

SECTION 15– ENVIRONMENTAL **MANAGEMENT**

Abridged Version

The Harper College Environmental Management Plan (EMP) is a complete manual on Environmental Management. The EMP is published in a separate Manual maintained by the Manager of Environmental Health and Safety (EHS). Contact the Manager of EHS at ehsm@harpercollege.edu for a copy of the environmental compliance program or the Executive Director of Facilities Management at ext. 6350.

- 15.1 Environmental Management Plan (EMP)**
- 15.2 Waste ID & Disposal**
- 15.3 Hazardous Materials Spills/ Release**

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15.1 Environmental Management Plan EMP

A. Objective

To describe and implement a comprehensive Environmental Management Plan (EMP).

B. Scope

Harper College will conduct affairs safeguarding the environmental health and safety of students, faculty, staff, visitors, and the community. The College will also strive to reduce pollutants released into the air, land, water, and properly dispose of all hazardous and non-hazardous waste. Environmental compliance and continuous improvement in waste reduction is our objective in all college operations.

C. References

Federal Environmental Protection Agency (EPA) Code of Federal Regulations Title 40- Protection of Environment and Illinois EPA - Title 35 of the Illinois Administrative Code. Harper College *Environmental Health and Safety Procedure Manual (EH&S Manual)*, *Chemical Hygiene Plan (CHP)* and *Spill Prevention, Control, and Countermeasure (SPCC) Plan*.

D. Responsibilities

1. All environmental releases, incidents, or problems at any of Harper College facilities shall be reported promptly to the Manager of Environmental Health and Safety or the Director of Facilities Management. The Manager of Environmental Health and Safety or the Director of Facility Management will report environmental issues to the relevant agency within the time limits imposed by the agencies.
2. Other Supervisors and Department Heads must be aware of the environmental requirements identified within the EMP and shall provide documentation and/or reports when requested by the Manager of Environmental Health and Safety.

E. Environmental Management Plan (EMP)

The following is an outline of EMP elements:

- Clean Air Act (CAA)
 - Criteria Pollutants, Attainment, and Non-Attainment
 - Chlorofluorocarbons (CFCs)
 - Emission from Mobile Sources
 - Air Toxics Rules and Hazardous Air Pollutants (HAP's)
 - Emission Report & Permit
- Clean Water Act (CWA)
 - Harper College's Spill Prevention, Control and Countermeasures (SPCC) Plan
- Emergency Planning and Community Right-to-Know Act (EPCRA)
 - Planning for response or releases
 - Reporting release
- Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)
 - Integrated Pest Management & Restricted Use Pesticide (RUP's)
 - State certified applicators and operators
- Resource Conservation and Recovery Act (RCRA)
 - Solid and Hazardous Waste Management
 - Generator Status
 - Universal Waste Management- batteries, mercury containing thermostats, pesticides, lights, and computer wastes



- Waste from Classrooms/ Labs, Art Department, Facilities Management, etc.
 - Used Oil (except PCB's and cooking oil)
 - Underground Storage Tanks
 - Waste Minimization
- Toxic Substances Control Act (TSCA)
 - Asbestos Management Procedures
 - Harper College's Chemical Hygiene Plan (CHP)

F. Sources of Additional Information

For additional information about the Harper College Environmental Management Plan or any other Environmental Health and Safety questions, please contact the Manager of Environmental Health and Safety at ehsrn@harpercollege.edu.

- Harper College *Environmental Health and Safety Procedure Manual (EH&S Manual)* - https://www.harpercollege.edu/about/directory/ehs/occupational_health.php
- Web Pages
 - EPA's Website: <https://www.epa.gov/>
 - Illinois EPA Website: <https://epa.illinois.gov/>



15.2 CHEMICAL WASTE ID & DISPOSAL

A. Objective

To properly identify waste and the proper disposal of waste.

B. Scope

Waste disposal must be in compliance with *Harper's Environmental Management Plan (EMP)*, *Chemical Hygiene Plan (CHP)*, *Spill Prevention, Control, and Countermeasure (SPCC) Plan*, as well as all federal, state, and local regulations.

C. References

Harper College *Environmental Management Plan (EMP)*, *Chemical Hygiene Plan (CHP)* and *Spill Prevention, Control, and Countermeasure (SPCC) Plan*. Applicable Federal, State, and Local Law and Ordinances, e.g., Occupational Safety and Health Administration (OSHA), Environmental Protection Agency (EPA), and State Labor Codes.

