

G CONTINGENCY PLAN

401 KAR 34:040

The Contingency Plan must be maintained at the facility and be submitted to the local police departments, hospitals, state, and local emergency response teams that may be called upon to provide emergency services.

The Contingency Plan has been designed as a stand-alone document, and is incorporated into this Application as Attachment G-1.



**ENVIRONMENTAL
PROTECTION SERVICES CENTER
Louisville, Kentucky**

**Contingency Plan
Attachment G-1 of the
Part B Permit Application**

February 2006

Prepared by:

**University of Louisville
Environmental Health & Safety
Department
Louisville, Kentucky**

CONTINGENCY PLAN

TABLE OF CONTENTS

Section	Page
1.0 GENERAL INFORMATION.....	1
2.0 EMERGENCY COORDINATOR.....	2
3.0 IMPLEMENTATION.....	2
4.0 EMERGENCY RESPONSE PROCEDURES.....	3
4.1 Notifications.....	3
4.2 Identification of Hazardous Materials	5
4.3 Hazard Assessment	6
4.4 Control Procedures.....	7
4.5 Prevention of Recurrence or Spread of Fires, Explosion, or Releases	9
4.6 Storage and Treatment of Released Material.....	9
4.7 Incompatible Wastes.....	10
4.8 Post-Emergency Equipment Maintenance.....	12
4.9 Container Spills and Leakage	12
5.0 EMERGENCY EQUIPMENT.....	14
6.0 COORDINATION AGREEMENTS	19
7.0 EVACUATION PLAN.....	19
8.0 REQUIRED REPORTS.....	20

CONTINGENCY PLAN

401 KAR 34:040
40 CFR 264 Subpart D

This Contingency Plan is incorporated into the University of Louisville (U of L) Part B Application as Attachment G-1 of Section G. The Contingency Plan is a document setting out an organized, planned, and coordinated course of action to be followed in case of a fire, explosion, or release of hazardous waste or hazardous waste constituent which could threaten human health or the environment.

1.0 GENERAL INFORMATION

401 KAR 34:040 Section 3
40 CFR 264.52

The U of L Environmental Protection Services Center (EPSC) is located at 1810 Arthur Street, Louisville Kentucky, and is used for the storage and treatment of hazardous and other wastes generated from University operations (Figure G-1). **The facility only accepts and stores waste generated from University operations.** The University's Department of Environmental Health and Safety (DEHS) is responsible for the operation of the facility. In the event that an emergency condition occurs with the potential to threaten human health or the environment, the following Contingency Plan will be initialized and maintained until the emergency condition has been stabilized. Any emergency outlined under Section 3.0 arising in the area will be responded to as outlined in this Contingency Plan.

The Contingency Plan will be reviewed and amended immediately, if necessary, whenever regulations are revised which affect the plan, the plan fails in an emergency, the facility's potential for emergency situations increases, the list of emergency coordinators changes, or the list of emergency response agencies changes.

In accordance with 40 CFR 270.42 and 401 KAR Chapter 38:040, the University will request permit modification procedures found in the referenced regulations. It will be the responsibility of the Emergency Coordinator or his designee, to review the plan and make necessary modifications for submittal to the Division of Waste Management in accordance with 401 KAR Chapter 38:040 and 40 CFR 270.42. Permit modifications will be submitted for approval and modifications instituted in accordance with time tables approved in these referenced regulations. Modifications to the Contingency Plan will not be finalized until these permit modification requirements have been met. After these requirements have been met by the University, the Contingency Plan will be modified and sent to applicable response agencies for updating.

A copy of the Plan is posted in the storage area of the EPSC. A copy is also maintained in the DEHS administration offices and the Public Safety Office.

2.0 EMERGENCY COORDINATOR

401 KAR 34:040 Section 6
40 CFR 264.55

The DEHS Assistant Director will be the primary Emergency Coordinator (EC). In his/her absence the Chemical Regulatory Specialists (CRS) within the DEHS will be the alternate Emergency Coordinators. At all times, at least one of the above will be on call to respond to an emergency. The EC will have full authority to commit all necessary resources to implement the plan. The EC may modify the plan in emergency situations to more adequately protect human health or the environment, if necessary. Exhibit A provides a statement authorizing designated coordinators to commit the necessary resources to implement the Contingency Plan.

In addition, the Contingency Plan Notification List (Exhibit B) contains all emergency notification telephone numbers associated with the plan. The list is kept current at all times and is posted within the EPSC and the DEHS administrative offices.

3.0 IMPLEMENTATION

401 KAR 34:040 Section 2
40 CFR 264.51

The Contingency Plan is only required for emergency situations involving hazardous waste or hazardous waste constituents. The decision to implement the Contingency Plan depends upon whether or not the emergency situation presents a threat to human health or the environment.

The purpose of this section is to list the contingencies and provide associated decision making criteria for the EC to determine whether or not to formally implement the Contingency Plan.

