DEPARTMENT OF LABOR

Occupational Safety and Health Administration

29 CFR Parts 1910, 1915 and 1926

[Docket No. H–041]

Occupational Exposure to 1,3-Butadiene

AGENCY: Occupational Safety and Health Administration (OSHA), Department of Labor.

ACTION: Proposed Rule; Limited reopening of the rulemaking record.

SUMMARY: The Occupational Safety and Health Administration is reopening the record for the proposed revision of the 1,3-Butadiene (BD) standard to solicit public comment on a joint labor/industry agreement dated January 29, 1996, recommending that OSHA reduce the permissible exposure limits and expanding on some provisions that were addressed in OSHA's 1990 proposal (55 FR 32736, August 10, 1990). In addition, OSHA is seeking comment on possible changes in the medical surveillance requirements, including reliance on a medical questionnaire that would replace some of the proposed yearly medical examinations and reduce the need for medical removal protection. Finally, the Agency is entering into the rulemaking record four documents that have become available since the submission deadline of December 13, 1991, set by the Administration Law Judge following the rulemaking hearings.

DATES: Written comments must be postmarked by April 8, 1996.

ADDRESSES: Comments are to be submitted in quadruplicate to the Docket Office, Docket No. H–041, U.S. Department of Labor, Room N–2634, 200 Constitution Avenue, NW., Washington, DC 20210. Telephone (202) 219–7894. Written comments limited to 10 pages or less in length may also be transmitted by facsimile to (202) 219–5046, provided the original and 3 copies are sent to the Docket Office thereafter.

Copies of the labor/industry agreement and submissions to the record along with other information cited in this notice are available for inspection and copying in the Docket Office. For electronic copies of this notice, contact the Labor News Bulletin Board (202) 219–4784; or OSHA's WebPage on the Internet at http://www.osha.gov/. For news releases, fact sheets, and other short documents, contact OSHA FAX at (900) 555–3400 at $1.50 per minute.

FOR FURTHER INFORMATION CONTACT: Anne C. Cyr, Office of Information and Consumer Affairs, Occupational Safety and Health Administration, U.S. Department of Labor, Room N–3647, 200 Constitution Avenue, NW., Washington, DC 20210. Telephone (202) 219–8148.

SUPPLEMENTARY INFORMATION:

I. Background

A. History

The present OSHA standard for BD requires employers to ensure that employee exposure does not exceed 1,000 ppm determined as an 8-hour time weighted average (TWA) (29 CFR 1910.1000, Table Z–1).

In 1983, the American Conference of Governmental Industrial Hygienists (ACGIH) classified BD as an animal carcinogen based on a National Toxicology Program (NTP) animal study showing that BD caused cancer in rodents. The ACGIH recommended that employee exposures be reduced to or below 10 ppm (8-hr TWA). In 1984, the United Rubber, Cork, Linoleum and Plastic Workers of America (URW), the Oil, Chemical and Atomic Workers, and the American Federation of Labor and Congress of Industrial Organizations (AFL–CIO) petitioned OSHA to issue an Emergency Temporary Standard (ETS) of 1 ppm or less. OSHA denied the petition for an ETS, but began collecting information in order to institute rulemaking under Section 6(b) of the Occupational Safety and Health Act. The Environmental Protection Agency (EPA) was also studying the health hazards of BD. That agency's analysis found that BD was a probable human carcinogen and that workplace exposures presented an unreasonable risk of injury to human health. Because exposures to BD occurred primarily in the workplace, EPA, in accordance with section 9(a) of the Toxic Substances Control Act, referred BD to OSHA to give this Agency an opportunity to regulate the chemical under the OSH Act. (50 FR 41393; October 10, 1985).

On August 10, 1990, OSHA issued a notice of proposed rulemaking (55 FR 32736) to address the significant occupational risks of BD-induced health effects. The proposed rule required employers to reduce occupational exposure to BD to 2 ppm as an 8-hour TWA and 10 ppm as a 15-minute short term exposure limit (STEL), and to institute ancillary measures, such as employee training and medical surveillance, for further protection of BD-exposed workers.

OSHA convened public hearings in Washington, DC, on January 15–23, 1991, and in New Orleans, Louisiana, on February 20–21–1991. The post-hearing period for the submission of briefs, arguments and summations was to end July 22, 1991, but was extended by the Administrative Law Judge to December 13, 1991, in order to give participants time to review new data on low-dose exposure submitted by NTP and a quantitative risk assessment done by NIOSH.

