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 Part Number: 1910 Part Title: Occupational Safety and Health Standards Subpart: Z Subpart Title: Toxic and Hazardous Substances Standard Number: 1910.1450 App B Title: References (Non-Mandatory) 		
The following references are provided to assist the employer in the development of a Chemical Hygiene Plan. The materials li offered as non-mandatory guidance. References listed here do not imply specific endorsement of a book, opinion, technique specific solution for a safety or health problem. Other references not listed here may better meet the needs of a specific labo Materials for the development of the Chemical Hygiene Plan:	e, policy or a	
1. American Chemical Society, Safety in Academic Chemistry Laboratories, 4th edition, 1985.		
2. Fawcett, H.H. and W.S. Wood, Safety and Accident Prevention in Chemical Operations, 2nd edition, Wiley-Interscience, Ne	ew York, 1982.	
3. Flury, Patricia A., Environmental Health and Safety in the Hospital Laboratory, Charles C. Thomas Publisher, Springfield IL,	1978.	
4. Green, Michael E. and Turk, Amos, Safety in Working with Chemicals, Macmillan Publishing Co., NY, 1978.		
5. Kaufman, James A., Laboratory Safety Guidelines, Dow Chemical Co., Box 1713, Midland, MI 48640, 1977.		
 Mational Institutes of Health, NIH Guidelines for the Laboratory use of Chemical Carcinogens, NIH Pub. No. 81-2385, GPO, 20402, 1981. 	, Washington, DC	
7. National Research Council, Prudent Practices for Disposal of Chemicals from Laboratories, National Academy Press, Washin	gton, DC, 1983.	
 National Research Council, Prudent Practices for Handling Hazardous Chemicals in Laboratories, National Academy Press, N 1981. 	Washington, DC,	
9. Renfrew, Malcolm, Ed., Safety in the Chemical Laboratory, Vol. IV, J. Chem. Ed., American Chemical Society, Easlon, PA, 19	981.	
10. Steere, Norman V., Ed., Safety in the Chemical Laboratory, J. Chem. Ed. American Chemical Society, Easlon, PA, 18042, V 1971, Vol. III, 1974.	/ol. I, 1967, Vol. II,	
11. Steere, Norman V., Handbook of Laboratory Safety, the Chemical Rubber Company Cleveland, OH, 1971.		
12. Young, Jay A., Ed., Improving Safety in the Chemical Laboratory, John Wiley & Sons, Inc. New York, 1987.		
(b) Hazardous Substances Information:		
1. American Conference of Governmental Industrial Hygienists, Threshold Limit Values for Chemical Substances and Physical Workroom Environment with Intended Changes, 6500 Glenway Avenue, Bldg. D-7, Cincinnati, OH 45211-4438.	Agents in the	
 Annual Report on Carcinogens, National Toxicology Program U.S. Department of Health and Human Services, Public Health Government Printing Office, Washington, DC, (latest edition). 	h Service, U.S.	
3. Best Company, Best Safety Directory, Vols. I and II, Oldwick, N.J., 1981.		
4. Bretherick, L., Handbook of Reactive Chemical Hazards, 2nd edition, Butterworths, London, 1979.		
5. Bretherick, L., Hazards in the Chemical Laboratory, 3rd edition, Royal Society of Chemistry, London, 1986.		
6. Code of Federal Regulations, 29 CFR part 1910 subpart Z. U.S. Govt. Printing Office, Washington, DC 20402 (latest edition)).	
7. IARC Monographs on the Evaluation of the Carcinogenic Risk of chemicals to Man, World Health Organization Publications Sheridan Avenue, Albany, New York 12210 (latest editions).	Center, 49	
8. NIOSH/OSHA Pocket Guide to Chemical Hazards. NIOSH Pub. No. 85-114, U.S. Government Printing Office, Washington, E edition).	DC, 1985 (or latest	
9. Occupational Health Guidelines, NIOSH/OSHA. NIOSH Pub. No. 81-123 U.S. Government Printing Office, Washington, DC,	1981.	
