

Smoke and Excessive Heat Rulemaking

October 21, 2021

1pm

Agenda

- Excessive heat (Ted Bunch)
 - Measuring heat index temperature
 - Acclimatization
 - Work/rest schedule
 - Non-mandatory Appendix
 - Wildfire smoke (Tom Bozicevic)
 - Exemptions
 - Enclosed buildings and structures
 - Short-duration exposures
 - AQI threshold for required respirator use
 - Employee access to respirators for voluntary use
-

Dave McLaughlin with Oregon OSHA started the meeting at 1:01pm.

Deadline to submit comments is 10/29/21. Send emails or redline versions to Ted Bunch or Tom Bozicevic.

At the end of the draft permanent heat rule, language was added from the temporary rule for ALH as it relates to heat. That was done for filing purposes and is not intended to be discussed today. ALH rulemaking meeting is upcoming.

Excessive heat (Ted Bunch)

Changes to sections below were reviewed.

- Measuring heat index temperature
- Acclimatization
- Work/rest schedule
- Non-mandatory Appendix

- *Measuring heat index temperature*
Questions? None

- *Acclimatization*
Questions?
 - Q. Attendee: (d) clarification: in ag environments, workers are coming from areas that have higher temperatures. They have already been acclimatized. Can that be worked into/written into the plan?
 - A. Ted Bunch: It does allow for that and maybe we could consider some additional language to make that clearer.

- *Work/rest schedule*
 - Questions?
 - Q. Attendee: 1) Section 5, page 4 of draft, shows that there are two definitions of heat danger and heat hazards that had temperatures attached to them. The chart lists 105 degrees, but there is nothing in that note that goes above 103 degrees. Could imply that everything ends at 103 degrees in regards to plans. Needs clarification. 2) A and B options, this latest version adds an exemption that contradicts NIOSH chart that is non-mandatory in regards to work defined as rest and light. (Page 1, section e). Encourage that this exemption that is new to this draft be removed. There is no NIOSH exemption for light work.
 - A. Ted Bunch: 1) that note should have referred to the heat index chart which is color coded. 2) NIOSH work/rest schedule does define by intensity or levels of workloads.

- A. Dave McLaughlin: please include these comments in a letter/email so we have detailed information by Oct. 29.
- A. Michael Wood: the reason for the exemption is based on language in NIOSH and OSHA guidance in terms of what it covers. We will take another look at it and the article in the LA Times as mentioned by the attendee.
- Q. Attendee: The heat illness prevention plan is not clear if it allows for employee self-reporting as is stated in the smoke rules. Similarly, the training language in the smoke rule is very clear that the training needs to allow for employee feedback and questions. Request similar language in the heat rule.
- Q. Attendee: Acclimatization: subsection A. This is not feasible for employers who are single-employee organizations to be closely monitored by a supervisor. Way it is written is that it is to occur at the beginning of the employee's employment which might not be during a heat-related incident. So it adds to the confusion. Also, this language is only for fit individuals and how do we determine who is unfit, and what do we do for those individuals who are unfit? Also, it says we can acclimatize in as little as 4-5 days, so what do we do for those remaining 2-9 days? And, do we have to re-acclimatize after three days (for example) of cooler temperatures?
- Q. Attendee: Related to rest breaks, says it is a work assignment that it must be compensated. But BOLI has the jurisdiction to define what is working hours and this seems to be an overstep here. In this case, OSHA is defining this, not the employer.
- A. Michael Wood: In the context of safety and health rules, it is not at all unprecedented or outside Oregon OSHA's authority or federal OSHA's authority to indicate that activity has to be performed as part of work. That is not defining work assignment, that is indicating that that particular activity is to be considered a work activity. I don't think this creates any conflict with BOLI. We will talk to BOLI before we finalize.
- Q. Attendee: Regarding Acclimatization, nice that wording "where feasible" has been added, under (8)(b). But in the Written Program section under G, procedure seems to be required regardless of feasibility. Would like to see "when feasible" carried over there.
- Q. Attendee: Under (8) Acclimatization Plan starting with (c), important to clarify if these are "and" or "or" in these sections and following. As it reads, impossible to tell and implement. Also, (e) needs additional clarification if employers are to develop their own plan in writing. Not practical in ag industry to not consider previous acclimatization.
- Q. Attendee: 1) I am concerned that ag sections are in this draft rule but are not being discussed during this meeting. When will this be open for comment? 2) once temps rise, employees are exerting, wearing protective gear and carrying heavy loads. They may still have issues with excessive heat. 3) In regards to training, repetition and timing will be important for workers, not training right up to harvest time or once in crisis mode. 4) There is a lag time between when people are working in warmer climates before they start working in Oregon (or initially the US). People are no longer used to the warmer climates after even a short lag time.
- A. Renee Stapleton: The ALH relationship with heat is something we did a temporary rule on. Anticipated proposal in November. Having a separate labor housing meeting is where that work belongs. The temporary language at the bottom of this draft allows us to have it proposed and have protection in place. Probably February 2022, some language addressing labor housing and heat. Then have the bigger discussion on labor housing.
- Q. Attendee: 1) Acclimatization 8(b), gradual period is supposed to be at least 7 days, what about if the heat wave is only 3-4 days (for example)? How do we follow that if less than 7 days? 2) In (d), are we supposed to go back to 50% each time the temp goes up/down? Does the Note in your mind address that issue?
- A. Ted Bunch: 1) Sounds like some clarification in that language is needed to take in account the temperature fluctuations you mentioned. 2) I don't believe that it the intent. There is no one size fits all with acclimatization.
- Q Attendee: WA has some newer guidance on temperature fluctuations. Matching similar state periods could be helpful for employers.
- Q. Attendee: 1) Section on Acclimatization is really confusing and we support a rewrite. "Feasibility" definition is confusing. Strongly think that language needs rewritten, and we don't feel it is based in law. 2) This covers indoor workplaces too. We also strongly fight for a year-round rule with training

