

**Comments/Notes from Wildfire Smoke Stakeholder Meetings
January 21 and February 11, 2021**

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| Rulemaking Comments |
| Concern regarding why an emergency rule vs permanent rule |
| Who is the petition for rulemaking from? |
| For emergency rules, does the department still have to follow the APA? |
| Fit tests and medical evaluations should be considered in the fiscal impact study (permanent rule) |
| Will today's presentation cover any rule substance? Or just the process you are undertaking? |
| Why is this an emergency rule? There is no emergency |
| Can you talk more about the emergency rule process vs. other processes? A And when it is allowed? Can anyone ask? |
| You stated "We have been asked to have a rule in place by next fire season". Where/who did this request come from? |
| Are you working with OROSHA as they are also developing a wildfire smoke rule. It could be helpful to have similar/same requirements for both states |
| Do you know what exactly United Farm Workers are concerned about specifically with this rule? That farmworkers are not being told about air quality? Or no PPE? |
| APA is put in place for a good reason. Emergency rules could have a strong impact on businesses. Consider making the emergency rule the least impactful. Do not do a series of emergency rules. You can be more stronger with the permanent rule, doing the normal rulemaking and completing a SBEIS and CBA. |
| Enforcement/Consultation |
| How is DOSH going to enforce the rule? Will inspectors have their own monitors or will they use the WAQA site? |
| Assuming the rule will have employee training requirements, are there any plans to offer training materials on the web site? |
| California Rule Comments |
| Given their substantial experience with wildfires, why wouldn't WA follow CA's lead? |
| Has California's rule been considered during this rulemaking process? |
| The CA rule has an exemption for controlled burns and initial attack – does this fall under Chapter 305? Respond to put fire out quickly – again CA has exemptions. |
| What is the citation for the CA rule, so we can easily look them up? |
| I know of a case in CA where an employee filed a W/C claim on a prostrate cancer situation and was accepted due to wildfire smoke exposure while in his work setting. Anything like that in WA happen and was accepted? |
| What health data did CA use to establish their rule? It looks like they only used "Wildfire Smoke: A Guide for Public Health Officials (August, 2019)," which doesn't seem complete. I don't see anything on NIOSH. |
| PM 2.5, AQI and WAQA Comments |

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| <p>With regard to those low cost sensors, would it be possible for LNI to show some pictures or actual models that would be acceptable for an employer to use to measure. One of the issues we are going to run into is that the scope of this rule will include a lot of businesses that don't have IH's or Environmental Engineers. We want to comply but don't know how. Can you help us comply?</p> |
| <p>Haven't looked at all of the low cost sensors. I need to look at maintenance and calibration. There will be requirements regarding costs and maintain and this is something we will be looking at. Having a workplace 40 miles from a sensor is something we are looking at, if we just look at using the AQI that won't be accurate so we thank you for bringing up that concern and that is something we are considering so we are clear, concise and easy to comply with.</p> |
| <p>Concern about access to accurate PM 2.5 sensors. Low cost sensors vary greatly on accuracy and require varying levels of maintenance and calibration. Our workplace is over 40 miles from the closest Air Now PM 2.5 sensor. When being held to a standard, how would the variability be accounted for? Such as a standard for calibration, type, etc.</p> |
| <p>Do smokers have more resilience to wildfire smoke or are they more susceptible to illness?</p> |
| <p>I'm trying to decide what I am having to look for. – A - PM 2.5, AQI and the WACA – those are the 3 main methods that could be used for measuring the wildfire smoke for this rule. We are not saying one is better than the other, and we want to know from you what would be better over another?</p> |
| <p>On most of air quality websites you can select PM 2.5 to see numbers.</p> |
| <p>WAQA & AQI are based on 24 hour exposures as opposed to PEL's that are based on an 8 hour exposure. How will you compare the two?</p> |
| <p>EPA reduced the sort-term PM 2.5 standard from 65 to 35 ug/m3 24 hour TWA, but didn't adjust AQI for several months. During that delay, Ecology & DOH created WAQA. Keep up with literature, we've seen WAQA could be performing relatively well.</p> |
| <p>How often during the day is the air quality updated? Can we just use the AQI we find near our region?</p> |
| <p>AQI varied quite a bit from one website to another back in September. Is there one that we have to use?</p> |
| <p>Were you saying that the AQI for PM2.5 is not measured regularly in WA?</p> |
| <p>What is the driver for the lower threshold of WAQA compared to AQI?</p> |
| <p>Even though there is no specific language yet drafted. Can we expect some language such as, Employees "reasonably anticipated" to be exposed? Relating to non firefighting operations employees, and AQI levels to determine controls or actions to be taken?</p> |
| <p>Where did this health data come from?</p> |
| <p>Oregon has a PDF that breaks down into various PM 2.5, average concentrations of 24 hr., 8 hr. & 1 hr.</p> |
| <p>DustTrak? Spendy but good for monitoring general PM 2.5 for real-time data</p> |
| <p>This past year, our company was monitoring the air quality VERY closely, and found wide ranges and differences in the major air quality websites (Air Now, AQICN, etc.) Will we be given direction on where to monitor? Or where LNI is monitoring so we can duplicate?</p> |
| <p>Not sure if it could or would happen but if there's an air stagnation advisory in place and part of the contribution is from wood stoves in the winter, is the concern the same and would the standard apply year round or just wild fire season?</p> |
| <p>When I reviewed the AirNow website they discussed combining the results of air monitoring stations and the local low cost sensors to provide better information on wildfire air quality conditions. Will this be considered as part of WA requirements?</p> |
| <p>Do you yet have any idea how you are defining good faith efforts by employers to monitor air quality so they can respond appropriately? Daily, hourly, continuously?</p> |