The Contingency Plan will be implemented in any of the following situations:

A. Fire and/or Explosion

1. A fire causes, or could cause, the release of hazardous waste or hazardous waste constituents.
2. A fire spreads and could possibly ignite hazardous wastes or hazardous waste constituents, or could cause heat-induced explosions.
3. The fire could possibly spread to off-site areas.
4. Use of water or chemical fire suppressant could result in uncontained contaminated run-off.

5. Use of water or available fire suppressant could cause violent reaction or explosion.
6. An imminent danger exists that an explosion could occur.
7. An explosion has occurred.

B. Sudden or Non-sudden Release of Hazardous Waste or Hazardous Waste Constituents

1. A spill occurs on-site, but a potential exist for air, soil, groundwater, or surface water contamination.
2. A spill releases flammable liquids, vapors, gases, or dusts, thus causing a fire or explosion hazard.
3. A spill releases or is expected to release airborne contaminants at levels which could present an imminent health hazard, i.e. above threshold limit values (TLV's) recommended by the American Conference of Governmental Industrial Hygienists (ACGIH), to personnel responding to the emergency.
4. A spill cannot be contained on-site resulting in the potential for off-site soil contamination and/or ground or surface water contamination.
5. The spill enters the sewer system inadvertently.
6. A cloud of toxic gas, vapor, fume, or mist is formed from a release and presents an imminent danger to human health off-site.
7. A spill or release of any material occurs in excess of a reportable quantity limit.

C. Injured or Ill Personnel

An individual who receives an injury or illness due to an exposure to some form of hazardous waste or hazardous material requires outside emergency medical assistance and/or hospitalization. (This would not include an exposure, such as a small splash of material which could easily be washed off by facility personnel.)

4.0 EMERGENCY RESPONSE PROCEDURES

401 KAR 34:040 Section 7
40 CFR 264.56

4.1 Notifications

401 KAR 34:040 Section 7(1) and (2)
40 CFR 264.56(a)

The EPSC is required to have an internal communications or alarm system capable of providing immediate emergency instruction, by voice or signal, to facility personnel. The hazardous waste storage area has telephones which can be used to call other University departments or to call outside the University. Emergency response phone numbers for police, fire, ambulance, and the Emergency Coordinator are posted near each telephone. Telephones are located in the office and storage areas. The facility is also equipped with emergency buttons and pull boxes.

DEHS utilizes FM radio communication devices which can communicate with University departments (e.g. Public Safety, Physical Plant), as well as within DEHS. DEHS has a base station located in its administrative offices for monitoring during normal working hours.

All University Public Safety Officers have FM radio communication capabilities to communicate with one another and with other departments. The hazardous waste area is equipped with a heat sensor which sends an alarm to Public Safety in the event of an excessive heat buildup. Fire alarms, smoke/heat sensors, and sprinkler system alarms are wired into the Public Safety Office.

In the event of an emergency situation as listed in Section 3.0, the EC must be immediately notified. The first person recognizing an emergency must immediately notify either the EC or the Public Safety Office.

A. The EC (or alternate) or Public Safety Officer (whomever is notified first) will obtain the following information from the caller. The Public Safety Office is open 24 hours a day, seven days a week. The telephone number is 852-6111:

1. Name of the person reporting incident and telephone number calling from
2. Time, date, and location of emergency
3. Type of emergency, i.e. fire, spill, or explosion
4. Hazardous wastes and constituents involved (name and quantity, to the extent known)
5. Notification of any injuries or potential for injury
6. Determine if incident threatens other occupants in building or adjacent properties.

B. 1. If the EC is contacted first, he/she or his/her designee will immediately relay all pertinent information to Public Safety as well as any specific instructions regarding assistance.

2. If Public Safety is notified first, they will likewise immediately contact the EC and relay the information. Both the DEHS and Public Safety will have forms readily available for the recording of emergency information. The Emergency Coordinator will, or if not immediately available Public Safety, will additionally make any regulatory agency notification necessary in accordance with Section 4.1 and Section 8.0.

C. If the emergency involves any of the following, Public Safety will immediately call 911 and report the incident to the appropriate authorities:

1. Fire or fire potential
2. Injury
3. A hazardous material release to the sewer system in any quantity
4. Threat to other occupants in a building or adjacent property
5. An undefined chemical or a chemical over its “reportable quantity” (RQ) value

They will likewise immediately contact the EC and relay the pertinent information.

D. Public Safety, if requested by the EC or alerted by the caller that evacuation is necessary, will dispatch security units to block off the area and/or assist in evacuating personnel out of the building.

4.2 Identification of Hazardous Materials

401 KAR 34:040 Section 7(2)
40 CFR 264.56(b)

Whenever there is a release, fire, or explosion, the EC will immediately identify the character, exact source, amount, and area extent of any released material. The spilled waste will be identified by visual inspection, sampling, reference to manifests, and/or by consulting with operations personnel. The facility operating record includes information on the characteristics and management procedures for all types of wastes to be received at the facility. This information will be used to evaluate the chemical characteristics of any spilled material, as well as to ascertain the volume of the release.

Routine identification of wastes and other materials managed by the EPSC is described in Section C.2, Waste Analysis Plan.

The chemical and physical characteristics of waste accepted at the facility are sufficiently identified by analytical and/or detailed process knowledge provided by the individual generator. This information is necessary to accept, store, treat, and dispose of waste, or for response to spills of these materials.

