

Trenching Rescue and Excavation Plan Chapter 296-155 WAC, Safety standards for construction work Part N, Excavation, trenching, and shoring

Virtual Stakeholder Meeting Summary

March 8, 2022 via Zoom

Washington State Department of Labor & Industries (L&I) Staff present:

Tracy West, Agency Rules Coordinator/Senior Policy Advisor
Erich Smith, Division of Occupational Safety and Health (DOSH) Safety and Health Specialist
Kevin Walder, DOSH Administrative Regulations Analyst
David Gaw, DOSH Management Analyst
Teri Neely, DOSH Technical Services Safety Program Manager
Allison Drake, DOSH Policy/Stakeholder Engagement Manager
Cathy Coates, DOSH Administrative Regulations Analyst

Attendees, and organizations represented:

There were 190 attendees representing a wide variety of interests, including construction businesses, utility companies, labor groups, trade groups, safety trainers, and local governments.

Preparatory:

Attendees were provided electronic copies of the meeting materials via GovDelivery. Additional information located on the Trenching Rescue & Excavation Plan Rulemaking webpage.

Summary:

Meeting called to order at 1:00 p.m.

DOSH staff provided introductions for presenting panelists, an update on the rulemaking history to date, and, general virtual meeting etiquette.

Discussion:

DOSH safety and health specialist provided an overview of the discussion draft; including the purpose, rationale, and development of the draft language. The presentation included sources for language, including corresponding federal regulations or Washington Administrative Code.

Following the presentation of the discussion draft, the DOSH safety and health specialist answered the questions submitted by attendees (live and those submitted via Zoom Q&A application).

Question and answer session:

"The revised "emergency" definition removed notation of occurrence to "property." Is this no longer a concern for DOSH as personnel safety is their singular focus? Does endangerment to property now become a "civil court" matter?"

DOSH Response:

The WAC addresses for workers in excavation but WAC does not address personal property. The purpose of the "Dig Law" is to protect the utility. The purpose of our WAC is to ensure the worker is protected. If there is contact with utility, you would need to deal with utility group.

"Will you be providing this draft document with "source notes" available?"

DOSH Response:

Yes, definitely. Kevin will add to website, by next week some time, if not before.

"Please differentiate between WAC 296-155-655(13) and WAC 296-155-655(14)"

DOSH Response:

WAC 296-155-655(13) applies to all excavation whereas WAC 296-155-655(14) would apply to only excavations that meet the definition of a trench. All trenches are excavations; however, not all excavations are trenches.

"Is agency going to 'take it easy on employers the first year' and issue general versus serious citation?"

DOSH Response:

Directed by policy. If DOSH shows up and there are protections in place, lack of a plan would be a general violation. If we show up, see no plan with employees working 8 feet deep and hazards are present, that would be a serious violation. An employer can "copy/paste" from the standard, add "spaces" to complete and would be "done."

"Please distinguish between WAC 296-155-655(14)(b)(xi) and WAC 296-155-655(14)(b)(xiv); is exit in WAC 296-155-655(14)(b)(xi) different than egress in WAC 296-155-655(14)(b)(xiv)?"

DOSH Response:

Good point. The requirement for access and egress-- ladder every 25 feet in a trench is under the general requirement in WAC 296-155-655. Under WAC 296-155-655(14)(b)(xi) that is under WAC 296-155-657, specific provision to shields, WAC 296-155-655 is a general provision and that will apply to all excavations 4 feet or greater, WAC 296-155-655(14)(b)(xi) is specific to a shield and addresses use of a shield in an excavation.

"Will you be providing this draft document with "source notes" available?"

DOSH Response:

Yes, meeting summary will be made available on webpage.

"As far as documentation requirements for this rescue plan - would it be sufficient to put this information into the site specific safety plan?"

DOSH Response:

Certainly, you could. We know that the construction accident prevention plan isn't required to be site specific, it is tailored to the particular hazards involved (although a site-specific plan would be fantastic). Then the only thing would be to ensure that as the project progresses and things come up, make sure to review periodically to determine whether any changes need to be made in the plan based on what you are finding.