completed before the unexpected temperature change. 3) Training, often a disconnect for workers who are not primarily English speakers.

- Q. Attendee: With metabolic workload, REL with NIOSH and with TLV, even with light workloads could be problematic. Possible to add additional information in an Appendix on this document from NIOSH and the TLV heat/physical hazard stress documentation would be helpful.
 - Q. Attendee: Would OSHA provide clarification on two alternatives in Section 6, heat illness prevention break schedules (a) and (b)? Appears to be more stringent. Suggestion to marry this with NIOSH.
 - A. Michael Wood: The simpler table is designed to be the high end of the NIOSH table for strenuous work. If employers want a simpler approach, then they can take this option. It would be more restrictive than if they do the more detailed analysis that is based in more detail on the NIOSH table. Difference of simplicity or greater precision.
 - Q. Attendee: Asked for clarification on exemptions of documentation that previous attendee mentioned. What is the implication to that?
 - A. Attendee: Looking at 2017 TLV standards, showed concern with temperatures around 90 degrees, even with light work and rest, needing some breaks.
 - Q. Attendee: Do these work/rest charts consider people's PPE? How will enforcement treat that employers did not follow the non-mandatory appendix?
 - A. Ted Bunch: It is mentioned in the training section and also in the Non-mandatory Appendix section. Non-mandatory is meant to provide resources to employers.
 - A. Dave McLaughlin: There is not a requirement for an employer to follow a non-mandatory appendix every time. However, if there is information in there that would have helped them with the requirements within the rule and there is a failure in there, that would be part of this is why this was a failure.
 - Q. Attendee: It would be easier for workers for the PPE to be included in the chart. Why not make this mandatory instead of waiting and wondering to see if it made a difference?
 - A. Dave McLaughlin: The basic expectation in the heat rule is that they have a process in place to protect employees from excessive heat. How they do that as long as they provide protection is pretty black and white. If they have conditions that affect a person's ability to manage their own heat, and they don't take that into account, then they are not managing heat. These charts become very complicated, very quickly. On the other hand we don't want to have employers that this is all they do is try to figure out heat loads and PPE and clothing. There is a balance that we need to maintain.
 - Q. Attendee: I am concerned that this information is too important to be included in an appendix that may not be read by employers.
 - Q. Attendee: The draft of this rule is difficult for employers to implement, follow, monitor as currently written. Under the emergency response section, there is wording where if an employee is having any sign or symptom, they are to report that to their supervisor, they have to take a rest break until those signs and symptoms are relieved. That is a tool there that proves that we don't need to make this rule more complicated. If the employer is dealing with employees who constantly show signs and symptoms, they are going to be changing their procedures so they don't have it, because they are losing work time.
- *Non-mandatory Appendix*
 - Any other topics that attendees would like to discuss?
 - Q. Attendee: any discussion on the increase in temperature and increase chance of injuries on the job related to that (including mental health impacts related to increased heat)? Also, ALH proper protections for heat as well?
 - A. Ted Bunch: Aware of studies that talk about influence of heat on mental illness. But those are not addressed in this rule. It is a temporary rule for labor housing earlier this summer.
 - Q. Attendee: About the two charts, why does Oregon OSHA chart start at 90 degrees and the NIOSH/CDC start at 95 degrees?
 - A. Ted Bunch: That is something that we can go back and take a look at.
 - Q. Attendee: About clothing comment from another attendee, a worker gave an example of how difficult it was to work in certain PPE with heat. Those materials are not breathable. Seems like there is research on this and should be addressed more explicitly.