10. Patty, F.A., Industrial Hygiene and Toxicology, John Wiley & Sons, Inc., New York, NY (Five Volumes).		
11. Registry of Toxic Effects of Chemical Substances, U.S. Department of Health and Human Services, Public Health Service, Disease Control, National Institute for Occupational Safety and Health, Revised Annually, for sale from Superintendent of doc Printing Office, Washington, DC 20402.		
12. The Merck Index: An Encyclopedia of Chemicals and Drugs. Merck and Company Inc. Rahway, N.J., 1976 (or latest edition	on).	

Exhaust Systems ANSI Z 9.2-1979 American National Standards Institute, N.Y. 1979. 3. Imad, A.P. and Watson, C.L. Ventilation Index: An Easy Way to Decide about Hazardous Liquids, Professional Safety pp 15-18, April 1980. 4. National Fire Protection Association, Fire Protection for Laboratories Using Chemicals NFPA-45, 1982. Safety Standard for Laboratories in Health Related Institutions, NFPA, 56c, 1980.		
(c) Information on Ventilation: 1, American Conference of Governmental Industrial Hygienists Industrial Ventilation (latest edition), 6500 Glenway Avenue, Bldg, D-7, Cincinnati, Ohio 45211-4438. 2, American National Standards Institute, Inc. American National Standards Fundamentals Governing the Design and Operation of Local Exhaust Systems ANSI 2 9.2-1979 American National Standards Institute, N.Y. 1979. 3. Imad, A.P. and Watson, C.L. Ventilation Index: An Easy Way to Decide about Hazardous Liquids, Professional Safety pp 15-18, April 1980. 4. National Fire Protection Association, Fire Protection for Laboratories Using Chemicals NFPA-45, 1982. Safety Standard for Laboratories in Health Related Institutions, NFPA, 56c, 1980. Fire Protection Association, Batterymarch Park, Quincy, MA 02269. 5. Scientific Apparatus Makers Association (SAMA), Standard for Laboratory Fume Hoods, SAMA LF7-1980, 1101 16th Street, NW, Washington, DC 20036. (d) Information on Availability of Referenced Material: 1. American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103. [S5 FR 3327, Jan. 31, 1990; 57 FR 29204, July 1, 1992; 61 FR 5507, Feb. 13, 1996] Mext Standard (1911) Mext Standard; (1911) Preved on of Information Ad Privacy & Security Statement Dicialmers Customer Survey Important Web Ste Notices International Contact Us Explore: B003/2004, Nev; Mathridgen, DC 20210	13. Sax, N.I. Dangerous Properties of Industrial Materials, 5th edition, Van Nostrand Reinhold, NY., 1979.	
A. American Conference of Governmental Industrial Hygienists Industrial Ventilation (latest edition), 6500 Glenway Avenue, Bidg, D-7, Cincinnati, Ohio 45211-4438. 2. American National Standards Institute, IN.Y. 1979. 3. Imad, A.P. and Watson, C.L. Ventilation Index: An Easy Way to Decide about Hazardous Liquids, Professional Safety pp 15-18, April 1980. 4. National Fire Protection Association, Fire Protection for Laboratories Using Chemicals NFPA-45, 1982. Safety Standard for Laboratories in Health Related Institutions, NFPA, 56c, 1980. Fire Protection Association, Batterymarch Park, Quincy, MA 02269. 5. Scientific Apparatus Makers Association, GAMA), Standard for Laboratory Fume Hoods, SAMA LF7-1980, 1101 16th Street, NW., Washington, DC 20036. (d) Information on Availability of Referenced Material: 1. American National Standards Institute (ANSI), 1430 Broadway, New York, NY 10018. 2. American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103. [55 FR 3327, Jan. 31, 1990; 57 FR 29204, July 1, 1992; 61 FR 5507, Feb. 13, 1996] Mext Standard (1911) Regulations (Standards - 29 CFR) - Table of Contents I.S. Opertment of Laboratory I Competent and Standards (MSTM), Versults Standards I unstreament [Disclaimers [Customer Survey] Important Web Site Notices] International [Contact Us U.S. Opertment of Laboratory Competent [Materials [Materials Materials Materials Materials]	14. Sittig, Marshall, Handbook of Toxic and Hazardous Chemicals, Noyes Publications. Park Ridge, NJ, 1981.	
