Response to proposed new fit testing protocol
Docket No. OSHA-2015-0015 , RIN – 1218-AC94

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Background and Experience:
I own a company that works with Occupational Health clinics in four states. I work with and consult with nurses and technicians about their respirator fit programs and some of the challenges they have in conducting a quantitative respirator fit test. I am familiar with both the TSI Portacount fit tester and the OHD Qauntifit fit tester.

Concerns:
Will the two proposed protocols generate reproducible fit-testing results?
There is concern whether the TSI Portacount is accurately detecting leaks with the current protocols. With the difficulties maintaining particle counts as discussed below, to take out steps and to shorten the sampling times for each step is troubling.

Will the two proposed protocols reliability identify respirators with unacceptable fit as effectively as the quantitative fit testing protocols, including the OSHA-approved standard PortaCount protocol, already listed in appendix A of the Respiratory Protection Standard?

I have a concern with the new Fast Full and Fast Half protocols, that there is only a short 5 second ambient test conducted at the start of the test and at the end of the test. In the real world, not in an enclosed testing chamber, technicians have a difficult time reaching and maintaining ambient particle counts. Many times they have to burn candles or incense in order to maintain their particle count. Other employees are moving about, doors are opened and closed and ventilation systems are running that can cause the particles to fluctuate. With airflows constantly moving about, to only check once at the beginning and again at the end of the fit test cannot adequately monitor the fluctuations that can occur during the test. If the ambient count is significantly decreased during any step in the testing protocol, then that step could result in an erroneous pass when a leak was present simply because there were not enough particles that could make their way into the mask.

Does the elimination of certain fit-test exercises (e.g., normal breathing, deep breathing, talking) required by the existing OSHA-approved standard PortaCount protocol impact the acceptability of the proposed protocols?

On page 9 of the proposal, it is stated that talking out loud was one of three "most critical" exercises in determining overall fit factor. On page 10 it was eliminated as being less critical. It was stated that talking out loud rarely was the lowest fit factor for poor fitting respirators but it is not indicated whether it still produced a failing fit factor. Simply because it wasn't the worst doesn't mean it wasn't a contributing failing factor. With good fitting respirators, talking out loud was the exercise that produced the lowest fit factor. Talking out loud clearly causes a lower

fit factor with good fitting respirators, it doesn't make sense to eliminate this exercise simply because it wasn't the worst contributing exercise with poor fitting respirators.

Conclusion:

Because the of concerns I have stated above I believe that the proposed new fit testing protocol Not be accepted.