

# **State of Iowa Department of Corrections**

## **Policy and Procedures**

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Chapter 3: INSTITUTIONAL OPERATIONS

Sub Chapter: SAFETY & EMERGENCY PROCEDURES

Related DOC Policies: AD-GA-06, IO-SE-03

Administrative Code Reference: 875-110, 875-120, 875-130, 875-140

Subject: CHEMICAL CONTROL AND HAZARD COMMUNICATION PROGRAM/PLAN

PREA Standards: N/A

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### **1. PURPOSE**

To describe procedures required for the control of hazardous materials within the Iowa Department of Corrections (IDOC), such as flammables, toxics, and caustics.

### **2. POLICY**

It is the policy of the IDOC to enact controls on all flammable, toxic, and caustic materials in order to ensure the safe operation of its institutions.

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### **3. DEFINITIONS – As used in this document:**

- A. Combustible Liquid – A substance with a flashpoint at or above 100 degrees Fahrenheit. (37.8 degree Centigrade) (Classified by flashpoint as a Class II or Class III liquid.)
- B. Corrosive Materials - A highly reactive substance that is capable of destroying or eating away by chemical reaction.
- C. Flammable Liquid - A substance with a flashpoint below 100 degrees Fahrenheit. (37.8 degree Centigrade) (Classified by flashpoint as a Class I liquid.)
- D. Flashpoint - The minimum temperature at which a liquid shall give off sufficient vapors to form an ignitable mixture with the air near the surface of the liquid (or in the vessel used).
- E. Hazardous Material – Any items or agent (biological, chemical, radiological, and/or physical) that has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors.
- F. Health Hazard - A chemical for which there is statistically significant evidence, according to established scientific principles, that acute or chronic health effects may occur in exposed workers.
- G. Immediate Use - The hazardous chemical shall be under the control and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.
- H. Label – Written, printed, or graphic materials displayed on or affixed to containers of hazardous chemicals.
- I. Physical Hazard - A chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer, pyrophoric, unstable (reactive) or water reactive.

- J. Pictogram - A standardized symbol on a white background framed within a red board that represents a distinct hazard. The pictogram is required on product labels of chemical manufactures, importers, and distributors but may not be included for secondary labels.
- K. Safety Data Sheet (SDS) – Formally known as MSDS, the standardized form containing 16 sections providing information regarding the properties of a particular substance. Its intent is to provide procedures for handling or working with the substance such as the melting point, boiling point, and spill handling procedures.
- L. Signal Words - Used to indicate the relative level of severity of hazard and alerts the reader of potential hazards on the label. There are two signal words: “danger” and “warning”. “Danger” is used for more severe hazards while “warning” is used for less severe hazards.
- M. Toxic Materials – A substance that through chemical reaction or mixture can produce possible injury or harm to the body by entering through the skin, digestive tract, or respiratory tract. (Examples: zinc chromate paint, ammonia, chlorine, antifreeze, herbicides, and pesticides.)
- N. See IDOC Policy **AD-GA-16** for additional Definitions.

## **4. PROCEDURES**

### **A. Prevention**

1. The emphasis of this plan is prevention of any hazardous material incident that would jeopardize the public, staff and incarcerated individual’s safety.
2. The Safety Officer and Associate Warden of Security shall maintain a detailed program of prevention and daily control, including storage, issue, and supervision of toxics, corrosives, flammables, and explosive compounds.
3. Adequate controls for all flammable, toxic, and caustic materials shall be provided through an organized system of regulations governing the acquisition, storage, and use of such materials. The Safety Officer and Associate Warden of Security are responsible for the management of this program, and each supervisor is responsible for the control and accountability of all hazardous substances used in his/her respective department or section of the institution.

4. Special consideration must be given to the possibility of a hazardous material incident arising outside the institution that potentially impacts institutional operations.
5. The local plan should take into account the proximity of highways and railroads with vehicles that may be transporting hazardous materials, as well as any factories or other industrial operations, which could cause a hazardous material incident that could spread to the institution. Under these circumstances, total evacuation on very short notice may be required.
6. An up-to-date list shall be maintained of other persons and organizations with current phone numbers to allow for immediate notification at the direction of the Warden, Safety Officer, or Associate Warden/Security. This list shall include pre-identified agencies with hazardous material experts, appropriate law enforcement agencies and the local fire department.

