



**Georgia Institute of Technology  
Hazardous Chemical Protection and  
Employee Right to Know Plan  
September 2010**



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## 1. Policy:

It is the responsibility of the Georgia Institute of Technology to provide employees with a safe and healthful work environment and to comply with all applicable State and Federal regulations. In order to comply with the Georgia Public Employees Hazardous Chemical Protection and Right to Known Rules, and the University System of Georgia Hazardous Chemical Protection Communications (Right to Know) Plan, this written Hazardous Chemical Protection and Right to Know Plan is established for the Georgia Institute of Technology

## 2. Scope:

All work units of the Georgia Institute of Technology (GIT) are included within this program. The written program is available for review at the office of the GIT Right to Know Coordinator, located at 490 Tenth Street, Room Suite 313.

## 3. Definitions:

**“Chematix” is the computer application used to maintain chemical usage and storage, waste pick up requests, track incoming and outgoing status of chemicals and is the vehicle used to submit mandatory, semi-annual reconciliations of lab inventories. Use of Chematix to manage chemical inventories in laboratories and shops has been a GT requirement since 2005.**

“Member Unit” means any of the thirty four colleges and universities governed by the Board of Regents of the University System of Georgia.

“Member Unit Right to Know Coordinator” means an individual who is assigned the responsibilities associated with the title in the written member unit Hazardous Chemical Communication (Right to Know ) Plan. The Georgia Institute of Technology Right to Know Coordinator is Deborah Wolfe-Lopez (404-385-2964, [Deborah.wolfe-lopez@facilities.gatech.edu](mailto:Deborah.wolfe-lopez@facilities.gatech.edu) )

“Principle Investigator” (PI) means the person who is responsible for a laboratory and the work that is conducted there.

“University System Right to Know Coordinator” means the individual who is assigned the responsibilities associated with that title with the Board of Regents (BOR). The BOR Right to Know Coordinator is Alex Lehocky [alex.lehocky@usg.edu](mailto:alex.lehocky@usg.edu) .

“Work area” means a room inside a building or structure, an outside area, or other defined space in a work place where hazardous chemicals are produced, stored, or used and where employees are present in the course of their employment.

“Work Area Supervisor” means the person in charge of a work area, such as a shop supervisor, foreman, lab supervisor, lab manager, or Principle Investigator.

“Work place” means an establishment or business of an employer at one geographic location at which work is performed by a state employee and which contains one or more work areas. In the case of an independent contractor or subcontractor, the work place shall be defined as all work areas wholly owned or controlled by such independent contractor or subcontractor.

“Work Unit” means a department or an institute within the university which has its own director, manager, or chair.

“Work Unit Right to Know Coordinator” means the individual who is assigned the responsibilities associated with that title as described below.

## **4. Responsibilities**

### **4.1. The GIT Right to Know Coordinator**

- 4.1.1.** is Deborah Wolfe-Lopez, (404-385-2964, [Debbie.wolfe-lopez@ehs.gatech.edu](mailto:Debbie.wolfe-lopez@ehs.gatech.edu) )who shall:
- 4.1.2.** Acts as liaison between the University System RTK Coordinator and the Georgia Institute of Technology on hazardous chemical issues.
- 4.1.3.** Resolves questions regarding applicability of the Chapter 300-3-19 rules to individual work places and work areas of the Georgia Institute of Technology.
- 4.1.4.** Makes arrangements for and/or provide appropriate and adequate RTK training to all employees of GIT by means of:
  - 4.1.4.a. Annual Right to Know Training (offered monthly and is on line)
  - 4.1.4.b. Training, as needed on using Chematix/reconciling Chemcatix inventories. (offered monthly and on line)
  - 4.1.4.c. Periodic Chemical Hazard/Lab Safety Training (offered monthly and on line)
  - 4.1.4.d. will include access to a list of hazardous chemicals used, stored or manufactured in the particular work place.
  - 4.1.4.e. will include written Standard Operating Procedures (SOP) for processes involving hazardous materials, waste disposal, and common equipment.
  - 4.1.4.f. will communicate MSDS resources to employees and students

- 4.1.4.g. may include a new employee orientation check list to be used by the Principle Investigator (PI) or his/her designee to orient new employees/students to the work place.
- 4.1.4.h. Accumulate semiannually the hazardous chemical inventory for GIT.

#### **4.1.5. The Work Unit Right to Know Coordinator**

- 4.1.5.a. Will ensure that all work unit employees receive initial RTK training prior to their work start date and refresher RTK training be accomplished between July 1 and September 30 annually.
- 4.1.5.b. Will ensure, beginning in December 2005, that all inventories are reconciled within Chematix between Jan 1 and June 15 and again between July 1 and Dec 15 each year for all work places within their work unit that use or store hazardous chemicals. Work places where Chematix has not yet been implemented may submit their inventories as an Excel file until Chematix can be initiated in their location.
- 4.1.5.c. Will ensure that information on where to obtain MSDSs such as <http://www.chematix.gatech.edu> ; <http://www.hazard.com> , <http://www.usg.edu/ehs/library/msds/index.phtml> , is prominently displayed in all work areas.