D. General Information

- The U.S. Environmental Protection Agency regulates hazardous waste under the Resources Conservation and Recovery Act, commonly known as RCRA. Enacted in 1976 and modified in 1978, 1980, and 1984 (by the Hazardous and Solid Waste Amendments), RCRA established a "cradle-to-grave" system for managing hazardous wastes. This means that from the time a hazardous waste is created until it is finally destroyed, a paperwork trail makes sure someone is responsible for safeguarding it. The law also provides specific requirements for those who generate, transport, treat, store, or dispose of hazardous wastes. Training personnel in hazardous waste management and emergency procedures is required under RCRA.
- Other regulations such as the Clean Air Act and the Clean Water Act govern the disposal of waste into the air and sewer systems. Consult the Laboratory Chemical Hygiene Officer (CHO) for identification, collection, storage, and disposal of laboratory wastes. Consult the Manager of Environmental Health and Safety for storage, collection, or disposal of chemical waste in other areas of the College.

E. Waste Identification

- **Hazardous Waste** regulations require that hazardous waste be accurately identified. Common waste include:
 - **Spent solvents, acids, bases, and oxidizers** used in extraction, cleaning, or other processes
 - **Unused reagents and other chemicals** that are no longer needed, do not meet specifications, are contaminated, have exceeded their storage life, and/or are otherwise unusable in the lab
 - **Waste oils**
 - **Other miscellaneous materials**, including broken thermometers, heavy metals, salts, pesticides, paints, etc.
- These wastes may be identified as either; "**listed wastes**" (appear on lists of specific chemicals defined as hazardous waste issued by the EPA) or "**characteristic wastes**" (exhibits certain characteristics defined by the EPA including ignitability, corrosivity, reactivity, and toxicity). The Laboratory Chemical Hygiene Officer is to determine hazardous waste identification in the laboratories.



F. Nonhazardous and Nonregulated Waste

- Waste that is not regulated by RCRA because it does not exhibit any of the hazardous characteristics (ignitability, corrosivity, reactivity, or toxicity) as defined by the EPA and is not listed as hazardous by the EPA should be segregated from hazardous waste.
- The common wastes usually not regulated as hazardous include:
 - **Certain salts** such as potassium chloride and sodium carbonate;
 - **Natural products** such as sugar and amino acids;
 - **Inert material** such as noncontaminated chromatography resins and gels.
- When safe and allowed by regulation, disposal of nonhazardous wastes via the normal trash or sewer (down the drain of the laboratory sinks) can substantially reduce disposal costs. This is the kind of waste segregation that makes economic as well as environmental sense.
- If unsure, always check with either the Laboratory Chemical Hygiene Officer or the Manager of Environmental Health & Safety prior to disposing of any chemical in the normal trash or pouring down the drain in sinks.

G. Storage and Disposal of Hazardous Waste

- Regulations require that hazardous waste be accumulated and stored in properly managed containers on sufficiently impervious surfaces (free of cracks, gaps, etc.)
- Hazardous waste may be stored in satellite accumulation areas. Once a satellite accumulation area container is filled, it must be dated and transferred to a main accumulation area.
- The Manager of Environmental Health and Safety will coordinate storage, pick up and disposal by a professional waste hauler.
- **Disposal of hazardous waste in sinks, in the normal trash or evaporation into the atmosphere is strictly prohibited by law.**

H. Storage and Disposal of Nonhazardous Waste

- The local municipality regulates the **disposal of nonhazardous waste in normal trash**. Certain precautions should be observed when disposing of nonhazardous waste. Because custodians, who usually empty the trash containers, are not usually familiar with laboratory operations, no objects that could cause harm to them should be disposed of in those containers. Sharp metal and broken glassware, even though they may be considered nonhazardous trash, should be collected in specially marked containers. Empty chemical bottles should be rinsed and collected into a large cardboard box and clearly labeled "empty chemical bottles" and stored with normal trash for pick up.
- The Metropolitan Water Reclamation District regulates the **disposal of nonhazardous waste into the sewer system** (down the drain of laboratory sinks). Certain chemicals may be permissible for sewer disposal. These include aqueous solutions that readily biodegrade and low-toxicity solutions of inorganic substances. Water-immiscible chemicals and organic solvents should never go down the drain. Water-miscible flammable liquids are prohibited from disposal in the sewer system.

I. Labeling of Waste

- Containers that accumulate and store hazardous waste must be labeled with the following information:
 - The words "Hazardous Waste";
 - The waste type in words (spent non-halogenated solvents, waste oil, solid metal waste, etc.);
 - The date upon which the container became filled.
- All containers must be closed at all times unless waste is being added or removed. Containers must be in good condition. There may not be severe rusting, dents or other conditions that could cause leaks. Organic waste jugs must have a flame arrestor in



place and in good condition. Containers must be compatible with the hazardous waste stored within them. The use of empty food containers like peanut butter jars or plastic pop bottles are not acceptable. Containers should be inspected to ensure that they are properly labeled, in good condition, and meet the criteria described above.

