##. Proposed Amendments.

For the reasons discussed in the preamble, the Occupational Safety and Health Administration proposes to amend 29 CFR parts 1910, 1915 and 1926 as set forth below:

PART 1910—OCCUPATIONAL SAFETY AND HEALTH STANDARDS [AMENDED]

Subpart Z--[Amended]

13. Revise the authority citation for subpart Z to read as follows:

AUTHORITY: Secs. 4, 6, 8, of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); Secretary of Labor's Order No. 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), 1-90 (55 FR 9033), 6-96 (62 FR 111), 3-2000 (65 FR 50017), 5-2002 (67 FR 65008), or 5-2007 (72 FR 31159), as applicable; and 29 CFR part 1911.

All of subpart Z issued under section 6(b) of the Occupational Safety and Health Act of 1970, except those substances that have exposure limits listed in Tables Z-1, Z-2, and Z-3 of 29 CFR 1910.1000. The latter were issued under section 6(a) (29 U.S.C. 655(a)).

Section 1910.1000, Tables Z-1, Z-2 and Z-3 also issued under 5 U.S.C. 553, Section 1910.1000 Tables Z-1, Z-2, and Z-3 but not under 29 CFR part 1911 except for the arsenic (organic compounds), benzene, cotton dust, and chromium (VI) listings.

Section 1910.1001 also issued under section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704) and 5 U.S.C. 553.

Section 1910.1002 also issued under 5 U.S.C. 553, but not under 29 U.S.C. 655 or 29 CFR part 1911.

Sections 1910.1018, 1910.1029, and 1910.1200 also issued under 29 U.S.C. 653. Section 1910.1030 also issued under Pub. L. 106-430, 114 Stat. 1901.

§1910.1001 Asbestos.

- 14. Amend §1910.1001 as follows:
 - A. Remove paragraph (i)(5);
- B. Redesignate paragraphs (j)(1) through (j)(4) as paragraphs (j)(2) through (j)(5);
- C. Revise paragraphs (h)(2)(iv), (h)(3)(vi), the newly redesignated paragraphs (j)(4), (j)(5), and the introductory text of (j)(6).
 - D. Add new paragraph (j)(1);

The revisions, with new designations, read as follows:

- * * * * *
 - (h) * * *
 - (2) * * *
- (iv) The employer shall ensure that containers of contaminated protective devices or work clothing, which are to be taken out of change rooms or the workplace for cleaning, maintenance or disposal, bear labels in accordance with paragraph (j) of this section.
 - (3) * * *
- (vi) The employer shall ensure that contaminated clothing is transported in sealed impermeable bags, or other closed, impermeable containers, and labeled in accordance with paragraph (j) of this section.
- * * * * *
 - (j) * * *

- (1) <u>Hazard Communication General.</u> The employer shall include asbestos in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of asbestos and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (j)(7) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer and lung effects.
 - (2) [Redesignated from (j)(1)].
 - (3) [Redesignated from (j)(2)].
 - (4) Warning signs.
- (i) <u>Posting.</u> Warning signs shall be provided and displayed at each regulated area. In addition, warning signs shall be posted at all approaches to regulated areas so that an employee may read the signs and take necessary protective steps before entering the area.
 - (ii) Sign specifications.
- (A) The warning signs required by paragraph (j)(4)(i) of this section shall bear the following legend:

DANGER ASBESTOS MAY CAUSE CANCER CAUSES DAMAGE TO LUNGS AUTHORIZED PERSONNEL ONLY

(B) In addition, where the use of respirators and protective clothing is required in the regulated area under this section, the warning signs shall include the following:

WEAR RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING IN THIS AREA

(iii) The employer shall ensure that employees working in and contiguous to regulated areas comprehend the warning signs required to be posted by paragraph (j)(4)(i)

of this section. Means to ensure employee comprehension may include the use of foreign languages, pictographs and graphics.

(iv) At the entrance to mechanical rooms/areas in which employees reasonably can be expected to enter and which contain ACM and/or PACM, the building owner shall post signs which identify the material which is present, its location, and appropriate work practices which, if followed, will ensure that ACM and/or PACM will not be disturbed. The employer shall ensure, to the extent feasible, that employees who come in contact with these signs can comprehend them. Means to ensure employee comprehension may include the use of foreign languages, pictographs, graphics, and awareness training.

(5) Warning labels.

- (i) <u>Labeling</u>. Labels shall be affixed to all raw materials, mixtures, scrap, waste, debris, and other products containing asbestos fibers, or to their containers. When a building owner or employer identifies previously installed ACM and/or PACM, labels or signs shall be affixed or posted so that employees will be notified of what materials contain ACM and/or PACM. The employer shall attach such labels in areas where they will clearly be noticed by employees who are likely to be exposed, such as at the entrance to mechanical room/areas. Signs required by paragraph (j) of this section may be posted in lieu of labels so long as they contain information required for labeling.
- (ii) <u>Label specifications</u>. In addition to the requirements of paragraph (j)(1), the employer shall ensure that labels of bags or containers of protective clothing and equipment, scrap, waste, and debris containing asbestos fibers include the following information:

DANGER CONTAINS ASBESTOS FIBERS

MAY CAUSE CANCER CAUSES DAMAGE TO LUNGS DO NOT BREATHE DUST

(6) The provisions for labels and for safety data sheets required by paragraph (j) of this section do not apply where: * *

§1910.1003 13 Carcinogens (4-nitrobiphenyl, etc.).

