HAZARDOUS WASTE CONTINGENCY PLAN (HWCP)  
FOR  
UNIVERSITY OF RICHMOND  

1.0 INTRODUCTION AND GENERAL INFORMATION  

1.1 Introduction  

The University of Richmond (U of R) Hazardous Waste Contingency Plan (HWCP) presents procedures and equipment maintained by the institution to respond to hazardous situations related to the generation and storage of hazardous wastes. Responses to emergencies involving hazardous waste will be supervised by the Emergency Coordinator (EC.) The Emergency Coordinator will have the ultimate authority to commit the resources needed to carry out this plan, and the following duties and responsibilities:  

1. Determining if the emergency involves a spill of a reportable quantity of material (per 40 CFR 117)  
2. Assessing the immediate threat to the environment or human health beyond the boundaries of the facility  
3. Determining when to initiate notification procedures to other agencies  
4. Ensuring that proper clean up equipment and procedures are available  
5. Providing assistance and equipment for spill response  

Departments responsible for emergency response are identified in this plan. Specific methods of response to spills, fires, and flood emergencies involving hazardous waste are given. Emergency and protective equipment is also described.  

1.2 General Information  

The University of Richmond Departments that generate hazardous wastes are Biology, Chemistry, Psychology, Physics (limited), Facilities, and Art. See “ATTACHMENT A” for a list of wastes generated at the University of Richmond. See “ATTACHMENT B” for a list of equipment to contain and cleanup leaks/spills. See “ATTACHMENT C” for important phone numbers and contact information.
2.0  (HW) EMERGENCY COORDINATORS

The Emergency Coordinator(s) for all emergencies at the Hazardous Waste Facilities and hazardous waste spills are:

**PRIMARY**
John E. Sheffield, Jr.
621 Fort Lowry Lane
Dunnsville, VA  22454
Desk:  (804) 289-8721
Cell:    (804) 539-3392

**ALTERNATE #1**
John Conover, Jr.
7007 Deer Thicket Drive
Midlothian, VA  23112
Desk:  (804) 287-6477
Cell:  (804) 698-0318

**ALTERNATE #2**
George Souleret
8483 McClellan Road
Mechanicsville, VA  23111
Home: (804) 779-2108
Desk:  (804) 289-8604
Cell:  (804) 221-9459

3.0  IMPLEMENTATION CRITERIA

The HWCP must be implemented under the following circumstances:

1. Fire/Explosion where there is:
   a. Fire causes release of toxic fumes
   b. Fire threatens off-site area
   c. Fire fighting agents result in contaminated runoff
   d. Imminent threat of explosion

2. Spills/Leaks where:
   a. Fire hazard exists due to spilled material
   b. Toxic fume hazard exists
   c. Groundwater may be threatened
   d. Spill threatens off-site property
   e. Spill threatens navigable water
4.0 EMERGENCY RESPONSE PROCEDURES

4.1 Notification

In the event of an emergency situation which meets the implementation criteria, the Emergency Coordinator (EC) must be notified by the discoverer. The Emergency Coordinator will make federal, state and local officials aware of the emergency.

If the Emergency Coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment outside the facility, he/she must report their findings as follows:

1. If EC assessment indicates that evacuation of local areas may be advisable, EC must immediately notify appropriate local authorities. The EC must be available to help appropriate officials make a final determination on whether local areas should be evacuated.

2. EC must immediately notify the Virginia Department of Emergency Management (VDEM) at telephone number 1-800-468-8892, and file a report which must include:
   a. Name and telephone number of reporter
   b. Name and address of facility
   c. Time and type of incident (e.g., release, fire)
   d. Name and quantity of materials(s) involved, to the extent known
   e. The extent of injuries, (if any)
   f. The possible hazards to human health or the environment, outside the facility.

4.2 Identifying Type of Waste

The Emergency Coordinator will determine the types of waste involved, or threatened, in the emergency by referencing the hazardous waste log. If the containers can be approached safely, this identification will be made from the labels on the containers. “ATTACHMENT A” lists hazardous wastes generated at the University of Richmond and potentially stored at various generating work stations.