- Q. Attendee: Humidity on the inside concerns me. I don't agree with the 80 degree standard. Unless employers are going to provide the clothing, we don't want to have to be too prescriptive. Training is better for the pros and cons of certain clothing (OSHA training, videos, more than an internet search). Would like an opportunity down the road to look at how the temporary rule worked and didn't work out before it becomes a permanent rule.
- Q. Attendee: For those concerns on (A) and (B) on charts: Option A is for heat index and the NIOSH chart is not, has an adjustment for heat index. It would be incorrect to have the trigger numbers at the same temperatures because these are different scales being used here.
- Q. Attendee: 1) exemption of rest and light work, including that in an exemption is exempting office workers. Advocating for that to stay in. 2) Heat illness prevention break section, concerns on making it more difficult for employers to comply with (time spent monitoring temperatures and needed breaks). Look at emergency responders, they do not have ability to stop work and take a break. Needs to be an exception for emergency responders when during an emergency where they cannot take breaks every two hours. 3) Heat illness prevention chart, confusing to know when to take breaks after time worked. Suggest modifying chart if left in, more aligned with NIOSH.
- Q. Attendee: Confused on rest/break chart, in section on 100 degrees or greater, in an eight hour day, workers are working four hours?
- A. Ted Bunch: That is correct.
- Q. Attendee: That seems really high in terms of rest breaks. Limiting productivity by 50%.
- Q. Attendee: Work/rest schedule, intense work in 90 degree weather needs breaks. Other countries are showing health results from working in excessive heat, even in younger, fit workers. Productivity levels go down if work in extreme heat is continued without breaks, shade, water.
- Q. Attendee: 1) language about emergency responders in the smoke rule that should be added to the heat rule. 2) experiencing prior heat illness can have a stronger effect if experienced again. This should be in the training. 3) Also, in the smoke rule, there is language on electronic recordkeeping that should be in the heat rule too. 4) if you want people to look at information in the rule, don't leave it in a non-mandatory appendix that may not get read. Needs to be put in a place that has to be looked at.
- Q. Attendee: Timing for breaks, the chart seems aggressive for amount of breaks during the higher temperatures.

BREAK

Wildfire smoke (Tom Bozicevic)

Changes to sections below were reviewed.

- Exemptions
 - Enclosed buildings and structures
 - Short-duration exposures
- AQI threshold for required respirator use
- Employee access to respirators for voluntary use

Questions?

- Q. Attendee: On point on enclosed buildings, any provisions other than buying monitoring equipment to know the levels inside vs outside?
- A. Tom Bozicevic: The employer would need to know how their mechanical ventilation is set up, and use direct measuring device for indoor PM2.5. Would be performance based. Employees have ability to file a complaint. Note that for those indoor work environments if you notice smoke intrusions, the draft allows using the AQI value for the location of your building and use the control methods under section 7 to protect employees.
- Q. Attendee: In examples with "smoke intrusion," with idea that certified HVAC professional to tell you that you are ok on a building's ventilation system, I would be more comfortable with A if that language was in there. Seems excessive for every employer in Oregon to buy a direct read instrument or not be exempt from that section of the rule. Also, section C (three categories) could be read as that an employee could be exposed for 3 hours and 15 minutes in a single 24-hour period as long as AQI moved between those ranges. I know that is not the intent but could be read that way. Also, how do you equate an employee's 24-hour exposure if you bounce between different AQI levels?