- 15. Amend §1910.1003 as follows:
- A. Revise the last sentence in paragraph (c)(4)(v) to remove the words "paragraphs (e)(2), (3), and (4)" and add the words "paragraph (e);"
 - B. Revise the heading of paragraph (e) to "Communication of hazards;"
- C. Remove paragraphs (e)(1) through paragraphs (e)(3) and add new (e)(1) through (e)(2);
 - D. Redesignate paragraphs (e)(4) and (e)(5) as (e)(3) and (e)(4).

The revisions read as follows:

- (e) <u>Communication of hazards</u>. (1) <u>Hazard communication</u>. The employer shall include the carcinogens listed below in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of the carcinogens listed below and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (e)(3) of this section. The employer shall ensure that at least the hazards listed for the following chemicals are addressed:
 - 4-Nitrobiphenyl: Cancer;

alpha-Naphthylamine: Cancer: skin irritation, and acute toxicity effects;

Methyl chloromethyl ether: Cancer; skin ,eye and respiratory effects; acute toxicity effects; and flammability;

3,3'-Dichlorobenzidine (and its salts): Cancer and skin sensitization;

Bis-Chloromethyl ether: Cancer; skin, eye, and respiratory tract effects; acute toxicity effects; and flammability;

Beta-Naphthylamine: Cancer and acute toxicity effects;

Benzidine: Cancer and acute toxicity effects;

4-Aminodiphenyl: Cancer

Ethyleneimine: Cancer; mutagenicity; skin and eye effects; liver effects; kidney effects; acute toxicity effects; and flammability;

Beta-Propiolactone: Cancer; skin irritation; eye effects; and acute toxicity effects;

- 2-Acetylaminofluorene: Cancer;
- 4-Dimethylaminoazo-benzene: Cancer; skin effects; and respiratory tract irritation;
 - N-Nitrosodimethylamine: Cancer; liver effects; and acute toxicity effects;
- (2) <u>Signs</u>. (i) The employer shall post entrances to regulated areas with signs bearing the legend:

DANGER (CHEMICAL IDENTIFICATION) MAY CAUSE CANCER AUTHORIZED PERSONNEL ONLY

(ii) The employer shall post signs at entrances to regulated areas containing operations covered in paragraph (c)(5) of this section. The signs shall bear the legend:

DANGER

(CHEMICAL IDENTIFICATION) MAY CAUSE CANCER WEAR AIR SUPPLIED HOODS, IMPERVIOUS SUITS, AND PROTECTIVE EQUIPMENT IN THIS AREA AUTHORIZED PERSONNEL ONLY

(iii) Appropriate signs and instructions shall be posted at the entrance to, and exit from, regulated areas, informing employees of the procedures that must be followed in entering and leaving a regulated area.

* * * * *

§1910.1017 Vinyl chloride.

- 16. Amend §1910.1017 by revising paragraph (l) to read as follows:
- * * * * *
- (l) Communication of hazards. (1) Hazard communication. The employer shall include vinyl chloride in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of vinyl chloride and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (j) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer; central nervous system effects; liver effects; blood effects; and flammability.
- (2) <u>Signs</u>. (i) The employer shall post entrances to regulated areas with legible signs bearing the legend:

DANGER
VINYL CHLORIDE
MAY CAUSE CANCER
AUTHORIZED PERSONNEL ONLY

(ii) The employer shall post signs at areas containing hazardous operations or where emergencies currently exist. The signs shall be legible and bear the legend:

DANGER VINYL CHLORIDE MAY CAUSE CANCER WEAR RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING IN THIS AREA AUTHORIZED PERSONNEL ONLY

(3) <u>Labels</u>. (i) In addition to the other requirements in paragraph (l), the employer shall ensure that labels for containers of polyvinyl chloride resin waste from reactors or other waste contaminated with vinyl chloride are legible and include the following information:

CONTAMINATED WITH VINYL CHLORIDE MAY CAUSE CANCER

(4) No statement shall appear on or near any required sign, label, or instruction which contradicts or detracts from the effect of any required warning, information, or instruction.

* * * * *

§1910.1018 Inorganic arsenic.

- 17. Amend §1910.1018 by revising paragraphs (j)(2)(vii) and (p) as follows:
- * * * * *
 - (j) * * *
 - (2) * * *
- (vii) In addition to the communication requirements in paragraph (p), the employer shall ensure that the containers of contaminated protective clothing and equipment in the workplace or which are to be removed from the workplace are labeled

and that the labels include the following information: DANGER: CONTAMINATED WITH INORGANIC ARSENIC. MAY CAUSE CANCER. DO NOT EAT, DRINK, OR SMOKE. DO NOT REMOVE DUST BY BLOWING OR SHAKING.

* * * * *

- (p) Communication of hazards. (1) Hazard communication. (i) The employer shall include inorganic arsenic in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of inorganic arsenic and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (o) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer; liver effects; skin effects; respiratory irritation; nervous system effects; and acute toxicity effects.
- (ii) The employer shall ensure that no statement appears on or near any sign or label required by this paragraph which contradicts or detracts from the meaning of the required sign or label.
- (2) <u>Signs</u>. (i) The employer shall post signs demarcating regulated areas bearing the legend:

DANGER INORGANIC ARSENIC MAY CAUSE CANCER DO NOT EAT, DRINK OR SMOKE WEAR RESPIRATORY PROTECTION IN THIS AREA AUTHORIZED PERSONNEL ONLY

(ii) The employer shall ensure that signs required by this paragraph are illuminated and cleaned as necessary so that the legend is readily visible.

