

Interoffice Communication

TO: Safety & Occupational Health Advisory Council
FROM: L. A. Legendre - EOHS, Houston 
DATE: November 7, 1988
SUBJECT: OSHA BENZENE STANDARD INTERPRETATION

Attached is a report from ORC on a meeting they had with OSHA representatives regarding interpretation of the benzene standard. Please see to distribution of this information as you deem necessary within your operating area. Our office is available to answer any questions.

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Attachment

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Organization Resources
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October 7, 1988

Memorandum

To: ORC Occupational Safety and Health Group
ORC Western Occupational Safety and Health Group

From: Elizabeth A. Treanor *Beth*
Rebecca L. Daiss *Becky*

Subject: Report of the August 17, 1988 Meeting Between the
Benzene Task Force and OSHA Representatives

Since OSHA will not be developing a compliance directive for the Benzene Standard, you may be interested in the enclosed letter and summary of a meeting of ORC member companies and OSHA representatives.

The August 17 meeting was of a question and answer session between members of the ORC Benzene Task Force and OSHA representatives Chuck Gordon, DOL Office of the Solicitor, Melody Sands, and Jennifer Courtney, Office of Health Compliance Assistance. The meeting was informal, so responses do not necessarily reflect official OSHA policy and should not be cited as such. Attached is a letter from Tom Shepich, Directorate of Compliance programs, in response questions submitted by ORC in February, 1988. Some of the interpretations may be of interest.

There were several questions which OSHA representatives were unable to answer definitively. ORC has requested written clarification on these issues.

The following is ORC's account of the question and answer session with OSHA officials.

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1. Q. How will an OSHA compliance officer determine whether a work area is a regulated area under the Benzene Standard?
- A. Generally, rather than actually collecting samples, the compliance officer will look at the company's monitoring data to determine whether an area is a regulated area and should be demarcated. If the compliance officer has reason to believe, based on employer monitoring data or circumstantial information, that an area should be

4. Q. Table 1 - Respiratory Protection for Benzene (34564) does not indicate whether the airborne concentrations listed in the left column are TWAs or instantaneous exposure levels. Are the levels TWAs?
- A. Although it is not indicated in the Table, OSHA intended the table to provide guidance for respiratory protection against 8 hr. TWA exposures. As a rule, OSHA does not sample for instantaneous exposures.
5. Q. Table 1, referred to in question 4 does not include respiratory protection specifically for STELS. Therefore, according to Table 1, the use of half-mask respirators against STELS exceeding 10 ppm is prohibited. Typically, a half-mask respirator is assigned a protection factor of 10 and considered protective against STELS less than or equal to 50 ppm.
- A. OSHA representatives could not officially confirm that the table applies to the 15 minute STEL, but stated tentatively that the standard method of determining permissible use of respirators (Table 1) was intended to apply to STELS and that OSHA's omission of STELS was an oversight. OSHA officials suggested that ORC submit this question in writing to get a formal response from OSHA.
6. Q. Is OSHA aware of any effective test for determining benzene breakthrough in respirators?
- A. OSHA is not currently doing any testing to ascertain end of service life indicators for respirators and is not aware of work being done elsewhere.
7. Q. The standard provides no information regarding STEL monitoring methods. What are the Agency's recommended methods for short term monitoring? Does OSHA allow the use of passive dosimeter badges for STEL monitoring?
- A. Other than increasing the flow rate of the sampling pump, OSHA uses the same method for monitoring STELS as it uses for 8 hr. TWA monitoring. To get a more detailed response OSHA should be requested to elaborate in writing. However, the Agency has not developed a standard method for STEL monitoring at this point.
- Regarding passive badges, it is currently up to the employer to demonstrate the adequacy of the sampling method being used since OSHA does not address STEL monitoring methods in the standard.
8. Q. Is the cancer warning language of the Benzene Standard required on refinery containers, i.e., reaction vessels and gasoline storage tanks?

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have been lowered through the installation of engineering controls or improved work practices and the employer can demonstrate this to OSHA, medical surveillance can be terminated. However, OSHA would advise that the employer continue to monitor for at least an additional year, in order to show that lower levels aren't due to normal fluctuations in monitoring.

11. Q. Can OSHA provide more guidance on when emergency examinations are required?
- A. The emergency examination requirement is necessarily subjective. The employer is to provide the exam to employees who are exposed in "emergency situations." There is no specific level which defines an emergency situation. The employer is expected to rely on common sense and the judgement of company medical personnel and industrial hygienists in identifying emergency situations. The intent of the provision is to ensure that employers and employees are aware of and addressing any adverse health effects which may result from emergency exposures.
12. Q. Can an employer make a determination that a facility is exempt from the Benzene Standard based on monitoring data from identical facilities or is initial monitoring required at every site?
- A. Representative monitoring is not valid basis for claiming exemption of a facility from the requirements of the standard. Initial monitoring must be conducted at each location.
13. Q. Under the mandatory quantitative fit testing protocol, use of the PORTACOUNT fit tester is prohibited. Is OSHA reassessing this provision based on the effectiveness and ease of use of PORTACOUNT testers? Will an employer be cited for using PORTACOUNT testers for quantitative fit testing?
- A. OSHA has not revised its mandatory specifications for quantitative fit testing of respirators to include the PORTACOUNT method. Therefore, use of PORTACOUNT testers is a technical violation of the standard. OSHA would likely issue an other-than-serious citations for use of the PORTACOUNT. However, OSHA is aware of the potential benefits and validity of PORTACOUNT testers. The office of Health Standards will be assessing of the adequacy of PORTACOUNT as part of its rulemaking on Respiratory Protection. Also Lawrence Livermore Laboratory is currently testing PORTACOUNTs. Based on these findings OSHA will make a formal determination regarding use of PORTACOUNT testers under the Benzene Standard.

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