



*State of North Carolina  
Department of Correction  
Division of Prisons*

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***POLICY AND PROCEDURE***

Chapter: F  
Section: .3600  
Title: **Hazardous Chemical  
Control & Management**  
Issue Date: 10/05/07  
Supersedes: New Policy

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**.3601 Purpose**

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 the North Carolina Division of Prisons. This policy and procedure shall govern the control and use of all flammable, toxic, and caustic materials used and stored on DOP property.

**.3602 Policy**

The properties which compose the entirety of the North Carolina Division of Prisons necessarily require a number of chemicals to maintain daily operations. Because chemicals pose varying risks, it is necessary to identify and categorize all, and to store, issue, and track many of the chemical products in use within our organization.

**.3603 Resource & Reference**

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

**.3604 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.

### **.3605 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 inmates. 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 MSDS 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 inmates alike.

### **.3606 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 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.

### **.3607 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. Diluted products with a hazardous rating of (0) or (1) for health, flammability, and reactivity, using the guidelines from the MSDS, do not meet the definition of toxic material. Issue logs for these substances are not required but all containers must be labeled. MSDS sheets must be maintained on these substances and readily available. An 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 inmates, 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 utilized to record issuance and return of chemicals from the secure storage area. All stored chemicals will have corresponding MSDS readily accessible. Staff will supervise inmate 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.

### **.3608 Chemical Issuance and Use**

Chemicals must be issued to properly trained individuals and used according to manufacturer's instruction. A properly trained individual is defined as someone who can read and understand the manufacturer's label, has been briefed by staff proper usage techniques, and utilizes safety equipment appropriate to the chemical during use. Inmates and staff who will use chemicals should be orientated by knowledgeable supervisory staff and safe work practices should be stressed at all times. All materials designated as "Hazardous," "Dangerous," or "Flammable" may be used by inmates only under direct staff supervision, which requires staff to be in the immediate physical area as the inmates. General staff training must include the standard hazard communication program.

### **.3609 Chemical Spill & Exposure Management**

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 MSDS sheet. Supervisory staff should stress to the staff and inmates under their supervision that reporting of spills or exposures is mandatory.

### **.3610 Material Safety Data Sheets**

Material Safety Data Sheets, or MSDS, are documents required by government regulation for all hazardous chemical substances produced and/or sold in the United States. Each MSDS 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. MSDS sheets are available from the manufacturer of every chemical product on the market today. Each facility within the Division of Prisons is required to have a current MSDS for every chemical present on their property. The facility will maintain their complete master collection of MSDS sheets in an organized binder in the facility medical section, and a duplicate copy will be maintained with the facility safety officer. The facility safety officer will maintain a master index

of all flammable, caustic, and toxic substances used by a facility, including their MSDS sheets. Additional copies may be necessary depending on the structure and function of the individual facility. The NCDOC Safety Office should be contacted as necessary for specific instructions on MSDS maintenance if needed.

### **.3611 Annual Review Responsibility**

At least annually, the control of toxic, flammable and caustic chemicals should be reviewed by the facility safety officer to ensure continued compliance with all aspects of the program. This annual review will be documented in memorandum format and maintained in the facility's safety records. Any deficiencies will be addressed with remedial action.

*Greg Bennett 10-05-07*

Director of Prisons

Date

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