Policy No. SF- 1373.3A

Delgado COMMUNITY COLLEGE

# POLICY & PROCEDURES MEMORANDUM

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| **TITLE:** | **CONTROL OF HAZARDOUS MATERIALS** |
| **EFFECTIVE DATE:** | **November 6, 2012** |
| **CANCELLATION:** | DCI 1373.3 (9/15/86) |
| **CATEOGRY:** | Safety (SF) |

## POLICY STATEMENT

Delgado Community College is committed to a continuing and aggressive effort to maintain a safe work environment for employees, students, and persons using College facilities. Control of hazardous material practices have been established to ensure compliance with state and federal regulations and adherence to nationally recognized safety standards.

Delgado is covered by the State of Louisiana Department of Environmental Quality Hazardous Waste Regulations mandated by the Hazardous Waste Control Law, L.R.S. 30:2171, et al. This legislation also serves as the State's response to the federal Resource Conservation and Recovery Act (RCRA); the rules and regulations of the legislation apply to owners or operators of all facilities that generate, transport, treat, and store or dispose of hazardous waste. The College maintains a close liaison with the State of Louisiana Office of Risk Management in developing and implementing its Control of Hazardous Materials program.

All employees responsible for hazardous materials at the College are required to rigorously enforce safety regulations governing the handling, storage, and disposal of the materials. Department heads and supervisors are responsible for maintaining up-to-date inventories of all hazardous materials in their respective units. The College's designated Risk and Safety Manager maintains up-to-date inventories of hazardous material at all College locations and ensures periodic inspections are conducted to maintain compliance with safety regulations for these hazardous materials.

## PROCEDURES & SPECIFIC INFORMATION

1. **Purpose**

To establish a program for controlling all hazardous materials used by or housed in any operating unit of Delgado Community College.

## 2. Scope and Applicability

This policy and procedures memorandum applies to all College operating units and to all employees, students and visitors of the Delgado Community College.

## 3. Definitions

As used in this instruction, the following definitions apply.

***Chemical*** - any element, chemical compound, or mixture of elements and/or compounds.

***Container*** - any bag, barrel, bottle, box, can cylinder, drum, storage tank, or the like that contains a hazardous material.

***Distributor*** - the company that supplies hazardous chemicals to the College.

***Explosive*** - a chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.

***Facility*** - the physical premises at which hazardous materials are used or stored.

***Hazardous Material*** - Any biological agent, disease-causing or other agent which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any person...will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions...or physiological deformations in such persons or their offspring (OSHA 1910 Standards).

***Label*** - any written, printed, or graphic material displayed on or affixed to containers of hazardous chemicals.

***Identity*** - any chemical or common name which is indicated on the material safety data sheet (MSDS) for the chemical. The identity permits cross-referencing among the required list of hazardous chemicals, the label, and the MSDS.

***Material Safety Data Sheet (MSDS)*** - written or printed material concerning a hazardous material. An MSDS must be prepared in a manner that provides basic chemical identity, health, safety, and emergency response information, and is usually prepared in accordance with the OSHA Hazard Communication Standard or the U.S. Coast Guard Chemical Hazard Response Information System (CHRIS).

## 4. Background

Delgado's hazardous material program is a component of the College's Comprehensive Safety Program. It is designed to achieve closer control over all hazardous materials used and stored on Delgado facilities. The objective of the hazardous material inventory is to accumulate information on all hazardous materials on campus and to ensure proper safety regulations and MSDS information are available to all employees and students using them.

## 5. Hazardous Material Survey Reporting

### A. Categories of Hazardous Material

For reporting purposes, hazardous material will be classified according to the following two categories.

(1) Hazardous material on hand but no longer used or needed; or
(2) Hazardous material needed for instructional purposes, custodial or general operational needs.

If an operating unit has hazardous substances that fall under both categories, two Hazardous Materials Survey Reports will be submitted annually to the College's Risk and Safety Manager—one for each category.

### B. Report of Hazardous Material

All hazardous material, regardless of amount, type, use, or age, must be inventoried and reported on the Hazardous Material Survey Form, Form 1373/001 (Attachment A). The supervisor of each operating unit will make an exhaustive search of his/her area to ensure all hazardous materials are reported. If any unidentified substance or material is discovered during this inventory, the supervisor will contact the Risk and Safety Manager for assistance in identifying the material and for handling and disposition instructions.

### C. Timetable for Submitting Reports

Supervisors will submit the initial inventory of hazardous material to the Risk and Safety Manager the first week in November of each year. Additions, deletions, and changes to this list will be made as they occur.

The following information will be furnished for each hazardous material:

(1) **Identity of the Hazardous Material** (See definition of "Identity" above.)

