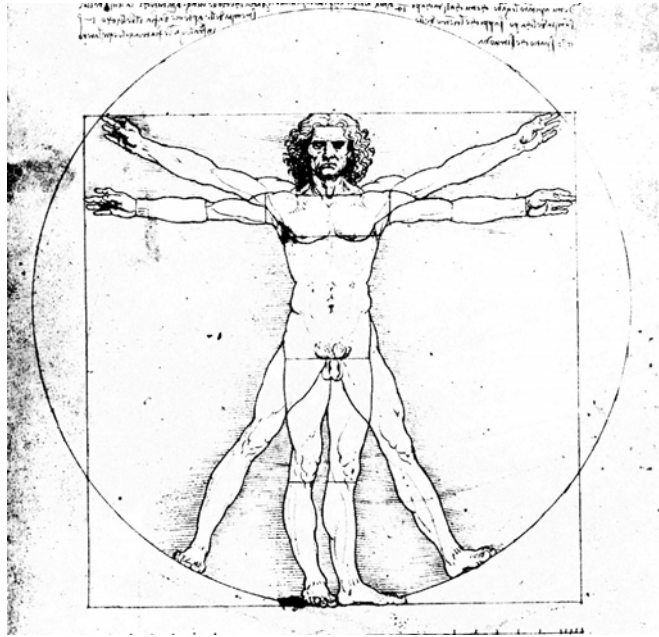


# CHEMICAL HYGIENE WRITTEN PROGRAM

AS PER 29CFR1910.1450

## CHEMICAL HYGIENE PLAN



Mortuary Science Department  
San Antonio College

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## 1) INTRODUCTION:

This document describes the Chemical Hygiene Plan for San Antonio College/Mortuary Science Department of NTC121, 1300 San Pedro Avenue, San Antonio, Texas, 78212 as required by OSHA's Occupational Exposure to Hazardous Chemicals in Laboratories Standard. 29CFR1910.1450.

In order to comply with the Standard, San Antonio College/Mortuary Science Department has established a plan to ensure our workplace is capable of protecting employees from Health Hazards associated with Hazardous Chemicals in the laboratory, and capable of keeping exposures below the Permissible Exposure Limits (PEL) specified in 29CFR1910 Subpart "Z". Questions regarding this plan should be directed to Mary E. Allen-Martin.

This plan is made readily available to the employees of San Antonio College/Mortuary Science Department, employee representatives & upon request by the Assistant Secretary for the Occupational Safety & Health Administration.

A review and evaluation of this program is conducted on an annual basis and updated as necessary.

The person responsible for implementation of this plan is Mary E. Allen-Martin. The assigned Chemical Hygiene Officer is Mary E. Allen-Martin. This facility has established a Chemical Hygiene Committee comprised of the following personnel:

- A) Mary E. Allen-Martin
- B) Mary Helen Mena
- C) Felix B. Gonzales
- D) Dr. Francisco E. Solis
- E) Frederick Beyer

## 2) STANDARD OPERATING PROCEDURES:

For laboratory work at San Antonio College/Mortuary Science Department which involves the use of Hazardous Chemicals, standard operating procedures (SOP) have been addressed in order to reduce potential Safety and/or Health Hazards caused by such use. These procedures include various engineering control measures such as laboratory hoods and fume hoods, maintenance procedures for these engineering controls including testing proper function of such equipment, the use of appropriate Personal Protective Equipment (PPE) and maintenance of such equipment.

The specific procedures implemented by San Antonio College/Mortuary Science Department are as follows:

### **Purpose**

The Lab Standard requires operating procedures relevant to safety and health considerations to be followed when laboratory work involves the use of hazardous chemicals. This Plan represents a minimum set of guidelines for San Antonio College/Mortuary Science Department laboratories handling hazardous chemicals.

### **Hierarchy of Defense**

To protect workers from exposure to hazardous chemicals there is a hierarchy of defense. The first line of defense is engineering controls; that consists of general room ventilation and most notable in laboratories, fume hoods. The second is work practice/administrative controls and finally, personal protective equipment. It is imperative that all lab personnel know what PPE is appropriate for all operations in the lab, what work practices are to be followed and then understand how the engineering controls work.

The following standard operating procedures apply to all labs at the University. Your lab may require additional requirements as determined by a hazards evaluation.

### **Personal Protective Equipment**

**Attire** At a minimum, all lab personnel and students should be wearing gloves and a face shield when there is active work being done with hazardous chemical in the lab. Also, legs and feet should be covered, i.e. no open toed shoes and shorts, and loose clothing and long hair should be confined. PPE should be left in the laboratories and not worn in public areas. Gloves shall not be worn in halls or public areas. The ungloved hand shall be used to open doors or push elevator buttons. Full-face shields must be worn when conducting a procedure where splashing is a potential.

## **Work Practice and Administrative Controls**

**Authorized Access** The laboratory supervisor must restrict access to laboratories. Entry to lab is obtained by primus cylinder key.

