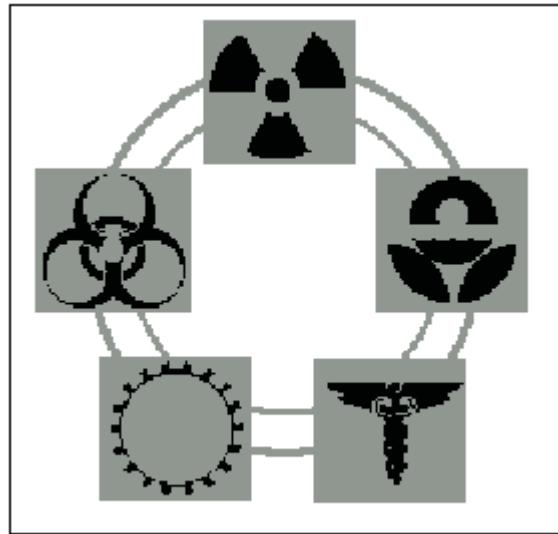


Hazard Communication at Purdue University



Radiological and Environmental Management

Written Compliance Manual

IOSHA Right-to-Know Law

29 CFR 1910.1200

Department of Radiological and
Environmental Management (REM)

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1 PURPOSE AND SCOPE

This document establishes the procedures, objectives, and administrative requirements for Purdue University's Hazard Communication Program. This document is intended to ensure compliance with Federal and State regulatory requirements. Applicable regulations are the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (Haz Com Standard) 29 CFR 1910.1200, and the Environmental Protection Agency (EPA) Community Right-To-Know Standard (SARA), 40 CFR Part 370. This document was prepared by the Department of Radiological and Environmental Management (REM). Additional copies are available from REM, 1662 CIVL, Room B173.

2 APPLICABILITY

This document applies to employees who work with or supervise operations involving work with hazardous chemicals at the West Lafayette Campus, regional campuses, University farms, and related facilities and operations. An employee of Purdue University is any person who receives a paycheck containing the Purdue Griffin or Seal watermark.

This program also applies to laboratories as follows:

- 2.1 Container labels must be maintained.
- 2.2 SDSs received must be maintained and readily accessible during each work shift to laboratory employees when in their work area.
- 2.3 Information and training must be provided to laboratory employees.
- 2.4 Laboratories that ship hazardous chemicals are considered manufacturers and/or distributors and must ensure containers are labeled in accordance with the standard and must supply SDSs to the down line user or receiver of the hazardous chemical.
- 2.5 In addition, laboratory personnel must comply with the requirements of the "Occupational Exposures To Hazardous Chemical In Laboratories Standard" (29 CFR 1910.1450) and Purdue University's Chemical Hygiene Plan. Hazardous chemicals are chemicals which pose a physical and/or health hazard during routine or non-routine operations or during emergency conditions at any phase of the chemicals' "life-cycle" including receipt, issue, use, storage, or disposal.

3 BACKGROUND

Why the standard was promulgated:

Employees have the right to know the hazards of the chemicals and products they work with. The Hazard Communication Standard (29 CFR 1910.1200) was initially promulgated to protect employees handling chemicals during chemical manufacturing or as a chemical user in the manufacturing sector (SIC Codes 20-39). The standard was expanded to cover the non-manufacturing sector including universities.

The state of Indiana, under the authority of Indiana Occupational Safety and Health Administration (IOSHA), 402 West Washington Street, Room W-195, Indianapolis, Indiana 46204, has adopted the Federal Hazard Communication Standard.

What is the purpose of a written Hazard Communication Program (HCP)?

The standard requires employers to develop and implement a written hazard communication program for their workplaces. The document provides information to employees about their rights under the law and details how the program is administered at their workplace. It specifies the methods for providing employee training so they, 1) recognize and understand the hazards of the chemicals they work with, and 2) recognize and understand the labeling system for chemicals and products they use.

Hazard Classification

In classifying chemicals covered by provisions of the standard, Purdue University will rely on safety data information provided by chemical manufacturers, importers, and distributors. Principally, only products for which accurate and complete safety data sheets (SDSs) are available will be purchased for use at Purdue University. All chemicals and chemical products are included in this program at Purdue University.

