From: Ringo, Shawn Patrick

To: Ireland, Cynthia D. (LNI); Gaw, David (LNI)

Subject: Wildfire Smoke Rule

Date: Wednesday, August 17, 2022 11:10:24 AM

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External Email

Good Morning Cynthia and David,

I hope you are well. We have found the emergency wildfire smoke rule workable, although we have generally not been in a position where action has been required so far this summer, fingers crossed. It also aligns with a program we have had in place for 7 years or so, including the voluntary use of N95s. During the stakeholder meeting last week, there was some discussion about the potential for lowering the PM 2.5 concentration for when respirators would be required. If L&I opts to lower the threshold for requiring respirator use below the current 555 ug/m3, please consider allowing for some alternatives to requiring respiratory protection, such as reducing the amount of time employees work outdoors when air quality deteriorates e.g. employee rotation, which has been a long established methodology for reducing employee exposures to airborne contaminants i.e. TWA calculations. This would preclude a requirement to enroll a good number of additional employees in WSU's respiratory protection program, which even for a program as robust and efficient as ours at WSU, where we can have a new participant typically medically cleared in less than 24 hours and have qualitative fit testing apparatus on-site, would present additional challenges to program management. Among the challenges are those workers that wear facial hair, and it is economically burdensome to require us to purchase PAPRs for all those participants. Many of those same employees belong to a bargaining unit. Please also understand that we depend upon outdoor workers to maintain our facilities during smoke events so that many other employees may work comfortably inside. An example for allowable employee exposures given PM 2.5 concentrations could be (with voluntary use of N95s):

| PM 2.5 ug/m3 | AQI | Hours worked outdoors with voluntary use of N95s |
|--------------|-----|--|
| 250.5 | 300 | 6 cumulative hours |
| 350.5 | 400 | 4 cumulative hours |
| 500 | 500 | 0 hours, respiratory protection required |

Note, if conditions change from those identified above and drop below the target concentrations, it may be permissible for employees to continue working outdoors for longer periods of time.

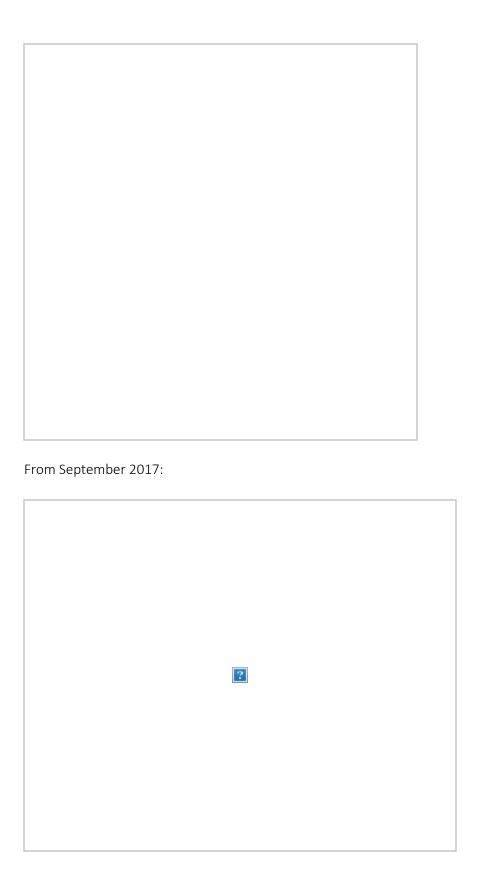
Please understand, part of our smoke program from the onset has been to have our employees with health conditions placing them at higher risk of smoke exposure aka in "Sensitive Groups" reach out to their supervisor and Human Resources in advance of wildfire smoke season for an accommodation so they can be assigned indoor work during smoke events when available. The

accommodation requirement could also be incorporated into the rule and reduce the risk of smoke exposure for those individuals.

Finally, a few additional considerations, smoke conditions entering into the hazardous category are somewhat rare, here is some monitoring data from September 2020 when we were affected by the smoke from the California and Oregon fires (the area shaded gray is hazardous referencing the AQI):



From August 2018:



Finally, for what it is worth, because we have the ability to quantitatively fit test our employees on N95s and we have done a lot of it since COVID, AND because N95s are some of the most finicky respirators to successfully fit test people upon, we have had incredible success with the 3M 9210+ fitting the broadest range of people with small to large faces.

Thank you for this opportunity for input, and your time,



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