**Containers** Check the integrity of containers and if damaged or leaking, transfer to an acceptable container.

**Broken Glassware** Broken glassware cannot be disposed of in the regular garbage. It should be placed in a box with a plastic liner so that no shards can present a hazard when disposing of the entire container. Do not overfill the container; try to keep it under 30 pounds.

**No Smoking** This policy exists throughout San Antonio College and applies in all laboratories.

**Housekeeping** Exits and safety equipment must NOT be obstructed in any way with equipment, furniture, etc. No items must be stored in the corridors.

**Food, Drink, Cosmetics** Eating, drinking and the application of cosmetics (including lip balm) are forbidden in areas where hazardous chemicals, and biohazard materials are used. These activities must be in designated, well defined non-chemical areas. Consumables must not be placed in the same refrigerator as chemicals or biohazard material.

**Horseplay** Practical jokes or other inappropriate and unprofessional behavior in the laboratory setting is forbidden. Avoid distracting or startling any other workers.

**Disposal of Waste** To request pick-up of hazardous waste, biohazardous waste or chemicals, call Ms. Norwood at 733-2247.

**Personal Hygiene** Hands should be washed frequently throughout the lab session, before leaving the lab, after contact with any hazardous material, and before eating, drinking, smoking and applying make-up or lip balm.

**Personal Use of Chemicals** Lab workers are not allowed to remove chemicals from the lab for personal use.

**Chemical Spills and Accident Response** As a matter of policy, San Antonio College/Mortuary Science Department personnel should handle their own small spills and releases. For emergency situations i.e., large spills and leaks, evacuate and call Mary E. Allen-Martin at 733-2905.

**Chemical Storage** Chemicals should be stored by compatibility and use, not simply by alphabetical arrangement.

**Chemical Handling** Close caps securely and avoid storing chemical containers in hard to reach areas. Pour chemicals carefully

**Labeling** All chemical containers must be labeled. All labels must be legible, in English and include chemical/product name (chemical formulas alone are not acceptable) and include information related to relevant hazards. Labels on incoming containers must not be removed or defaced.

## **Engineering Controls**

As per Anatomical Board, State of Texas Standards and Inspection law code §479.3:

<b>TITLE 25</b>	<b>HEALTH SERVICES</b>
<b>PART 4</b>	<b>ANATOMICAL BOARD OF THE STATE OF TEXAS</b>
<b>CHAPTER 479</b>	<b>FACILITIES: STANDARDS AND INSPECTIONS</b>
<b>RULE §479.3</b>	<b>Standards for Facilities</b>

### **(a) Health standards.**

**(1) Dissection facilities.** Dissection areas must be clean, well ventilated, and well lighted. The floor should be of a composition that can be easily cleaned and nonskid. Tables and tanks must be conducive to easy cleaning and to the long-term preservation of cadavers.

**(2) Storage facilities.** Storage facilities must be conducive to long-term storage of bodies and conducive to the health of personnel who must work in the area. It should be of sufficient size to handle, without undue crowding, the total of one year's use and receipt of bodies.

**(3) Preparation area.** The preparation area must be clean, well ventilated, and well lighted. It must be fully equipped with table and drain of approved type and the equipment necessary for satisfactory embalming. All construction must be of a type conducive to easy cleaning.

**(4) Embalming.** The embalming formula shall be appropriate to the long-term preservation of cadavers and will not present a health hazard to persons dissecting.

### **(b) Safety standards.**

**(1) Air exchange.** All dissecting and preparation areas must have sufficient air-handling machinery to provide for not less than seven full changes of air per hour.

**(2) Storage of hazardous chemicals.** All hazardous chemicals shall be stored in a separate and approved facility or area. Explosive or flammable chemicals must be properly stored.

**(3) Dangerous fumes.** Particular attention must be given to holding the concentrations of all dangerous or hazardous fumes to an absolute minimum. Suitable air-handling equipment, appropriate storage, and careful handling are essential.

### **(c) Public welfare.**

**(1) Visibility.** All areas where human bodies are handled must not be visible from the outside of the building or so located that the public has ready visibility of transport, preparation, or dissection in progress.

**(2) Accessibility.** All areas used for receipt and preparation, storage, or dissection of human bodies must be inaccessible and inadmissible to the general public and all unauthorized personnel. All areas must have appropriate locks. Only personnel concerned with the preparation of cadavers should have access to storage and preparation areas. Storage areas should be securely locked at all times when bodies are not being placed in or removed from storage.

## **3) EMPLOYEE EXPOSURE:**

San Antonio College/Mortuary Science Department makes an initial determination of employee's exposure to any substance regulated by an OSHA Standard (29CFR1910.1001 through 29CFR1910.1050) which requires monitoring if there is reason to believe exposure levels for substances routinely exceed the Action Level or in the absence of an Action Level, the Permissible Exposure Limit (PEL). If initial monitoring discloses employee exposure over the Action Level and/or Permissible Exposure Limit, exposure monitoring and cessation of monitoring shall be in accordance with the relevant OSHA Standard.