4 GENERAL UNIVERSITY POLICY AND ADMINISTRATIVE STRUCTURE

- 4.1 It is the policy of Purdue University to take every reasonable precaution to provide a work environment free from recognized hazards for its employees in accordance with the General Duty Clause of the OSHA Act (Public Law 91-596 Section 5 (a)(1)). The University's policy document is **Environmental Health and Safety Compliance (I.2.4)**.
- 4.2 It is the policy of Purdue University, as required by the OSHA Hazard Communication Standard, to ensure that chemical hazards are identified within each work area and that chemical hazard information is made available to all employees.
- 4.3 For Community Right-to-Know Compliance, see section 11.0 of this document.
- 4.4 For Contractor Right-to-Know Compliance, see section 12.0 of this document.

5 EMPLOYER RESPONSIBILITIES

5.1 General Responsibilities

The President is responsible for assuring Purdue University is in compliance with applicable Federal and State Occupational Safety and Health regulations. The President has designated the Vice President for Physical Facilities as the OSHA compliance officer. Under him, the Department of Radiological and Environmental Management (REM) has been delegated the responsibility for the development, implementation, and oversight of the Hazard Communication Program. Deans, Directors, and Department Heads are responsible for implementing and maintaining the Hazard Communication Program in their work areas. In most cases, this involves designating one or more individuals to coordinate the hazard communication program and empowering the designee(s) to do what is necessary to maintain compliance. Employees are responsible for learning about the hazardous chemicals in their work areas, for attending training courses, for understanding hazard information on the products they use, and for using safe work practices.

5.2 Specific Responsibilities

5.2.1 Radiological and Environmental Management will:

- 5.2.1.1 Develop and provide overall administrative support for the Hazard Communication Program (HCP) including interpretation of the regulation.
- 5.2.1.2 Provide training for managers, supervisors and/or designated individuals concerning their responsibilities and the requirements of the program.
- 5.2.1.3 Provide guidance for the preparation of procedures, survey reports, chemical inventories, and training programs required by the HCP.
- 5.2.1.4 Validate employee training.
- 5.2.1.5 Conduct periodic audits of work area compliance activities.
- 5.2.1.6 Maintain a master file of documentation and records associated with the HCP, including but not limited to:
 - ◆ Training records
 - ◆ Employee exposure information
 - ◆ Chemical Inventories

- 5.2.1.7 Assist with SDS requests. Call 765-494-6371 to request SDS assistance.
- 5.2.2 Managers/Supervisors will:
 - 5.2.2.1 Understand their responsibilities pursuant to the **Environmental Health and Safety Compliance Policy (I.2.4)**. They must designate their representative(s) who will be a Designated Trained Individual (DTI) for the work area.
 - 5.2.2.2 Managers and Supervisors shall be responsible for effectively communicating to their designee(s) and the other employees in the work area that the designated individual is empowered, as necessary, to meet the requirements of the University's Haz Com program for their work area.
 - 5.2.2.3 Ensure that a work area specific Hazard Communication Program is established and that employees receive necessary training. The program must be written, applicable to work area chemical process, and at least as stringent as the requirements of this document. REM must approve the plan prior to implementation. A written work area program has been developed and is included as Appendix P. **A completed copy of this program must be posted in the work area and a copy must be kept with the University's Written Compliance Program.**
 - 5.2.2.4 Ensure that employees are provided effective information and training on hazardous chemicals in their work area at the time of initial assignment, whenever a new physical or health hazard the employees have not previously been trained is introduced into their work area, and that annual refresher training is conducted.
 - 5.2.2.5 Seek guidance from REM concerning compliance with or interpretation of the Hazard Communication Standard and refer employee questions to REM.
 - 5.2.2.6 Ensure an inventory is completed for all chemicals used in the work area (as defined in Appendix C) using form HCP-4, Chemical Inventory Form (Appendix J). Ensure the names of persons exposed to each chemical are recorded on form HCP-5. Ensure copies of forms HCP-4 and HCP-5 are submitted to REM. Ensure that the inventory is updated annually (fiscal basis).
 - 5.2.2.7 Review and understand SDSs for chemicals used by employees under their supervision and inform employees of new or updated SDSs received.
 - 5.2.2.8 Ensure SDS files are maintained in the work area and are readily accessible to employees.
 - 5.2.2.9 Ensure that employee requests for SDSs and other materials are promptly handled.
 - 5.2.2.10 Ensure that **all** containers of hazardous chemicals are labeled with the chemical and/or trade names, or the chemical abstract numbers (CAS). Code letters or numbers and/or chemical formulas are generally not acceptable forms of labeling.
 - 5.2.2.11 Ensure that safe and healthful work conditions are maintained. To this end, departments and supervisors shall ensure that employees' exposure to hazardous chemicals, as defined by this program, do not exceed the permissible exposure limit (PEL) specified in 29 CFR 1910.1000 subpart Z or the Threshold Limit Value (TLV) as published by the American Conference of Governmental Industrial Hygienists, whichever is lower.
- 5.2.3 The Designated Individual:

The University uses a train the trainer approach to achieve HazCom compliance. Individuals designated from the work areas shall be known as designated trained individuals or DTIs.

