**LABORATORY-SPECIFIC CHEMICAL SAFTETY PLAN**

1. **PRINCIPAL INVESTIGATOR INFORMATION:**
	1. **Name:**
	2. **Laboratory Location(s):**
	3. **Telephone:**
2. **DATE OF PLAN PREPARATION/REQUIRED APPROVALS/SIGNATURES:**
	1. **Date Plan Prepared:**

**2.**

**3.**

**4.**

**5. Date Plan Approved:**

1. **CHEMICAL HAZARD INFORMATION**
	1. **Types of Hazardous Chemicals**
		1. Chemicals stored and in used in this laboratory are listed in the laboratory-specific chemical inventory. The chemical inventory includes chemicals classified in one or more of the following general classes of potential chemical hazards:

Corrosives, volatiles and explosives, respiratory, poisons (including potential carcinogens or mutagens), contact irritants

* + 1. The specific hazard type for each chemical is designated in the laboratory-specific chemical inventory.
	1. **Locations of use and storage**

VAMC       will be the location for use and storage of all potentially hazardous chemicals.

* 1. **Communication of Chemical Hazard Information:**

Information about the hazard potential of a chemical will be communicated by several mechanisms:

* + 1. All hazardous chemicals will have an appropriate label on the container. If this is not prepared by the manufacturer, then the container will be labeled appropriately by lab personnel when the chemical arrives and is placed in the laboratory-specific chemical inventory. Labels should include receipt and any relevant expiration dates.
		2. The laboratory-specific chemical inventory will designate the general class of chemical hazard for each potentially hazardous chemical. This inventory will be maintained as an electronic file in the laboratory computers. A printed copy will be available in       for ready reference. New chemicals will be entered into the inventory as they are received. The chemical inventory will be updated bi-annually.
		3. The master Safety Data Sheet (SDS) binder will be available for quick reference in      . This binder contains SDSs for all laboratory chemicals, arranged in alphabetical order.
		4. The Laboratory-Specific Chemical Safety Plan (this document) and the Research Service Laboratory Chemical Hygiene Plan contain additional information about the handling, disposal of hazardous chemicals in this location. Copies of these will be in       for ready reference.

1. **LABORATORY PRACTICES AND PROCEDURES**
	1. **Laboratory Entrance Requirements**
		1. Signs: Chemical warning signs will be posted on all laboratory entrance doors. These signs will be labeled according to the guidelines described in the VA Research Service Laboratory Chemical Hygiene Plan, Part I Section 13.0.
		2. Entry Restrictions: Access to the laboratory will be restricted at the discretion of the Principal Investigator.

There will be no eating, drinking or applying cosmetics in laboratories in which hazardous chemicals are in use.

* 1. **Handling Chemical Hazards**

Handling of potentially hazardous chemicals will be according to the recommendations of the SDS for that chemical and per the Research Service Laboratory Chemical Hygiene Plan (Part II). Available laboratory-specific containments include:

Fume hood in      for handling respiratory, corrosive and flammable hazards.

Baker Class IIA/B3 Biosafety Class II cabinet in      for special handling of carcinogens, mutagens, or contact irritants.

All centrifugations involving potential carcinogens/mutagens/contact irritants will be performed in       in compliance will all lab safety regulations.

Personal protective equipment should be according to the SDS for a specific chemical but should include:

Masks for the nose and mouth for respiratory hazards. When a respirator may be needed for use of a specific chemical respiratory hazard, Health and Safety Office will be contacted to provide the respirator, as well as training and proper fit.

Eye protection, face protection and chemical protective gloves for corrosive hazards.

For carcinogens, mutagens or contact irritants, personnel will wear protective clothing to include laboratory coats, and vinyl/nitrile gloves, and will perform procedures in a biosafety cabinet behind a vertical clear glass shield.

When working with all potentially hazardous chemicals is in progress, laboratory doors will be closed and entry by others denied. Telephone calls will be answered by answering machine or voicemail system.

* 1. **Chemical Spills**

The response to chemical spills will follow the steps described in part IV Section 1.0 of the VA Research Service Laboratory Chemical Hygiene Plan. Personnel should immediately call the Research Safety Officer (X6602), Industrial Hygienist (X3199) or Environmental, Health and Safety Office (X4220) to report the spill. Give name, exact location and the identity of the chemical spilled. Refer immediately to the SDS and attend to persons contaminated by the spill. A spill kit with adsorbent materials for absorbing spilled liquids is available in      .

