

IUPUI HAZARDOUS MATERIALS CONTINGENCY PLAN AND EMERGENCY PROCEDURES

1.0 GENERAL INFORMATION

This plan has been prepared in an effort to establish response procedures and protocols for University emergency response personnel to follow in the event of an actual or pending release of hazardous materials. The plan describes action which will be taken by IUPUI emergency response personnel when hazardous materials are involved with fires, explosions or releases.

The plan has been prepared in accordance and in compliance with Title 29 of the Code of Federal Regulations, Part 1910.120 and Title 40 of the Code of Federal Regulations, Part 265.5.

1.1 HAZARDOUS MATERIALS TYPES AND SOURCES

IUPUI has numerous locations which routinely store and use a diverse inventory of hazardous materials. The IUPUI Department of Environmental Health and Safety maintains Material Safety Data Sheets for materials found on campus.

In addition, The Department of Environmental Health and Safety provides contractual chemical waste management and hazardous materials emergency response for Clarian Health, Inc. the Indiana State Department of Health and Wishard Health Partners, Inc.

Figure 1-1 (page 2) illustrates, generically, the sources and types of hazardous materials generated at IUPUI.

FIGURE 1-1
HAZARDOUS MATERIALS SOURCES

FIGURE 1-1
HAZARDOUS MATERIALS SOURCES

<u>IUPUI Activities</u>	<u>Hazardous Materials</u>
<div style="border: 1px solid black; padding: 5px;"> Instructional & Laboratories </div>	----- --- --- ----- † Solvents (Flammable, Research Combustible, Halogenated) † Reagents † Corrosive materials † Miscellaneous Poisons † Heavy Metal-Bearing Waste
<div style="border: 1px solid black; padding: 5px;"> Campus Facility Services </div>	----- --- --- ----- † Solvents (Flammable, etc.) † Corrosive Liquids & Solids † Cleaning & Degreasing Compounds † Paint-related Wastes † Miscellaneous Poisonous Materials
<div style="border: 1px solid black; padding: 5px;"> Biomedical Research and Patient Treatment </div>	----- --- --- ----- † Scintillation Fluids (water solvent mixtures containing xylene and toluene) † Organic solvents used in various laboratory operations † Miscellaneous Poisons † Corrosive Materials † Heavy Metal-Bearing Waste † Other Reagents

1.2 GENERAL EMERGENCY PROCEDURES

Emergency procedure handbooks are routinely distributed to University faculty and staff. This handbook provides general response guidance for fires, explosions, chemical spills and hazardous gas leaks. The IUPUI Staff and Faculty Emergency Procedures Handbook is included in Appendix F.

1.3 IUPUI EMERGENCY RESPONSE TEAM

Personnel from the Department of Fire Protection Services and the Department of Environmental Health and Safety compose a University Hazardous Materials Emergency Response Team. Representatives from these departments respond to all notifications of chemical spills, odors and other situations involving hazardous materials or wastes.

All team members are properly trained for emergency response. Team members have access to level D, C and B personal protective equipment and a variety of spill containment and cleanup equipment. Team members maintain full communication capabilities through the IUPUI 800 mhz system.

Table 1-1 (page 9) identifies current members of the IUPUI Hazardous Materials Emergency Response Team and specifies their current level of training.

Medical monitoring, in compliance with 29 CFR 1910.120, will be provided for team members on an annual basis. Medical monitoring will be tailored to each team member's responsibilities and potential for exposures over the previous year and their tenure at IUPUI.

1.4 INCIDENT COMMAND SYSTEM

At the time the plan is activated, a site-specific incident command system (ICS) will be established. The ICS will follow nationally-recognized standards for incident command as established by the National Fire Protection Association and the National Fire Academy.

At the time non-University resources are summoned, the ICS of University will be integrated into the ICS of the responding agency and unified command operations will be conducted.