## **B. Procurement**

Effective procurement controls are the first major steps in the control of hazardous materials. The Safety Officer and Associate Warden of Security shall review and approve the procurement of any hazardous substance covered by this policy. Whenever possible, hazardous substances shall be replaced with non hazardous products less likely to be abused or misused in a prison setting.

## **C. Hazardous Material Storage**

1. Inside storage rooms for flammable and combustible liquids shall be of fire-resistive construction, have self-closing fire doors at all openings, four-inch sills or four-inch depressed floors, a ventilation system that provides at least six air changes within the room per hour, and electrical wiring approved for use in hazardous locations.
2. Outside storage areas shall be graded to divert spills away from exposure, or be surrounded with curbs or dikes at least six inches high. The area shall be protected against tampering or trespassing where necessary, and shall be kept free of weeds, debris, and other combustible materials not necessary to storage.

3. Poisonous, caustic, and toxic materials shall be stored inside securely constructed locked containers or inside locked rooms accessible only to designated employees.
4. Chemicals shall be stored in their original or like containers. All containers shall be properly labelled as outlined in E and F of Procedures. Chemicals shall be secured in a locked area, either in a cabinet, closet, caged area, or other location, as approved by the Safety Officer.
5. To the extent feasible, all hazardous chemicals shall be diluted and stored in a central location.
6. Pesticides/Herbicides
  - a. Only persons licensed/certified in accordance with Iowa Department of Agriculture and Land Stewardship (IDALS) regulations may mix or apply pesticides. The licensed applicator shall also be responsible to maintain all records required by IDALS.
  - b. Licensed applicators may mix pesticides at the site of application.
  - c. All pesticides/herbicides shall be stored outside the secured perimeter when not in use.
  - d. They shall be stored in their original or like container and shall be clearly labelled as specified in this policy.
  - e. Pesticides/herbicides shall only be used under constant supervision; only enough necessary for the job at hand shall be issued.
7. Used and/or leftover regulated hazardous wastes requires compliance with all federal, state, and local regulations governing the handling, management, and disposal of hazardous materials. Regulated hazardous wastes shall include, but is not limited to, some paints (primarily oil based), paint thinner, paint waste containing paint thinner, varnishes, and stains.
  - a. Collection and holding of regulated hazardous waste shall be located at sites established by the Safety Officer for a particular area (i.e.: maintenance shops, armory, etc.)

- b. Employees with questions about whether a substance is a regulated hazardous waste shall contact the Safety Officer before disposal.
  - c. Collection containers shall be labeled as hazardous waste. The collection container shall be designed for liquid storage and be sealed at all times except when being filled.
- 8. Poisonous, flammable, and corrosive chemicals shall not be stored with food storage, paper products, and other janitorial supplies.

#### **D. Inventory Issuance and Usage**

- 1. All hazardous chemicals shall be inventoried and their usage monitored by staff.
  - a. Each institution shall develop a procedure for an appropriate usage log.
  - b. The log shall be filled out by issuing staff completely each time a chemical is added to/removed from storage.
  - c. Hazardous chemicals shall be added to/removed from storage and inventory only by staff. Incarcerated individual shall not have unsupervised access to these materials.
- 2. Inventory Usage Logs shall be stored with the materials. The log sheets shall be retained for 30 days after the last entry and then may be destroyed.
- 3. Care shall be taken in dispensing cleaning supplies to incarcerated individuals for in-cell use as follows:
  - a. Cleaning supplies shall be diluted per manufacturer's instructions before being issued for incarcerated individual use.
  - b. The approved chemicals for general cleaning includes:
    - 1) Mop it Once
    - 2) Shurguard
    - 3) Hydrogen Peroxide

#### 4) Oxivir Wipes

4. Each work area (e.g., kitchen, shop area, etc.) shall maintain an inventory of all types and amounts of flammable or poisonous substances in their respective areas.