(2) **Usage/Disposition**
Explain operation or instructional lab that requires use of the hazardous material. If chemical is no longer required, use this column to explain what disposition is being made of the chemical.

(3) **Container/Storage Location** (See definition of "Container" above.)
Indicate where stored—building, room number, exact location; i.e., cabinet, shelf, etc.

(4) **Inventory Range**
Indicate greatest amount and lowest level of material stored.

(5) **Distributor**
Provide name and address of company supplying the material to the College.

(6) **MSDS Location** (See definition of "MSDS" above.)
Indicate where MSDS Sheets are kept. They must be readily available to personnel using material. If MSDS information is not available, the personnel using the material must contact Delgado's Risk and Safety Manager.

## 6. Training

Campus/site-specific hazardous materials training is presented annually by Department Heads/Supervisors to affected employees, or when changes in operations warrant. All faculty, staff and students who may come into contact with hazardous chemicals **must** be trained in safe handling procedures, health and safety hazards, labeling, MSDSs and personal protective equipment.

### A. Contents of Training

Employees **must** be trained on and informed of:

(1) Requirements of the OSHA Hazard Communication Standard;

(2) Any operations in the work area where hazardous substances are present;

(3) Methods that may be used to detect the presence of a chemical or material by visual appearance, odor, and irritation (skin, headaches, coughing);

(4) Location and availability of the written campus/site-specific hazardous materials training resources including lists of hazardous substances and MSDS information;

(5) Methods and observations that may be used to detect the presence or release or a hazardous substance in the work area;

(6) Physical and health hazards of the substances in the work area, and the measures employees can take to protect themselves from these hazards (i.e. appropriate work practices, emergency procedures and personal protective equipment, work practices, respiratory equipment, eye protection, other personal protective equipment, special training, etc.);

(7) Measures used to protect the employee (engineering design, barriers, ventilation, operating procedures, special training, etc.);

(8) Details of the College's Control of Hazardous Materials policy;

(9) The right to personally receive information regarding hazardous substances to which they may be exposed.

### B. Frequency of Training

Employees **must** be trained on hazardous substances in their work area:|

(1) Upon initial assignment and annually from then on; and

(2) Whenever a new hazard is introduced into the work area.

### C. Recordkeeping of Training

Training records **must** be maintained by the Supervisor for at least one year.

## 7. Personal Protective Equipment (PPE)

This section applies to employees, students, or visitors on campus determined to be in need of personal protective equipment by virtue of their exposure to hazards in the working, teaching, or research environment.

### A. Selection

The selection of appropriate protective gear is based on the hazards anticipated or recognized. Complete protection calls for assembling a set of gear including respirator, hardhat, safety glasses or faceshield (preferably both), body covering (coveralls, pants and jacket), gloves and safety boots/shoes (steel toe and shank). Omitting one item may compromise the individual's safety.

Some pieces of protective equipment, such as hardhats and boots, have specific standards for manufacture and only those items meeting these standards should be used. However, there are no such standards for chemical protective clothing. Selections must be based upon judgment.

In selecting the protective material, the following should be considered:

***Chemical Resistance*** - when clothing contacts a hazardous material, it must maintain its structural integrity and protective qualities.

***Strength*** - which is based on resistance to tears, punctures, and abrasions, as well as tensile strength.

***Flexibility*** - clothing easy to move in and work in. Flexibility is especially important in glove materials.

***Thermal limits*** affect the ability of clothing to maintain its protective capacity in temperature extremes. Thermal limits also affect mobility in cold weather and transfer of heat to the wearer in hot weather.

***Cleanbility*** - difficult and expensive if protective clothing is not cleanable. Some materials are nearly impossible to clean adequately under any circumstances. Disposable clothing is sometimes used.

***Lifespan*** - which is the ability to resist aging, especially in severe conditions over time. This should be balanced against the initial cost of the garment.

## B. Benefits and Limitations

It is widely recognized that the risk of exposure should be addressed through administrative and engineering controls, work practices and training. It is equally recognized that these controls may not prove to be adequate in situations where the risk could not be completely minimized, or in the event of an unplanned exposure. Therefore, the use of personal protective equipment (PPE) becomes the last line of defense against exposure.

The **benefits** gained by wearing PPE are:

- possible prevention of exposure,
- potentially minimizing the risk should an exposure occur, and
- compliments to existing controls that enhance personal protection.

The **limitations** associated with PPE are:

- PPE only protects the individual wearing it, not anyone else in the workplace;
- The discrepancy between theoretical and actual levels of protection provided exists (the latter is difficult to assess);
- PPE is only effective if correctly selected, fitted, used, and cared for, and the individual is trained; and
- The choice of PPE may compromise mobility, visibility, communication, etc.