§1910.1025 Lead.

18. Amend §1910.1025 to revise paragraph (g)(2)(vii) and paragraph (m) to read as follows:

- * * * * *
 - (g) * * *
 - (2) * *
- (vii) The employer shall ensure that labels of bags or containers of contaminated protective clothing and equipment include the following information: DANGER: COTHING AND EQUIPMENT CONTAMINATED WITH LEAD. MAY DAMAGE FERTILITY OR THE UNBORN CHILD. CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM. DO NOT EAT, DRINK OR SMOKE WHEN HANDLING. DO NOT REMOVE DUST BY BLOWING OR SHAKING
- * * * * * *
- (m) Communication of hazards. (1) Hazard communication. The employer shall include lead in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of lead and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (l) of this section. The employer shall ensure that at least the following hazards are addressed: Reproductive/developmental toxicity; central nervous system effects; kidney effects; blood effects; and acute toxicity effects.
- (2) <u>Signs</u>. (i) The employer shall post the following warning signs in each work area where the PEL is exceeded:

DANGER LEAD

MAY DAMAGE FERTILITY OR THE UNBORN CHILD CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM DO NOT EAT, DRINK OR SMOKE IN THIS AREA

- (ii) The employer shall ensure that no statement appears on or near any sign required by this paragraph which contradicts or detracts from the meaning of the required sign.
- (iii) The employer shall ensure that signs required by this paragraph are illuminated and cleaned as necessary so that the legend is readily visible.

* * * * *

§1910.1026 Chromium (VI).

19. Amend §1910.1026 to revise paragraphs (h)(2)(iv), (j)(3)(ii) and (l)(1) to read as follows:

- * * * * *
- (h) * * *
- (2) * * *
- (iv) The employer shall ensure that bags or containers of contaminated protective clothing or equipment that are removed from change rooms for laundering, cleaning, maintenance, or disposal are labeled in accordance with the requirements of the Hazard Communication standard, 29 CFR 1910.1200.
- * * * * *
 - (j) * * *
 - (3) * * *

05/03/09 - Draft -

(ii) The employer shall ensure that bags or containers of waste, scrap, debris, and any other materials contaminated with chromium (VI) that are consigned for disposal are labeled in accordance with the Hazard Communication Standard, 29 CFR 1910.1200.

* * * * *

(1) * * *

(1) <u>Hazard communication</u>. The employer shall include chromium (VI) in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of chromium (VI) and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (I)(2) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer, eye irritation, and skin sensitization.

* * * * *

§1910.1027 Cadmium

20. Amend §1910.1027 to revise paragraphs (i)(2)(iv), (k)(7), (m)(1), (m)(2)(ii), (m)(3)(i), and (m)(3)(ii) to read as follows:

* * * * *

- (i) * * *
- (2) * * *

(iv) The employer shall ensure that bags or containers of contaminated protective clothing and equipment that are to be taken out of the change rooms or the workplace for laundering, cleaning, maintenance or disposal are labeled in accordance with paragraph

(m) of this section. As a minimum, the employer shall ensure that labels on containers of contaminated protective clothing and equipment include the following information:

DANGER CONTAINS CADMIUM MAY CAUSE CANCER CAUSES DAMAGE TO LUNGS AND KIDNEYS AVOID CREATING DUST

- * * * * * * (k) * * *
- (7) Waste, scrap, debris, bags, containers, personal protective equipment, and clothing contaminated with cadmium and consigned for disposal shall be collected and disposed of in sealed impermeable bags or other closed, impermeable containers. These bags and containers shall be labeled in accordance with paragraph (m) of this section.
- * * * * * * (m) * * *
- (1) <u>Hazard communication</u>. The employer shall include cadmium in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of cadmium and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (m)(4) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer; lung effects; kidney effects; and acute toxicity effects.
 - (2) * * *

(ii) Warning signs required by paragraph (m)(2)(i) of this section shall bear the following legend:

DANGER CADMIUM MAY CAUSE CANCER CAUSES DAMAGE TO LUNGS AND KIDNEYS WEAR RESPIRATORY PROTECTION IN THIS AREA AUTHORIZED PERSONNEL ONLY

- (3) * * *
- (i) Shipping and storage containers containing cadmium or cadmium compounds shall bear appropriate warning labels, as specified in paragraph (m)(1) of this section.
- (ii) The warning labels for waste, scrap, or debris shall include at least the following information:

DANGER CONTAINS CADMIUM MAY CAUSE CANCER

* * * * *

§1910.1028 Benzene

- 21. Amend §1910.1028 to revise the heading of paragraph (j) and the regulatory text of paragraphs (j)(1) and (j)(2) to read as follows:
- * * * * *
- (j) Communication of hazards. (1) Hazard communication. The employer shall include benzene in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of benzene and to safety data sheets, and is trained in accordance with the provisions of HCS and (j)(3) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer; central nervous system

effects; blood effects; aspiration; skin, eye, and respiratory tract irritation; and flammability,

Note to paragraph (j)(1) of this section: There is no requirement to label pipes.