5.2.4 The DTI will:

Assume the responsibilities outlined under the managers/supervisors and will also include the following additional responsibilities:

- 5.2.4.1 Act as the work area Haz Com coordinator.
- 5.2.4.2 Conduct effective hazard communication training sessions for the employees in your area(s) of responsibilities.
- 5.2.4.3 Ensure training provided is documented using form HCP-8, Employee Right-to-Know Training Attendance Record, and a copy of this form is submitted to REM.
- 5.2.4.4 Generate documentation as required.
- 5.2.4.5 Provide contractor employees with chemical hazard information for the areas within your DTI responsibilities.

6 EMPLOYEE RIGHTS AND RESPONSIBILITIES

6.1 Employees have the right to:

- 6.1.1 Be informed about the known health hazards and toxic properties of the chemical substances in their work environment, to have SDSs readily accessible in the work area during each shift, and to be properly trained to work safely with these substances.
- 6.1.2 File a complaint with IOSHA if they feel they are being exposed to unsafe or unhealthy work conditions.
- 6.1.3 Not to be discharged, suspended, or otherwise discriminated against by their employer because of their filing a complaint or otherwise exercising their rights under the law.

6.2 Employees have the responsibility to:

- 6.2.1 Attend the training programs on the Hazard Communication Standard.
- 6.2.2 Use safe work practices and to use protective clothing and equipment provided and required for the job task.
- 6.2.3 Inform their supervisor or DTI of accidents, conditions, or work practices they believe to be a hazard to their health or to the health of other individuals.
- 6.2.4 Stay informed about the chemicals used on the job.

7 PROCEDURE FOR PROGRAM IMPLEMENTATION AND MAINTENANCE

7.1 Manager, Supervisor, DTI Training

To begin the process of program implementation, it is necessary to provide initial training to managers, supervisors, and/or DTIs. This training is provided by REM and covers the Hazard Communication Standard, the program developed for implementation of the standard at Purdue University, and the responsibilities of the managers, supervisors, and DTIs. An example training outline for Managers, Supervisors, and DTIs is included as Appendix N.

REM will maintain documentation of Hazard Communication training provided to managers, supervisors and DTIs using form HCP-7, Manager/Supervisor/DTI Certification Form (Appendix L).

7.2 Chemical Inventory and Employee Exposure Information

A list of chemicals, henceforth known as the **Chemical Inventory or form HCP-4**, (Appendix J: Procedures for Completing HCP-4 and HCP-5), used in the work area(s) must be completed annually (fiscal year basis). The chemical inventory must include the following:

- 7.2.1 Chemical or product name and product or catalog number.
- 7.2.2 Manufacturer name, city and state address, and phone number for the manufacturer.
- 7.2.3 Operation of process that the product is used in.
- 7.2.4 Do you have an SDS for the product already in your files?

The procedures for completing a chemical inventory for the HazCom Program are fully outlined in Appendix J of Purdue University's Written Compliance Manual. An example is provided to facilitate completing your work area inventory.

A copy of the work area's current Chemical Inventory **must** be included in the work area's Written Compliance Manual. The current inventory should be inserted as Appendix H. Previous years' inventories should be maintained in the work area or a designated departmental location. A copy of the Chemical Inventory must also be submitted to REM each fiscal year. REM will keep a master set of chemical inventories.

The hazard communication standard requires that employees be identified who work in the area and the chemicals to which they may be exposed. Purdue program documents this information on the **Employee Exposure Information, form HCP-5**. A copy of this form and instructions for completing the form are located in Appendix J. A form HCP-5 should be completed for each Chemical Inventory, form HCP-4, and should be attached to the inventory form and included in Appendix H for the current fiscal year. Previous form HCP-5's should be maintained in the work area or other designated departmental location.