B. The Labor/Industry Agreement

To assist OSHA in issuing a final rule for BD, representatives of the major unions and industry groups involved in the production and use of BD submitted a voluntary agreement reached by the parties dated January 29, 1996, on provisions that should be included in the standard. The letter transmitting the agreement was signed by J.L. McGraw for the International Institute of Synthetic Rubber Producers, Michael J. Wright for the United Steelworkers of America and Michael Sprinker for the International Chemical Workers Union. The committee that worked on the issues also included Joseph Holtshouser of the Goodyear Tire and Rubber Company, Carolyn Phillips of the Shell Chemical Company, representing the Chemical Manufacturers Association, Robert Richmond of the Firestone Synthetic Rubber and Latex Company, and Louis Beliczsky (formerly of the URW) and James L. Frederick of the United Steelworkers. OSHA is pleased that labor and industry have joined together to recommend regulatory requirements that can lead to lower and less frequent exposures for employees who work with or near BD.

The agreement proposes a significant change in the permissible exposure limits, additional provisions for exposure monitoring, and an exposure goal program designed to reduce exposures below the action level. It also proposes other modifications to the scope, respiratory protection, communication of hazards, medical surveillance, and start-up dates sections of the final rule. The agreement also assumes that items not specifically addressed in the agreement will remain as proposed. OSHA reprints the provisions below in order to allow the public an opportunity to provide the Agency with comments.

1, 3-Butadiene

Recommended Revisions to OSHA's Proposed Standard Scope and Application: Exclude [from the final rule's coverage]:

1. Products with BD concentration of 0.1% or less by volume unless objective data shows exposure could exceed the

AL [action level] or STEL [short-term exposure level].

2. Storage, transportation, distribution or sale of BD in intact containers or pipelines, except for labeling requirements and emergency response provisions.

Definitions: Objective Data means monitoring data or mathematical calculations or modeling based on the chemical and physical properties of the material, stream or product.

Limits:

1. Action level (AL) of 0.5 ppm [parts per million] (ppm) as an 8-hour TWA.

2. Permissible Exposure Limit (PEL) of 1 ppm as an 8 hr TWA.

3. Short Term Exposure Limit (STEL) of 5 ppm [sampled] for 15 minutes.

Exposure Monitoring:

1. Establish a baseline of at least 8 samples. The samples may be taken in a single year, so long as at least one sample is taken in each quarter, and no two are taken within 30 days of each other. The employer may utilize monitoring data from the previous two years to satisfy the initial monitoring requirement as long as [the] process has been consistent.

2. After the baseline has been established, monitoring is [required]:

a. Every 6 months if exposure exceeds PEL or STEL.

b. Annually if exposure is at or above the AL but below the PEL.

Additional Monitoring: May use direct reading instruments for any spills, leaks, etc. to ensure that levels have returned to normal following an emergency.

Employee Notification: Five (5) day [period for] employee notification of sampling results.

Exposure Goal Program: The employer shall institute an ''exposure goal program'' which attempts to limit exposure levels to or below the action level. No exposure goal program is required if all exposures are at or below the action level. The program shall include the following controls, unless the employer can demonstrate that they will not be feasible or effective.

a. A leak prevention, detection, and repair program.

b. A program for maintaining the integrity of local exhaust ventilation systems.

c. The use of pump exposure control technology such as, but not limited to, double-sealed or seal-less pumps.

d. Gauging devices designed to limit employee exposure, such as magnetic gauges on rail cars.

e. Unloading devices designed to limit employee exposure, such as vapor return systems.

f. Maintaining control rooms below the AL by use of engineering controls.

Respirators:

1. Use when exposure may exceed PEL or STEL.

2. Fit testing as per ANSI standards.

3. Allow ½ face negative pressure respirators for certain applications.

Medical Surveillance:

1. Medical evaluations for all employees exposed above the PEL for 30 days or more, or above the AL for 60 days or more.

2. Medical evaluations for formerly-exposed employees whose work history includes exposure as defined in (1) for 10 year or more, or exposure above 10 ppm as an 8-hr TWA for more than 30 days in any past year, so long as they continue to be employed by the employer responsible for the exposure, or a successor owner.

3. An exam with respect to acute effects as quickly as possible in the case of exposure from a significant release.

4. Appropriate exams for respirator wearers in accord with 29 C.F.R. 1910.134.

5. Medical evaluations include an update of medical history [and] a CBC [complete blood count] including platelets. Additional tests are deemed appropriate by the examining physician. Remove references to fertility evaluations.