All pertinent information from generators are entered on Work Orders and stored in a computer waste tracking system. The facility is equipped with a computer terminal for access to that system for emergency situations.

The EC will use chemical information, analytical data, and/or information from the generator regarding the process generating the waste, together with literature reviews and the professional judgment of the reviewer, to determine the character, event source, and approximate amount.

In addition to this information on each waste/material at the facility, the EC can utilize air monitoring and surveillance instrumentation. Two such methods include combustible gas and oxygen deficiency meter and colorimetric (detector) tubes which can identify specific airborne contaminants or general chemical groups.

4.3 Hazard Assessment

401 KAR 34:040 Section 7(3)
40 CFR 264.56(c)

Once the spilled/ignited/reacted hazardous waste has been positively identified as described in Section 4.2., it should be possible to determine the extent of the danger posed by the incident.

Individuals performing an assessment will determine both the direct and indirect hazards posed by the incident. Assessment will be made through observations for the following criteria:

- The nature and extent of the incident;
- The intensity or magnitude of fire or explosion;
- The location of the incident;
- What materials are involved;
- The extent of materials released to the air and surrounding area;
- The potential for escalation through subsequent explosions or the spread of fire to other hazardous materials;
- Potential short and long-term effects, with regard to human health and the environment;
- The potential that the fire or explosion could spread to nearby buildings;
- The need for outside assistance and/or evacuation (Note: No firefighting will be attempted by the facility staff if it is believed there could be significant risk or injury to unit personnel).

The proper extinguishing media for the fire will be established by the EC (i.e. foam, dry chemical, water, etc). Based on evaluation of the event, the EC or alternate will determine whether evacuation of the facility is required. If evacuation of buildings in the vicinity of the facility or the entire neighboring area is required, evacuation will be in accordance with Section 7.0.

In the event that the Contingency Plan is activated, the EC will notify the Kentucky Division of Waste Management and the National Response Center. Activation of the appropriate emergency response will be decided by the EC. As additional information on

the event becomes available, the classification of the event and the response level will be revised accordingly if necessary.

4.4 Control Procedures

A. Fire

1. A person encountering a fire in its incipient stages should attempt to extinguish the fire if a fire extinguisher is readily available and in doing so this does not endanger the health of the person and the person is trained in its proper use. The person should then notify the EC or Public Safety. Even if the fire is extinguished, the Louisville Fire Department will still be called as a measure of safety.
2. If the fire has spread, or is too dangerous to fight with facility personnel, activation of the emergency pull button, notification of the EC or Public Safety, and evacuation of the building(s) will occur.
3. When the Fire Department is on-scene, the highest ranking fire official will have control of emergency actions relative to mitigating the fire emergency. The EC will act as the University representative providing information as needed and serving in an advisory role.
4. The EC and Fire Department officials will make the determination as to whether or not other response agencies need to be notified (which had not already been notified as required elsewhere within the Contingency Plan) and/or if adjacent properties need to be evacuated.
5. The area will be cleared of all personnel not actively involved in fighting the fire and emergency response efforts.
6. Any injured personnel will be removed and medical treatment will be administered by qualified emergency medical personnel.
7. Fire officials will consult with the EC when a question arises as to the proper fire extinguishing media to use. The Emergency Coordinator will attempt to have available material safety data sheets (MSDSs), chemical reference books, or other available information on hazardous materials and wastes involved in an emergency for review to assist in determining appropriate response actions.
8. Fire fighting will not be done when it is determined that the risk of injury is too great for persons fighting the fire. In such cases, fire officials and other response agencies may decide to evacuate a larger area.

B. Sudden or Non-sudden Releases of Hazardous Waste or Hazardous Wastes Constituents

1. The DEHS has, in the general EPSC storage area and facility office, an ample supply of emergency response equipment. Section 5.0 lists all emergency equipment and includes a physical description and capabilities for responding to hazardous materials incidents. Additionally, personnel within the DEHS have received specialized training regarding hazardous wastes/materials handling and emergency response. For these reasons, it is foreseeable that any spills or releases occurring can be safely handled by University personnel unless severe in magnitude.
2. Any spills or releases will be immediately reported to the EC. The EC will determine what actions are to be taken as a result of his/her assessment.
3. Personnel, when discovering a spill or release, should attempt to contain the material to prevent contamination spread if this can be done safely, and then evacuate the building and await instructions from the EC.
4. If the EC determines that University personnel can mitigate the spill/release, then personnel from the DEHS will clean up the spill/release. The EC will instruct personnel as to the proper emergency response procedures including what personnel protective equipment to don based upon the hazardous wastes/materials involved and a review of available MSDSs or other chemical hazard resource material.
5. If the EC determines that evacuation of the entire building and/or adjacent properties is necessary, then evacuation will take place in accordance with Section 7.0.
6. If the EC determines that outside emergency response assistance is needed, then the appropriate agencies will be contacted as listed in Section 6.0

C. Injured Person

1. Any personnel injured as a result of exposure to hazardous wastes or materials will receive appropriate medical attention. If a person has a hazardous material splashed in the eyes, the person should immediately go to an emergency eye wash station or other source of clean water and rinse the eyes for 15 minutes. If a person has skin contact with a hazardous material which can be injurious via contact with the skin, the person should immediately wash off the skin with clean water, removing clothing if necessary.
2. Any injury as a result of exposure to hazardous materials will be reported to the EC and outside emergency medical assistance will be summoned (if required).