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| How low-cost are the low-cost PM2.5 monitors? If they're truly low-cost, could Ag employers be required to test the air on their ranches or orchards? |
| Many companies have hundreds of operations and sites... so even low cost monitors would add up to a significant expense... relying on a "source" for AQI sure makes more sense for companies with multiple sites and locations. |
| Consider the cost of calibration of those low cost monitors... |
| I heard from someone at DOE that they are considering dropping the use of WAQA due to continual confusion. You may want to check with them or just go with AQI. |
| Meet with Ecology to determine where WAQA numbers are from/created. |
| Respiratory Protection Comments |
| Most employers won't own their own particle meters just in case there is a wildfire event. |
| Will there be consideration for Voluntary and/or Mandatory respiratory protection? |
| Right now we don't know if there will be enough N95's due to availability issues. |
| We will not be able to comply with any of the current fit-test requirements in advance of the need for when the need is almost impossible to know when it will happen. It clearly doesn't make sense for wildfire smoke that is a very rare event, can't predict when we will need to shave employees, fit-test, etc. when we will have an immediate need. Having to do all of that all of the time is not practical. The Dept. of Labor and Industries should come up with something, the current respiratory code should not apply to this. |
| Will N95's/KN95's be required just for employees who are required to perform outside work? Or for employees who voluntarily work outside and/or for employees when commuting to work? |
| Knowing it could change, do you expect any change in continuing to allow the use of KN95's for 2021? For both general particulates and other exposures like COVID. |
| So if we need to use N95 masks, we will not have to do fit testing? During a wildfire event? |
| CA rule – timberland owners. Comfortable complying with voluntary use. Concern with any currently written program requiring respirators. Need something short of the current. |
| Will there be any consideration or provided direction given N95s are still being primarily directed for frontline healthcare workers and may not be available in sufficient quantities for wildfire smoke where work isn't able to just cease for long periods of time? |
| You mentioned that KN95s will likely be allowed for 2021 due to N95 shortages related to COVID. We've received medical advice that we should look at KF94s for COVID purposes, as they are high quality masks, and have a lower risk of counterfeit than KN95s. Have you considered allowing KF94s for wildfire smoke purposes for 2021? If not, please do. |
| The LNI Wildfire Smoke Page makes this statement regarding filtering facepiece respirators (FFR) "Dust masks restrict breathing and can put stress on the heart and lungs, which may worsen health symptoms". These are serious health effects, more so than many health effects indicated for wildfire smoke. Will L&I be doing a risk assessment to ensure the massive increased use of FFR's will not exceed the risk of adverse effects of wildfire smoke? Will it be demonstrated that overall risk to workers will be reduced by use of FFR's over and above the risk presented by wildfire smoke? |
| The last time I checked there are no respirators that have an FR rating. |
| The medical evaluation requirement could be very difficult for those in the Ag industry who have seasonal employees who work for a very short time frame during harvest - sometimes as short as a few days to a week. It could be very extremely costly for employers as well. Couple that with the fact that some employees will work for 1 to 2 days only and then "no show." Unfortunately, temporarily halting harvest is not a good option either as you have an extremely tight window to complete |