1.5 INCIDENT COMMANDER

In an effort to coordinate University or other resources, incident command will be established for any incident requiring activation of this plan. Incident command will be established by those individuals specified in Table 1-2 (page 11) (in descending order). The Incident Commander has the responsibility and authority to carry out all tactical priorities and commit all resources necessary to contain and mitigate the emergency.

Tactical Priorities:

1. Provide for personnel safety and survival.
2. Protect, remove, and provide care for endangered persons.
3. Control the incident.
4. Conserve property during and after incident control operations.
5. Limit environmental impact of the incident.

Responsibilities During Contingency Plan Activation:

1. Assume Initial Command Responsibilities including:
 - a. Assume an effective command position
 - b. Transmit the initial radio report
 - c. Rapidly evaluate the situation (size-up)
 - d. Develop plan to control the incident
 - e. Assign units as available and required to carry out tactical incident control
2. Fulfill Continuing Command Responsibilities including:
 - a. Provide continuing overall command and coordinate communications. Transfer of command may be used to accomplish this over long or complicated incidents.
 - b. Assign sectors and branches as necessary to manage specific functions or to control operations in a given area. (Figure 1-2, page 6)

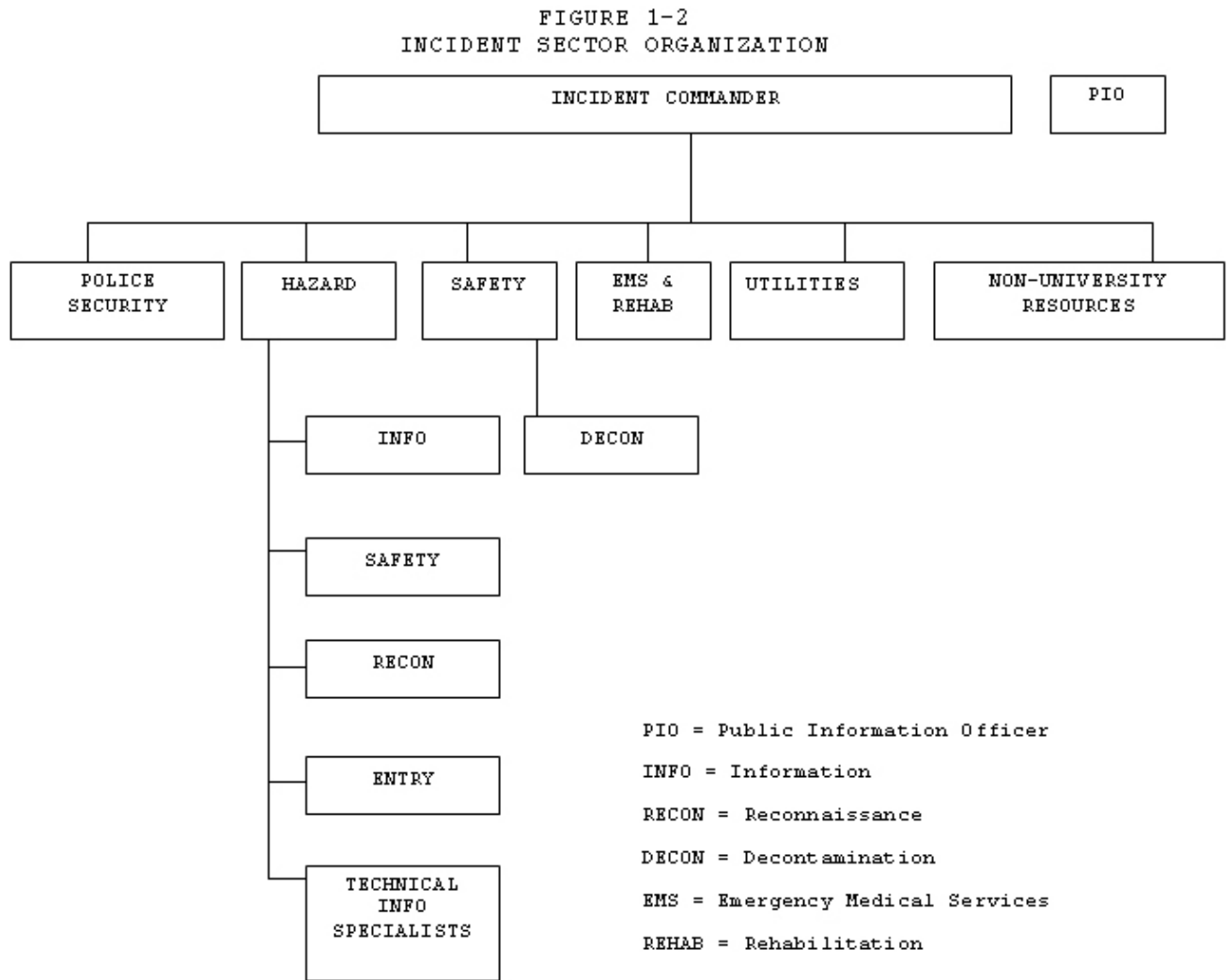
Sectors may include:

- (1) Hazard Sector - To be directed by the Emergency Coordinator.
- (2) Safety Officer - To be implemented by qualified safety staff.
- (3) Utilities - To assist in control of facility utilities and building utility functions.
- (4) Security - To be directed by senior IUPD Officer assigned to the incident.
- (5) Public Information Officer - To be directed by senior Media Relations representative assigned to the incident.
- (6) Planning - To be used to assist in resource planning and logistical support.
- (7) Rescue or Medical - To be directed by a qualified emergency medical technician trained in hazardous materials response.

Anytime additional sectors are needed for tactical priorities and incident control, they will be assigned by the Incident Commander. When the span of control is exceeded, branches or sector reassignments may be instituted to bring an appropriate span of control back to the Incident Commander.

- c. Evaluate the safety of operations and revise operations if needed. This will often be accomplished through the utilization of a qualified safety officer.
- d. Review and evaluate control efforts and revise incident control plan as needed.
- e. Request and assign additional units as necessary.
- f. Return units to services and terminate command.

FIGURE 1-2
INCIDENT SECTOR ORGANIZATION



1.6 EMERGENCY COORDINATOR

Depending on the circumstances of the event, initial response to a hazardous material emergency may involve personnel from the University Police Department, the Department of Fire Protection Services or the Department of Environmental Health and Safety. At the time the responding party determines the emergency involves hazardous materials, the responder is to make contact with an Emergency Coordinator listed in Table 1-3 (page 12). Contact is to be made in descending order as specified in Table 1-3 (page 12) until contact is made with a designated Emergency Coordinator.

The Emergency Coordinators specified in Table 1-3 (page 12) have complete authority to commit all resources necessary to contain and mitigate the emergency.

The Emergency Coordinator will be the chief resource person for the Incident Commander and will direct the hazard sector of each incident. The Emergency Coordinator will have the responsibility and authority to utilize resources necessary to carry out the tactical priorities associated with the Hazard Sector. This includes; but, is not limited to, protection of personnel, spill containment and control, hazard control, environmental protection, and decontamination.

The Emergency Coordinator will coordinate his actions through the Incident Commander and will have primary responsibility for the development of hazard control, spill control and containment, remediation and decontamination plans.

The Hazard Sector will include the "hot" zone, "warm" zone and "cold" zone. Operations within these areas will be directed by the Emergency Coordinator.

1.7 SAFETY OFFICER(S)

The duties of Safety Officer will be assumed or delegated by the Incident Commander based upon the nature of the incident. Delegation of this task to a qualified individual will take place in all but the most minor of incidents. The Safety Officer will report to the Incident Commander and has the responsibility for safety oversight for the entire incident. The Safety Officer has the responsibility to recommend the suspension of any and all operations in consultation with the Incident Commander and the Emergency Coordinator if an unsafe condition threatens the safety of personnel at the incident. Should the nature of the incident preclude the Safety Officer from performing all of his responsibilities, then he shall request additional resources from the Incident Commander.