3. A person who has suspected fractures, neck, or back injuries should never be moved until qualified medical assistance arrives, unless the person is in danger where he/she lies, i.e. fire, spill.
4. The EC will make an assessment as to any response actions necessary, other than medical treatment. Any further actions necessary, i.e. spill response, fire hazard, will take place in accordance with Section 4.0
5. The EC will ensure that information regarding the hazardous wastes/materials involved is relayed to the medical authorities for proper treatment of injured personnel.

4.5 Prevention of Recurrence or Spread of Fires, Explosion, or Releases

401 KAR 34:040 Section 7(5) and 7(6)
40 CFR 264.56(e)

The EC will take whatever steps are necessary to prevent the recurrence or spread of fires, explosions, or releases in any emergency situation. This may include the stopping of processes and operations, collection and containment of released hazardous materials/waste, and/or isolating containers. The EC will, in an emergency situation, continually monitor for signs of leaks, pressure buildup, gas generation or ruptures in valves, pipes, or other equipment, where applicable.

4.6 Storage and Treatment of Released Material

401 KAR 34:040 Section 7(7)
40 CFR 264.56(g)

When the emergency has been brought under complete control and the threat to human health and the environment has been stabilized or neutralized, the EC or his/her designee will immediately initiate the following remedial actions in order to restore the facility to operational readiness. If needed, a contract remediation contractor will be used to perform these tasks.

A. Monitoring of the Cleanup Actions

1. The EC or his/her designee will continue to monitor the area during the remedial cleanup operations.
2. The entire area involved in the emergency will be cordoned off and only operations directly related to the remedial cleanup will be allowed in the affected area.
3. The EC will ensure that all remedial operational personnel are properly equipped with necessary personal and respiratory protective equipment. The EC will use

available information such as MSDSs, process knowledge, or other available information to make this determination.

4. If flammable materials are involved, all sources of ignition will be eliminated and only explosion-proof or non-sparking equipment will be used during the cleanup.

B. Storage, Treatment, or Disposal of Released Material

1. All recovered waste, contaminated soil, absorbent liquids, or other liquid or solid material resulting from the incident will be collected, containerized in DOT-approved containers, if required, and stored for off-site disposal when the remedial cleanup is complete.
2. The EC or his/her designee will make arrangements for the treatment, storage, or disposal of recovered waste material, contaminated soil, surface water, or any other contaminated material resulting from the emergency.
3. All disposable personal protective equipment (e.g. gloves, chemical suits and jackets, etc.) will be collected and placed in DOT-approved containers for off-site disposal.

C. Sampling of Affected Area to Determine if Remedial Cleanup was Successful

As necessary, the EC or his/her designee will perform appropriate sampling and analysis of the affected area to determine if the spill material has been satisfactorily removed and no further contamination exists. The sampling will be performed as follows when warranted:

1. The sampling will be performed in accordance with all Environmental Protection Agency and Kentucky Department for Environmental Protection guidelines and acceptable methodologies. A sampling plan will be developed prior to the sampling and reviewed with the appropriate agency (if needed) to ensure the sampling event meets all objectives. Sample type and number will depend on the materials released and the extent of the release.
2. All sample analysis will be performed in accordance with accepted analytical procedures utilizing acceptable quality assurance and quality control.
3. All required notifications and written reports will be made to the appropriate agencies of the results of the cleanup efforts and analytical results.

4.7 Incompatible Wastes

401 KAR 34:040 Section 7(8)(a)

After an emergency, the EC or his/her designee will ensure that no waste that may be incompatible with released material is treated or stored in the affected area until cleanup

procedures are completed. Wastes from cleanup activities will be managed in the same manner as all other wastes. Incompatible wastes will not be placed in the same container. Containers will be placed in storage areas appropriate for their compatibility class.

Since not all wastes are compatible with each other, the mixture of two or more chemicals (wastes) may produce undesirable or uncontrolled reactions resulting in adverse consequences (i.e. fire, explosion, toxic gas generation, etc.).

Incompatible wastes and chemicals will be physically separated, while items of similar nature and characteristics can be placed together or in close proximity. Section 9.0 of the Waste Analysis Plan (Attachment C-1 of Section C) describes EPSC procedures in determining compatibility and segregation of wastes.

Using all information available, including information from the waste tracking computer system, container labels, and literature searchers, the EC and the technical staff will evaluate the waste characteristics. Using professional training/education and waste management experience, the compatibility group most closely related to the waste will be selected.

Stored containerized cleanup wastes will be segregated with respect to ignitability, compatibility, and considerations for ultimate treatment and/or disposal. Each waste will be placed in storage according to its compatibility group.