7.3 General Training

All affected employees must be informed that Purdue University has a Hazard Communication Program. Employees must be provided with effective information and training on hazardous chemicals in their work area at the time of initial assignment, and whenever a new physical or health hazard is introduced into their work area. *Training must also be conducted when an employee transfers work areas.* Training is required for full-time, part-time, temporary, and student employees in your work areas.

Hazard communication **re-fresher training must be conducted annually**, upon reassignment, or whenever you introduce a new physical or health hazard into the area. Re-training is needed to maintain an effective work area hazard communication program. Re-training must also include the general information and the job specific information.

7.4 Job Specific Training and Education

Employees who work with, or may be exposed to hazardous chemicals while performing routine and non-routine hazard job duties must be informed of the possible hazards. It is acceptable to put the chemicals into categories (e.g. hepatotoxins, neurotoxins, nephrotoxins, etc.) for instructional purposes if it is more convenient. Instructions may be general to the hazard categories or specific to each chemical. The hazard information given to employees must be sufficient to provide them protection when followed.

Employee training sessions **must** include the following:

- 7.4.1 Describe operations in the employee's work area where hazardous chemicals are present.
- 7.4.2 Describe the potential hazards associated with non-routine tasks before the employees go to work on the task.

- 7.4.3 Indicate the location and availability of the University's Written Hazard Communication Program including the list(s) of hazardous chemicals (Chemical Inventory) and the Written Right-to-Know Program for their specific work area (Appendix P).
- 7.4.4 Explain what an SDS is, how to read an SDS (i.e., what each section contains and where to look for specific information), where SDSs are kept in each work area, and how to obtain SDSs.
- 7.4.5 Explain how to relate information on SDSs to the information on container labels (e.g. CAS numbers, physical properties, and health hazards).
- 7.4.6 Encourage employees to familiarize themselves with the chemicals they use and to update themselves as new or revised product sheets arrive. This should be done before an employee works with a chemical to ensure maximum understanding and employee protection.
- 7.4.7 Explain the secondary labeling system used at Purdue University. All containers of hazardous chemicals must be labeled with the product name and/or chemical name(s) and hazard warnings. The National Fire Protection Association Rating System is described in Appendix I of this document.
- 7.4.8 Explain methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area or at the work site (such as monitoring conducted by the employer, continuous monitoring devices, visual appearances or odor of hazardous chemicals when being released, etc.). Include physical symptoms and other potential risks resulting from exposure to the chemicals in the work area.
- 7.4.9 Explain personal protective equipment requirements (PPE), why PPE is important, and the SDS section detailing the PPE for each chemical.
- 7.4.10 Explain safe handling procedures for the chemicals the employees will be exposed to and where this information is referenced on the SDS.
- 7.4.11 Explain to employees what to do in case of:
 - 7.4.11.1 Mechanical accidents (i.e. equipment failure)
 - 7.4.11.2 Spill/leaks
 - 7.4.11.3 Ingestion/inhalation/injection/absorption (This should include the emergency treatment on the SDS.)
 - 7.4.11.4 Emergency procedures to follow at Purdue University
- 7.4.12 Explain any caution signs or other warning signs used in the work area.

Training sessions may include videotapes, slide presentations, visual demonstrations, or other appropriate teaching techniques selected by the DTI. The hazards associated with the chemicals in each work area must be effectively communicated to employees. The program must provide effective worker protection.

7.5 Training Documentation

Documenting that employees have received training is critical to an effective hazard communication program. Therefore, employees will be asked to sign the employee attendance form HCP-8 (Appendix L) at the end of the training session. A copy of this form must be maintained by the DTI and/or designated department location and a copy must be submitted to REM.

7.6 Written Work Area Hazard Communication (Right-To-Know) Program

A **written work area** Right-To-Know Program must be completed, in addition to the University's Written Compliance Manual. A sample document is available from REM and included as Appendix

P. If a written program is adopted by a work area that is different than the sample document, it must be approved by REM.

A completed copy of the Written Work Area Right-To-Know Program must be posted in work area. The large, Right-To-Know posters must also be completed and posted in the work area. Employees must be informed about the location of these postings and where the University's Written Compliance Manual is located in their work area. A completed copy of the Written Work Area Right-To-Know Program must also be included in Appendix H of the University's Written Compliance Manual.