(2) <u>Signs</u>. The employer shall post signs at entrances to regulated areas. The signs shall bear the following legend:

DANGER BENZENE MAY CAUSE CANCER HIGHLY FLAMMABLE LIQUID AND VAPOR DO NOT SMOKE WEAR RESPIRATORY PROTECTION IN THIS AREA AUTHORIZED PERSONNEL ONLY

* * * * *

§1910.1029 Coke oven emissions.

- 22. Amend §1910.1029 to revise paragraph (1) to read as follows:
- * * * * *
- (1) Communication of hazards. (1) Hazard communication. The employer shall include coke oven emissions in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of chemicals and substances associated with coke oven processes and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (k) of this section. The employer shall ensure that at least the following hazard is addressed: Cancer.
 - (2) Signs.
 - (i) The employer shall post signs in the regulated area bearing the legend:

DANGER COKE OVEN EMISSIONS MAY CAUSE CANCER DO NOT EAT, DRINK OR SMOKE WEAR RESPIRATORY PROTECTION IN THIS AREA AUTHORIZED PERSONNEL ONLY

(ii) In addition, the employer shall post signs in the areas where the permissible exposure limit is exceeded bearing the legend:

WEAR RESPIRATORY PROTECTION IN THIS AREA

- (iii) The employer shall ensure that no statement appears on or near any sign required by this paragraph which contradicts or detracts from the effects of the required sign.
- (iv) The employer shall ensure that signs required by this paragraph are illuminated and cleaned as necessary so that the legend is readily visible.
- (3) <u>Labels</u>. In addition to the requirements in (l)(1) of this paragraph, the employer shall ensure that labels of containers of contaminated protective clothing and equipment include the following information:

CONTAMINATED WITH COKE EMISSIONS MAY CAUSE CANCER DO NOT EAT, DRINK, OR SMOKE DO NOT REMOVE DUST BY BLOWING OR SHAKING

* * * * *

§1910.1043 Cotton dust.

- 23. Amend §1910.1043 to revise paragraph (j) as follows:
- * * * * *
- (j) <u>Signs</u>. The employer shall post the following warning sign in each work area where the permissible exposure limit for cotton dust is exceeded:

DANGER COTTON DUST CAUSES DAMAGE TO LUNGS (BYSSINOSIS) WEAR RESPIRATORY PROTECTION IN THIS AREA

*	*	*	*	*

§1910.1044 1,2-dibromo-3-chloropropane

24. Amend §1910.1044 to revise paragraphs (j)(2)(v), (k)(1)(iii)(\underline{b}), and (o) to read as follows:

- * * * * *
 - (j) * * *
 - (2) * * *
- (v) Containers of DBCP contaminated protective devices or work clothing which are to be taken out of change rooms or the workplace for cleaning, maintenance or disposal, shall bear labels in accordance with paragraph (o) of this section. As a minimum, the employer shall ensure that labels for containers of contaminated protective devices or work clothing include the following information: CONTAMINATED WITH 1,2-Dibromo-3-chloropropane (DBCP), MAY CAUSE CANCER.
 - * * * * * *
 - (k) * * *
 - (1) * * *
 - (iii) * * *
- (b) Portable vacuum units used to collect DBCP may not be used for other cleaning purposes and shall be labeled as prescribed by paragraph (o) of this section.

- (o) Communication of hazards. (1) General. (i) Hazard communication. The employer shall include DBCP in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of DBCP and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (n) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer; reproductive effects; liver effects; kidney effects; central nervous system effects; skin, eye and respiratory tract irritation; and acute toxicity effects.
- (ii) The employer shall ensure that no statement appears on or near any sign or label required by this paragraph which contradicts or detracts from the meaning of the required sign or label.

(2) <u>Signs.</u>

The employer shall post signs to clearly indicate all regulated areas. These signs shall bear the legend:

DANGER 1,2-Dibromo-3-chloropropane MAY CAUSE CANCER WEAR RESPIRATORY PROTECTION IN THIS AREA AUTHORIZED PERSONNEL ONLY

(3) The employer shall ensure that the precautionary labels required by this paragraph are readily visible and legible.

* * * * *

§1910.1045 Acrylonitrile.

25. Amend §1910.1045 to revise paragraph (p) as follows:

- (p) Communication of hazards. (1) Hazard communication. The employer shall include AN in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of AN and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (o) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer; central nervous system effects; liver effects, skin sensitization, skin, respiratory, and eye irritation; acute toxicity effects; and flammability.
- * * * * * *
- (2) <u>Signs</u>. The employer shall post signs to clearly indicate all workplaces where AN concentrations exceed the permissible exposure limits. The signs shall bear the following legend:

DANGER ACRYLONITRILE (AN) MAY CAUSE CANCER RESPIRATORY PROTECTION MAY BE REQURED IN THIS AREA AUTHORIZED PERSONNEL ONLY

* * * * *

(3) <u>Labels</u>. The employer shall ensure that precautionary labels are affixed to all containers of liquid AN and AN-based materials not exempted under paragraph (a)(2) of this section. The employer shall ensure that the labels remain affixed when the materials are sold, distributed, or otherwise leave the employer's workplace.