"WAC 296-155-655(13) sounds vague, and WAC 296-155-655(14) kind of repeats itself. What's the purpose?"

DOSH Response:

Management wanted to ensure rescue was specifically addressed in chapter 296-155 WAC, Safety standards for construction work, Part N, Excavation, trenching and shoring. The idea being that WAC 296-155-655(13) applies to all excavations, whereas WAC 296-155-655(14) is specific to a trench. Some overlap, yes. WAC 296-155-655(14) breaks down more specifically what we are looking for. In a typical excavation WAC 296-155-655(14)(b)(xv), could be used as well. Again, a trench is an excavation; however, not all excavations are trenches.

"Is a mental plan (in one's head but not necessarily written down) okay?"

DOSH Response:

For an excavation that is not a trench, yes.

"If we're doing everything right, we must imagine what can possibly go wrong and fix or prepare for it. In other words, if I am doing everything right, this plan shouldn't exist. We could make a plan that is 100 pages long of what could go wrong. How long does this document have to be, and at what point do I stop?

Also, there will be a lot of excavations companies that do not know about this rule when it becomes effective so I suggest that LNI to do a good job to notify everyone, and for at least the first year take it easy on the people if they didn't realize there is a new requirement to fill out paperwork. Maybe make it a general violation, not serious."

Just the other night in Fife there were workers on the side of the highway who were injured when two cars that were racing veered off the road into the work zone. They were doing everything right, but a plan taking into account general procedures for unexpected emergencies is necessary. When trenching, you've got to consider water lines, electricity lines, gas lines, vehicles driving by, proximity to pedestrian traffic, etc. Would it be violation if someone outside of your organization somehow ruptured a gas line, for example? No, but the employer needs to have a plan to get workers out so they have to think more broadly about potential hazards and have a reasonable plan based on the situation at hand. Whatever the case, you will establish procedures for contacting emergency services and removing or rescuing workers from an excavation. What is the employer's plan to ensure the workers get out? Under what conditions does a competent person or foreman say, "hey, get out of there until we get this taken care of'? If removing workers from excavation, rescue may not be an issue. If the trench isn't in jeopardy, you are addressing how you would notify workers to evacuate, just as is currently required under WAC 155-035(9). Maybe there a building next door catches fire, what is the plan to get workers out, or ensure it's safe to go back to work? What is your plan for an earthquake? Do the workers in the trench know the plan?

"Would be great to see DOSH provide a trench scenario and fill out a mock written work plan to see exactly in detail what DOSH expects from employers on this written plan."

DOSH Response:

Good idea. No issue putting something together. With Unified Fall Protection (which similarly requires a plan) employers tend to just modify what they've previously used a bit for each new job, which is ok. The idea of writing it this way, employer could copy/paste to word document and fill in and it is done. DOSH will work with our internal Education and Outreach program to develop and get materials out before the effective date of this rule.

"Is there a minimum requirement to be considered a viable trench rescue agency?"

DOSH Response:

No, if an employer is going to perform rescue, the standard doesn't prohibit them from performing their own rescue. The standard prohibits workers in an excavation without an adequate protective system. The standard doesn't say an employer can't rescue on their own, using shovels, an excavator etc. What we have seen though -- people jump in, expose themselves to hazards greater than 4 feet in a situation we already know is a hazardous excavation. If your plan is to rely on 9-1-1, then you really need to have communication with the Fire Department or whomever it is beforehand to determine if they are trained and have the capacity to actually provide the service in the event of an emergency? Volunteer rescue services are often non-existent or very limited. On the other hand, some fire departments, such as Snohomish Fire, have robust rescue services available.

"Under WAC 296-155-655(14), is there potentially a template to use like in the PRCS? Are there examples of a form to use? Permit required confined space."