The Emergency Coordinator must determine the characteristics of the waste that have been released, the source of the release, an approximation of the quantity of waste released, and the area of contamination.
4.3 **Assessment**

The Emergency Coordinator will determine whether the emergency poses a major threat sufficient to activate the Hazardous Waste Contingency Plan with consideration of the implementation requirements of Section 3.0. In particular, the EC must consider both direct and indirect effects of the release, fire, or explosion; including the possibility of toxic fumes and gas, contamination and run-off of fire fighting water, and exposures of nearby buildings/personnel.

4.4 **Control Procedures**

Potential emergency incidents may be classified under one of the following:

1. Fire/Explosion
2. Spills/Leaks

Additional guidance relating to fires/explosions and spills/leaks are contained in the following paragraphs.

4.4.1 **Fire/Explosion**

Fire Extinguishers - Class A-B-C portable extinguishers are available in laboratories, shops and service areas.

In the event of fire, personnel who have received annual training may choose to use an extinguisher if such action does not endanger their safety. Personnel are never required to attempt to fight fires.

The Fire Department will initiate immediate response as follows:

1. Ensure that all personnel have evacuated the affected area  
   Give first aid to injured personnel
2. Evacuate any loading/unloading vehicles if they are present
3. Contact Emergency Coordinator (who will notify all proper federal, state, and local officials as required)
4. If the Fire Commander orders a limited evacuation, the Emergency Coordinator will evacuate all personnel within a 300 foot radius of the area
5. Fire Department will conduct fire extinguishing efforts
6. An "All-Clear" signal will be given when the Fire Commander and the Emergency Coordinator agree that the emergency is over

Note: Per National Incident Management System (NIMS), the Incident Commander or highest ranking fire official is in command until the event is marked “Under Control.”
4.4.2 Spills/Leaks

Some common emergencies involving spills or leaks of hazardous waste are:

1. Spills caused by accidents during loading of waste at generating units
2. Spills as a result of a vehicular accident during movement of waste
3. Leaks from stored containers at the waste accumulation buildings
4. Leaks from containers at the satellite accumulation areas

In the event of a spill or leak from one or more containers, the Emergency Coordinator will make an immediate assessment of the degree of hazard(s) posed by the incident. This assessment will include: the type of material spill/leak; direction of movement of material and associated vapors, if any; potential for injury; and the threat of fire or explosion. Based on this assessment, the Emergency Coordinator will initiate one or more of the following actions:

4.4.3 Spills/Leaks (Incident Procedures)

1. Direct the Fire Department to stand by (ready) at the site for fire protection
2. Request spill response personnel to handle spill/leak under EC supervision
3. Notify an outside spill response vendor if necessary

For spill response call:

<table>
<thead>
<tr>
<th>Company</th>
<th>Phone</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Veolia Environmental Services</td>
<td>1-800-423-2382</td>
<td>24 Hour Service</td>
</tr>
<tr>
<td>MM &amp; A</td>
<td>1-866-730-7810</td>
<td>24 Hour Service</td>
</tr>
</tbody>
</table>

The area impacted by the spill/leak will be evacuated for a distance of 100 feet in all directions. If greater evacuation is probable or necessary, further action will be taken.

If the Emergency Coordinator determines that University personnel can handle the spill/leak, employees will be directed to bring absorbent material, recovery drums, and personal protective equipment to the incident location. These personnel, instructed in safety procedures and use of emergency equipment, will attempt to contain and clean up the spill/leak.