8 SAFETY DATA SHEETS (SDS)

Manufacturers and/or distributors of chemical products must prepare Safety Data Sheets in accordance with Appendices A and B of the OSHA Revised (2012) Hazard Communication Standard. The SDS must contain the hazard evaluation information for that product. Appendices A and B should be consulted for assistance in interpreting SDS information and in evaluating the quality of information provided by a given manufacturer. Purdue University will rely on the chemical manufacturers, importers, and/or distributors to provide an accurate, complete, and current SDS for all chemicals and/or chemical mixtures.

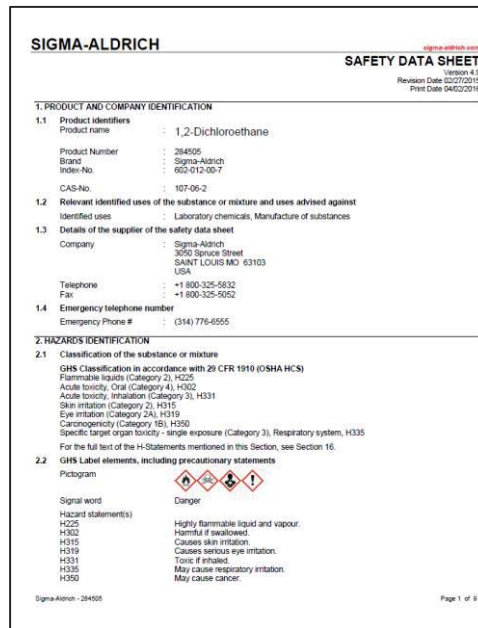
An SDS must be obtained for all hazardous chemicals used in a work area. In addition, when considering a new chemical, a complete and current SDS should be forwarded to REM. New products should be evaluated prior to purchase and general use.

- 8.1 SDSs relevant to the work area must be available and accessible during **all** work shifts. In all cases, the SDSs must be complete and readily accessible to all employees during each work shift.
- 8.2 SDS are considered to be a part of employee medical records and therefore must be maintained for at least 30 years from the date of last use. SDS for materials no longer used or stored should be kept in a separate "archived" SDS binder. Employees must be made aware of the location of the SDS file in their work area. A copy of each new or updated SDS should be posted or, in some other manner, be made available for review by the employees prior to being placed in the file.
- 8.3 In the event an SDS is not available for a particular chemical, an SDS may be requested from REM by calling 765-494-6371 and asking to be transferred to SDS assistance.
- 8.4 Employees who conduct their work in areas other than their primary work location must have ready accessibility to the SDSs for the materials used at the job site. Examples of ways to provide ready accessibility including, but are not limited to, 1) carry the SDSs in a tool box, 2) having a notebook of SDSs in a vehicle, or 3) having SDSs available at the base radio. Whatever method is chosen, the method must provide effective hazard communication to the employees.

SDSs containing the hazard and precautionary information required by the Revised Hazard Communication Standard (2012) should be kept for each hazardous material listed on the work site's Chemical Inventory (Appendix B). The most current SDS supplied by the chemical manufacturer or distributor should be kept on file and made accessible to all employees, their representatives, and contractors for viewing or copying during each work shift.

Each SDS shall include the following information in the referenced order. (Appendix A):

1. Identification
2. Hazard(s) identification
3. Composition/information on ingredients
4. First aid measures
5. Fire-fighting measures
6. Accidental release measures
7. Handling and storage
8. Exposure controls/personal protection
9. Physical and chemical properties
10. Stability and reactivity
11. Toxicological information
12. Ecological information
13. Disposal considerations
14. Transport information
15. Regulatory information
16. Other information, including date of preparation or last revision



Sample Safety Data Sheet

If the manufacturer or distributor does not automatically provide a complete SDS with the chemical purchased, the supervisor should send a written request to the vendor. If the vendor does not provide an SDS, the problem should be reported to REM, who will contact the vendor and obtain the legally required SDS for the product in question.

SDSs must be in a central location that can be accessed immediately in the event of an emergency. Electronic copies may be kept in a file on a shared drive, or hard copies maintained in a central location at the worksite (i.e. SDS Binder). Supervisors must provide information to their employees within 30 days of receipt of any new or revised SDS. This information should indicate any increased risks to health and safety, as well as any new measures necessary for employees to protect themselves.