* * * * *

§1910.1047 Ethylene oxide.

26. Amend §1910.1047 to revise paragraphs (j)(1) and (j)(2) as follows:

* * * * *

- (j) Communication of hazards.
- (1) <u>Hazard communication</u>. The employer shall include EtO in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of EtO and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (j)(3) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer; reproductive effects; mutagenicity; central nervous system; skin sensitization; skin, eye and respiratory tract irritation; acute toxicity effects; and flammability.
 - (2) Signs and labels.
- (i) <u>Signs</u>. The employer shall post and maintain legible signs demarcating regulated areas and entrances or access ways to regulated areas that bear the following legend:

DANGER ETHYLENE OXIDE MAY CAUSE CANCER MAY DAMAGE FERTILITY OR THE UNBORN CHILD RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING MAY BE REQUIRED IN THIS AREA AUTHORIZED PERSONNEL ONLY

(ii) <u>Labels</u>. The employer shall ensure that labels are affixed to all containers of EtO whose contents are capable of causing employee exposure at or above the action level or whose contents may reasonably be foreseen to cause employee exposure above the excursion limit, and that the labels remain affixed when the containers of EtO leave

the workplace. For the purposes of this paragraph, reaction vessels, storage tanks, and pipes or piping systems are not considered to be containers.

Note to paragraph (j)(2): The labeling requirements under this section do not apply where EtO is used as a pesticide, as such term is defined in the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 et seq.), when it is labeled pursuant to that Act and regulations issued under that Act by the Environmental Protection Agency.

* * * * *

§1910.1048 Formaldehyde.

- 27. Amend §1910.1048 as follows:
 - A. Revise paragraphs (e)(1); (h)(2)(ii); (j)(4) and (m);
 - B. Add paragraphs (h)(2)(ii)(A) and (B).

The revisions read as follows:

- * * * * * * (e) * * *
- (1) The employer shall establish regulated areas where the concentration of airborne formaldehyde exceeds either the TWA or the STEL and post all entrances and access ways with signs bearing the following legend:

DANGER FORMALDEHYDE MAY CAUSE CANCER CAUSES SKIN, EYE, AND RESPIRATORY IRRITATION AUTHORIZED PERSONNEL ONLY

(h) * * * (2) * * *

- (ii) When formaldehyde-contaminated clothing and equipment is ventilated, the employer shall establish storage areas so that employee exposure is minimized.
- (A) <u>Signs</u>. Storage areas for contaminated clothing and equipment shall have signs bearing the following legend:

DANGER FORMALDEHYDE-CONTAMINATED [CLOTHING] EQUIPMENT MAY CAUSE CANCER CAUSES SKIN, EYE AND RESPIRATORY IRRITATION DO NOT BREATHE VAPOR DO NOT GET ON SKIN

(B) <u>Labels</u>. The employer shall ensure containers for contaminated clothing and equipment and storage areas are labeled in accordance with the Hazard Communication standard, 29 CFR 1910.1200, and shall, as a minimum, include the following:

DANGER FORMALDEHYDE-CONTAMINATED [CLOTHING] EQUIPMENT MAY CAUSE CANCER CAUSES SKIN, EYE, AND RESPIRATORY IRRITATION DO NOT BREATHE VAPOR DO NOT GET ON SKIN

- * * * * * * (j) * * *
- (4) Formaldehyde-contaminated waste and debris resulting from leaks or spills shall be placed for disposal in sealed containers bearing a label warning of formaldehyde's presence and of the hazards associated with formaldehyde. The employer shall ensure that the labels are in accordance with paragraph (m) of this section.

- (m) Communication of hazards. (1) Hazard communication. The employer shall include formaldehyde in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of formaldehyde and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (n) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer; skin and respiratory sensitization; eye, skin and respiratory tract irritation; acute toxicity effects; and flammability.
- (i) The employer must include chemicals and substances associated with formaldehyde gas, all mixtures or solutions composed of greater than 0.1 percent formaldehyde, and materials capable of releasing formaldehyde into the air at concentrations reaching or exceeding 0.1 ppm, in the hazard communication program.
- (ii) In making the determinations of anticipated levels of formaldehyde release, the employer may rely on objective data indicating the extent of potential formaldehyde release under reasonably foreseeable conditions of use.
- (2) In addition to the requirements in paragraphs (m)(1) and (m)(1)(i) of this section, for materials listed in paragraph (m)(1)(i) capable of releasing formaldehyde at levels above 0.5 ppm, labels shall appropriately address all hazards as defined in paragraph (d) of §1910.1200 and Appendices A and B to §1910.1200, including cancer and respiratory sensitization, and shall contain the hazard statement "may cause cancer."

* * * * *

§1910.1050 Methylenedianiline.

28. Amend §1910.1050 as follows:

- A. Revise paragraph (i)(2)(v) and the heading of paragraph (k);
- B. Remove paragraphs (k)(1) and (k)(2);
- C. Redesignate paragraphs (k)(3) and (k)(4) as (k)(4) and (k)(5);
- D. Add new paragraphs (k)(1) through (k)(3).