The Emergency Coordinator will initiate all required notifications for the spill/leak of a reportable quantity of a hazardous substance or hazardous waste (listed in 40 CFR 117.)
The Emergency Coordinator will initiate all notifications required by the Hazardous Waste Contingency Plan. These notifications include the reporting of a spill/leak of a reportable quantity of any hazardous material and reports to the appropriate authorities. The procedures to be followed in the event of a spill include:

1. Locate injured personnel, if any, and notify Campus Police at (804) 289-8911 (on campus dial 911)
2. Evacuate area within 100-foot radius
3. Dispatch emergency personnel and associated response equipment to site of spill/leak
4. Monitor progress to determine whether an outside spill/leak response team should be mobilized
5. Assure that personnel responsible for clean up use personal protective equipment (gloves, eye-protection, protective clothing, respirators, etc.)
6. Remove leaking drums/material to a recovery drum
7. Use absorbent material to contain and solidify (for liquid)
8. Place all solidified spill/leak material and contaminated debris into recovery drum(s)

After the incident has concluded, the Emergency Coordinator must assess whether unprotected soils have been contaminated and arrange for the containerization and removal of contaminated soils to protect groundwater supplies from contamination. The Emergency Coordinator will also ensure that all emergency equipment and safety equipment is cleaned, decontaminated, and restored for immediate use. Stocks of absorbent material, personal protective equipment, and recovery drums must be checked and replenished if necessary.

4.5 Prevention of Recurrence of Fires, Explosions, or Releases

The Emergency Coordinator may order the temporary removal of containers of waste from the accumulation areas after an emergency until the building is safe and no recurrence can be expected.

4.6 Storage and Treatment of Released Material

The Emergency Coordinator will order all spilled material, clean up debris, and contaminated soil be containerized and stored in the appropriate hazardous waste accumulation facility for disposal, unless bulk removal and transport are feasible. All spill residues and debris will be treated as hazardous waste.

If bulk removal and transport are feasible, (i.e. for contaminated soils), no storage will occur. Bulk spill debris will be transported to an off-site treatment, storage, or disposal facility upon removal.
4.7 **Incompatible Wastes**

The Emergency Coordinator will ensure that released material incompatible with other wastes is segregated during temporary storage and that incompatible wastes are not accidentally mixed during clean up.

4.8 **Post-Emergency Equipment Maintenance**

After an emergency event, all emergency equipment will be cleaned or replaced so that it is serviceable for reuse. Before operations are resumed, an inspection of all safety equipment will be conducted. State authorities will be notified that post-emergency equipment maintenance has been performed and operations will be resumed.

### 5.0 EMERGENCY AND PROTECTIVE EQUIPMENT

Emergency and personal protective equipment (PPE) is stored at the Facilities warehouse and in the basement of the Special Programs Building. The types of PPE provided are:

1. Gloves
2. Boots
3. Chemical resistant suits
4. Face shields/eye protection

Emergency equipment, primarily fire extinguishers and absorbent material, must be located at all temporary waste collection points. Employees must be trained in the use of this equipment in case of a hazardous waste emergency.

### 6.0 DISTRIBUTION AND COORDINATION

Copies of the University of Richmond Hazardous Waste Contingency Plan (HWCP) will be sent to, and coordinated with, the City of Richmond (Virginia) Department of Fire and Emergency Services, LEPC, Virginia Department of Emergency Management, Virginia Department of Environmental Quality, University of Richmond Police Department, and St. Mary’s Hospital; obtaining receipts for each for delivery of the HWCP.
7.0 EVACUATION PLAN

The Emergency Coordinator is responsible for determining whether evacuations are necessary in the event of an emergency. An evacuation of all personnel in the vicinity of an emergency must be made when:

1. Toxic fumes or gases are released (or a release is imminent)
2. An explosion has occurred (or is imminent)
3. Access for emergency responders may be provided

Because of the relatively small quantities of hazardous waste generated at the University of Richmond, it is unlikely that an evacuation of the entire campus would be necessary under any emergency.

If the Emergency Coordinator determines that evacuation of a temporary storage area is necessary, the Emergency Coordinator will notify occupants and instruct them to leave the immediate vicinity.

Re-entry to the area will be allowed only when the Emergency Coordinator gives an "All-Clear" instruction.

