



*State of North Carolina
Department of Public Safety
Prisons*

Chapter: R
Section: .0200
Title: **Hazardous Chemical
Control & Management**
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POLICY AND PROCEDURE

References

5th Edition Standards for Adult Correctional
Institutions

5th Edition Appendix D: Guidelines for the
Control and Use of Flammable, Toxic, and
Caustic Substances

Related ACA Standards

5-ACI-3B-05

.0201 Purpose

It is the policy of North Carolina Department of Public Safety, Prisons to establish operational procedures for the storage, issuance, use and tracking of chemicals at all **prisons, institutions, correctional centers, plants, office buildings and other properties operated** under the authority of Prisons. *This policy and procedure shall govern the control and use of all flammable, toxic, and caustic materials used and stored on Prisons property (5-ACI-3B-05).*

.0202 Policy

The properties which compose the entirety of Prisons require a number of chemicals to maintain daily operations with written policy requiring compliance with all federal, state, and local regulations governing the handling, management, and disposal of hazardous materials. Chemicals pose varying risks; therefore, it is necessary to identify and categorize all, and to store, issue, and track many of the chemical products in use within our organization.

.0203 Resource & Reference

The North Carolina Department of Public Safety (NCDPS) Safety Policy & Procedure Manual should be used as a detailed reference regarding safety issues including the management of hazardous chemicals.

.0204 Definitions

- (a) Caustic Material – A substance that can destroy or eat away by chemical reaction.
- (b) Combustible Liquid – A substance with a flash point at or above 100 degrees Fahrenheit. Classified by flash point as a Class II or Class III liquid.

- (c) Flammable Liquid – A substance with a flash point below 100 degrees Fahrenheit. Classified by flash point as a Class I liquid.
- (d) Flash Point – The minimum temperature at which a liquid will give off sufficient vapors to form an ignitable mixture with the air near the surface of the liquid (or in the vessel used).
- (e) Toxic Material – 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.
- (f) Personal Protective Equipment (PPE) – Equipment intended to be worn by an individual to create a barrier against workplace hazards.

.0205 Procedural Guidelines

Facility staff should control the use of flammable, toxic, and caustic materials through the use of a comprehensive program that begins with a review of what chemicals are in use in a particular facility. Controlling what is purchased is the critical first step in limiting the use of dangerous materials and increasing the safety of both staff and offenders. A thorough review process by the safety officer and safety committee can help to ensure that the least dangerous product is used for a particular task. The information contained in the Safety Data Sheet (SDS) is critical in choosing products. Limiting the use of extremely dangerous materials whenever possible is the best method of insuring the highest degree of safety for staff and offenders alike. For each facility, the institution safety committee shall review any purchase of a new product to make certain there is appropriate storage identified for the product and determine what training needs to be accomplished prior to its use.

.0206 Training

Staff and offender workers will be properly trained utilizing the standards identified in the NCDPS Safety Manual, Section E-11, Health and Environmental Standards, Title: Hazard Communication Standard: Chemical Right to Know and shall include the following:

- (a) The location and availability of the written hazard communication program, the list of hazardous chemicals and SDS.
- (b) All employees shall be trained in the safe usage and labeling of hazardous materials, how to understand the SDS, the use of PPE and the emergency procedures to be followed for hazardous material spills and physical contact with hazardous materials.
- (c) Each work area supervisor shall be responsible for ensuring chemicals are being used as

intended and that each offender receives training of proper use, handling, dilution, and required PPE prior to using any chemical. This training shall address the safe usage and handling of each hazard category of chemicals (e.g. corrosives, flammables, etc.) or specific chemicals used as all are unique and may have different protective equipment requirement.

- (d) This training shall be documented for offenders as outlined in the Diagnostic Center Procedures Manual. Section B.201.03, Number 16 requires Hazardous Materials to be taught and Section D.201.03 requires offenders to sign they have received the information. Employee training will be documented following procedures in the NCDPS Safety Manual, Section E-11, Health and Environmental Standards, Title: Hazard Communication Standard: Chemical Right to Know.
- (e) Refresher training must be conducted when one of the following conditions occurs:
 - (1) When there are chemicals, processes or equipment changes which could affect employee exposures.
 - (2) Employees or offenders are transferred to another job assignment where different hazardous products are present.

Information concerning the purpose, content and requirements of the facility's Hazard Communication Program must be provided during the initial orientation of the employee or worker. Staff who conduct new employee orientation shall make sure Hazardous Communication is a part of the orientation. Staff who complete the offender orientation shall make sure the Hazardous Communication Program is explained to all offenders. For both staff and offenders, the orientation training is to be documented.

.0207 Compliance Monitoring

Each location will inspect each area having chemicals for compliance with this policy at least monthly in conjunction with the Monthly Facility Inspection, utilizing the guidelines established in the NCDPS Safety Manual, Section B-1, Safety Inspections, form DC-428A, Monthly Facility Inspection. In addition, semi- annual inspection will be conducted utilizing the same guidelines and form DC-428, Semi- Annual Inspection Checklist. The institution's safety committee will annually review the control of toxic, flammable and caustic chemicals and submit a report with any recommendations to the Warden. The Warden shall ensure an Associate Warden follows up regarding the recommendations.

.0208 Chemical Container Labeling

The cornerstone of proper chemical control, storage, and use is the strict adherence to proper labeling of all containers in a consistent manner. Every chemical product issued to offenders will

have a manufacturer's label with important information about the product's ingredients, proper use, interactions with other chemicals, and hazards. It is imperative that the label be fully intact and able to be read in its entirety. Containers with damaged or faded labels should be discarded. Chemicals should never be stored in a container other than the container provided by the manufacturer for that specific chemical.