- A. Tom Bozicevic: We recognize that and would welcome suggested language.
- Q. Attendee: 1) In regards to the three levels, they seem confusing. Maybe recommend one trigger point in a one-hour period is easier than various levels. 2) section 7, word of practical vs feasible. Is there a significance that it doesn't match the wording to the rest of the draft rule?
- A. Tom Bozicevic: For wildfire smoke, we decided we weren't going to require employers to follow the hierarchy of controls. Language change from feasible to practical is a lower bar. Employers can jump straight to some controls without implementing administrative and engineering controls.
- A. Carol Trenga: 1) We need to consider that indoor concentrations of PM2.5 can end up higher than ambient/outdoor air concentrations. 2) Short-term exposure exemptions, if we look at exposures from the bottom of the scale to the top of the scale, it is over 100% difference. Maybe more discussions with WA and CA.
- Q. Attendee: 1) exposure monitoring section, says you can estimate PM2.5 interior by the AQI from closest sensors and it would be important to say that and say exactly what you mean there. 2) In regards to not using the hierarchy of controls in this rule, if that is true, the respiratory protection sections require clearing up meaning of thresholds and specific requirements.
- A. Tom Bozicevic: Note on indoor work environments needs to be discussed further.
- A. Tom Bozicevic continued with updates.
- Q. Attendee: Making mandatory use of respirators at AQI 301 instead of 201 makes a lot more sense. We want to protect our people, but the location might not really make it necessary (no hazard).
- Q. Attendee: In relation to CA, does WA have anything mandatory or is it all voluntary?
- A. Tom Bozicevic: Yes, it is all voluntary. They have not indicated if they are going to have anything mandatory.
- Q. Attendee: If we do good training and employers have available that equipment at the 101. Yes, 201 is better than 101 or 150, but if you do really good training, maybe 301 is still too low.
- Q. Attendee: The 151 level [of AQI] is specifically unhealthy for all people. It should not be about what CA or WA is doing. Should be tied to standards of safety that we know by research for all people at 151.
- A. Tom Bozicevic: It is based on 24-hour exposure. Concern brought up is that you are using a 24-hour average exposure in a typical 8-hour shift exposure.
- Q. Attendee: With regard to the handheld monitor that may be able to identify the hazard at the site more closely, what is the reason for that not being required?
- A. Tom Bozicevic: The discussion for the higher AQI is not based on determining the AQI. To determine if the AQI reaches 101, the visibility test uses one mile as a landmark to identify if concentrations have reached that level compared to the other levels where you are trying to identify a landmark at 15 miles away. Seems like it would be easier to establish a one-mile landmark and if you could see it, the air quality isn't at that threshold to require respiratory protection. But if you couldn't see it, respiratory protection is now required, no longer voluntary. We are not limiting or discouraging employers from getting the direct read instruments, but there is a cost of obtaining that and there is training the employee to use and calibrate it.
- Q. Attendee: With regard to feasibility, it doesn't sound like it is with the employer deciding it is too expensive. Per this rule, the feasibility part kicks in when it is impossible to do the work. Correct? When does the agency view it as not being feasible?
- A. Tom Bozicevic: When we are talking about increase in AQI, it has nothing to do with the employer's ability to measure it. What we are talking about with the higher AQI is with the ability to comply with wearing a respirator.
- Q. Attendee: Concern that breaks are only related to heat, not smoke.
- A. Tom Bozicevic: Technically need to wear the respirator on paid rest break since employees are not removed from that smoke exposure.
- Q. Attendee: Typically filtering facepieces do not come in sizes, maybe can try different manufacturers for a different fit. In the end, if you aren't going to require fit testing, maybe doesn't matter. As written, protection is only as far as giving them a facepiece and telling them when to wear it, but not making sure that it does what it is intending to do.
- A. Dave McLaughlin: When you look at a filtering facepiece, the entire facepiece is the filter. With an elastomeric respirator, the size of where the air comes in is much, much smaller, which presents more of a potential problem for the person wearing it. Fed OSHA made an explicit allowance for voluntary use of a filtering facepiece respirators would not require a medical evaluation, basically because they

recognized that there was way more surface area for air to come in that it presents a much less, much lower problem for the wearer than with an elastomeric respirator. They made no such provisions for any other type of respirator.

- Q. Attendee: If we are going to use the respirator as the primary means of protection, several things need to be changed. The seal check language in the appendix gets back to there being no fit test. Doesn't address that some don't fit people's faces. What is the employer going to do when it is 201? Does it go from voluntary to mandatory? Can we rely on employers to do that?
- A. Tom Bozicevic: We have the two-way communication system where employer would be responsible to notify employees at those cut points for voluntary use. And they would align with the AQI we land on as far as those control measures (cut points for voluntary and mandatory, and 501 as upper limit for not having a full respiratory protection program).
- Q. Attendee: The wording is, "some members of the general public *may* experience health effects." AQI is not an appropriate tool for setting occupational standards. Push for a voluntary standard like WA (with training). There are a lot of employees who do not want to wear the respirator or shave their face to wear it.
- Q. Attendee: Air monitoring at DEQ and measurements of PM2.5, added monitoring stations. Low-cost sensors are around \$200 but out of the box may not be all that accurate. Factsheet with references should be available soon.
- Q. Attendee: Smoke rules are missing an emergency medical plan that is present in the heat rules.
- A. Carol Trenga: AQI does address activity levels, versions available online. Look up AQI "what you can do about it."
- Q. Attendee: In 2020, there were no temporary smoke rules. Important to educate your employees, make N95s available, and trust that they [employees] are going to do a good job.
- A. Ted Bunch: Correction: we are taking comments on the temporary heat rule for ag labor housing. Same deadline of Oct. 29.
- Dave McLaughlin: thank you all for your time and we value these discussions. Questions remaining in the chat box of this meeting will have answers that will be part of this rulemaking record.

Meeting adjourned at 4pm.