Mechanical Inspection Proposed Regulations
Questions and Answers

Division of Labor Standards & Safety: Mechanical Inspection – File No. 2019200855

Question:
Under the proposed regulations, must all trainees be indentured in an accredited apprenticeship program?

Answer:
No. Under the proposed regulations, apprenticeship registration will not be required to obtain a trainee certificate of fitness. However, it’s important to realize that the experience requirement to obtain a journeyman certificate of fitness will be 8,000 hours of experience if the individual was indentured in a federally registered apprenticeship program and 12,000 hours of experience if the individual was not indentured in a federally registered apprenticeship. The proposal would create an alternate pathway outside of registered apprenticeship to legally obtain experience necessary for a journeyman electrical or plumbing certificate of fitness, but the individual would be required to pass the same extensive four-hour exam in order to obtain a journeyman certificate of fitness license.

It’s also important to recognize that under current regulations, qualifying experience that meets the “legally obtained” standard is only limited to registered apprenticeship where it is legally mandated by the jurisdiction having authority. This means that an individual could legally obtain experience in another state where registered apprenticeship is not required and then move to Alaska and become a journeyman electrician or plumber after passing the exam.

Question:
Can a person qualify to take the journeyman test without ever registering as an apprentice?

Answer:
Yes. Under current regulations a person is qualified to take the journeyman test upon demonstrating 8,000 hours of legally obtained work experience. If the work experience is obtained in Alaska, current regulations limit that experience to federally registered apprenticeship. However, if the person gained experience in another state, such as Florida, where registered apprenticeship is not legally required, that person would be eligible under current regulations to take the journeyman test in Alaska after documenting 8,000 hours of on-the-job training work experience subject to the applicable code.

The proposed regulations will require 12,000 hours of work experience subject to the applicable code if the person was not enrolled in a registered apprenticeship program. This will be the same standard whether the experience was acquired inside or outside of Alaska. In essence, this simply puts Alaskans on a level playing field with non-residents who can currently acquire qualifying experience without being enrolled in a registered apprenticeship program.

Question:
Why is the department changing the apprenticeship requirement that was developed in 2003? Hasn’t the apprenticeship requirement helped to improve the skills of Journeyman electricians and plumbers?

Answer:
The federally registered apprenticeship requirement was developed in 2006. The Department of Labor and Workforce Development supports apprentice training programs, and recognizes their value. This proposal does not change the requirement for registered apprenticeship for an 8,000 hour program, but is designed to offer an alternative route for Alaskans who are unable to take advantage of apprenticeship opportunities. There is no evidence to support the notion that the registered apprenticeship mandate improved the skills of journeymen electricians or plumbers in Alaska.

To determine whether safety improved after training for electricians was restricted to registered apprenticeship in 2006, the division evaluated the occupational safety and health fatalities in the electrical industry for a period 10 years prior to and 10 years after the change. From 1996 to 2006, there were zero fatalities in the electrical industry. From 2006 to 2016, there were three fatalities (one in 2010 and two in 2011) in the electrical industry and one of the accident victims was a registered electrical apprentice.

Question:
Will a person who is currently registered in a registered apprenticeship program be considered a "student trainee"?

Answer:
No. The proposed “student trainee” certificate of fitness is for students who are enrolled in state or federal education programs to allow those students to perform practical code installation work, on real-world projects, as part of their course of study. Under current regulations, there is no option for a training program to provide real world installation experience to students unless the students are enrolled in a federally registered apprenticeship program.

Question:
Has the Department considered the inherent risks involved with allowing students to participate in construction projects, and does allowing for a 10:1 supervision ratio on active construction projects provide for the safety of those students?

Answer:
The certificate of fitness helps to ensure the quality and integrity of electrical and plumbing installations in Alaska. The safety of students in a construction environment would be the responsibility of the educational program, and the proposed regulations limit the student trainee certificate of fitness in a training program administered by the state or federal government or a school district (including charter schools) to help ensure that student safety is of paramount concern.

Question:
Why are only state and federal administered education programs written into the proposed regulation changes? How can you exclude all the other non-profit and for-profit training programs who deliver trade-specific training to Alaskans?