The revisions read as follows:

- * * * * *
 - (i) * * *
 - (2) * * *
- (v) Containers of MDA-contaminated protective work clothing or equipment, which are to be taken out of change rooms or the workplace for cleaning, maintenance, or disposal, shall bear labels warning of the hazards of MDA. The employer shall ensure that labels are consistent with requirements in paragraph (k) and that labels include at least the following information:

DANGER CONTAINS METHYLENEDIANILINE (MDA) MAY CAUSE CANCER CAUSES DAMAGE TO THE LIVER

- * * * * *
 - (k) Communication of hazards.
- (1) <u>Hazard communication</u>. The employer shall include MDA in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of MDA and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (k)(4) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer; liver effects; and skin sensitization.

(2) <u>Signs</u>. The employer shall post and maintain legible signs demarcating regulated areas and entrances or access ways to regulated areas that bear the following legend:

DANGER MDA MAY CAUSE CANCER CAUSES DAMAGE TO THE LIVER RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING MAY BE REQUIRED IN THIS AREA AUTHORIZED PERSONNEL ONLY

- (3) <u>Safety data sheets (SDS)</u>. In meeting the obligation to provide safety data sheets, employers shall make appropriate use of the information found in Appendices A and B to §1910.1050.
 - (4) Information and training. * * *
 - (5) Access to training material. * * *
- * * * * *

§1910.1051 1,3-Butadiene.

- 29. Amend §1910.1051 to revise paragraph (1)(1) as follows:
- * * * * *
 - (1) * * *
- (1) <u>Hazard communication</u>. The employer shall include BD in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of BD and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (1)(2) of this section. The employer shall ensure that at

least the following hazards are addressed: Cancer; eye and respiratory tract irritation; center nervous system effects; and flammability.

* * * * *

30. Amend §1910.1052 to revise paragraph (k) as follows:

* * * * *

(k) <u>Hazard communication</u>. The employer shall include MC in the workplace hazard communication program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of MC and to safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (l) of this section. The employer shall provide information on at least the following hazards: Cancer, cardiac effects (including elevation of carboxyhemoglobin), central nervous system effects, liver effects, and skin and eye irritation.

* * * * *

PART 1915 -- OCCUPATIONAL SAFETY AND HEALTH STANDARDS FOR SHIPYARD EMPLOYMENT

33. Revise the authority citation for part 1915 to read as follows:

AUTHORITY: Section 41, Longshore and Harbor Workers' Compensation Act (33 U.S.C. 941); Sections. 4, 6, and 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); Secretary of Labor's Order No. 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), 1-90 (55 FR 9033), 6-96 (62 FR 111), 3-2000 (65 FR 50017), 5-2002 (67 FR 65008), or 5-2007 (72 FR 31160) as applicable; 29 CFR Part 1911.

Section 1915.120 and 1915.152 of 29 CFR also issued under 29 CFR part 1911.

Subpart Z-- [Amended]

§1915.1001 Asbestos.

34. Amend § 1915.1001 to revise paragraphs (i)(3), (k)(7), and (k)(8) to read as follows:

- * * * * * *
 - (i) * * *
- (3) The employer shall ensure that contaminated clothing is transported in sealed impermeable bags, or other closed, impermeable containers, and labeled in accordance with paragraph (k) of this section.
- * * * * *
 - (k) * * *
 - (7) Hazard Communication.

- (i) Labels shall be affixed to all products containing asbestos and to all containers containing such products, including waste containers. Where feasible, installed asbestos products shall contain a visible label.
- (ii) General The employer shall include asbestos in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of asbestos and safety data sheets, and is trained in accordance with the provisions of the HCS and paragraph (k)(9) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer and lung effects.
 - (iii) The provisions for labels required in this paragraph do not apply where:
- (A) Asbestos fibers have been modified by a bonding agent, coating, binder, or other material, provided that the manufacturer can demonstrate that, during any reasonably foreseeable use, handling, storage, disposal, processing, or transportation, no airborne concentrations of asbestos fibers in excess of the permissible exposure limit and/or excursion limit will be released, or
 - (B) Asbestos is present in a product in concentrations less than 1.0 percent.
 - (8) <u>Signs</u>.
- (i) Warning signs that demarcate the regulated area shall be provided and displayed at each location where a regulated area is required to be established by paragraph (e) of this section. Signs shall be posted at such a distance from such a location that an employee may read the signs and take necessary protective steps before entering the area marked by the signs.
 - (ii) The warning signs required by this paragraph shall bear the following legend:

DANGER ASBESTOS MAY CAUSE CANCER CAUSES DAMAGE TO LUNGS AUTHORIZED PERSONNEL ONLY

(iii) In addition, where the use of respirators and protective clothing is required in the regulated area under this section, the warning signs shall include the following:

WEAR RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING IN THIS AREA

- (iv) The employer shall ensure that employees working in and contiguous to regulated areas comprehend the warning signs required to be posted by this paragraph. Means to ensure employee comprehension may include the use of foreign languages, pictographs, and graphics.
- (v) When a building/vessel owner or employer identifies previously installed PACM and/or ACM, labels or signs shall be affixed or posted so that employees will be notified of what materials contain PACM and/or ACM. The employer shall attach such labels in areas where they will clearly be noticed by employees who are likely to be exposed, such as at the entrance to mechanical room/areas. Signs required by paragraph (k)(6) of this section may be posted in lieu of labels so long as they contain information required for labeling. The employer shall ensure, to the extent feasible, that employees who come in contact with these signs or labels can comprehend them. Means to ensure employee comprehension may include the use of foreign languages, pictographs, graphics, and awareness training.