### **E. Hazardous Material Control**

1. Procedures for managing hazardous materials shall include controls on inventory, storage, and use. These procedures shall cover flammables, caustics, toxics, and aerosols in pressurized cans.
2. In coordination with the department head involved, the Associate Warden/Security shall establish strict controls on the issue, supervision during use, and storage of these materials. All hazardous substances shall be stored in locked cabinets or other secure storage areas.
3. Gasoline and other flammables shall be strictly controlled to prevent arson or the manufacture of bombs.
  - a. Gasoline shall be transported only in the approved safety can.
  - b. Gasoline pumps shall be located outside the main compound and shall be locked when not in use.
  - c. Gasoline-propelled lawn mowers and other small engines shall be stored in a secure place in non-residential buildings when not in use.
  - d. An employee shall supervise movement of any gasoline within the secured perimeter for use in small engines.
  - e. All flammable materials shall be stored in their original containers and the manufacturers' labels describing contents or antidotes shall not be removed.
  - f. All flammable liquids shall be stored in secure flammable storage cabinets or a room that meets National Fire Protections Association (NFPA) requirements. NFPA 30 Chapter 9: Flammable and Combustible Liquids Code, 9.5.

## **F. Hazard Communication Program**

1. Each institution shall develop a written hazard communication program which shall include:
  - a. A list of chemicals and hazardous materials on grounds;
  - b. Safety Data Sheet (SDS) information and location;
  - c. Training methods and documentation methods for employees, contractors and incarcerated individuals;
  - d. Information on labels and container warnings;
  - e. Information on employee training which reinforces other information (testing, retraining, etc.);
  - f. The hazardous communication program shall be readily available to visitors and the public (during normal business hours), and to employees, contractors, and incarcerated individuals.
2. A list of hazardous chemicals known to be present in the work area shall be maintained by the work supervisor, using an identity that is referenced on the appropriate SDS.
3. Container Labeling
  - a. The work supervisor shall verify that all containers for use are properly labeled with either the facility's uniform container label or the manufacturer's label. The label identifies the following:
    - 1) Name, Address, and Telephone Number
    - 2) Product Identifier
    - 3) Signal Word (Danger/Warning)
    - 4) Hazard Statement
    - 5) Precautionary Statement
    - 6) Pictogram



- b. Labels shall be filled out completely; containers shall not be released for use until all the above data is verified.
  - c. Existing labels on incoming containers of chemicals shall not be defaced or removed unless the container is immediately marked with information.
- 4. Safety Data Sheet (SDS)
  - a. Each institution shall obtain, develop, and maintain a current SDS for all chemicals and hazardous materials on institutional grounds.
  - b. All SDS forms shall be readily available to visitors (during normal business hours), employees, contractors, volunteers and incarcerated individuals.
- 5. Training

See **IO-SE-03**, *Safety and Health Program Management* for training requirements.

## **G. Containment Procedures**

- 1. Immediate containment procedures after release of a hazardous substance shall focus on limiting the spread of the substance and minimizing exposure to the public, staff and incarcerated individuals to its effects. These procedures shall include restricting access of the area, shutting off ventilation and drain systems, and containing other avenues for spread of a hazardous substance.
- 2. Outside expert assistance can be critical in responding effectively to a hazardous material incident. The plan should include the following information:
  - a. A list of location, type, and approximate quantities of each category of hazardous material, with appropriate hazardous material sheets.
  - b. A list of names and phone numbers of local, state, and federal authorities with the responding capability to specific hazardous material incidents.

- c. Procedures for decontamination of staff, incarcerated individuals, and affected areas of the facility.

## **H. Evacuation**

1. The decision to evacuate in the case of a hazardous material incident shall be made by the Warden or designee in consultation with the IDOC Safety Director and outside hazardous material experts.
2. Immediate removal of staff and incarcerated individuals from the area may be ordered by, the Shift Supervisor upon immediate need. Each facility shall have a procedure for evacuation if there is a potential for a large scale hazardous material incident.