## **4.2. Principle Investigators/Area Supervisors**

- 4.2.1. Will designate an individual to be responsible for the Chematix inventory including regularly updating changes within the lab concerning chemical usage, disposal and inventory status.
- 4.2.2. Will develop a work place specific check list to orient new employees to the chemical and physical hazards specific to their work area
- 4.2.3. Will ensure that employees are made aware of and are properly trained in the uses and hazards associated with chemicals to which they may become exposed in their work area.
- 4.2.4. Will ensure that employees are provided with personal protective equipment appropriate to each work environment, and receive adequate training in the use and maintenance of this equipment.
- 4.2.5. Will ensure that the chemical inventory is reconciled semiannually.
- 4.2.6. Will arrange for the disposal of any hazardous material remaining on GIT property as a result of the departure of a student.
- 4.2.7. Are responsible for the quality and accuracy of the inventory information in Chematix at all times:
  - 4.2.7.a. Ensure the accuracy of the chemical names and CAS numbers in their inventory
  - 4.2.7.b. Ensure that all chemicals entering the work area are bar coded with Chematix bar code labels at the time of receipt.
  - 4.2.7.c. Ensure that containers of chemicals that are used up in process or wasted out are decremented from the inventory.

### 4.3. Department Heads

Are responsible for ensuring that all unwanted hazardous chemicals remaining on GIT property as a result of the departure of a faculty member are turned over to GIT Environmental Health and Safety.

## 5. Procurement of Hazardous Chemicals

- 5.1.1. It is the responsibility of the person approving the purchase of a chemical to determine whether a chemical or product used is a hazardous chemical and whether special training/handling/storage procedures are needed prior to the receipt of the chemical into the work area.
- 5.1.2. All chemical containers received into the work area must be bar code-labeled and entered into Chematix as soon as it is received.
- 5.1.3. Material Safety Data Sheets (MSDS): It is the responsibility of the person procuring a hazardous chemical to obtain and review the MSDS for that chemical prior to purchase.
- 5.1.4. Contact EH&S for assistance in determining handling and storage procedures

## 6. Restricted Purchases

Purchase/acquisition of certain chemicals requires pre notification to GT EHS and/or pre approval by the GT Chemical and Environmental Safety Committee (CESC)

### 6.1. Chemicals Requiring Pre-Notification to GT EHS and CES Committee Approval

- 6.1.1. Explosives including but not limited to TNT and RDX (any amount)
- 6.1.2. Pyrophorics (solid, liquid, or gaseous)
- 6.1.3. Highly toxic gases which include:
  - 6.1.3.a.1. gases with a Lethal Concentration 50% by inhalation exposure of less than 3000 ppm
  - 6.1.3.a.2. gases which carry an NFPA Health Safety Rating of 3 or 4
  - 6.1.3.a.3. gases which Carry an NFPA Health Safety Rating of 2 but have poor physiological warning properties (little or no odor or taste at harmful levels)

### 6.2. Materials Requiring ONLY Pre-Notification to GT EHS

- 6.2.1. Water reactive materials (if not already included in the lab's chemical inventory)
- 6.2.2. Extremely toxic solids or liquids which include material with a Lethal Dose 50% by ingestion of 5 mg of material per kg of animal body weight ( $LD_{50} \leq 5\text{mg/kg}$ )
- 6.2.3. Procedures for requesting approval for restricted purchases can be found at:  
([http://www.ehs.gatech.edu/chemical/pre\\_approval.pdf](http://www.ehs.gatech.edu/chemical/pre_approval.pdf))

## 7. Container Labeling

### 7.1. Primary Containers

- 7.1.1. The person receiving a chemical or product containing a hazardous chemical should verify that all containers received for use are clearly labeled as to the contents, display appropriate hazard warnings, and list the name and address of the manufacturer.
- 7.1.2. Never deface a manufacturer's label unless the container has been emptied and rinsed.

### 7.2. Secondary Containers

- 7.3. The work shift supervisor in each section should ensure that all secondary containers are labeled with the chemical name and basic hazard information (NFPA labels work well for this).
- 7.4. Secondary containers intended for one work shift or less shall be labeled at a minimum with the name of the contents and the user's name.
- 7.5. Vials and test tubes may have hazard labels affixed to the rack or container in which they are held, rather than every vial or test tube, so long as every vial or tube in the rack presents the same hazard.
- 7.6. Unlabeled Containers: If an employee finds a container in the work area that is unlabeled or has a defaced label and is thought to contain a hazardous chemical, the employee should immediately notify the work place supervisor. If the supervisor is unable to identify the container, the supervisor should immediately call the EHS at 404-894-4635

## 8. Employee Training:

- 8.1. Current Employees should have received Right to Know Training within 6 months of their hire date and refresher training annually thereafter. Refresher training can be accomplished by on line training at <http://www.usg.edu/ehs/training/rtkbasic/>. Individuals should print out the completion certificate at the end of the training and forward a copy to their Work Unit RTK Coordinator. Work Unit RTK coordinators can Contact Deborah

Wolfe-Lopez for a complete list of those persons in their departments that have completed the training on line.