* * * * * *

1915.1026 Chromium (VI).

05/03/09 - Draft -

35. Amend §1915.1026 to revise paragraphs (g)(2)(iv) and (j)(1) to read as follows:

- * * * * *
 - (g) * * *
 - (2) * * *
- (iv) The employer shall ensure that bags or containers of contaminated protective clothing or equipment that are removed from change rooms for laundering, cleaning, maintenance, or disposal are labeled in accordance with the requirements of the Hazard Communication standard, 29 CFR 1910.1200.
- * * * * * *
 - (j) * * *
- (1) <u>Hazard communication</u>. The employer shall include chromium (VI) in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of chromium (VI) and safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (j)(2) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer; skin sensitization; and eye irritation.

PART 1926--SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION Subpart D--[Amended]

36. The authority citation for subpart D is revised to read as follows:

AUTHORITY: Section 3704 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701); Sections 4, 6, and 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, and 657); and Secretary of Labor's Order No. 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), 1-90 (55 FR 9033), 6-96 (62 FR 111), 3-2000 (65 FR 50017), 5-2002 (67 FR 65008), or 5-2007 (72 FR 31159), as applicable; and 29 CFR part 1911.

Sections 1926.58, 1926.59, 1926.60, and 1926.65 also issued under 5 U.S.C. 553 and 29 CFR part 1911.

Section 1926.62 of 29 CFR also issued under section 1031 of the Housing and Community Development Act of 1992 (42 U.S.C. 4853).

Section 1926.65 of 29 CFR also issued under section 126 of the Superfund Amendments and Reauthorization Act of 1986, as amended (29 U.S.C. 655), and 5 U.S.C. 553.

§1926.60 Methylenedianiline.

37. Amend §1926.60 to revise paragraph (j)(2)(v), (l)(1), and (l)(2) to read as follows:

(j) * * *

(2)

*

(v) Containers of MDA-contaminated protective work clothing or equipment that are to be taken out of decontamination areas or the workplace for cleaning, maintenance, or disposal, shall bear labels warning of the hazards of MDA. The employer shall ensure that labels are consistent with requirements in paragraph (l) and that labels include at least the following information:

DANGER CONTAINS METHYLENEDIANILINE (MDA) MAY CAUSE CANCER CAUSES DAMAGE TO THE LIVER

- * * * * *
 - (1) * * *
- (1) <u>Hazard communication</u>. The employer shall include MDA in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of MDA and safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (1)(3) of this section. The employer shall ensure that at least the following hazards are addressed: Cancer; liver effects; and skin sensitization.
- (2) The employer shall post and maintain legible signs demarcating regulated areas and entrances or access ways to regulated areas that bear the following legend:

DANGER MDA MAY CAUSE CANCER CAUSES DAMAGE TO THE LIVER RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING MAY BE REQUIRED IN THIS AREA AUTHORIZED PERSONNEL ONLY

§1926.62 Lead.

38. Amend §1926.62 to revise paragraph (g)(2)(vii), the heading of paragraph (l) and paragraph (l)(1)(i) and paragraph (m) to read as follows:

- * * * * *
 - (g) * * *
 - (2) * * *
- (vii) The employer shall ensure that the containers of contaminated protective clothing and equipment required by paragraph (g)(2)(v) of this section are labeled as follows:

DANGER: CLOTHING AND EQUIPMENT CONTAMINATED WITH LEAD.

MAY DAMAGE FERTILITY OR THE UNBORN CHILD

CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM

DO NOT EAT, DRINK, OR SMOKE WHEN HANDLING

DO NOT REMOVE DUST BY BLOWING OR SHAKING

- * * * * *
 - (1) Communication of Hazards
 - (1) * * *
- (i) <u>Hazard communication</u>. The employer shall include lead in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of lead and safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (l). The employer shall ensure that at least the following hazards are addressed: Reproductive/developmental toxicity; central nervous system effects; kidney effects; blood effects; and acute toxicity effects.

- (m) Signs.
- (1) General.
- (i) The employer shall post the following warning signs in each work area where an employees exposure to lead is above the PEL.

DANGER LEAD

MAY DAMAGE FERTILITY OR THE UNBORN CHILD CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM DO NOT EAT, DRINK OR SMOKE IN THIS AREA

- (ii) The employer shall ensure that no statement appears on or near any sign required by this paragraph that contradicts or detracts from the meaning of the required sign.
- (iii) The employer shall ensure that signs required by this paragraph are illuminated and cleaned as necessary so that the legend is readily visible.
- (iv) The employer may use signs required by other statutes, regulations or ordinances in addition to, or in combination with, signs required by this paragraph.

* * * * *

Subpart Z--[Amended]

44. Revise the authority citation for subpart Z to read as follows:

AUTHORITY: Section 3704 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701 et seq.); Sections 4, 6, and 8 of the Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); and Secretary of Labor's Order No. 12-71 (36 FR 8754), 8-76 (41 FR 25059), 9-83 (48 FR 35736), 1-90 (55 FR 9033), 6-96 (62 FR 111), 3-2000 (65 FR 50017), 5-2002 (67 FR 65008), or 5-2007 (72 FR 31159), as applicable; and 29 CFR part 1911.