Where the use of respirators is determined to be necessary to maintain exposure below permissible limits, appropriate respiratory protection shall be provided at **NO COST** to employees. Respirators shall be selected and used in accordance with requirements in 29CFR1910.134(b)(d)(e) & (f).

San Antonio College/Mortuary Science Department notifies employees of these results in writing either individually or by posting results in NTC 121 within fifteen (15) working days after receipt of monitoring results.

## **4) EMPLOYEE INFORMATION & TRAINING REQUIREMENTS:**

San Antonio College/Mortuary Science Department provides employees with information and training on hazardous chemicals in their work area, at time of initial assignment, and prior to assignments involving new exposure situations to ensure employees are apprised of the hazards of chemicals present in their work area. Initial information and training sessions for new employees are conducted by Mary E. Allen-Martin.

**The following information is conveyed to employees:**

- A)** The contents of the Occupational Exposure to Hazardous Chemicals in Laboratories Standard 29CFR1910.1450 and its appendices.
- B)** The location and availability of the Chemical Hygiene Plan.
- C)** The signs and symptoms associated with exposures to hazardous chemicals used in the laboratory; and
- D)** The location and availability of known reference material on the hazards, safe handling, storage & disposal of hazardous chemicals found in the laboratory including but not limited to Material Safety Data Sheets (MSDS) received from chemical suppliers.

**In addition to above information, employees are trained on the following:**

- A)** Methods & observations which may be used to detect the presence or release of a hazardous chemical in the work area. (Monitoring Methods & Devices, Visual Appearance and/or Odor, etc.)
- B)** The Physical and Health Hazards of the Chemicals.
- C)** The measures employees can take to protect themselves from these hazards, including specific procedures which have been implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used.
- D)** The applicable details of the Chemical Hygiene Plan.

## **5) MEDICAL PROGRAM:**

San Antonio College/Mortuary Science Department provides all employees who work with hazardous chemicals an opportunity to receive medical attention, including any follow-up examinations which the examining physician determines to be necessary, for the following circumstances:

- A)** Whenever an employee develops signs or symptoms associated with a hazardous chemical to which the employee may have been exposed in the laboratory, the employee is provided an opportunity to receive an appropriate medical examination.

- B)** Where exposure monitoring reveals an exposure routinely above the Action Level, or in the absence of an Action Level above the Permissible Exposure Limit (PEL), for an OSHA regulated substance for which there are exposure monitoring and medical surveillance requirements. Medical Surveillance shall be established for the effected employee as prescribed by the particular OSHA Standard. (Medical Surveillance & Exposure requirements as per 29CFR1910.1001 through 29CFR1910.1050)
- C)** Whenever an event takes place in the work area such as a spill, leak, explosion or occurrence resulting in the likelihood of a hazardous chemical exposure, the effected employee(s) is provided an opportunity for a medical consultation. This consultation is for the purpose of determining the need for a medical examination. An appropriate medical examination is provided as necessary.

Medical Examinations & Consultations are performed by or under direct supervision of a licensed physician, are provided at **NO COST** to employees without **LOSS OF PAY** and at a reasonable time and place.

**The physician shall be provided with the following:**

- A)** The identity of hazardous chemical(s) to which the employee may have been exposed to;
- B)** A description of the conditions under which the exposure occurred including quantitative exposure data, if available; and
- C)** A description of the signs and symptoms of exposure the employee is experiencing if any.

A written opinion from the examining physician for an examination or consultation which is required by the Standard is obtained.

**This opinion shall include:**

- A)** Any recommendation for further medical follow-up;
- B)** The results of the medical examination and any associated tests;
- C)** Any medical condition that may be revealed in the course of the examination which may place the employee at increased risk as a result of exposure to a hazardous chemical found in the workplace; and
- D)** A statement the employee has been informed by the physician of the results of the consultation or medical examination and any medical condition that may require further examination or treatment.

The written opinion shall not include any findings/diagnoses which is not related to an occupational exposure.

## **6) HAZARD IDENTIFICATION:**

With respect to labels and Material Safety Data Sheets (MSDS), San Antonio College/Mortuary Science Department assures labels on incoming containers of hazardous chemicals are not removed or defaced and Material Safety Data Sheets that are received with incoming shipments of hazardous chemicals are maintained and readily accessible to laboratory employees.

**For chemical substances developed in the laboratory, the following procedures have been implemented for the following circumstances:**

- A)** For known composition for chemical substances produce exclusively for laboratory use which are determined to be hazardous, the appropriate training is provided;
- B)** For unknown composition of chemicals produced as a by product, the substance is assumed to be hazardous and the appropriate standard procedures under Section (2) of this plan are implemented

## **7) RECORDKEEPING:**

San Antonio College/Mortuary Science Department establishes and maintains for each employee an accurate record of any measurements taken to monitor employee exposure and any medical consultation and examinations including tests or written opinions as required by the Standard. These records are kept, transferred, and made available in accordance with 29CFR1910.20, Access to Employee Exposure and Medical Records.