The containment system for each compatibility group in the EPSC is required to have sufficient capacity to contain ten percent of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids do not need to be considered in this determination; however, the EPSC has been conservatively designed with the assumption that all containers will contain free liquids.

The storage areas which will hold ignitable or reactive wastes are located greater than fifty feet from the facility property line. The general storage area has discrete management areas/rooms with individual secondary containment structures. Ignitable and reactive wastes are managed in self-contained explosion proof rooms. The rooms are provided with explosion proof equipment and lighting. Containers of flammable materials are bonded and grounded during all opening/transfer operations. Each area managing flammable materials has LEL detectors which will activate an emergency ventilation system should a potentially dangerous situation occur.

Cleanup of spills where wastes or materials are incompatible will follow special containment and treatment requirements. Berms of inert materials will be utilized to contain the waste or material.

4.8 Post-Emergency Equipment Maintenance

401 KAR 34:040 Section 7(8)(b)
40 CFR 264.56(h)(2)

Any emergency response equipment that is used in an emergency or cleanup operation will be decontaminated or replaced so that it will be in operable condition. Supplies will be fully stocked as before the emergency. The EC or his/her designee will ensure that this is completed through an inspection prior to the resuming of normal operations. University personnel will wear disposable personal protective equipment whereby decontamination consists of removal of clothing and placement in DOT-approved containers for proper disposal. If equipment or property (i.e. floor surfaces, walls, fixed equipment) requires decontamination, spill pads, absorbent, cleaning solutions, or a combination thereof will be used.

Example procedures for cleaning equipment are as follows:

- All dry chemical extinguishers will be washed and wiped clean and then refilled as soon as it is practical. The wash water will be collected and managed as appropriate (to be determined through testing).
- If a fire truck is involved, it will be inspected for mechanical or other deficiencies. Steam cleaning and decontamination will occur in-situ; wash water will be collected for off-site disposal.
- All facility fire fighting capabilities, water, dry chemical, and foam will be replenished, where necessary.
- All additional emergency equipment (e.g. backhoes, bulldozers, hand tools) will be washed and cleaned in-situ, and serviced as required after the emergency.

4.9 Container Spills and Leakage

401 KAR 34:180 Section 2
40 CFR 264.56(h)(2)

If a container is leaking, its contents will be transferred to a new or overpack container. Ignitable or reactive wastes will be transferred according to fire safety procedures (e.g. use of non-sparking tools, use of explosion-proof electrical equipment, grounding of containers).

If a container is not leaking, but is of questionable integrity, it will be transferred to an overpack container. All void space in the overpacks will be filled with absorbent material (e.g., vermiculite). Any waste containers filled as a result of leak response (e.g. overpacks, cleanup residuals) will be labeled and managed in the same manner as other hazardous waste containers.

All operating procedures will be geared to minimize the chance of spills from occurring. In the event of a discharge or spill of hazardous wastes, the immediate objectives are to contain the spill and to properly decontaminate the area prior to resuming operations.

General spill response will include the following:

- Isolate and contain the spill area to prevent further surface contamination.
- Collect the spilled materials by use of pumps and/or absorbent materials for liquids, and by use of shovels or vacuums for solid materials or dust.
- Clean up the spill area by removing the absorbing agents, waste materials, and any contaminated soils. The contaminated soils, absorbing agents, and spilled materials will be consolidated and stored.
- All equipment or hand tools employed during the spill response operations will be cleaned and decontaminated in-situ and returned to their pre-emergency state.

If a container leaks or spills, resulting in a situation which requires implementation of the Contingency Plan, the EC will be notified immediately. De minimus spills or drips caused by routine waste transfer/process operations will be absorbed and cleaned up as part of daily operations and would not require implementation of the Contingency Plan. The following safety precautions and countermeasures will be implemented by the EC or his/her designee during a spill response, as appropriate:

- All unnecessary personnel will be removed from the area.
- Injured personnel will be removed from the area.
- All personnel within the contaminated area will wear protective safety equipment, such as protective clothing, boots, gloves, goggles, and respirators.
- Individuals splashed with spilled materials will flush the exposed area with large quantities of water from the safety shower/eyewash.
- Clothing contaminated by spilled materials will be removed immediately to minimize contact with the skin.

As soon as the spill is under control and contained, the EC or his/her designee will initiate appropriate clean-up activities, such as the following:

- Absorb liquids or pump them into drums or other appropriate containers.
- Shovel solid materials into drums or other appropriate containers.

Removal of liquids from containment systems is described in Section D.1.a (5). The EC or his/her designee will ensure that any equipment used in the spill response will be thoroughly cleaned and decontaminated in-situ before reuse.

General Storage Area

- Alert other personnel who may be endangered, call for backup, use alarm signals.
- Use appropriate protective clothing and equipment.
- Eliminate ignition sources.
- Locate source, attempt to control leak so container can be moved and isolated.
- Notify EC.
- Place container in overpack drum, if necessary.
- Use absorbent materials to contain spill and prevent exposure to incompatible materials.
- Remove or isolate incompatible wastes from the affected area when possible.
- After containment is assured, transfer leaky container contents to another specification container. Spill residues and clean-up materials to be contained as well.
- Contain and prevent further migration of any visible release to the environment outside of containment, and provide for removal and proper disposal of visibly contaminated soil or surface water.