05/03/09 - Draft -

Sections 1926.1101 and 1926.1127 also issued under 5 U.S.C. 553.

Section 1926.1102 of 29 CFR not issued under 29 U.S.C. 655 or 29 CFR part 1911; also issued under 5 U.S.C. 553.

§1926.1101 Asbestos.

45. Amend §1926.1101 as follows:

A. Redesignate paragraph (k)(1) as (k)(1)(i) and add a new heading to paragraph (k)(1);

- B. Add new paragraph (k)(1)(ii);
- C. Revise paragraphs (k)(2)(i) and (k)(3)(i) by changing the reference in the last line from "(k)(1)" to "(k)(1)(i);"
 - D. Revise paragraphs (k)(7)(ii)(A) and (B), and (k)(8)(ii) and (iii).

The revisions read as follows:

- * * * * *
 - (k) * * *
 - (1) <u>Hazard communication.</u>
 - (i) Redesignated from (k)(1).
- (ii) The employer shall include asbestos in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of asbestos and safety data sheets, and is trained in accordance with the provisions of HCS and paragraphs (k)(9) and (10) of this section. The employer shall provide information on at least the following hazards: Cancer and lung effects

- (7) * * *
- (i) * * *
- (ii) * * *
- (A) The warning signs required by paragraph (k)(7) of this section shall bear the following information.

DANGER ASBESTOS MAY CAUSE CANCER CAUSES DAMAGE TO LUNGS AUTHORIZED PERSONNEL ONLY

(B) In addition, where the use of respirators and protective clothing is required in the regulated area under this section, the warning signs shall include the following:

WEAR RESPIRATORY PROTECTION AND PROTECTIVE CLOTHING IN THIS AREA

- (iii) * * *
- (8) * * *
- (i) * * *
- (ii) The employer shall ensure that such labels comply with paragraphs (k).
- (iii) The employer shall ensure that labels of bags or containers of protective clothing and equipment, scrap, waste, and debris containing asbestos fibers bear the following information:

DANGER
CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATH DUST

05/03/09 - Draft -

* * * * *

§1926.1126 Chromium.

46. Amend §1926.1126 to revise paragraphs (g)(2)(iv) and (j)(1) to read as follows:

- * * * * *
 - (g) * * *
 - (2) * * *
- (iv) The employer shall ensure that bags or containers of contaminated protective clothing or equipment that are removed from change rooms for laundering, cleaning, maintenance, or disposal shall be labeled in accordance with the requirements of the Hazard Communication Standard, 29 CFR 1910.1200. The employer shall ensure that the labels state the following hazards: Cancer, eye irritation, and skin sensitization.
- * * * * * *
 - (j) * * *
- (1) <u>Hazard communication</u>. The employer shall include chromium (VI) in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of chromium and safety data sheets, and is trained in accordance with the provisions of 29 CFR 1910.1200 and paragraph (j)(2) of this section. The employer shall provide information on at least the following hazards: Cancer; skin sensitization; and eye irritation.

05/03/09 - Draft -

§1926.1127 Cadmium.

47. Amend §1926.1127 to revise paragraphs (i)(2)(iv), (k)(7), and (m)(1), (m)(2)(ii), and (m)(3)(i) and (ii).

The revisions read as follows:

* * * * * * (i) * * *

(2)

- (iv) The employer shall ensure that containers of contaminated personal protective clothing and equipment that are to be taken out of the change rooms or the workplace for laundering, cleaning, maintenance or disposal shall bear labels in accordance with paragraph (m) of this section. As a minimum, labels on containers of contaminated protective clothing and equipment must state MAY CAUSE CANCER, CAUSES DAMAGE TO LUNGS AND KIDNEYS. AVOID CREATING DUST.
- * * * * * *

 (k) * * *
- (7) Waste, scrap, debris, bags, and containers, personal protective equipment and clothing contaminated with cadmium and consigned for disposal shall be collected and disposed of in sealed impermeable bags or other closed, impermeable containers. These bags and containers shall be labeled in accordance with paragraph (i)(2)(iv) of this section.
- * * * * * * (m) * * *

- (1) <u>Hazard communication</u>. The employer shall include cadmium in the program established to comply with the Hazard Communication Standard (HCS) (29 CFR 1910.1200). The employer shall ensure that each employee has access to labels on containers of cadmium and safety data sheets, and is trained in accordance with the provisions of HCS and paragraph (m)(4) of this section. The employer shall provide information on at least the following hazards: Cancer; lung effects; kidney effects; and acute toxicity effects
 - (2) * * *
 - (i) * * *
- (ii) Warning signs required by paragraph (m)(2)(i) of this section shall bear the following information:

DANGER CADMIUM MAY CAUSE CANCER CAUSES DAMAGE TO LUNGS AND KIDNEYS WEAR RESPIRATORY PROTECTION IN THIS AREA AUTHORIZED PERSONNEL ONLY

- (iii) * * *
- (3) * * *
- (i) Shipping and storage containers containing cadmium and cadmium compounds shall bear appropriate warning labels, as specified in paragraph (m)(1) of this section.
- (ii) The warning labels for waste, scrap, or debris shall include at least the following information:

DANGER
CONTAINS CADMIUM
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS AND KIDNEYS
CAN CAUSE LUNG AND KIDNEY DISEASE

05/03/09 - Draft -

AVOID CREATING DUST