The Safety Officer(s) is responsible for:

- Providing the Incident Commander and Emergency Coordinator with recommendations on the establishment of control zones.
- Providing the Incident Commander and Emergency Coordinator with recommendations on respiratory and personal protective equipment.
- Implementing other applicable provisions of campus safety plans.
- Monitoring personnel making entry into the hot zone. At a minimum, temperature, blood pressure, pulse rate, and water intake are to be monitored before and after entry into the hot zone. The Safety Officer's is responsible for making visual observations for indication of heat stress or other health problems related to the response.
- Monitoring and maintaining communications between the entry team, themselves and the Emergency Coordinator and Incident Commanders.
- Ensuring that a backup team to the entry team is ready and properly equipped when entry operations are ongoing.
- Assessing the need for standby emergency medical services with transport.
- Documenting potential exposures of either entry or backup personnel.

1.8 SITE SECURITY SECTOR

Upon activation of the plan, and until the Security Sector Commander is on-scene, police and security officers will coordinate site security through the Incident Commander or Emergency Coordinator, whichever is on-scene first. Upon establishment of the Incident Command System, site security will be coordinated through the Officer-In-Charge which in-turn will coordinate activities through the Incident Commander.

1.9 NON-UNIVERSITY RESOURCES

Appendix A provides a comprehensive list of support organizations or agencies that may be contacted or contracted with to provide additional assistance.

As specified by Appendix F, the Emergency Coordinator(s) specified within this plan are authorized by the IUPUI Director of Purchasing, under emergency circumstances (as defined within this Plan), to enter into binding contracts or agreements on behalf of the University with private hazardous materials response contractors or for other support services as necessary to stabilize and mitigate the hazardous materials emergency.

The Director of Purchasing is to be apprised of such contractual agreements at the earliest opportunity.

TABLE 1-1

IUPUI HAZARDOUS MATERIALS EMERGENCY RESPONSE TEAM

Amanda Foti, Environmental Specialist

The Department of Environmental Health & Safety

- Hazardous Materials Technician

Bob Cesnik, Fire Equipment Technician

The Department of Fire Protection Services/The Indianapolis Fire Department

- Hazardous Materials Technician
- Incident Command

Tom Hulse, Manager

The Department of Fire Protection Services

- Incident Command

Chris Mahalek, Industrial Hygienist/Safety Specialist

The Department of Environmental Health & Safety

- Safety Officer
- Hazardous Materials Technician

Colleen McCormick, Compliance Facilitator

The Department of Environmental Health & Safety

- Hazardous Materials Technician

Kevin Mouser, Environmental Manager
The Department of Environmental Health & Safety

- Hazardous Materials Specialist
- Incident Command

Rebecca Bratt, Senior Industrial Hygienist
The Department of Environmental Health & Safety

- Safety Officer

Brian Payne, Environmental Technician
The Department of Environmental Health & Safety

- Hazardous Materials Specialist

Lee Stone, Laboratory Safety Manager
The Department of Environmental Health & Safety

- Technical Resource
- Safety Officer

Rich Strong, Director
The Department of Environmental Health & Safety

- Hazardous Materials Specialist
- Incident Command
- Safety Officer

Ron Troutt, Fire Systems Technician
The Department of Fire Protection Services/Indianapolis Fire Department

- Hazardous Materials Technician
- Incident Command

Robert True, Captain
Indiana University Police Department

- Incident Command

TABLE 1-2

INCIDENT COMMANDERS

Primary Incident Commander

Tom Hulse, Manager
Department of Fire Protection Services
Office Telephone Number: 274-1384
Home Telephone Number: 844-5187
Pager #: 12-1680, 592-7383
Radio Call#: 1901

First Alternate Emergency Commander

Bob True, Lieutenant
IUPUI Police Department
Office Telephone Number: 274-2058
Home Telephone Number: 467-0841
Cellular Telephone: 697-2118
Pager #: Alpha page through IUPUI Police Dispatch or e-page at 3176972118@vtext.com
Radio Call#: 309