J. Waste Minimization

- Federal law requires generators of hazardous waste to implement measures to limit and reduce the volume and toxicity of hazardous waste. Waste minimization techniques include:
 - Process/equipment adjustments or modifications;
 - Toxic material substitution;
 - Waste segregation, separation, concentration; and
 - Recycling.
- Where possible, microchemistry will reduce waste volume and has the added benefits of minimizing health and safety concerns.
- The exercise of prudence in ordering new chemicals will also ensure that excess chemicals do not become subject to disposal as hazardous waste. Always check your inventory supplies prior to purchasing any new chemicals. Only purchase the quantities that are needed. Furthermore, always obtain and review Safety Data Sheets (SDSs) for any new substances. SDSs contain disposal instructions as well as toxicity information that you may want to consider before actually purchasing a new chemical.

K. Training

- Laboratory Instructors shall be trained on the Chemical Hygiene Plan including;
 - Section 12 – Emergency Procedures for Accidents and Spills
 - Section 13 – Chemical Waste; Storage and Disposal of Hazardous Waste
 - Standard Operating Procedure - Chemical Management Plan
 - Training is conducted for Instructors by the Laboratory Chemical Hygiene Officer upon hire, and via the online safety training platform, Safe Colleges.
- Training on waste identification and disposal for other areas of the College, including but not limited to Art and Facilities Management, is given to the Supervisors of each area, by the Manager of Environmental Health & Safety (ehsrn@harpercollege.edu) and the online safety training platform, Safe Colleges.

L. Sources for Additional Information

- Harper's Laboratory *Chemical Hygiene Plan* (CHP) describes the identification, Standard Operating Procedure – Disposal of Wastes; collection, minimization techniques, and disposal procedures for waste accumulated in the Department of Chemistry.
- The Environmental Protection Agency (EPA) has excellent resource material to assist with waste minimization. You may access the EPA home page at the following address: <https://www.epa.gov/>.
- To address questions or concerns contact the Manager of Environmental Health & Safety or the Laboratory Chemical Hygiene Officer for additional information.



15.3 CHEMICAL SPILLS OR RELEASE

A. Objective

Specific information on Laboratory spills and releases (for Biology and Chemistry Laboratories) is maintained in *Section 13- Chemical Waste*, of the *Laboratory Chemical Hygiene Plan of the EH&S Manual*.

B. Scope

Any chemical spills or release on campus.

C. Procedures

- Report ALL chemical spills/ release immediately to Harper Police at ext. 6330.

Harper Police shall:

1. Isolate and control the area.
2. Call the Palatine Fire Department.
3. Notify the Manager of Environmental Health & Safety
 - a. If the Manager of Environmental Health & Safety is unavailable, notify the Director of Facilities Management.
4. If the spill is required to be cleaned up by an outside contractor, the Manager of Environmental Health & Safety or Director of Facilities Management or Supervisor of Harper Police should call Harper's Restoration Contractor.

SET Environmental in Wheeling, IL at 1-877-43SPILL or 1-877-437-7455



1.3 PRINCIPLES AND GOALS

An effective occupational, health and safety program will be maintained. The college, in keeping with these principles and goals, will provide qualified personnel and adequate facilities and equipment. The following principles are fundamental to a successful operation:

A. Fundamental Principles

- Appropriate programs shall be implemented to protect employee, student, and visitor health and safety.
- Occupational injuries and illnesses are preventable.
- Administration seeks to define, initiate, and maintain programs and procedures to prevent injuries and illnesses.
- Continuing scrutiny of programs and ongoing employee training and education in occupational health and safety are essential program elements.

B. Goals

- Minimize health and safety risks by providing safe and healthful work environments, preventing unsafe acts, and controlling exposures to health and safety hazards in the workplace.
- Provide and assure appropriate health and safety programs exist and are in place.
- Control health hazards in the workplace and assure that employees are informed of hazards and how to protect themselves from overexposure.
- Assure all administrators, managers, employees, and students have received orientation, instruction and training in health, safety and environmental protection matters.
- Require that all health, safety, environmental protection and loss control practices, standards, laws, and regulations be observed relating to people, facilities, materials, processes, wastes, and the environment.



1.4 ASSIGNMENT OF RESPONSIBILITY

All employees and students are responsible for compliance with the *Environmental Health & Safety Procedure Manual (EH&S Manual)* and associated programs. Everyone is accountable for his or her own activities, as well as those occurring under their operational control. The following is a non-inclusive list identifying responsibility and accountability for environmental health and safety issues:

A. President

- Overall responsibility for establishing and maintaining environmental health and safety programs for the College.
- Provide the leadership, procedures, and funding necessary to ensure a safe and healthy environment for the College.