* 1. **Storage of Chemical Hazards**

Storage procedures will follow specifications of VA Research Service Laboratory Chemical Hygiene Plan Part II Section 5.0 and will use the specific SDS for each chemical as the principal reference. Cabinets for separate storage of Acids, Bases or Organics chemicals will be marked on cabinet doors.

* 1. **Disposal of Chemical Hazards**

Disposal procedures follow the guidelines of the VA Research Service Laboratory Chemical Hygiene Plan, Part II Section 10.0.

The SDS for a given chemical will be the first reference for the disposal method for that chemical.

Any chemical that cannot be safely discarded in the trash or drain will be labeled with full identification and stored at or near the place of generation in a secondary container at an approved satellite waste accumulation area. When containers are ¾ full, the GEMS Coordinator will be contacted at X6931 for final chemical disposal. The lab will keep a record of all wastes disposed by the GEMS Coordinator.

1. **TRAINING REQUIREMENTS**
	1. All training requirements described in the VA Research Service Laboratory Chemical Hygiene Plan, Part I Section 4, must be reviewed at the start of employment in the laboratory. New laboratory technicians will work under the direct supervision of experienced personnel for at least the first three months of employment and whenever initiating a new procedure using a potentially hazardous chemical.
	2. Personnel will be required to attend all VA Research Service level training sessions on safety practices and procedures related to work with potentially hazardous chemicals.
	3. Prior to initiating work with any potential hazardous chemicals in the laboratory, personnel will be required to read the VA Research Service Laboratory Chemical Hygiene Plan, and the Laboratory-Specific Chemical Safety Plan (this document). Completion of this reading assignment will be documented. Personnel will demonstrate an understanding of the major types of chemical hazards (e.g., volatile, corrosive, etc.). Personnel will demonstrate an understanding of the special hazards presented by carcinogens or mutagens. Personnel should also learn the nearest location and use of the eyewash and drenching shower outlets.
	4. Prior to initiating work with a specific chemical, personnel should read the SDS for that chemical and follow the SDS directions regarding handling, use of personal protection equipment, and disposal of that chemical.
	5. Additional training by the Principal Investigator or an individual with equivalent technical experience will be provided when an employee’s chemical-related tasks or procedures are modified, with attention to appropriate additional containment, personal protection equipment, or handling tasks, if necessary.
2. **EXPOSURE INCIDENTS**
	1. Signs and symptoms associated with exposures: The SDS will be the reference source for specific signs and symptoms of harmful exposure to a specific chemical. Personnel should review the SDS for a specific chemical before initiating work with that chemical. In general, anyone handling a potentially, hazardous chemical should be alert to systemic signs of possible exposure – dizziness, headache, sudden fatigue, shortness of breath, blurring or other changes in vision, tearing, sweating, nasal discharge, numbness or tingling, salivation, strange tastes, or coughing. Personnel experiencing signs and symptoms while handling hazardous chemicals should contact their supervisor immediately and report to Employee Health office during business hours or to the Medical Emergency Room otherwise see “Medical Emergency” below.
	2. Medical Emergency: In the event of a Medical Emergency, including experiencing signs and symptoms associated with exposure to hazardous chemicals, personnel will follow the procedures described in Part IV Section 2.9 of the VA Research Service Laboratory Chemical Hygiene Plan. The supervisor should be contacted immediately. The employee should report to Employee Health or the medical ER and the employee, if possible, should bring a copy of the SDS for the suspected hazardous chemicals to the Employee Health visit.

Procedures for reporting exposure incidents include:

* + - 1. Immediate reporting of the exposure incidents to the Principal Investigator and the Research Administrative Officer (X3179).
			2. Completion by the employee of VA Form CA-1 (Federal Notice of Traumatic Injury). This is completed on computer using the Miami VAMC DHCP (ASSIST) software.
			3. Completion by the Principal Investigator of VA Form 2162 (Report of Accident, Injury, Occupational Illness, or Fire). This is completed on computer using the Miami VAMC DHCP (ASSIST) software.
	1. Health Hazard Evaluation: Where there is evidence or concern that employees may be overexposed to a hazardous chemical, the employee or the supervisor may request a “Health Hazard Evaluation” by completing VA Form 2169 and submitting it to the Engineering Service. If an emergency, an employee should contact Engineering Service at ext. 3064 for assistance.
1. **COMPLIANCE MONITORING**
	1. The Principal Investigator will directly observe and monitor employee compliance with both the laboratory-specific and the VA Research Service Chemical Safety Plan and Manual on a regular basis.
	2. Incidents on non-compliance will be documented in a written log. The employee will receive written notification documenting incidents of non-compliance.
	3. Repeated incidents on non-compliance will lead to disciplinary actions against the employee.