Cincinnati, Ohio 45211-4438. 2. American National Standards Institute, Inc. American National Standards Institute, N.Y. 1979. 3. Imad, A.P. and Watson, C.L. Ventilation Index: An Easy Way to Decide about Hazardous Liquids, Professional Safety pp 15-18, April 1980. 4. National Fire Protection Association, Fire Protection for Laboratories Using Chemicals NFPA-45, 1982. Safety Standard for Laboratories in Health Related Institutions, NFPA, 56c, 1980. Fire Protection Association, Batterymarch Park, Quincy, MA 02269. 5. Scientific Apparatus Makers Association (SAMA), Standard for Laboratory Fume Hoods, SAMA LF7-1980, 1101 16th Street, NW, Washington, DC 20036. (d) Information on Availability of Referenced Material: 1. American National Standards Institute (ANSI), 1430 Broadway, New York, NY 10018. 2. American Society for Testing and Materials (SATM), 1916 Race Street, Philadelphia, PA 19103. [55 FR 3327, Jan. 31, 1990; 57 FR 29204, July 1, 1992; 61 FR 5507, Feb. 13, 1996] [Vext Standard (1911) [Vecepatition of Information Act Privacy & Security Statement Dicdamers Customer Survey Important Web Site Notice International Contact Us US. Department of Labor Coccepational Safety & Jean Material Safety & Jean Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103. [Standard (1911) [Vector Standards - 29 CFR] - Table of Contentis [Preedom of Information Act Privacy & Security Statement Dicdamers Customer Survey Important Web Site Notice International Contact Us [Vector Decomption Safety & Jean Material Safety & Jean Material Jaco Contention Act Privacy & Jean Material Safety & Jean Material Jaco Contention Act Privacy & Jean Material Safety & Jean Material Jaco Contention Act Privacy & Jean Mat	(c) Information on Ventilation:	
Exhaust Systems ANSI Z 9.2-1979 American National Standards Institute, N.Y. 1979. 3. Imad, A.P. and Watson, C.L. Ventilation Index: An Easy Way to Decide about Hazardous Liquids, Professional Safety pp 15-18, April 1980. 4. National Fire Protection Association, Fire Protection for Laboratories Using Chemicals NFPA-45, 1982. Safety Standard for Laboratories in Health Related Institutions, NFPA, 56c, 1980. Fire Protection Guide on Hazardous Materials, 7th edition, 1978. National Fire Protection Association, Batterymarch Park, Quincy, MA 02269. 5. Scientific Apparatus Makers Association (SAMA), Standard for Laboratory Fume Hoods, SAMA LF7-1980, 1101 16th Street, NW, Washington, DC 20036. (d) Information on Availability of Referenced Material: 1. American National Standards Institute (ANSI), 1430 Broadway, New York, NY 10018. 2. American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103. [55 FR 3327, Jan. 31, 1990; 57 FR 29204, July 1, 1992; 61 FR 5507, Feb. 13, 1996] (Next Standard.(1911)) (Preedom of Information Act Privacy & Security Statement Disclaimers Customer Survey Important Web Site Notices International Contact Us U.S. Department of Labor Occupational Safety & Heath Admistration 200 constitution Ave., NV, Washington, DC 20210		
4. National Fire Protection Association, Fire Protection for Laboratories Using Chemicals NFPA-45, 1982. Safety Standard for Laboratories in Health Related Institutions, NFPA, 56c, 1980. Fire Protection Guide on Hazardous Materials, 7th edition, 1978. National Fire Protection Association, Batterymarch Park, Quincy, MA 02269. 5. Scientific Apparatus Makers Association (SAMA), Standard for Laboratory Fume Hoods, SAMA LF7-1980, 1101 16th Street, NW., Washington, DC 20036. (d) Information on Availability of Referenced Material: 1. American National Standards Institute (ANSI), 1430 Broadway, New York, NY 10018. 2. American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103. [55 FR 3327, Jan. 31, 1990; 57 FR 29204, July 1, 1992; 61 FR 5507, Feb. 13, 1996] Next Standard (1911) Regulations (Standards - 29 CFR) - Table of Contents Freedom of Information Act Privacy & Security Statement Distaimers Customer Survey Important Web Site Notices International Contact Us U.S. Department of Labor Occupational Safety & Health Administration 200 Constitution Ave., NW, Washington, DC 20210 Explore: 800-327-0346 (0742) TY: 927-889-8277	2. American National Standards Institute, Inc. American National Standards Fundamentals Governing the Design and Operation of Local Exhaust Systems ANSI Z 9.2-1979 American National Standards Institute, N.Y. 1979.	