Loading/Unloading Area

- Alert other personnel who may be endangered, call for backup, use alarm signals.
- Immediately notify EC.
- Use appropriate protective clothing and equipment.
- Cut off source, close valves, shut down pumps, eliminate ignition sources.
- Attempt to contain spills or runoff by use of absorbent material or diking with soil/sand, absorbent booms, pillows, and/or pads.
- Remove or isolate incompatible wastes from affected area when possible.
- Contain and prevent further migration of any visible release to the environment outside of containment, and provide for removal and proper disposal of visibly contaminated soil or surface water.
- Pump sumps containing spilled material to appropriate containers.

5.0 EMERGENCY EQUIPMENT

Listed below is the emergency response equipment maintained by the DEHS, including a brief description of equipment capabilities. The safety equipment will be contained in the Administrative Area; the spill supplies will be maintained in the Storage Area.

Chemical Protective Clothing:

- Disposable Tyvek coveralls and jackets - disposable clothing suitable for protection against chemical particulate contamination and for general personal hygiene protection.
- Disposable Saranex-coated Tyvek coveralls – disposable clothing suitable for protection against chemical particulate contamination and for handling of acids, caustics, and limited organic solvents.
- Chemical resistant suits – designed for splash protection with heavy duty PVC fabric; resists oil, grease, and wide range of chemicals.
- Rubber boots – chemical resistant boots which offer protection against wide range of chemical contaminants.
- Nitrile gloves – disposable gloves which offer the broadest range of chemical contaminant protection.
- Vinyl gloves – thin disposable tight-fitting gloves which offer minimal chemical resistant protection and are most suitable for general personal hygiene.

Respiratory Protection:

- Half face air purifying respirators – designed for use with a wide selection of respirator filter cartridges offer varying chemical protection; protection is limited to respirator cartridge limitations; cannot be used in atmospheres which are deficient in oxygen or in IDLH conditions.
- Full face air purifying respirators – designed for use with a wide selection of respirator filter cartridges offering varying chemical protection; protection is limited to respirator cartridge limitations; offers chemical splash protection for eyes and face; cannot be used in atmospheres which are deficient in oxygen or in IDLH atmospheres.
- Respirator cartridges to be used with air purifying respirators – approved for protection against organic vapors, chlorine, hydrogen chloride, sulfur dioxide, dusts, fumes, mists, and radionuclides.

Additional Personal Protective Equipment:

- Hard hat – designed to offer wearer minimal head protection against bumps and impact objects.
- Safety glasses – designed to offer wearer minimal eye protection from airborne projectiles.

- Safety goggles – designed to offer wearer minimal eye protection from chemical splashes and airborne particulate matter.
- Full face shields – designated to offer wearer minimal face and eye protection from chemical splashes and airborne projectiles.

Air Monitoring and Surveillance Instrumentation:

- Combustible gas and oxygen deficiency meter – measures the percentage of the lower explosive limit (LEL) of a flammable gas/vapor in air and the oxygen content in air.
- Detector tube – colormetric tubes which are utilized to measure specific airborne contaminants or general chemical groups.

Spill Response and Emergency Response Equipment:

- First aid kit.
- Mercury vacuum cleaner – for liquid mercury and contaminated particulate pick-up, equipped with a HEPA filter.
- Drums – 55 gallon and 85-gallon DOT drums.
- Absorbent – bags of oil-dry; waste absorbent corncobs; absorbent booms for various chemical spills.
- Shovel, broom, bung wrench.
- Fire extinguishers – Class A, B, ABC and D fire extinguishers will be available in accordance with 29 CFR 1910.57.
- Granular neutralization materials for acid, base, and organic spills.

Table G-1 lists the types and descriptions of the emergency equipment that will be maintained at the facility.

TABLE G-1
EMERGENCY EQUIPMENT
(revised October 2007)

EQUIPMENT	DESCRIPTION/USE/CAPABILITIES	LOCATION
Environmental Protection Services Center	Secure, safe storage of emergency and spill response equipment	1810 Arthur Street Louisville, KY 40208
<u>Major Spill Equipment:</u>		
• Absorbent booms	Liquid absorbent/diking material	Receiving area – Storage shed
• Sandbags	Diking material	Outside on dock
• Portable pumps	1-3 inch air-powered diaphragm; liquid removal & transfer	Bulk/Blend room
• Overpack drums	To contain leaking drums, 85-gallons each	Receiving area
<u>Minor Spill Equipment:</u>		
• Absorbent materials	To absorb liquids/diking material	Receiving area, Storage areas, & Response Truck
• Pads/pillows/socks	Oil absorbent/water repellent or liquid absorbent	Receiving area, Storage areas, & Response Truck
• Shovel, broom	Contain spilled dry solid material	Receiving area & Response Truck
Protective clothing & equipment	Protection from exposure	Receiving area – Storage shed and cabinet
Self-contained breathing apparatus	Full-face, 25-min rescue pack	Response Truck and Lab
Fire extinguishers	A, B, D, and ABC	Receiving area, Storage areas, & Response Truck
First-Aid kits	On-site first aid, minor injuries	Facility restroom & Response Truck
Emergency showers & eye wash units	Decontamination, emergency aid	Receiving area, Lab and outside of Bulk/Blend room
Fire hydrants	Fire control water supply	At Bloom Street, south side of 1700 Arthur St. (Harley Davidson bldg.)
Permanent fire monitor (Infrared sensor)	Aimable nozzle for fire detection	Flammable storage & Bulk/Blend room
Sprinkler systems	Automatic foam or water fire suppression in response to extreme heat	Facility-wide