This is something we can look into with Education and Outreach. It would be as simple as copy and paste the WAC, add spaces, and fill it out. In addition, the plan can be paper or digital on a phone, tablet or computer.

"WAC 296-155-655(14)(b)(xv) - why not replace 'emergency' with 'trench collapse'?"

DOSH Response:

Other emergencies are possible – this would cover more than just a collapse or cave in; for example, such as water line or gas line issue, etc. What is plan to get them out?

"Does the required training have to come from a competent person?"

DOSH Response:

No, if the training doesn't specifically say qualified or competent, generally speaking you must provide training. "You" means the employer. The employer can do it themselves, hire out, or certainly have the competent person, an engineer, or anyone perform the training.

"Snohomish County only has 1 station that is qualified in trench safety. Best to find which station is qualified and how far away they are in your plan."

DOSH Response:

Fantastic point. Appreciate bringing that up. 9-1-1 is fantastic service, but may not be able to help depending on where you are.

"Is there a record keeping requirement?"

DOSH Response:

Like fall protection it would need to be available on site for inspection by the department. After the excavation is done, there wouldn't be a requirement to keep for a period of time, just like fall protection.

"Can the work plan be in digital format?"

DOSH Response:

Yes, great question, we will update the draft. The term "written" has changed through the years. We could add a statement that, like with fall protection, a digital copy or copy on computer is sufficient.

"Who is required to have this training and information available for employees in construction? Say those in roofing, painters, etc. Is everyone in construction required to have this available?"

Any worker that goes into the trench would be required to be trained. This would apply to people putting in utilities, also workers that going into a trench to do rebar, electrical, plumbing, etc. If it's a multiple employer work site, and a general contractor has plans that include all subcontractors, that is acceptable.

"Does 1926.1211 confined space in construction apply to this on rescue?"

DOSH Response:

No, because that is an OSHA standard it wouldn't apply anywhere the WAC applies. Chapter 296-809 would be the applicable WAC. Under the WAC, by policy, trench or excavation is not a confined space, but it can be. A structure in an excavation can be a confined space. In order to cite confined space in a trench, we'd have to have conditions beyond what is addressed in WAC 296-155. If not, WAC 296-155 Part N, WAC 296-809 would apply. Part N addresses atmosphere.

- "1) Concern with plan in general; this would require 19 items to be put into a check list with a lot of description. If a general contractor creates a work plan for a site, how effectively is it communicated out? Some employees could be left in the dust not knowing the plan. We're concerned with this requirement creating a paperwork nightmare and missing the point of how we are applying the standard to protect employees.
- 2) Rather than just focusing on trench collapse, you want the employer to identify what might/might not happen? Example car crash: I can reasonably predict some things and address in the plan, if shorting or jack failure, "do this" in engulfment. Anything other than collapse or adjacent structure failing, I don't know what expectation is beyond that.
- 3) Looking back at fatality and injury data it would appear that having a shoring plan ahead of time to prevent trench collapse would be the primary focus rather than unpredicted emergency. Predicting the unpredictable is something employers have heartburn with. If we're looking at protecting employees and preventing fatalities in the trade, how will this help? The problem is failure to shore and so forth, not from predicating a gas line rupture."

DOSH Response:

- 1) Good point. Let's say employer is already doing something similar. No requirement to use specific form or document. If an employer has addressed all this somewhere else, use it. If plans incorporate all these items, great. As long as all the elements are addressed.
- 2) Good point, some things you can't account for. We know in construction employers are required to have action plan. If something happens, employer has a plan in place to get employees out of buildings, to a secure area, account for all employees. We don't expect 100 page for WAC 296-155-655(14)(b)(xv). 3) WAC 296-155-655(13) would apply more generally to all excavations whereas WAC 296-155-655(14)(b)(xv) is more specific to trench excavations.
- "When you say preventing unauthorized persons from attempting a rescue, who determines who is authorized?"

The employer determines who is authorized and would specify this in their work plan. The employer would train workers how they are supposed to operate in the event of an emergency, including who is or is not authorized to attempt rescue.