Communication of BD Exposure to Employees: Modify warning signs and label requirements to eliminate reproductive/lung/kidney reference.

Employee Training: Required annually or with change of job when exposure may reach PEL, STEL or AL.

Dates: Employer may take up to two (2) years from effective dates to implement engineering controls.

Appendices: OSHA should also correct certain misstatements in Appendices A and B:

Appendix A, Part IV(B): The sentence; ''Any clothing which becomes wet with liquid BD should be removed immediately * * *'' should be deleted. BD evaporates too rapidly to cause wet clothing.

Appendix B, Part II(A)(6): The statement that ''vapors of BD will burn without the presence of air or other oxidizers'' is incorrect.

Appendix B, Part III(A)(3): The suggestion that spills of small quantities of BD should be absorbed on paper towels is unnecessary, as the BD will evaporate too quickly.

Appendix B, Parts VI (C) and (D): Sanitation requirements concerning agents to remove BD from the skin, and separate lockers, are unnecessary, since liquid BD evaporates rapidly and will not contaminate skin or clothing for any significant time.

Not also the odor threshold discrepancy between Appendix B, Part II(C) and Appendix D, Part 1.1.4. The correct value is 0.45 ppm, based on the AIHA publication, ''Odor Thresholds for Chemicals with Established Occupational Health Standards,'' (1989).

OSHA believes the agreement contains a number of provisions that will greatly improve worker health and therefore should be included in the final BD standard. However, prior to inclusion, the Agency must be certain of the meaning and effect of the provisions and then translate the recommendations into regulatory language. To this end, OSHA seeks comment on the following issues addressed by labor and industry in their agreement:

1. *Definitions.* When objective data are relied upon to exclude products with a BD concentration of 0.1% or less, what should be the source of the objective data? Should conditions be placed upon the monitoring or modeling methods used to obtain or project exposure levels in order to ensure accuracy?

2. *Exposure Monitoring.* OSHA is concerned that the taking of 8 samples to establish a baseline may not be an effective use of scarce industrial hygiene resources in that the number of samples taken may be far less important than the quality of the samples used to characterize the exposure of BD employees. Are there other ways to improve OSHA's traditional approach of monitoring at least the one most exposed employee in each job classification on each shift? Please comment.

3. *Exposure Goal Program.* OSHA requests comment on whether the requirements for specific engineering controls rather than a performance approach could lead to situations in which (1) better engineering controls are discouraged or ignored, (2) the required controls may not be applicable, or (3) the required controls may not be needed because work practices will achieve the necessary reduction. How could these situations be avoided?

4. *Respirators.* ANSI does not have final protocols for respirator fit-testing. OSHA is in the process of completing its generic respirator standard that will include protocols for fit-testing. (OSHA Docket No. H–049; 59 FR 5884, November 15, 1994). Do workers exposed to BD need special provisions for respirator fit-testing? If so, what provisions are necessary and why? What applications are appropriate for half-mask negative pressure respirators? Should the standard specify tasks or exposures where the respirators are or are not appropriate?

5. *Medical Surveillance.* OSHA is concerned that some at-risk employees

will not be afforded the protection of medical surveillance because eligibility for inclusion requires exposures of 60 days above the AL or 30 days above the PEL, requirements that are more restrictive than the comparable requirements in OSHA standards for acrylonitrile, (any exposure above the AL); benzene, (30 days above AL or 10 above PELs); and cadmium, (30 days above AL). OSHA also seeks comment on whether the medical requirements in the respirator standard for general industry, 29 CFR 1910.134(b)(10), may be inadequate to protect workers with occupational exposure to BD. In addition, should each employee whose exposure to BD requires the use of a respirator be included in the medical surveillance program, regardless of duration of exposure? Finally, by requiring employees whose former exposures were above the action level for 60 days or the PEL for 30 days to have had 10 years of exposure before being included in medical surveillance, would the standard improperly exclude employees whose exposures occurred over a lesser period of time, say 5 years, but whose risk may be comparable?

6. *Communication of BD Exposure to Employees.* OSHA is concerned that eliminating the reference to potential reproductive hazard from warning signs and labels would not provide sufficient information to employees. Toxicological studies cited in the proposal indicate BD is a potential reproductive hazard. For example, ovarian atrophy and testicular atrophy were observed in mice exposed to BD. OSHA is considering requiring the warning signs and labels to contain the phrase ''Cancer and Potential Reproductive Hazard.''