OR THE RANKING POLICE
OFFICER ON-SCENE

Second Alternate Emergency Commander

Richard Strong, Director
Department of Environmental Health and Safety
Office Telephone Number: 274-1388
Home Telephone Number: 201-0789
Cellular Telephone: 201-0789
Pager #: 799-2051
Radio Call#: 470

TABLE 1-3

EMERGENCY COORDINATORS

Primary Emergency Coordinator

Kevin Mouser, Environmental Manager
Department of Environmental Health and Safety
Office Telephone Number: 274-4351
Home Phone Number: 787-2863
Cellular Telephone #: 626-1516
Pager #: 254-5164
Radio Call#: 471

First Alternate Emergency Coordinator

Richard Strong, Director
Department of Environmental Health and Safety
Office Telephone Number: 274-1388
Home Telephone Number: 201-0789
Cellular Telephone: 201-0789
Pager #: 799-2051
Radio Call#: 470

Second Alternate Emergency Coordinator

Amanda Foti, Environmental Specialist
Department of Environmental Health and Safety
Office Telephone Number: 278-3328
Home Telephone Number: 283-6434
Cellular Telephone: 847-9379
Pager #: 799-2052
Radio Call#: 473

TABLE 1-4

SAFETY OFFICERS

Primary Safety Officer

Rebecca Bratt, Senior Industrial Hygienist
Department of Environmental Health and Safety
Office Telephone Number: 274-2829
Home Phone Number: 595-5726
Cellular Telephone #: 379-1890
Radio Call#: 469

First Alternate Safety Officer

Chris Mahalek, Industrial Hygienist/Safety Specialist
Department of Environmental Health and Safety
Office Telephone Number: 274-5248
Home Telephone Number: 596-1614
Cellular Telephone: 557-3696
Pager #: 799-1714
Radio Call#: 476

Second Alternate Safety Officer

Richard Strong, Director
Department of Environmental Health and Safety
Office Telephone Number: 274-1388
Home Telephone Number: 201-0789
Cellular Telephone: 201-0789
Pager #: 799-2051
Radio Call#: 470

Third Alternate Safety Officer

Lee Stone, Laboratory Safety Manager
Department of Environmental Health and Safety
Office Telephone Number: 278-6150
Home Telephone Number: 765-987-7855
Pager #: 799-1712
Radio Call#: 472

TABLE 1-5

PUBLIC INFORMATION OFFICIALS

Public Information Official

Rich Strong, Director
Department of Environmental Health & Safety
Office Telephone Number: 274-1388
Home Telephone Number: 201-0789
Cellular Telephone: 201-0789
Pager #: 799-2051
Radio Call#: 470

First Alternate Public Information Official

Tom Hulse, Manager
Department of Fire Protection Services
Office Telephone Number: 274-1384
Home Telephone Number: 844-5187
Pager #: 12-1680, 592-7383
Radio Call#: 1901

Second Alternate Public Information Official

Emergency Coordinators as specified in Table 1-2 (page 12) (in descending order).

IUPUI COMMUNICATIONS AND MARKETING

The Office of Communications and Marketing as follows: 274-7711 or the following Communications and Marketing representatives:

Primary Contact: Rich Schneider
Communications and Marketing
Office Telephone Number: 278-4564
Home Telephone Number: 299-5401
Cellular Telephone: 371-9288

Secondary Contacts: Diana Brown
Office Telephone Number: 274-2195
Home Telephone Number: 858-3260
Cellular Telephone: 371- 04377

1.10 IMPLEMENTATION OF THE CONTINGENCY PLAN

The decision to implement the Contingency Plan will depend upon whether or not an imminent or actual incident at IUPUI is beyond the scope of being an "incidental release" and poses a reasonable threat to human health or the environment. The purpose of this section is to provide criteria to assist the Emergency Coordinator in determining when to implement the Contingency Plan.