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| harvest. Left too long on the trees, fruit will become overripe. Overripe fruit sent to the warehouse becomes cull or rot which the grower is ultimately charged for. |
| Cannot comply with required respiratory use, only voluntary. We would have to shutdown when it becomes required. Do not change the AQI numbers CA uses, you could be challenged. |
| Outdoor vs Indoor Comments |
| How will outdoor workers be defined? |
| Is there a timeframe for working outdoors? 1hr, 4hr, 8hr, etc. |
| Are any filtration or central air systems going to be required to be considered indoors? Or does the building envelope provide adequate protection from PM 2.5? Is driving a vehicle considered indoors? Machine, machinery, cabs with filtered air? |
| For vehicles CA rule states – Enclosed vehicles in which the air is filtered by a cabin air filter and the employer ensures that windows, doors and other openings are kept closed to minimize contamination by outdoor or unfiltered air. |
| How about new construction? At what point does outdoors become indoors? |
| Exemptions |
| Will there be exemptions during emergency response situations by non EMS? Storm damage, etc., that impacts utilities and poses immediate threat to the public. |
| I raised this in the first discussion but for emergency response, we can expect to respond to damages and outages which will require work outside for unknown durations. We could reasonably expect it to happen during wildfire season as it does multiple times a year. Consider exemptions for this type of work as both gas and electrical workers will have to be exposed to arc flash/flash fire hazards and aside from SCBA's none are rated for this. Damage response can last a few hours to days/weeks (as we saw this year) |
| The CA rule has an exemption for controlled burns and initial attack – does this fall under Chapter 305? Respond to put fire out quickly – again CA has exemptions. |
| Do you foresee any exemptions in this rule? For example, workers who spend a majority of their time inside a vehicle (truck drivers, package delivery drivers, etc.)? Will there be language associated with that? |
| Utility Work |
| I am with Pacific Power and we incorporated the CA law across WA and CA. We had no cell signal during the fires when we were trying to put poles back up. |
| Have you considered about utility workers who are required to wear FR clothing? N95 masks present their own hazards to utility workers in the case of an arc flash. |
| Similar question as the one from Tony. I work for an electric utility and we must protect workers from arc flash hazards when working within the minimum approach distance (MAD) of high voltage electricity. Restoration often has to occur during wildfire events |
| Please consider all the PPE that our high voltage utility workers have to wear and some restrictions that this industry has when working on energized lines. Must be FR! |
| Other Comments |
| Will there be a possibility of employer's doing their own site monitoring? |

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| Will the scope address walking into work when on the company premise? Will the rule address any sensitive populations? |
| It is important to look at toxicology behind different standards or recommendations. The DEQ/EPA are likely based on all age groups, 0 -100+ years old of all health levels. And knowing the EPA, they are based on 24 hours per day, 7 days per week exposure. OSHA's PEL's are based on an 8 hour per day exposure of (mainly) healthy adult workers age 18 – 65 or so. The OSHA PEL is possibly outdated but we do need to base our standard on good toxicology for workers. |
| Are we supposed to add a section for wildfire smoke to our current APP? |
| Would rules differ from industry to industry? |
| Since we have this presentation in Spanish, can it be available in Russian? |
| Is the slide presentation being recorded? Will it be available at LNI site? |
| Has the draft been released to the public? |
| There were questions asked/submitted in the first meeting - are answers available now or are you waiting until this is completed today. Where will answers be posted. Thanks |
| Is there going to be a way for farmworkers to report when they feel they re put at risk? |
| Has L&I done any specific air monitoring related to wildfire smoke and how it may affect different industries? |
| In regards to making sure the rule covers only wildfire smoke and not just bad air quality, I would like to see it specifically stated in the rule that this rule only applies to poor air quality caused by wildfires to prevent any ambiguity that could come up with the phrase "reasonably expected to be..." |
| If adding a HEPA unit is all that's required to show a good faith effort to reduce exposures, is there a number based on AC/Hr. or sized based on room size or simply providing something is satisfactory. This is similar to the issue with COVID and having older HVAC systems that don't support MERV 13 or higher filtration levels. I'm not suggesting an answer but when you add costs (initial and ongoing) like this it has to be part of the consideration. You get into the same thing with vehicle cab filtration - how much, how often and who decides when to change them out? I'm not asking for an answer but wanted you to consider this when you start talking about engineering controls. |