"Roofers are required to have a rescue plan."

DOSH Response:

Yes. This would be similar for those involved in trenching work.

"I agree, we use an excavation checklist that employees confirm all safety measures are in place versus having the lead or competent person fill out in a long form description."

DOSH Response:

Yes, this could be considered a checklist, although I like the term "work plan" because it's not just checking the boxes. The idea is that the employer has thought about existing and potential hazards and has addressed concerns/issues *before* work ever starts, and adjusts based on any changes.

"Is there an estimated rollout date for these changes to the current WAC code?"

DOSH Response:

The rule is not immediately imminent, and at this point we are at least several months away from a rule being adopted and made effective. We are still in first of three phases for the rulemaking. Even once adopted there may be a delayed implementation date to ensure ample time for employers to make necessary adjustments.

"Mechanical and natural threats are able to be identified by weather and equipment PMs on a routine basis. Emergency action plans should account for all workers."

DOSH Response:

Good point, thank you.

"Where does it say that we need to predict the unpredictable?"

DOSH Response:

It doesn't say predict the unpredictable. Current requirement applies generally to any hazard, such as for fires etc. The requirement is to ensure workers are removed from harm, basic things. It doesn't say that an employer must envision every possible scenario. Perhaps we should add something like "reasonably foreseeable emergency." We agree that we don't want to be too broad here.

"Can we get a copy of this webinar sent to our email?"

DOSH Response:

You can email me and I can send to you or it will be available on the web in about a week.

"Emergency" should be limited to that which is, "reasonably foreseeable and within the scope of work."

"...... and effective in practice."

DOSH Response:

Thank you for the suggestion.

"Would reaching into an excavation be considered 'entering' like it is in the confined space standard? Confined space refers to 'crossing the plane."

DOSH Response:

No, just crossing plane would not be considered entering in this case.

"If we do everything we are supposed to do (according to the standard), do we also need to develop a plan?"

DOSH Response:

Yes.

"How does this new work plan help ensure that trenches are safe for employees working in the field? Have you experienced a situation where the employer would have put in the proper protection had they only had this workplan requirement?"

DOSH Response:

The idea with work plan is similar to fall protection work plan. There is a current requirement that certain elements are in place. Based on past inspections, sometimes the employer and competent person know some of the rules and requirements but not all. We visit a site and see no protections, and the employer says they didn't know. So the idea is to help the employer know current requirements and ensure necessary elements are met.

These rules have largely been the same for decades and we still have people who don't know. Will it be 100% effective? No, but the goal is to create a relatively simple way for employers to meet current requirements and keep workers safe. This is more of a preventative, than a reactive solution.

"I have an aversion to check lists. Does the department know details they want? Seems duplicative. Defer to competent person and qualified crews."

Good point. In your case, if you already have something developed with a competent person the only thing that may need to be addressed would be the details of 911. You could call it a checklist or a plan, we just prefer the term plan.

"Shouldn't this be a guidance document then not a new rule?"

DOSH Response:

How many follow guidance? This would help people know what is required and make sure that requirements, established in 1991, are followed. The four foot information has been in the rule since 1960 and we still have people who don't know. Washington pre-dated OSHA by 10 years. Will it prevent all problems? The goal is to help employers and keep workers safe. And, how many would follow if it were a guidance document?

"Does the Department recognize a geo-engineer assigned to the jobsite as a competent person to classify soil characteristics?"

DOSH Response:

Certainly. The definition of competent person is someone capable to identify hazard and authority to take prompt corrective measure. Defined in terms of capability.

"Yes, and if they provide a written email/letter of the type of soil then that would meet the intent?"

DOSH Response:

Yes, of course if conditions change, re-evaluate.

"Are there any other state plan programs with a similar requirement?"

DOSH Response:

California OSHA requires a form and issues a permit. Washington does not issue a permit. We're not aware of other states doing this, would have to research. We do know that California OSHA requires a permit for any excavation that is any more than 5 feet before an employee may enter (California OSHA uses 5 feet). California requires employer to complete form and work cannot begin until/unless a permit is issued.