Answer:
The department did not receive inquiries or requests from non-profit and for-profit training programs to establish a student trainee certificate of fitness. It is possible that a future regulation proposal could be developed to accomplish appropriate standards, and that a successful implementation of the current proposed regulations in this area could provide the necessary experience to help ensure a successful expansion for other types of training providers.

**Question:**
Can any private business create a training program to avoid licensing and journeyman to trainee ratios under these proposed regulations?

**Answer:**
No. The “student trainee” license will only be available to students enrolled in state or federally sponsored education programs whose students perform practical code installation work, on real-world projects, as part of their course of study. There are exemptions for government entities for other licenses required to work as an electrical or plumbing contractor, which would not be available to a private business.

**Question:**
How did the department arrive at a permissible ratio of 10 student trainees to 1 journeyman for electrical and plumbing construction work? Why is the proposed trainee ratio different depending on whether the training program is public (“student trainee”) or private (“trainee”)?

**Answer:**
The ratio of 10 students to an instructor recognizes that most technical training courses require a low student/teacher ratio to ensure adequate direction and supervision. The standard ratio of 2 trainees per journeyman for certificate of fitness compliance is not affected by this regulatory proposal. The student trainee ratio is less restrictive because the training environment is different. In the student trainee scenario, the primary job of the instructor is to provide instruction and supervision (they are not being paid to complete an electrical or plumbing job) and the students are there solely to learn (they are not paid like apprentices and typically are paying tuition to the school).

**Question:**
Why is the department diverging further from the USDOL Office of Apprenticeship’s 1 trainee to 1 journeyman ratio, which is based on its conclusion that it 1 to 1 is the maximum ratio that protects trainee safety in high-hazard industries such as plumbing and electrical construction?

**Answer:**
The student trainee certificate of fitness is designed to provide increased training opportunities for Alaskans in the electrical and plumbing trades. This proposal should not be viewed to compete with the federally registered apprenticeship model, which requires a one to one journeyman to apprentice ratio. The student trainees are not apprentices. Current, long-standing Mechanical Inspection regulations have allowed for a ratio of up to two trainee certificate of fitness holders per journeyman and these ratios are unchanged under the proposed regulations.

**Question:**
Under the proposed regulations, what is the purpose of the trainee certificates of fitness and associated $250 fee?

**Answer:**
Alaska Statutes require individuals to hold a license (certificate of fitness) to perform certain types of work such as electrical wiring, high voltage, or plumbing installations. The purpose of the trainee certificate of fitness is to provide a mechanism to allow an individual to learn the electrical or plumbing trade by performing work subject to applicable codes under adequate supervision. The proposed “student trainee” certificate was developed at the request of educational programs who want to be able to perform limited electrical and plumbing code work as part of their hands-on curriculum. The purpose of the certificate is to provide a means for these students to gain skills, in a legally permissible teaching environment, while accumulating credible hours for the time spent performing these installations.

The proposed regulations do not change the trainee or journeyman certificate of fitness fees. The associated fees cover the administrative costs of issuing the license, as well as fund electrical and plumbing inspection and enforcement activities statewide. In the case of a student trainee certificate of fitness fee, the license would be transferrable for the period of the license to employment performed by the individual as a plumber or electrical trainee.

**Question:**
What is department’s reason for proposing to allow the commissioner to waive fees for “student trainee” certificates of fitness but not for “trainee” certificate of fitness?

**Answer:**
This proposal is designed to recognize that, unlike trainees working for an employer, student trainees will not typically receive wages while they are engaged in training and that there may be circumstances where the fee creates a hardship for an individual or a training program that could be resolved through a Commissioner waiver.

**Question:**
Does the student certificate of fitness require that all work be inspected, or only that the program agree to allow inspection? How does the agreement to allow inspection differ from current electrical and plumbing inspection statutes and regulations?

**Answer:**
As part of utilizing “student trainee” licensees to perform work, the educational institution would be explicitly required to comply with state or local inspections as required by statute or ordinance. The proposed regulation does not add any additional inspection requirements above those which already exist.

**Question:**
Commissioner Ledbetter signed a $1 million federal apprenticeship expansion grant in June 2019, to expand construction apprenticeships in Alaska. The Electrician occupation has the most registered apprentices nationally, and also in Alaska. Why would she sign that grant, knowing that this licensing regulation change was in the works?

