c. You will be expected to conduct yourself in a manner so as not to disturb the education process or affect the safety and well-being of yourself or fellow students.
- d. Cheating or plagiarism – presenting someone else's work as your own – is a serious offense with serious consequences and may be subject to disciplinary action up to and including termination/expulsion from the program.

V. Dress Code

- a. Your manner of dress will be appropriate with the type of training being conducted. At minimum, all students must wear pants and a short or long-sleeved shirt and close-toed shoes for safety reasons.
- b. Anyone not dressed in an appropriate manner will not be allowed admission to the Training Facility. Students may not wear items such as thong shoes/flip flops, low cut neck line shirts and/or shorts. The Apprenticeship Coordinator has discretion to decide what is appropriate dress for the program.

Brinderson Health and Safety Facility Procedures Industrial Pipefitter

I. Accidents

- a) All accidents resulting in injury or illness, no matter the severity, must be reported to the Apprenticeship Coordinator immediately and all proper notifications and paperwork must be completed.
- b) Apprentices are required to abide by Brinderson's OP-0124 Incidents, Injuries and Illnesses policy.

II. Driving

- a) All apprentices are required to have a valid state drivers license, per the state of Washington, to participate in the program and to operate equipment during training
- b) Apprentices are required to abide by Brinderson's OP-0261 Driver Safety policy.

III. Drugs/Controlled Substances/Alcohol

- a) The use, possession, concealment, or sale of drugs, controlled substances, or being under the influence of, look alike drugs, drug paraphernalia, alcoholic beverages, or firearms on the premises of the facility training center, its parking lots, or roads of entry or exit shall be strictly prohibited.
Apprentices are required to abide by Brinderson's OP-0302 Substance Abuse policy.

IV. Weapons

- a) Any apprentice possessing a dangerous weapon, firearms, or instrument intended or likely to produce great bodily harm, on school property, in his/her vehicle, may be subject to disciplinary action, up to and including termination/expulsion.
- b) Apprentices are required to abide by Brinderson's Code of Conduct policy.

V. Tobacco Use or Smoking

- a) **NO SMOKING IN THE FACILITY (or) BUILDING.** The use of tobacco and/or smoking is not allowed in classrooms or labs. Housekeeping in the smoking area will be the responsibility of the individuals who use them. Smokers must dispose of cigarette butts properly. Disposing of cigarette butts on the grounds of the facility is strictly prohibited.
- b) Apprenticeship program participants are required to abide by Brinderson's OP-0146 Site Control-Basic Code of Safe Practices policy.

VI. Labs

- a) All apprentices in the labs will be required to follow strict safety guidelines. This is everyone's responsibility.
- b) PPE will be required to be worn in all lab facilities. Review requirements prior to entering lab facility.
- c) First aid kits are located in all Training Center Facilities.

VII. Care and Use of Tools and Equipment

- a) Apprentices will be expected to use all tools, machinery, and supplies in a safe manner. Apprentices are personally responsible for any and all tools, supplies, and machinery that is supplied to them. Lost, damaged, or broken tools, supplies and machinery will be replaced

or repaired at the apprentice's expense. Apprentices will be expected to follow all checkout procedures very closely.

b) Apprentices are required to abide by Brinderson's OP-0243 Small Tools and Equipment policy.

VIII. Training Property

a) Malicious defacing of the Training Center building or contents (i.e.) desk, chairs, tables, toilets, sinks, walls, etc. Will be enough reason for immediate termination from the program. Theft will not be tolerated and will be enough reason for immediate termination from the program.