B. Administrators (*Chiefs, Deans, Directors, and Department Heads*)

- Provide facilities and equipment required for a safe work environment.
- Ensure individuals under their management have the authority and support to implement health and safety procedures, practices, and programs.
- Ensure areas under their management comply with the College health and safety procedures and programs.
- Establish priorities and commit resources for correction of safety deficiencies.
- Establish procedures for dissemination of safety-related information.
- Establish procedures for implementation of *EH&S Manual* and associated programs.
- Establish a system for assessing safety performance.

C. Managers and Supervisors

- Provide safe and healthy environments for those areas and personnel for whom they have supervisory or administrative responsibility, incorporating safety and health issues as an integral part of all activities at the College.
- Assure completion of training requirements as required in the *EH&S Manual* as well as other training needed to perform the job safely and maintain all training documentation.
- Initiate and enforce necessary preventive measures to control hazards.
- Report injuries and illnesses to Health and Psychological Services.
- Review accident and injury reports for their area(s).
- Serve as a focal point for safety and health concerns.

D. Faculty and Staff

- Participate in mandated training programs provided by Deans and/or Supervisors.
- Perform activities as trained.
- Promptly report safety, fire, and health hazards, environmental deficiencies, and injuries and illnesses to the supervisor or program director.
- Consider personal safety and the safety of others while performing tasks.

E. Environmental Health & Safety

- Assist the College community in evaluating, planning, development and executing health and safety programs. Establishing programs to assure applicable health and safety standards, as well as College policies and procedures, are followed. In the absence of appropriate statutes and governmental regulations, the published



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standards of recognized professional health and safety organizations will serve as guides.

- Maintain, review, and update the Environmental Health & Safety Procedure Manual.
- Provide safety and health related technical services.
- Provide training materials, assistance, and programs in safe and healthy work practices.
- Review legislation, recommending procedures, and monitoring compliance with environmental, health and safety statutes and regulations and College health and safety procedures and programs.
- Provide guidance and technical assistance to the College in identifying, evaluating, and correcting health and safety hazards.

F. Facilities Committee

- To identify areas which affect the safety, appearance, and sustainability of the College and/or which limit accessibility to the College.
- Communicate concerns and corrective measures to the Harper community.
- Recommend and aid in ongoing development of procedures and policies for emergencies and environmental health and safety
- Monitor and make recommendations to the Resource Allocation and Management Program (RAMP) and the College Master Plan implementation

G. Students

- While students are not covered under the provisions of the Illinois Department of Labor (IDOL) or the Occupational Safety and Health Administration (OSHA), students should be made aware of health and safety hazards in classroom situations and should be provided with information and equipment to protect themselves from those hazards. Faculty should provide student training at the beginning of each course in which hazards may be encountered. Special safety instructions should be provided at the beginning of each class period.

H. Outside Contractors and Guests

- Outside contractors and guests should be informed of the environmental health and safety hazards they may encounter while on campus. They are also responsible for acting in accordance with the EH&S Manual.



1.5 FACILITIES COMMITTEE

A. Purpose

To monitor the physical environment of the College which affects the accessibility, safety, and the appearance of the College.

B. Objectives

- To identify areas which affect the safety, appearance, and sustainability of the College and/or which limit accessibility to the College.
- Communicate concerns and corrective measures to the Harper community.
- Recommend and aid in ongoing development of procedures and policies for emergencies and environmental health and safety
- Monitor and make recommendations to the Resource Allocation and Management Program (RAMP) and the College Master Plan implementation

C. Membership

Twenty (20) Committee Members

- Two (3) Faculty at Large
- One (1) Adjunct Faculty
- One (1) Harper Police/ICOPS Representative
- One (1) IEA/NEA
- One (1) Pro-Tech
- One (1) Classified or
- One (1) Supervisory Management
- One (1) Administrator
- One (1) Student
- Sustainability Coordinator (By Position)
- Employee Relations (By Position)
- Director of Physical Plant (By Position)
- Curriculum and Scheduling Specialist (By Position)
- ADA/504 Compliance Officer (By Position)
- Retail Services Manager (By Position)
- Environmental Health & Safety Manager (By Position)
- Exec. Dir. Facilities Mgmt. (By Position) – Non-Voting
- Admin. Support (By Position) - Non-Voting

Term of Service: Two (2) years

Officers: Chairperson to be elected by committee during the spring term for the following academic year.

D. Decision Making

Policy recommendations shall be forwarded to the Institutional Resources Policy Council and Non-Policy recommendations shall be sent to the appropriate Administrator.