**Answer:**
The Department of Labor and Workforce Development is committed to expanding registered apprenticeship training opportunities for Alaskans. This regulation does not change that goal. The department is continuously working to improve opportunities for Alaskans to receive training, so they can obtain good paying jobs and meet industry needs for qualified workers. Limiting efforts solely to federal apprenticeship programs as a training model for entry into high
paying skilled trade jobs would leave many Alaskans behind.

**Question:**
Is the proposed definition of "electrical wiring" intended to cover work performed under the National Electrical Safety Code, and if so, which tasks would no longer require a lineman certificate of fitness?

**Answer:**
Yes. The proposed definition was crafted in line with Attorney General Opinion 1656-300-84 (May 1, 1984), which determined that operating a helicopter or tree trimming equipment to trim brush around electrical lines, though subject to electrical code requirements, does not necessarily constitute “electrical wiring” work which would require a certificate of fitness. The proposed regulation aims to publicly codify current policy under Mechanical Inspection Policy Letter 19-002, which provides examples of the functions that would not require a certificate of fitness.

**Question:**
Under the proposed changes to 8 AAC 90.900(10) and (16), what definition of "heavy equipment" will the department use to determine which tools used to perform electrical or plumbing installations will require a certificate of fitness vs. not require one?

**Answer:**
The proposed regulation does not provide a firm definition, but is designed to help codify existing Mechanical Inspection Policy Letter 19-002. In general the proposed definition would apply to the operation of heavy power equipment such as cranes, loaders, excavators, piledriving equipment and other construction heavy equipment that requires specialized skills unrelated to electrical or plumbing work.

**Question:**
What studies have been done to back up the need to implement a "student trainee" classification?

**Answer:**
The department did not conduct studies. Over the years, training programs have been subjected to corrective enforcement actions for violating the limitations on having students who are not licensed trainees perform hands-on work as part of a curriculum. This experience demonstrated the need and caused educational programs to request relief from the restrictive regulations to perform limited real world plumbing and electrical installations as part of their hands on curriculum.

**Question:**
What is meant by the term "Direct Supervision"?

**Answer:**
The proposed regulations do not redefine the term “direct supervision” which is already defined in 8 AAC 90.900(6): "direct supervision" means that while the trainee is legally performing work to the Standards established in either AS 18.60.580 and 8 AAC 70.025 or AS 18.60.705 and 8 AAC 63.010 a certified journeyman is on the same job site, on the same floor and in close and continual control of the trainee and is responsible for the competency of the work performed by the trainee.

**Question:**
Have you ever visited a construction site and witnessed a competent Journey-worker try to do his/her job effectively and "directly supervise" more than one qualified apprentice?
Question:
Do you think it to be physically possible to "directly supervise" ten unqualified trainees in ten different rooms?
Answer:
In a student training scenario, an instructor is typically able to provide adequate supervision for students at a ratio of 10 students to one instructor. The educational programs will be responsible to have standards to ensure the adequate supervision of students in their programs.

Question:
Why would you want to turn this state into another Alabama?
Answer:
This question is unclear and appears to be rhetorical.

Question:
Do we need a first death/lawsuit to support out any perceived cost reductions???
Answer:
This question lacks specificity and appears to be rhetorical. To determine whether safety improved after training for electricians was restricted to registered apprenticeship in 2006, the division evaluated the Alaska occupational safety and health fatalities in the electrical industry for a period 10 years prior to and 10 years after the change. From 1996 to 2006, there were zero fatalities in the electrical industry. From 2006 to 2016, there were three fatalities (one in 2010 and two in 2011) in the electrical industry and one of the accident victims was a registered electrical apprentice.

Question:
Why this change was deemed to be necessary?
Answer:
It is unclear which change this question is applicable to. In general, the primary aspects of the proposed regulations are necessary to update code standards and expand training opportunities for Alaskans in the plumbing and electrical industry.

Question:
Was there any input from a single tradesman or tradeswoman?
Answer:
Yes. Various aspects of the regulation proposal have been raised over the years by individuals engaged in the plumbing and electrical trades in Alaska.