"With this being a compliance standard, there should be a definition of competent person?"

DOSH Response:

The definition is in Part N. The federal OSHA definition does not include the "knowledge."

"Why do we need a form?"

DOSH Response:

As we have seen, planning is important. If you plan ahead of time, exposure is dramatically reduced. Know the requirements, and address hazards and emergency planning before going in, including how to get employees out.

DOSH Safety and Health Specialist posed the following question to attendees:

"How long do you think it would take you to develop a work plan for a typical excavation? How long to fill out/complete?"

Stakeholder responses:

"It depends? 10 minutes - an hour?"

"New: 1-2 hours. Existing template: 20 minutes"

"Standard trench/excavation - about 10-15 minutes"

"Depends on the site; would say around an hour."

Further Stakeholder Questions/Comments

"How does Cal OSHA's rate of incidents in trenches compare to Washington?"

DOSH Response:

Good question, haven't looked at that specifically but would have to look at OSHA BLS (Bureau of Labor Statistics) data, and "struck by" hazards, which unfortunately is not as clear cut as it would be preferred, so we may have better luck calling California OSHA. Based on how these are classified some "struck by" incidents may in fact be cave ins; it's worth looking into.

"Will a new plan need to be written for each individual trench during a shift? Multiple trenches can be dug in a day."

DOSH Response:

Multiple trenches could be addressed in one plan. However, if doing different system in each, you would need to identify that. One plan could cover all trenches that are dug that day or multiple days. It would be specific to the site, not the day.

DOSH Safety and Health Specialist posed the following question to attendees:

"What is opinion if term "emergency" changed to "cave in" in WAC 296-155-655(14)(b)(xv)?"

Stakeholder responses:

"Emergency is all encompassing, water etc."

Suggest "in case of emergency, such as cave in..."

Use "engulfment?"

"What about trench failure?"

"Replace emergency with cave-in."

"Emergency makes sense. Could be a physical injury, or heart attack. You should indicate to safely, promptly have a plan on how to remove the person."

"I prefer trench collapse."

"Water incursion can be as life-threatening as a cave-in. I think the language is good."

DOSH Response:

Currently, prompt safe removal in WAC 296-155-035(9) dates back to 1970s and is reiterated in the draft under WAC 296-155-655(13). For that reason I like changing it to "cave in." Cave in is defined in the standard, so it is clear what we are talking about for the more specific requirements under WAC 296-155-655(14)(b)(xy). "Trench failure" could be a few different things.

Further Stakeholder Questions/Comments

"For Rescue Teams do you need to vet the teams like Confined space. Do they have the same requirements? Do a drill in the last 12 months. Use a rescue team evaluation form? Does 911 need to notify you if they become unavailable?"

DOSH Response:

The current standard doesn't have a specific requirement for rescue, just that if a worker were to go in to perform a rescue, the worker must be protected by a protective system, possibly a slope or trench box. There are no specific rescue training requirement for workers. If 18 feet below ground and cave in, significant thing to deal with. 5-6 feet down would quite different story. Now if Snohomish county, other fire department, or 3rd party emergency services are doing rescue, it would be a little different but the employer would need to follow the current excavation standard. Does 911 need to notify? If you rely on 911, there needs to be communication to ensure they are able to perform a rescue based on when and where you are working.

Question and answer session concluded.

Following the presentation of the discussion draft, DOSH staff thanked attendees for attending; and, exchange of ideas/comments. DOSH staff informed attendees' internal staff plan to review comments, update the draft and share with stakeholders in late spring. The meeting summary from this meeting and, the discussion draft will be available on the Trenching Rescue & Excavation Plan Rulemaking webpage within one to two weeks. In addition, the department may hold an additional stakeholder meeting to continue public engagement in this rulemaking.

Meeting adjourned 2:48 p.m.