9 LABELS AND OTHER FORMS OF WARNING

- 9.1 Original and secondary containers must be labeled with EITHER:
(Example of secondary = spray bottles, transportation containers...)
- 9.1.1 an original manufacturer's label that contains the following information:
- 9.1.1.1 Product identifier
 - 9.1.1.2 Signal word
 - 9.1.1.3 Hazard statement(s)
 - 9.1.1.4 Pictogram(s)
 - 9.1.1.5 Precautionary statement(s)
 - 9.1.1.6 Supplier information

- 9.1.2 OR a supplemental label that provides at least
 - 9.1.2.1 the product identifier used on the SDS
 - 9.1.2.2 the GHS pictograms as they appear on the original container
 - 9.1.2.3 the signal word.
- 9.2 All chemical containers must be labeled in such a manner that the label elements, in conjunction with the other information available under this program, shall provide employees with specific information about the hazards associated with the chemical.
Note: As best practice, supplemental labels can be listed in the same format as original label.
- 9.3 Employees must not remove or deface existing labels, unless the containers are immediately re-marked with required information while the hazardous material is stored or in use. Labels must be legible, in English and prominently displayed on the container. Employees must ensure that containers are properly labeled and report any deficiencies to their supervisors.
- 9.4 Labels are not required on portable containers intended for the immediate use (within the same shift) of the person who performs the transfer. Examples of these containers include measuring cups, transfer containers, mixing jugs, etc. Secondary containers intended for use after the immediate shift must be labeled with the name of the chemical, the concentration, hazard warnings, date transferred and initials of the person who transferred it.
- 9.5 Labeling of chemicals that have a substance-specific standard (ex. formaldehyde, 29CFR 1910.1048) must conform to the requirements of that Standard.
- 9.6 Labeling of materials manufactured and transported from Purdue must conform to US DOT Hazardous Materials regulations.
- 9.7 Signs can be used for labeling of stationary process containers. The sign must be adjacent to the container and clearly indicate the container to which it applies.
- 9.8 Abbreviations or codes should not be used on containers unless there is insufficient space on the container. When used, abbreviations and codes must be readily accessible to users of the chemical.

Some secondary container labels and pictogram stickers are available from REM upon request.

10 **PROGRAM VALIDATION**

Validation audits of the Hazard Communication Program will be conducted by REM staff as part of the Integrated Safety Program Certification process. These are annual or semi-annual depending on the level of use and chemical hazards.

11 **COMMUNITY RIGHT-TO-KNOW AND EMERGENCY PLANNING**

- 11.1 Purdue University must comply with the Environmental Protection Agency (EPA) Emergency and Hazardous Chemical Inventory Forms and Community Right-to-Know reporting requirements (40 CFR Part 370) and the corresponding Indiana regulations administered by the Indiana Department of Environmental Management (IDEM).
- 11.2 Any person wanting information about the presence of hazardous chemicals at Purdue University may review such information at REM, B173, Civil Engineering Building. Information available includes:

11.2.1 A review of the available SDSs and the opportunity to make notes on this information.
Exception: Review of such information may be denied if such information violates the trade secret criteria of 29 CFR 1910.1200.

11.2.2 The storage location(s) and approximate quantities of the chemicals reported on the SARA TIER II forms filed for the previous calendar year.

11.3 For purposes of Emergency Planning, the local, state planning commissions, and the Purdue Fire Department are notified of those hazardous chemicals present in amounts equal to or greater than the threshold planning quantity for each chemical. Reports are prepared annual and filed by March 1 for the previous calendar year.

12 CONTRACT EMPLOYEES NOTIFICATION

Contract employees must be informed about the hazardous chemicals to which they may be exposed while working at Purdue University. The DTI must inform contract employees about the chemicals in the work area, where the SDSs are located, any necessary safety precautions, and answer safety-related questions. A contractor or its employees may also contact REM for SDSs and/or to ask safety and health questions.

Contractors should have a hazard communication program that meets the requirements established in 29 CFR 1910.1200. Contractors must coordinate the exchange of hazard information as specified in Facilities Planning, Bid Specifications Section 48.

APPENDIX A

HAZARD CLASSIFICATION AND SDS REQUIREMENTS

Appendices A and B to 1910.1200

The Physical and Health Hazard criteria detailed in the mandatory appendices of the Revised Hazard Communication Standard (2012) will be used when necessary for hazard classification, chemical hazard assessment, and in training employees about hazards.

Any chemical that meets the criteria set forth in Appendices A are health hazards, and any which meet Appendix B criteria are physical hazards.