TABLE G-1
EMERGENCY EQUIPMENT
(revised October 2007, continued)

EQUIPMENT	DESCRIPTION/USE/CAPABILITIES	LOCATION
<u>Alarm Systems:</u>		
• Fire call box	Manually operated fire warning	Facility-wide
• Fire alarms	Automatic fire warning; alarm sounds when sprinkler is tripped	Facility-wide
• Portable air horn	Manually operated emergency alarm	Facility office area
<u>Internal Communications Systems:</u>		
• Radio		
Base stations	Facility-wide communication system	Facility office area
Hand held	Communication between EPSC personnel & University police	Facility office area
• Public Address System	Facility-wide communication system	Facility-wide
• Telephones	Facility-wide communication system communication between HM personnel	Facility office area and Receiving area
<u>External Communication Systems:</u>		
• Telephone	Communication with emergency response service organizations and emergency planning committees	Facility office area and Receiving area
• Hand-held radios	Communication between EPSC personnel and University police	Facility office area
<u>Emergency vehicles:</u>		
• Response Truck	Mobile emergency unit for spill response and care of injured personnel	EPSC loading dock

6.0 COORDINATION AGREEMENTS

401 KAR 34:040 Section 3(3)

The following emergency response agencies have received copies of the Contingency Plan (see Exhibit C for an example Letter of Agreement). If applicable, the EC will obtain documentation of each agency's commitment to respond or refusal to respond to an emergency.

- Louisville Fire Department
- Louisville Fire Department Hazardous Material Unit
- Louisville Police Department
- University of Louisville Public Safety Department
- Louisville Emergency Medical Services
- University Hospital
- Norton Hospital Poison Control Center (only for telephone consultation of medical emergencies)
- Louisville Metro Health Department- Hazardous Materials Unit
- Kentucky State Fire Marshall's Office-Hazardous Materials Unit
- Louisville Metropolitan Sewer District
- Kentucky Department for Environmental Protection Emergency Response Team
- Chairman of Kentucky Emergency Response Commission - Disaster and Emergency Services
- Louisville Metro Emergency Management Agency
- Remedial Services Contractor

Whenever any revision is made to the Contingency Plan, the EC will send out update copies of the plan to the agencies and inform them of the specific changes.

7.0 EVACUATION PLAN

401 KAR 34:040 Section 3(6)

A. When the accumulation area, including the building in which it is located, must be evacuated, the EC, with the aid of Public Safety, will ensure proper evacuation. Personnel within the building will be informed that an evacuation is necessary. Exhibit D diagrams the evacuation routes. The safe areas of congregation upon egress will be in the parking area immediately adjacent to the exit door of the facility. When evacuating, personnel will close all doors behind them. Alarm systems include a fire call box, automatic fire alarms, and a portable air horn (see Table G-1).

B. If the EC determines that adjacent and/or surrounding properties are in danger and evacuation is required, the Louisville Fire Department in conjunction with Public Safety will be contacted to aid in expediting evacuation of the affected properties.

C. If evacuation of adjacent properties is deemed necessary, adjacent streets will be cordoned off to prohibit vehicular and pedestrian traffic. The EC in coordination with the proper response agencies will determine the area(s) of evacuation.

8.0 REQUIRED REPORTS

A. Verbal Notification of Off-Site Emergency

In addition to the 911 notification, the following additional notifications will be made when meeting the specified criterion. If the EC determines that an emergency threatens human health or the environment outside of the accumulation area or a release occurs in excess of CERCLA hazardous substance (40 CFR 302.4), the EC or his/her designee will immediately notify the Natural Response Center (800-424-8802), or if a release occurs in excess of a reportable quantity of either an extremely hazardous substance (40 CFR 355) or CERCLA hazardous substance, will immediately notify the state and local emergency response commissions, or if a release occurs in excess of reportable quantities or limits established by regulatory agencies or laws, will notify the KDEP's Emergency Response Team and report the following:

1. Telephone number of person to be contacted for further information.
2. Name and address of facility where release occurred.
3. Time and duration of release and type of incident (e.g. fire, spill).
4. Chemical name or identity of substance involved in the release and an estimate of the quantity of the material(s) involved, to the extent known.
5. An indication of whether the substance is an "extremely hazardous substance" per 40 CFR 355.
6. The extent of injuries, if any.
7. Description of the medium or media into which release occurred (i.e. air, water, soil, storm sewer).
8. The possible hazards to human health or the environment such as known or anticipated acute or chronic health risks associated with the emergency or medical advice for exposed individuals.
9. Proper precautions to take as a result of the release, including evacuation.