C. Additional Issues

OSHA is also seeking comment on the following issues that were neither addressed by labor and industry in their agreement, nor fully aired at the rulemaking hearing:

1. OSHA proposed to define ''Emergency'' as:

> * * * any occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment that may or does result in an unexpected significant release of BD.

OSHA is considering limiting the emergency releases to those that are uncontrolled, so that the last phrase of the definition would read: ''* * * that may or does result in an uncontrolled significant release of BD.'' Does this addition clarify what situations OSHA considers to be emergencies? Does the term ''significant release'' give adequate guidance to employers as to how much BD must be released in order to constitute an emergency?

2. OSHA is considering the adequacy of a less burdensome medical surveillance program for BD-exposed workers. The program would consist of an initial medical examination, repeated every third year, and an annual CBC along with a yearly questionnaire focusing on the hematopoietic and reproductive systems. OSHA requests comment on whether this approach is sufficiently protective. OSHA is also seeking comment on whether medical removal protection provisions similar to those contained in the Benzene Standard (29 CFR 1910.1028) are appropriate for BD. Removal would be predicated upon a medical determination that the employee should not continue to be exposed to BD.

3. Where employers rely on objective data to exempt them from monitoring responsibilities, OSHA is considering requiring these employers to keep the data for as long as such data continue to be relied upon. Is this the appropriate length of time to keep such data?

D. Additional Submissions to the BD Docket

OSHA is submitting the following reports to the BD Docket:

(1) *Abstracts from International Symposium: Evaluation of Butadiene and Isoprene Health Risks,* June 27–29, 1995, Blaine, Washington; (2) Delzell, E., N. Sathiakumar, M. Macaluso, M. Hovinga, R. Larson, F. Barbone, C. Beall, P. Cole, *A Follow-up Study of Synthetic Rubber Workers,* October 2, 1995; (3) Santos-Burgua, C., G. Matanoski, S. Zeger, L. Schwartz, ''Lymphohematopoietic Cancer in Styrene-Butadiene Polymerization Workers,'' *American Journal of Epidemiology,* Volume 136, 1992, pp. 843–844; and (4) M. Sorsa, K. Peltonen, H. Vainio, and K. Hemminki (eds.), *Butadiene and Styrene Assessment of Health Hazards,* International Agency for Research on Cancer Scientific Publication No. 127, Lyon, France, 1993.

II. Public Participation

Comments

Written comments regarding the issues raised by this notice must be postmarked by April 8, 1996. Four copies of these comments must be submitted to the Docket Office, Docket No. HS–041), U.S. Department of Labor, 200 Constitution Avenue, NW, Washington, DC 20210. Written comments limited to 10 pages or less in length may also be transmitted by facsimile to (202) 219–5046, provided the original and 3 copies are sent to the Docket Office thereafter. All materials submitted will be available for inspection and copying at the above address. Materials previously submitted to the Docket for this rulemaking need not be re-submitted.

III. Authority

This document was prepared under the direction of Joseph A. Dear, Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, 200 Constitution Avenue, NW, Washington, D.C. 20210. It is issued pursuant to section 6(b) of the Occupational Safety and Health Act (29 U.S.C. 655), and 29 CFR part 1911.

Signed at Washington, D.C., this 5th day of March, 1996.

Joseph A. Dear,

Assistant Secretary of Labor.

[FR Doc. 96–5519 Filed 3–7–96; 8:45 am]

BILLING CODE 4510–26–M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AP–FRL–5437–6]

RIN 2060–AE04

National Emission Standards for Hazardous Air Pollutants for Source Category: Pulp and Paper Production

AGENCY: Environmental Protection Agency (EPA).

ACTION: Announcement of availability of supplemental information, proposed rule, and opening of the public comment period for these actions.

SUMMARY: This action presents an assessment of supplemental information on 1993 proposed National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Pulp and Paper Production Source Category and announces proposed additional sources in that source category not covered by the 1993 proposed standards. These additional sources include mechanical mills, secondary fiber mills, nonwood fiber mills, and paper machines. This action also announces availability of data for public review that is in addition to data previously announced in a February 22, 1995 Notice of Data Availability (60 FR 9813). In addition, this action announces the availability and requests comments on new emission factors developed using that data.

This action sets forth the most significant changes EPA is considering, but is not inclusive of all changes likely