29 CFR 1910.1200 Appendix A: https://www.osha.gov/dsg/hazcom/appendix_a.pdf

29 CFR 1910.1200 Appendix B: http://www.osha.gov/dsg/hazcom/appendix_b.pdf

APPENDIX B

SDS COMPLIANCE CHECKLIST

This checklist provides guidance for assessment that the workplace SDS collection is complete and sufficient for the purpose of providing chemical hazard and safety information for employees, DTIs, supervisors, and others, and making the workplace compliant with the provisions of the Revised Hazard Communication Standard (2012).

- _____ 1. An SDS is available for each hazardous chemical used.
- _____ 2. Each work area has an SDS for each hazardous chemical used or stored by employees in the area and/or job location?
- _____ 3. All SDSs are in English.
- _____ 4. Each SDS for a single chemical has
 - _____ a. The identity used on the label
 - _____ b. The chemical and common name(s) for single substance hazardous chemicals.
- _____ 5. For mixtures tested as a whole each SDS contains
 - _____ a. the chemical and common name(s) of ingredients which contribute to these known hazards
 - _____ b. the common name(s) of the mixture itself
- _____ 6. All SDSs:
 - _____ a. contain the chemical and common name(s) of all ingredients which have been determined to be health hazards and that comprise 1% or more of the composition or, as in the case of chemicals identified as carcinogens, have concentrations of 0.1% or more
 - _____ b. contain the chemical and common name(s) of all ingredients which have been determined to present a physical hazard when present in the mixture
- _____ 7. All SDSs:
 - _____ a. contain the physical and chemical characteristics of the hazardous (vapor pressure, flash point, etc.
 - _____ b. contain the physical hazards of the hazardous chemical, including the potential for fire, explosion and reactivity
 - _____ c. contains the health hazards of the hazardous chemical (including signs and symptoms of exposure, medical conditions caused or aggravated by exposure)
 - _____ d. contains the primary route(s) of entry
 - _____ e. contain the OSHA PEL or ACGIH TLV or other exposure limits
 - _____ f. contain Section 2 information about GHS classifications; and appropriate GHS class and category designations, signal word, hazard statement(s), precautionary statement(s), and pictogram(s)
 - _____ g. contain applicable procedures and precautions for safe handling and use of the chemical (hygienic practices, maintenance, and spill procedures)
 - _____ h. contain applicable control (engineering controls, work practices, or personal protective equipment)
 - _____ i. contain emergency and first aid procedures
 - _____ j. contain date of preparation or last change
 - _____ k. contain the name, address, and telephone number of the chemical manufacturer, importer, employer or other responsible party
 - _____ l. are complete in all sections, and if not, the incomplete sections are marked to indicate that no applicable information was found

APPENDIX C

CHEMICAL INVENTORY FOR THIS WORK AREA

This is where the document formerly called HCP-4 (Chemical Inventory) is to be included in the work area Hazard Communication Program. It is permissible to continue to refer to it as HCP-4. (But there are no HCP-1, -2, -3, -5, or -6 as of the 2016 revision of this program.

Insert the chemical inventory here in this appendix. It is to be updated annually and dated with the current fiscal year. Maintain the first several lines as examples for training.

CHEMICAL/PRODUCT NAME & PRODUCT CATALOG NUMBER	MANUFACTURER NAME	CITY/STATE PHONE NUMBER OF MFCTR	OPERATION OR PROCESS OF USE	SDS ✓
Lemon Pledge (Institutional Size) 1096	S.C. Johnson & Son, Inc.	Racine, WI	Furniture Polishing	✓
DE-TAC	CRSI Environmental Systems	Michigan City, IN 219-872-5591	Solvent	✓
Liquid Paper Multi Fluid 563-01	The Gillette Company	Boston, MA	Typewritten Correction	✓

APPENDIX E
DTI CERTIFICATION

I acknowledge that I have received Hazard Communication Training. I have been informed about the labeling, SDS, and training requirements of the law and the University's Hazard Communication Program.

Name _____ Date training _____
PRINT

Job function/title _____ Phone _____

Email address _____ DTI: Y N

Dept _____ Work area _____

Supervisor name: _____

Signature: _____

HCP-8

EMPLOYEE RIGHT-TO-KNOW
TRAINING ATTENDANCE RECORD

DTI CONDUCTING
TRAINING

DATE

LOCATION OF
TRAINING

DEPAR
TMENT

WORK AREA

DTI RESPONSIBLE FOR
WORK AREA

By printing and signing my name below, I acknowledge that I have received training specific to my work area about how to read and find information on an SDS, where SDSs are located in my work area, and what labeling requirements are at Purdue University.