8.0 REQUIRED REPORTS

In addition to the verbal notifications to be initiated by the Emergency Coordinator, a written follow-up report will be prepared. All emergencies which require the implementation of the Hazardous Waste Contingency Plan will be reported in writing within 15 days to the Virginia Department of Environmental Quality. The report will detail name of the facility, date, time, and type of accident, type and quantity of material involved, extent of injuries, an assessment of the impact on human health and the environment, and the quantity and disposition of material released.

After an emergency, the Emergency Coordinator will review the HWCP for effectiveness and make changes as are appropriate. The HWCP will also be reviewed when Emergency Coordinators, emergency equipment, or the Hazardous Waste Management Plan is altered.
ATTACHMENT A

Waste alkaline liquid
Waste potassium hydroxide
Waste flammable liquid
Waste poison B, liquid
Waste poison B, solid
Waste oxidizers
Waste corrosive materials
Waste acids
Waste metallic mercury
Waste paint
Waste solvents
Mixed organic solvents
Waste chromic solutions
Lab waste
Picric acid
Waste Pesticides
## ATTACHMENT B

<table>
<thead>
<tr>
<th>Material/Equipment</th>
<th>Minimum Quantity</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absorbent</td>
<td>200 lbs</td>
<td>Spill response/clean up</td>
</tr>
<tr>
<td>Absorbent (Spill Magic)</td>
<td>2 bags</td>
<td>Spill response/clean up</td>
</tr>
<tr>
<td>Absorbent Pads</td>
<td>1 case</td>
<td>Spill response/clean up</td>
</tr>
<tr>
<td>Absorbent Booms</td>
<td>3 cases</td>
<td>Spill response/clean up</td>
</tr>
<tr>
<td>Absorbent Roll</td>
<td>200 feet</td>
<td>Spill response/clean up</td>
</tr>
<tr>
<td>Waste Container (55 gal)</td>
<td>1</td>
<td>Spill response/clean up</td>
</tr>
<tr>
<td>Overpack (85 gal)</td>
<td>1</td>
<td>Spill response/clean up</td>
</tr>
<tr>
<td>Neutralizers/Acid</td>
<td>2.5 gal</td>
<td>Spill response/clean up</td>
</tr>
<tr>
<td>Caustic</td>
<td>5 gal</td>
<td>Spill response/clean up</td>
</tr>
<tr>
<td>Non-sparking Safety Shovels</td>
<td>2</td>
<td>Spill response/clean up</td>
</tr>
<tr>
<td>Non-sparking Bung Wrench</td>
<td>1</td>
<td>Spill response/clean up</td>
</tr>
</tbody>
</table>

### PPE Provided:

- Chemical resistant suits 10  PPE
- Gloves (nitrile, butyl rubber)  PPE
- Boots (rubber, chemical resistant)  PPE
- Face shields/eye protection 2  PPE

### Notes:
- Main storage located in the Facilities warehouse.
- Satellite storage located in basement of Special Programs Building.
- Neutralizers are located in basement of Special Programs Building and Gottwald Center for the Sciences.
ATTACHMENT C

University of Richmond Police  Dispatch       (804) 289-8715  
24 Hours                  Emergency       (804) 289-8911

VEOLIA               1-800-423-2382*

MM & A                1-866-730-7810*

* Both for spill response 24 hours

Virginia Department of Emergency Management  1-800-468-8892
24 Hours

Virginia Department of Environmental Quality  (804) 698-4297
                                            (804) 698-4000

For hazardous spills, notifications must be made through VDEM. Separate follow-up notification to VDEQ is required also.

Haz Mat Team Members:

PRIMARY CONTACT: John Sheffield  Desk:  (804) 289-8721
Cell Phone:  (804) 539-3392

Alternate #1: John Conover, Jr.  Desk:  (804) 287-6477
Cell Phone:  (804) 698-0318

Alternate #2: George Souleret  Home:  (804) 779-2108
Desk:  (804) 289-8604
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