When considering the appropriate type of PPE, it is important to identify and assess all the types of risk one will be exposed to, what risks can be mitigated through other control mechanism, and any detrimental impact associated with the selection of the PPE.

## C. Donning/Removing PPE

When *donning* equipment, user must:

1. Identify hazardous, manage risk and gather necessary PPE;
2. Plan where to don equipment; and
3. Determine if other personnel or a mirror is available to ensure no areas are exposed.

When *removing* equipment, user must:

1. Avoid contamination of self, others and the environment;
2. If wearing gloves and gown, peel off gown and gloves and roll inside out for disposal;
3. Perform hand hygiene;
4. If wearing face shield, mask, or goggles, remove from behind; and
5. Perform hand hygiene.

## D. PPE Inspection

Pertaining to Coats, Pants, Helmets, Gloves, Hoods, Footwear, the following inspection categories apply as applicable:

- Evaluation of fit
- Soiling
- Contamination from hazardous materials or biological agents
- Rips, tears and cuts
- Damaged or missing hardware
- Thermal damage such as charring, burn holes, or melting in any layer
- Damaged or missing reflective trim
- Moisture barrier integrity- Rips, discoloration, thermal damage
- Loss or shifting of liner material
- Broken or missing stitches
- Material integrity: UV, chemical degradation
- Wristlets: elasticity, stretching, cuts, thermal damage
- Reflective trim: attached, reflectivity, damage
- Label integrity, legibility
- Hook and Loop functionality
- Liner attachment systems
- Closure system functionality

## E. Disposing of PPE

PPE such as gloves, aprons and masks are single use items and should be disposed of after each procedure or activity to prevent cross-transmission of micro-organisms. When these items are worn primarily to protect the wearer, the importance of their prompt removal between tasks on the same client or between clients can easily be overlooked and give rise to the possibility of contamination.

All PPE must be removed before leaving the area and disposed of in designated waste bend and any body fluids that have inadvertently contaminated the skin washed off immediately. PPE should not replace other infection prevention and control practices such as hand hygiene.

## F. Types of Protective Equipment

Protective equipment, including personal protective equipment for eyes, face, hands and extremities; protective clothing; respirator devices; and protective shields and barriers, are used and maintained in sanitary and reliable condition whenever it is necessary by reason of hazards of process or environment, chemical hazards, radiological hazards, biological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation, or physical contact (OSHA 1910 Standards).

Under no circumstances will a person knowingly be subjected to a hazardous condition without appropriate personal protective equipment. Persons who are exposed to hazards requiring personal protective equipment must be properly instructed in the use of such equipment by the individual in charge of the activity or his/her designee. It is the responsibility of the individual in charge of an activity to assure that safety practices are adhered to. If those individuals required to wear personal protective equipment fail to do so, they will be subject to disciplinary action.

### 1. Eye Protection

Persons working in or studying occupations such as painting, carpentry, construction, labor, landscape, general maintenance, metal trades, chemistry, other sciences and engineering, or any work/study activity which involves hazards such as flying objects, dust and/or vapors, hot metals, chemicals, or light radiation are required to wear approved safety air/goggles at all times while exposed. Food service personnel must wear approved goggles when there is a possibility of eye injury from caustic materials, hot fat splatters, or associated hazards.

Management level employees, students, or visitors, who make occasional visits to machine, welding, and carpentry shops, boiler rooms, equipment rooms, power houses, construction areas, chemistry labs, or other areas in which eye injury is a possibility must wear approved eyewear.

***Prescription Lens Wearers***
If required to wear eye protection, such persons are to wear an approved face shield, goggles that fit over glasses, prescription glasses with protective optical lenses fitted with side shields, or goggles that incorporate prescription lenses.

***Contact Lens Wearers***
Contact lenses must never be considered as a substitute for eye protection; eye protection is to be worn over them. "Contact lenses, of themselves, do not provide eye protection in the industrial sense and must not be worn in a hazardous environment without appropriate covering safety eyewear.

2. **Foot Protection**
For all non-office personnel, "Footwear such as sandals, open-toed shoes, platforms, high heels, cloth-bodied tennis shoes, or sneakers is not considered safe and is prohibited for use as a good work shoe. Well-built safety shoes, leather-bodied shoes, or boots in good condition with low heels and hard soles are to be used."

3. **Hand Protection**

Hand protection must be worn by employees when handling hot work, chemicals, electrical, material handling of rough and/or sharp items, doing landscaping work, welding, and "wherever it is necessary by reason of hazards of processes of environmental, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment" (OSHA 1910 Standards). Hand protection must not be worn while working on moving machinery such as drill saws, grinders, or other rotating and moving equipment that might catch the hand protection and pull the worker's hand into a hazardous area.