ATTENDANCE

NAME
(Please Print)

SIGNATURE

PUID Number

DATE

BLDG. or
RES. HALL

APPENDIX F

EXAMPLE TRAINING OUTLINE FOR DTIs

Part I

- Introduction
- Overview of OSHA Haz Com Standard
- Overview of Purdue Haz Com Program
- 1. Purpose
- 2. Applicability
- 3. Employee Rights and Responsibilities
- 4. Employer Rights and Responsibilities
- 5. Designated Trained Individuals
- 6. Labels and Labeling System
- 7. Safety Data Sheets
- 8. Employee Training
- 9. Availability of Documents/Information

Part II

- Basic Definitions
 - Basic Concepts
 - 1. Physical States (solid, liquid, gas)
 - 2. Pollutant Characteristics (particulate dust, fumes, mists, spray, smoke, gas vapor)
 - 3. Routes of Entry (inhalation, ingestion, injection, absorption)
 - 4. Cause and Effect Relationships (concentration/time/toxicity, systemic/local effects, acute/chronic exposure)
 - 5. Threshold Concepts (susceptibility, TLVs/PELs)
 - 6. Health Hazard Classes (acute and chronic toxicity, reproductive effects, cancer, sensitization...)
 - 7. Physical Hazard Classes (fire, explosion, corrosion...)
 - 8. GHS label elements (pictograms, hazard classes and categories, signal word....)
-
- Control/Mitigation Techniques
 - 1. Worker Training
 - 2. Engineering Controls
 - 3. Administrative Controls
 - 4. Personal Protective Equipment

Part III

- Implementing a Work Area Program
- 1. Chemical Inventory
- 2. SDS Collection & Maintenance
- 3. Labeling
- 4. Training

APPENDIX G

WRITTEN HAZARD COMMUNICATION PROGRAM IMPLEMENTATION

FOR PRIME Lab
(Work Area and/or Location)

PREPARED BY Ken Mueller DATE 7/21/2017

It is the policy of Purdue University to ensure that chemical hazards are identified within each work area and that chemical hazard information is made available to all personnel who may be potentially exposed.

This document provides information on how the Purdue Hazard Communication Program is implemented in this work area. For questions concerning the overall university program, the Occupational Safety and Health Administration (OSHA) Hazard Communication regulations, or hazard communication terms you may not understand, you should refer to this manual.

<http://www.physics.purdue.edu/primelab/safety/Safety%20Resources/HCPmenu.htm>

The Purdue University Haz Com Compliance Manual for this work area is: _____
(Location)

The Designated Trained Individual (DTI) for this work area is: Ken Mueller
(Name)

The DTI is responsible for assuring that all aspects of the Purdue Hazard Communication Program are implemented in this work area. This individual maintains an inventory of hazardous materials used in this work area, collects Safety Data Sheets for all hazardous chemicals used and stored in this workplace, assures that all hazardous chemicals are properly labeled, and assures that information is provided to all individuals working in this location on the hazards associated with the chemicals and procedures for the safe use of the chemicals. Information may be provided through training classes, individual discussions, or both. The DTI will document all training provided using the form provided in Appendix D, Training Attendance Record, which is to be signed by all who attend and a copy provided to REM.

The Safety Data Sheets (SDSs) location for this work area is: <http://www.physics.purdue.edu/primelab/safety/MSDS-Search/index.htm>
(Location)

SDSs are available to all personnel working in this area for all work shifts. If a Safety Data Sheet is not available for a product the DTI or supervisor should obtain one promptly. REM can assist with obtaining SDSs; call 46371 and ask for SDS assistance

All hazardous chemicals used in this area should be properly labeled. If a material is not labeled, the label is damaged, or if there are any questions concerning the information on the label, the DTI and supervisor are to obtain and provide answers. REM is available to help at all times.

NEVER use a chemical that is not clearly labeled.

You should know and understand the hazards of all materials you are working with in this area and take the recommended precautions for safe use of these materials. If you have any questions concerning the hazards of a product, or the procedures for safe use of the product, contact the DTI or your supervisor.

Personnel from REM are available to provide assistance with all aspects of the Hazard Communication Program. Call 46371 for any questions pertaining to this program which the DTI or supervisor cannot answer.