Question:
Did you know the IBEW was formed to fight for worker safety because at the time (the 1890’s) being a power lineman was the most dangerous job on earth?
Answer:
This question is not specific to the regulatory proposal.
Question: Will DOLWD provide oversight of ratio requirements?
Answer: As DOLWD inspectors visit work sites, they enforce the current statewide minimum ratio of two trainees to one journeyman for electrical and plumbing work. This practice will not change under the proposed regulations, and businesses and individuals found violating the ratio will be subject to enforcement action.

Question: Who will regulate the safety standards for those companies when they are not participating in a USDOL approved apprenticeship program?
Answer: Workplace safety in Alaska falls under the jurisdiction of Alaska Occupational Safety and Health. All employees, including trainees are subject to the workplace safety standards already in place in Alaska. This proposed regulation has no effect on the regulation of workplace safety.

To determine whether safety improved after training for electricians was restricted to registered apprenticeship in 2006, the division evaluated the Alaska occupational safety and health fatalities in the electrical industry for a period 10 years prior to and 10 years after the change. From 1996 to 2006, there were zero fatalities in the electrical industry. From 2006 to 2016, there were three fatalities (one in 2010 and two in 2011) in the electrical industry and one of the accident victims was a registered electrical apprentice.

Question: Who will be responsible for informing future trainees of the multiple routes to journeyman status that these regulations provide?
Answer: The department will develop an information sheet that will be distributed to new trainee applicants and available on the Mechanical Inspection web page. The information sheet will describe the routes to successful accumulation of legal hours, the difference between apprentice and non-apprentice hours, and what documentation will be required to take the journeyman exam for their trade.

Question: Can trainees combine registered apprentice hours and non-registered apprentice hours to qualify to sit for the exam after 8,000 hours?
Answer: No. In order to qualify at 8,000 hours, all of the qualifying hours must have been earned while registered as an apprentice. Otherwise the 12,000 hour limit will apply, regardless of the status when the hours were earned, so long as all other legal requirements were met.

Question: How will DOLWD regulate “student trainees” when they are working outside of the classroom environment for other contractors?
Answer:
The “student trainee” certificate of fitness will not be considered valid for work performed outside of the classroom environment. Unlike a trainee certificate of fitness, the “student trainee” certificate of fitness would only be valid within the classroom environment, and is not intended to be transferrable to other projects.

**Question:**
How would hours of work be counted for a “student trainee”? Are those hours counted as “classroom hours”?

**Answer:**
Under the “student trainee” certificate of fitness, hours of practical installation work, which was subject to state codes would be reportable to the department using the current Employer Verification Forms and completed by an authorized representative of the educational program. The hours would be counted separately as hours worked, so long as the work was performed legally and in accordance with the regulations.

**Question:**
Why doesn’t DOLWD simply change the rules regarding working out-of-state instead of changing rules for Alaskans?

**Answer:**
The department contends that Alaskans will benefit from increased training pathways into the electrical and plumbing trades. The current regulations limit training opportunities for Alaskans and provide unfair opportunities for individuals who acquire experience in other states where registered apprenticeship is not required.

**Question:**
Will DOLWD need to approve contractors who wish to hire trainees but do not want to participate in a USDOL apprenticeship program?

**Answer:**
No. There is nothing in the proposed regulation that would create an approval requirement for contractors. Electrical and plumbing contractors would be free to employ trainees so long as they adhered to the State of Alaska journeyman to trainee supervision ratio of 2:1. Trainees would be responsible for ensuring that they collect employer verification forms from each employer or job. This is the same way electrical and plumbing on-the-job training was accomplished and documented prior to 2006 in Alaska.

**Question:**
In the FAQ section – the answer on ratio of 10-1 did not adequately address safety or quality of education. It does not matter if one is paid or attending school. The work should be the same if they are learning the same trade. Why is it safe and how can it be quality education if 10-1?

**Answer:**
The ratio is designed to provide a close level of supervision for students. The safety of the students will ultimately be the responsibility of the educational training program.

**Question:**
Would you have someone working on your job who could cause harm or be harmed due to poor training?

**Answer:**
This question appears to be rhetorical and does not clearly apply to the proposed regulations.