Safety Standard for Laboratories in Health Related Institutions, NFPA, 56c, 1980. Fire Protection Guide on Hazardous Materials, 7th edition, 1978. National Fire Protection Association, Batterymarch Park, Quincy, MA 02269. 5. Scientific Apparatus Makers Association (SAMA), Standard for Laboratory Fume Hoods, SAMA LF7-1980, 1101 16th Street, NW., Washington, DC 20036. (d) Information on Availability of Referenced Material: 1. American National Standards Institute (ANSI), 1430 Broadway, New York, NY 10018. 2. American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103. [55 FR 3327, Jan. 31, 1990; 57 FR 29204, July 1, 1992; 61 FR 5507, Feb. 13, 1996] Next Standard (1911) Regulations (Standards - 29 CFR) - Table of Contents Internation Act Privacy & Security Statement Disclaimers Customer Survey Important Web Site Notices International Contact Us U.S. Department of Labor Occupational Safety & Heath Administration 200 Constitution Ave., NW, Washington, DC 2021 Department of Labor Occupational Safety & Heath Administration 200 Constitution Ave., NW, Washington, DC 2021 Department of Labor Occupational Safety & Heath Administration 200 Constitution Ave., NW, Washington, DC 20210 Department of Labor Occupational Safety & Heath Administration 200 Constitution Ave., NW, Washington, DC 20210 Department of Labor Occupational Safety & Heath Administration 200 Constitution Ave., NW, Washington, DC 20210 Department of Labor Occupational Safety & Heath Administration 200 Constitution Ave., NW, Washington, DC 20210 Department of Labor Occupational Safety & Heath Administration 200 Constitution Ave., NW, Washington, DC 20210 Department of Labor Occupational Safety & Heath Administration 200 Constitution Ave., NW, Washington, DC 20210 Department of Labor Occupational Safety & Heath Administration 200 Constitution Ave., NW, Washington, DC 20210 Department of Labor Occupational Safety & Heath Administration 200 Constitution Ave., NW, Washington, DC 20210 Depart	3. Imad, A.P. and Watson, C.L. Ventilation Index: An Easy Way to Decide about Hazardous Liquids, Professional Safety pp 15-18, April 1980.	
Fire Protection Guide on Hazardous Materials, 7th edition, 1978. National Fire Protection Association, Batterymarch Park, Quincy, MA 02269. 5. Scientific Apparatus Makers Association (SAMA), Standard for Laboratory Fume Hoods, SAMA LF7-1980, 1101 16th Street, NW., Washington, DC 20036. (d) Information on Availability of Referenced Material: 1. American National Standards Institute (ANSI), 1430 Broadway, New York, NY 10018. 2. American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103. [55 FR 3327, Jan. 31, 1990; 57 FR 29204, July 1, 1992; 61 FR 5507, Feb. 13, 1996] Next Standard (1911) Regulations (Standards - 29 CFR) - Table of Contents Internation Act Privacy & Security Statement Disclaimers Customer Survey Important Web Site Notices International Contact Us U.S. Department of Labor Occupational Safety & Health Administration 200 Constitution Ave, NW, Washington, DC 20210 Teppinore: 800-321-0544 (6/42) TTY: 877-889-5627	4. National Fire Protection Association, Fire Protection for Laboratories Using Chemicals NFPA-45, 1982.	