B. Written Notification

Within 15 days after any event requiring the implementation of the Contingency Plan, the EC will submit a written report to the Kentucky Environmental and Public Protection Cabinet. Additionally, where a release occurs in excess of an extremely hazardous substance or CERCLA hazardous substance reportable quantity, a written report will be submitted to the state and local emergency response commission. The report will detail the following:

1. Name, address, and telephone number of the owner or operator and facility.
2. Date, time, and type of incident (i.e. fire, spill, and description of response actions taken).
3. Name and quantity of material(s) involved.
4. The extent of injuries, if any.
5. An assessment of actual or potential hazards to human health or the environment, where applicable.
6. Estimated quantity and disposition of recovered material that resulted from the incident.

C. Other Notification

Before operations are resumed, the EC will notify the Cabinet and appropriate state and local authorities that:

1. No waste that may be incompatible with released materials is treated, stored, or disposed of until cleanup has been completed.
2. All emergency equipment listed in the contingency plan is cleared and fit for its intended use.

All notifications will be made in accordance with applicable city and county laws, regulations, and ordinances.

January ____, 2010

**Contingency Plan
Exhibit A
Commitment of Resources**

Environmental and Public Protection Cabinet
Department for Environmental Protection
Division of Waste Management
14 Reilly Road
Frankfort, KY 40601

Division of Waste Management:

This is to acknowledge that the Primary Emergency Coordinator, Alternate Emergency Coordinators, as identified in the University of Louisville Environmental Protection Services Center RCRA Part B Application Contingency Plan, are authorized to direct and commit, if necessary, all available resources to implement the Contingency Plan.

Sincerely,

Larry L. Owsley
Vice President for Administration

Exhibit B
University of Louisville
All Campuses & Environmental Protection Services Center (EPSC)
Contingency Plan Notification List For Hazardous Material Incidents & Releases
Revision August 2012

**U of L DPS Dispatch: To contact DEHS Responders - Initiate text message RAVE alert via
HazMat Response Group**

U of L DEHS Emergency Coordinators/Responders	Home Address and Telephone
Primary Emergency Coordinator: Dennis K. Sullivan, DEHS Assistant Director/ EOHM Manager Environmental Operations/Hazardous Materials Department of Environmental Health & Safety Office (502) 852-2948 Cell (502) 417-8407	918 Eastern Parkway Louisville, KY 40217 Cell: (502) 417-8407
Alternate Emergency Coordinator: Cathy Price, Hazardous Waste Coordinator Department of Environmental Health & Safety Office (502) 852-2956 Cell (502) 314-9629	4232 Danny Drive New Albany, IN 47150 Cell:(502) 314-9629
Alternate Emergency Coordinator: Paul Hoza, Environmental Specialist Department of Environmental Health & Safety Office (502) 852-2960 Cell (502) 472-1066	7232 Fox Harbor Rd Prospect, KY 40059 Home: (502) 228-6659 or Cell: (502) 472-1066
Emergency Responder: Nick Stoltz, Sr. Hazardous Materials Technician Department of Environmental Health & Safety Office (502) 852-7138 Cell (502) 419-7548	14104 Harbour Place Prospect, KY 40059 Home: (502) 228-6407 Cell: (502) 419-7548
Emergency Response Agencies	Telephone Number
All Emergency Agencies	911
Metropolitan Sewer District (MSD)	(502) 540-6000
Jefferson County Air Pollution Control District	(502) 574-6000
University of Louisville Hospital (Emergency Dept and Trauma Center)	(502) 562-3015
Norton Hospital Poison Control Center (Information Only)	(502) 589-8222
National Response Center	1-800-424-8802
Kentucky Release Reporting Hotline (Hazardous Substance/Environmental Harm)	1-800-928-2380 24 hr for ERT (502) 564-7815 SARA Title III
Kentucky Radiation Emergency Number (Kentucky Emergency Operations Center)	(502) 564-3700 (norm.business) 1-800-255-2587 (after hrs.)
Other University Contacts	Telephone Number
Department of Public Safety	(502) 852-6111
Office of News and Public Information	(502) 852-6171

Exhibit C

Section G - Contingency Plan

EXAMPLE ONLY

Letter of Agreement with Emergency Response Agency

Dear _____:

Enclosed please find an emergency preparedness and contingency plan for the University of Louisville Environmental Protection Services Center. The Federal Environmental Protection Agency (EPA) and Kentucky Environmental and Public Protection Cabinet regulations require an emergency contingency plan be prepared and submitted to emergency response agencies, in the event the University could potentially need such service.

Please review the enclosed plan as your agency will be called upon in the event of an emergency requiring your assistance. Should you have any questions or desire a meeting and/or site visit to become better familiarized with hazardous materials management procedures, and/or facility layouts, please do not hesitate to call to arrange for a time at your earliest convenience. We appreciate your cooperation. Thank you.

Respectfully yours,

Dennis Sullivan
Assistant Director
University of Louisville
Department of Environmental Health and Safety