4. **Head Protection**

Employees/students in areas such as painting, carpentry, construction, plumbing, labor, landscape, maintenance, metal trade, and any occupations that involve hazards from falling objects and/or overhead must be covered.

5. **Hearing Protection**

Hearing protection must be worn by employees/students when noise exposure is above that of the 85dB (action level) when measured on the A-scale of the standard sound level meter at slow response.

6. **Protective Clothing**

Protective clothing must be worn by employees/students when the potential of an employee/student being exposed or coming in contact with harmful substance is evident. i.e., chemicals, high heat (radiant), dust, open flame, etc.

## 8. Storage of Hazardous Materials

In order to effectively manage chemicals, a program should be established based on the following three principals:

***Minimize Exposures***. Take the necessary precautions when working with and storing chemicals. As a means of minimizing the potential for exposure, pursue opportunities for product substitution. Also reduce quantities on hand as much as possible.

***Do Not Underestimate Risks***. Ensure that the risk associated with each chemical is assessed, understood and communicated. It is prudent to assume all chemicals are hazardous and handle them accordingly. Retain Material Safety Data Sheets (MSDSs) that are sent to the lab or accompany the shipment.

***Use Proper Control Measures***. Eliminate the hazard through engineering controls, personal protective equipment, and administrative procedures. Ensure that all personnel are properly trained in accordance with regulatory requirements (e.g., Laboratory Standard and MSSM's Chemical Hygiene Plan) so that they can operate safely at their jobs.

The following are key management issues for the storage and handling of hazardous materials including hazardous chemicals, flammable liquids, and compressed gases.

- Materials handling regulations (OSHA 1910 Standards) require aisles and passageways kept clear and in good repair, with no obstructions that could cause hazards.

- "Storage of materials shall not create a hazard" therefore, containers should be placed carefully in tiers that are "stacked, blocked, interlocked and limited in height so that they are stable and secure against sliding or collapse."

- "Storage areas shall be kept free from accumulation of materials that constitute hazards from tripping, fire, explosion or pest harborage."

- MSDS contains vital information you need to know before storing or removing a container that holds a hazardous substance.

## 8. Disposal of Hazardous Materials

The College has contracted with an environmental services vendor to pick up and dispose of hazardous materials college-wide twice a year, at the end of fall and spring semesters. One month prior to the date of pickup, each unit/department is required to submit a complete list of all disposable materials to the Risk and Safety Manager, while assembling all hazardous materials in a designated area, at their respective location, for pickup.

The list is forwarded to contracted vendor for processing. Once all materials have been identified and retrieved, the vendor transports the materials for external disposal.

## 9. Responsibilities

A. **Department Heads/Supervisors of Operating Units Using Hazardous Materials** must:

(1) Ensure all hazardous material containers are properly labeled.

(2) Inventory and maintain an up-to-date list of all hazardous materials in his or her area of responsibility.

(3) Certify the types and amounts of hazardous material on hand are required for the intended purpose of operation.

(4) Provide safety instructions to employees/students covering proper handling, health considerations, storage, emergency response, and disposition of hazardous materials.

(5) Ensure appropriate MSDS information is readily available to personnel in the area where hazardous material is used/stored.

(6) Ensure that each work area requiring specific personal protective equipment is posted with appropriate warning signs.

(7) Ensure appropriate personal protective equipment is available as needed.

B. The College's designated **Risk and Safety Manager** will:

(1) Maintain a complete list of all hazardous materials currently used/stored on campus by location.

(2) Provide, as required, safety instructions and procedures for handling and disposing of hazardous materials.

(3) Ensure MSDS information is readily available at all locations.

(4) Ensure unscheduled inspections are conducted to ensure hazardous materials are used/stored in accordance with prescribed safety regulations.

(5) Provide overall direction in administering the Hazardous Materials Program at Delgado Community College.

## 10. Cancellation

This policy and procedures memorandum cancels DCI 1373.3, *Control of Hazardous Materials*, dated September 15, 1986.

*Attachment:*

Attachment A- Hazardous Material Survey Form, Form 1373/001

*Policy Reference:*

Delgado Policy and Procedures Memorandum, *Comprehensive Safety Program*
State of Louisiana Department of Environmental Quality Hazardous Waste Regulations mandated by the Hazardous Waste Control Law, L.R.S. 30:2171, et al.

*Review Process:*

Control of Hazardous Materials Ad Hoc Committee 9/20/12
Safety Council 10/18/12
College Council 11/6/12

*Distribution:*

Distributed Electronically Via College's Website and Email System