National Fire Protection Association, Batterymarch Park, Quincy, MA 02269. 5. Scientific Apparatus Makers Association (SAMA), Standard for Laboratory Fume Hoods, SAMA LF7-1980, 1101 16th Street, NW., Washington, DC 20036. (d) Information on Availability of Referenced Material: 1. American National Standards Institute (ANSI), 1430 Broadway, New York, NY 10018. 2. American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103. [55 FR 3327, Jan. 31, 1990; 57 FR 29204, July 1, 1992; 61 FR 5507, Feb. 13, 1996] (Next Standard (1911) (Regulations (Standards - 29 CFR) - Table of Contents Freedom of Information Act Privacy & Security Statement Disclaimers Customer Survey Important Web Site Notices International Contact Us U.S. Department of Labor Occupational Safety & Health Administration 200 Constitution Ave, NW, Washington, DC 20210 Ekphone: 800-321-OSHA (6742) TY: 877-889-5627	Safety Standard for Laboratories in Health Related Institutions, NFPA, 56c, 1980.	
5. Scientific Apparatus Makers Association (SAMA), Standard for Laboratory Fume Hoods, SAMA LF7-1980, 1101 16th Street, NW., Washington, DC 20036. (d) Information on Availability of Referenced Material: 1. American National Standards Institute (ANSI), 1430 Broadway, New York, NY 10018. 2. American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103. [55 FR 3327, Jan. 31, 1990; 57 FR 29204, July 1, 1992; 61 FR 5507, Feb. 13, 1996] (Next Standard (1911) (Regulations (Standards - 29 CFR) - Table of Contents Freedom of Information Act Privacy & Security Statement Disclaimers Customer Survey Important Web Site Notices International Contact Us U.S. Department of Labor Occupational Safety & Health Administration 200 Constitution Ave., NW, Washington, DC 20210 Telephone: 800-321-OSH4 (6142) TT: 877-889-5627	Fire Protection Guide on Hazardous Materials, 7th edition, 1978.	
DC 20036	National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.	
1. American National Standards Institute (ANSI), 1430 Broadway, New York, NY 10018. 2. American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103. [55 FR 3327, Jan. 31, 1990; 57 FR 29204, July 1, 1992; 61 FR 5507, Feb. 13, 1996] (Mext Standard (1911) (Regulations (Standards - 29 CFR) - Table of Contents Freedom of Information Act Privacy & Security Statement Disclaimers Customer Survey Important Web Site Notices International Contact Us U.S. Department of Labor Occupational Safety & Health Administration 200 Constitution Ave., NW, Washington, DC 20210 Telephone: 800-321-05HA (6742) TY: 877-889-5627		
2. American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103. [55 FR 3327, Jan. 31, 1990; 57 FR 29204, July 1, 1992; 61 FR 5507, Feb. 13, 1996] Next Standard (1911) Regulations (Standards - 29 CFR) - Table of Contents Freedom of Information Act Privacy & Security Statement Disclaimers Customer Survey Important Web Site Notices International Contact Us U.S. Department of Labor Occupational Safety & Health Administration 200 Constitution Ave., NW, Washington, DC 20210 Telephone: 800-321-OSHA (6742) TTY: 877-889-5627	(d) Information on Availability of Referenced Material:	
[55 FR 3327, Jan. 31, 1990; 57 FR 29204, July 1, 1992; 61 FR 5507, Feb. 13, 1996]	1. American National Standards Institute (ANSI), 1430 Broadway, New York, NY 10018.	
Next Standard (1911) Kegulations (Standards - 29 CFR) - Table of Contents Freedom of Information Act Privacy & Security Statement Disclaimers Customer Survey Important Web Site Notices International Contact Us U.S. Department of Labor Occupational Safety & Health Administration 200 Constitution Ave., NW, Washington, DC 20210 Telephone: 800-321-OSHA (6742) TTY: 877-889-5627	2. American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, PA 19103.	
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