.0209 Chemical Storage

Properly labeled chemicals must be stored according to the risk they present. All chemicals with a HMIS rating of two (2) or higher and chemicals that are labeled with the word "Warning" or "Danger" or "Flammable" present a significant enough potential risk to require storage in areas that are secure, and require a system of controlled issuance and accountability. Substances that do not contain any of the properties discussed in the guidelines but are labeled "Keep out of reach of children" or "May be harmful if swallowed" are not necessarily subject to the controls specified in these guidelines. Their use and control, however, including the quantities available, should be monitored in a responsible manner by the controlling facility. Questions concerning the use and control of any substance should be resolved by examining the Safety Data Sheet (SDS). Diluted products with a hazardous rating of (0) or (1) for health, flammability, and reactivity, using the guidelines from the SDS, do not meet the definition of toxic material. Issue logs for these substances are not required but all containers must be labeled. SDS sheets must be maintained on these substances at the location(s) where chemicals are stored/issued and readily available. A perpetual inventory of these products should be maintained in the primary storage area for general control.

If a substance falls into one of these labeling categories or possesses one or more of the chemical properties listed in the Definitions section, the following storage measures need to be implemented.

- (a) Secure storage area that is inaccessible to offenders, with a strong, locking door. Key control practices should be followed as with any other secured area.
- (b) Chemical inventory and sign in / sign out logs will be used to record issuance and return of chemicals from the secure storage area. All stored chemicals will have corresponding SDS readily accessible. Staff will supervise offender janitors and cleaning crews and will be responsible for signing the chemicals in and out.
- (c) Properly installed shelving should be placed in the storage areas, capable of supporting and holding all chemicals in a safe and ordered manner.
- (d) Flammable rated storage cabinets should be used to store flammable chemicals within the secure storage area.

- (e) All locations where chemicals are stored and/or issued from shall have appropriate inventory issue logs, as well as personal protective equipment (PPE). All hazardous chemicals are securely stored in areas where offenders cannot access these areas. Caustic, flammable and highly poisonous chemicals are maintained under lock and key. Offenders using chemicals with a rating of 2, 3, or 4 shall be under staff supervision while using these chemicals.

Accidental spills, exposures to skin and eyes, and combining of certain chemicals can all cause serious injury or even death. Even small incidents should be taken seriously and reported immediately to supervisory staff. Ignoring or attempting to control spills without taking proper steps can lead to more serious problems. Spills and disposal must be addressed in accordance with the guidelines indicated on the SDS sheet. Supervisory staff should stress to the staff and offenders under their supervision that reporting of spills or exposures is mandatory. Offenders are issued chemicals, cleaning agents, etc. with an HMIS rating of 0 or 1 in the quantity required to accomplish an immediate task. Unused chemicals are not allowed in work areas at the end of the workday and are secured before offenders leave the area. All flammable products are managed and controlled as hazardous materials and are stored in the flammable materials lockers in accordance with state and local fire codes. Products with a flashpoint of <100 degrees Fahrenheit are stored in a flammable locker, while those with a flashpoint of between 101 and 199 will be secured and inventoried. Products with a flashpoint of over 200 or greater will be treated as a 1 or 0.”

.0210 Chemical Issuance and Use

Chemicals must be drawn/issued to properly trained individuals by staff who are authorized by the Associate Warden. This authorization may, if appropriate, be delegated to the departmental level. Chemicals will be used according to manufacturer’s instruction. Offenders and staff who use chemicals should be orientated by knowledgeable supervisory staff. Safe work practices should be stressed at all times. All materials designated as “Hazardous,” “Dangerous,” or “Flammable” may be used by offenders only under direct staff supervision, which requires staff to be in the immediate physical area as the offenders.

.0211 Chemical Spill & Exposure Management

- (a) Accidental spills, exposures to skin and eyes, and combining of certain chemicals can all cause serious injury or even death. Even small incidents should be taken seriously and reported immediately to supervisory staff. Ignoring or attempting to control spills without taking proper steps can lead to more serious problems. Spills and disposal must be addressed in accordance with the guidelines indicated on the SDS sheet. Supervisory staff should stress to the staff and offenders under their supervision that reporting of spills or exposures is mandatory.
- (b) Each department with the potential to handle hazardous materials has clearly-labeled hazardous material storage containers in the area. Disposal of hazardous chemicals is

performed in a manner consistent with occupational health and safety codes. Offender involvement is not permitted in this activity or, alternatively, is allowed only under continuous direct staff supervision.

.0212 Safety Data Sheets

Safety Data Sheets, or SDS, are documents required by government regulation for all hazardous chemical substances produced and/or sold in the United States; use of all hazardous materials is consistent with the provisions and precautions listed in the Safety Data Sheet. Each SDS sheet shall be in English and shall contain the following information: the identity used on the label, physical and chemical characteristics, physical and health hazards, primary routes of entry, exposure limits, precautions for safe handling and use, control measures, emergency and first aid procedures, and the chemical manufacturer's name, address, and telephone number. SDS sheets are available from the manufacturer of every chemical product on the market today. Each facility within Prisons is required to have a current SDS for every chemical present on their property. The facility will maintain their complete master collection of SDS in an organized binder in the facility medical section, and a duplicate copy will be maintained with the Captain or facility safety officer. All staff who use chemicals or supervise offender use of chemicals are trained in, and understand SDS. These staff are trained in the handling, storage, inventory, and disposal of hazardous materials. **SDS shall be readily accessible to all employees for each chemical used in their area.** The facility safety officer will maintain a master index of all flammable, caustic, and toxic substances used by a facility, including their SDS. Additional copies may be necessary depending on the structure and function of the individual facility. The Prisons Safety Office should be contacted as necessary for specific instructions on SDS maintenance, as needed.



Commissioner of Prisons

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