- 8.2.** New Employees will receive RTK BASIC training prior to starting work. This training is usually presented at new employee orientation and may include showing the video program “Your Right to Know” produced by the Georgia Department of Labor for such training. This program covers all the required points of the Georgia Right to Know Law. Any additional RTK policies established for GIT will be presented at this time. Other training may be substituted for the video tape as long as it is presented by a competent person as determined by EH&S and follows all the requirements under the law.
- 8.3.** Employees Handling Hazardous Chemicals: The immediate supervisor of any employee who will routinely work with any hazardous chemical must ensure that before beginning work, each such employee receives additional chemical specific training on the specific chemicals present in the work place:
  - 8.3.1.** Their hazards and health effects.
  - 8.3.2.** Methods and observation techniques used to determine the presence or release of the chemical in the work areas.
  - 8.3.3.** How to avoid or lessen exposure to the chemical, proper work practices, use of engineering, administrative controls, and personal protective equipment
  - 8.3.4.** Emergency procedures to be followed in the event of a release and/or exposure
  - 8.3.5.** Procedure for safe disposal of waste chemicals.
  - 8.3.6.** Supervisors are responsible for documenting all training sessions. Documents must be made available to EH&S/DOL on request.
  - 8.3.7.** Maintenance of training records: copies of training documentation must be maintained for 30 years past the employee’s last date of employment.
  - 8.3.8.** Additional Training- Change in Process or Increased Hazard: Prior to the introduction of a new chemical or change in the way an old chemical is used, the immediate supervisor (PI, lab manager, foreman) of the affected employee(s) must ensure that any additional safety training specific to the new situation has been provided. EH&S can be contacted to assist with this, if needed. A record of this training must be kept and maintained by the supervisor for 30 years past the employee’s last date of employment.

## **9. Contractors:**

- 9.1.** The GIT Project Manager is required to inform contractors of any chemicals to which the contractor’s or subcontractor’s employees may be exposed as a result of working on GIT property and to provide MSDS for those chemicals upon request.
- 9.2.** A contractor doing work at GIT is required to notify the GIT Project Manager in writing, of any hazardous chemicals which will be used or stored at the work site by the contractor or sub-contractors 30 days prior to the start of work. (This 30 day requirement may be waived in the event of an emergency).
- 9.3.** If there will be GIT employees in or near the work area and it is feasible that GIT employees may be exposed to chemicals brought on site by the contractor, then



the GIT Project Manager will disseminate this information to the work area supervisor and obtain from the contractor, MSDSs for those hazardous chemicals and make them readily available to affected GIT employees during the contractor's presence at the site.

- 9.4.** Contractors are required to comply with The Federal Hazard Communication Standard for the Construction Industry , 29 CFR 1926.59 which ensures that the contractor's and subcontractor's employees have been trained in the hazards of the chemicals with which they are working. Contractors and subcontractors will be prepared to furnish to GIT, upon request, documentation of this training.

## **10. Hazardous Chemical Lists**

- 10.1.** The GT EHS Chemical Management Information Specialist shall supply, in July and January of each year, a chemical inventory of all the various department work places. The Principle Investigator or work place Supervisor is responsible to ensure that the area's hazardous chemical list is posted at or near the main exit for each workplace.
- 10.2.** The GIT RTK coordinator shall supply to the University system RTK Coordinator in July and January of each year, a list, by location, chemical name, and manufacturer, of all hazardous chemicals or products present at GIT.
- 10.3.** The two most Recent GIT Hazardous Chemical Lists are available upon request from the Board of Regents Office of Facilities – Administration and Compliance upon request.

## **11. Non-Conformance and Corrective Action**

- 11.1.** Failure by a PI or work unit supervisor to reconcile the unit's chemical inventory by the publicized deadline will be reported to member unit chair or director as well as to the dean of the appropriate college
- 11.2.** Accident Investigation: Mishaps involving chemicals will be investigated by EH&S
- 11.3.** Audit Results: Audit results will be reviewed by the director of EH&S who will make suggestions for improving deficiencies.

## **12. References**

Official Code of Georgia, title 45, Chapter 22, Public Employees Hazardous Chemical Protection and Right to Know Act of 1988.

Code of Federal Regulations 29.1926.59 Hazard Communication for the Construction Industry