An "incidental release", as defined in 29 CFR 1910.120, is a release which can be absorbed, neutralized, contained or otherwise controlled at the time of the release by employees in the immediate release area.

The Contingency Plan must be implemented if an imminent or actual incident could threaten human health or the environment in the following manner:

A. Spills or Releases

1. The spill or release has directly resulted in personal injury that requires hospital medical attention, is ongoing and could result in additional personal injuries.
2. The spill could result in the release of flammable liquids or vapors creating a fire or gas explosion hazard.
3. The spill could cause the release of toxic liquids, vapors, mists, dust or fumes, creating an imminent health hazard.
4. The spill can be contained on-site, but the potential exists for groundwater contamination.
5. The spill cannot be contained on-site resulting in off-site soil, ground or surface water contamination.

B. Fires

1. The fire could cause the release of toxic vapors, dust, mists or fumes.
2. If the fire spreads, it could ignite materials at other locations at the site or cause heat-induced explosions.
3. The fire could spread to off-site areas.
4. Use of water or other chemical fire suppressant could result in contaminated run-off.

C. Explosions

1. An imminent danger exists that an explosion could occur, resulting in an immediate safety hazard.
2. An imminent danger exists that an explosion could ignite other hazardous materials in the area.
3. An imminent danger exists that an explosion could result in release of toxic material.
4. An explosion has occurred.

D. Floods

1. The potential exists for surface or ground water contamination due to on-site flooding.

While the Contingency Plan will not be implemented for each chemical release on campus, the principles and procedures outlined within the plan will serve as the foundation for each hazardous materials emergency response.

1.11 ACTIVATION OF THE CONTINGENCY PLAN

The Emergency Coordinator is to activate the Plan by means of the following radio transmission on emergency channel 8C.

"Headquarters, (Radio Call #). Rush traffic. There is a chemical/hazardous materials emergency at (specific location). The campus hazardous materials contingency plan is now in effect."

The receiving dispatcher will immediately respond by issuing an announcement on the University Safety Talk Group. The announcement, at a minimum, is to include the following.

"Attention all units. There is a chemical emergency at (specific location). The campus hazardous materials contingency plan is in effect. Police and security unit assigned to this area are now asked to switch to emergency channel 8C."

Immediately following activation of the Plan, an incident command system will be established. Contact will immediately be made with an Incident Commander as specified in Table 1-2 (page 11).

Immediately following activation of the Plan, all site security is to be coordinated as specified in Section 1.8 (page 8).

1.12 COMMUNICATIONS

Radio communications will be maintained through the University 800 mhz radio system. Procedures outlined in the IUPUI Communication System Handbook are to be followed. Communications between fire and EMS units will be coordinated through the Incident Commander.

1.13 UNIVERSITY EMERGENCY NOTIFICATIONS

The following notifications are to be made immediately following activation of the Contingency Plan. It is the responsibility of the IUPUI Public Safety Dispatch Center, at the request of the Incident Commander or Emergency Coordinator, to complete the notifications:

- The Public Information Official as specified in Table 1-5 (page 14)
- The Vice Chancellor for Administrative Affairs as follows:

Robert Martin Home: 272-2423
 Office: 274-4511
- The Office of Communications and Marketing as follows: 274-7711 or the following Communications and Marketing representatives:

IUPUI COMMUNICATIONS AND MARKETING

Primary Contact: Rich Schneider,
Communications and Marketing
Office Telephone Number: 278-4564
Home Telephone Number: 299-5401
Cellular Telephone: 371-9288

Secondary Contacts: Diana Brown
Office Telephone Number: 274-2195
Home Telephone Number: 858-3260
Cellular Telephone: 371- 04377

MEDICAL BUILDINGS

In the event the emergency involves the following hospital or medical buildings;

- Coleman Hall
- Clinical Building
- Emerson Hall
- Fesler Hall
- Long Hospital
- Medical Science & Research Buildings
- Rotary Building

Contact is to be made with School of Medicine Dean's Office and the Office of Medical Media Relations as follows:

SCHOOL OF MEDICINE:

-Craig D. Brater, M.D. 274-8157

MEDICAL MEDIA RELATIONS

- Pamela Perry Home: 251-1671
 Office: 274-7722
 Cell: 695-2299

or

- Mary Hardin Home: 266-8781
 Office: 274-7722
 Pager: 312-2542

or

- Joe Stuteville Home: 881-0803
 Office: 274-7722
 Pager: 312-2504
 Cell: 946-9930

1.14 MEDIA RELATIONS

Upon activating the Contingency Plan and at a time that does not jeopardize public safety or the containment of the incident, the Emergency Coordinator is to contact the Public Information Official as specified in Table 1-5 (page 14). The Public Information Official will coordinate media activities through the Director of Media Relations or Medical Media Relations. All IUPUI emergency response personnel are to refer media

representatives to the Public Information Official during and at any time subsequent to the event.

The Director of Media Relations in coordination with the Public Information Official will be responsible for all media disclosures concerning any hazardous materials emergency involving IUPUI.

1.15 ACTIVATION OF THE IUPUI EMERGENCY NOTIFICATION PLAN

The Emergency Notification Plan as outlined in the IUPUI Administrative Emergency Procedures Handbook will be activated any time an incident results in disruption of activities at a level which would alter the official calendar of the University.

Notifications will be requested by the Incident Commander or may be made by the Director of Public Safety or Vice Chancellor of Administrative Affairs. Contact is to be made with the following University personnel as specified in the Emergency Notification Plan (in descending order):

Vice Chancellor of Administrative and Financial Affairs
Robert Martin. 274-4511

1.16 EMERGENCY RESPONSE PROCEDURES

A. Notifications

In the event of a hazardous materials emergency, the Emergency Coordinator (Table 1-3, page 12) will be notified immediately. Upon establishment of an incident command system, additional notifications will be made as required. Such notifications may include facility personnel, fire or police jurisdictions, fire or police departments or other organizations of assistance.

B. Identification of Material Involved

The Emergency Coordinator will, by visual means and utilizing appropriate personal protective equipment, immediately attempt to identify the material, the exact source, the amount of the material involved and the area affected by the release. If for some reason the released material cannot be readily identified upon inspection, samples will be collected for further evaluation and analysis.

C. Hazard Assessment

The Emergency Coordinator will (a) assess possible hazards, both direct and indirect, to human health or the environment and (b) coordinate all emergency response and control procedures based on this assessment.

D. Common Control Procedures

Potential accidents at the facility will likely fall into two general classifications: (1) fire and/or explosions and (2) spills or material release. Table 1-6 outlines general emergency response procedures to be considered by response personnel for various incident scenarios. The following guidelines will be utilized in the control of the incident:

SITE CONTROL

The area affected by a hazardous materials incident can vary greatly depending on the type and quantity of materials involved, factors such as ventilation, weather conditions, fire and other unforeseen factors. Despite these variabilities, general guidelines for organizing a hazardous material incident site will be developed as depicted in Figure 1-3 (page 22). The site of an incident will generally consist of three separate zones. These zones are designated by the Incident Commander after consultation with the Emergency Coordinator.

- **Hot Zone:** Beginning from the center of the spill/release, the zone immediately adjacent to the incident is the "hot zone" and is demarcated by the hot perimeter control line. This zone is considered to be grossly contaminated or subject to extreme fire, explosion, or other hazards. It is highly hazardous to all personnel without special protective clothing. Only special entry team members should enter this area under highly controlled conditions. A single hot zone entry/exit point is identified for all personnel entering or leaving the hot zone.
- **Warm Zone:** The "warm zone" is demarcated by the hot perimeter control line and the cold perimeter line. This zone is considered to be hazardous, but with limited contamination. Entry team personnel and victims are decontaminated at a personnel "decon" station located adjacent to the warm zone exit point.
- **Cold Zone:** The "cold zone" is bounded by the warm perimeter control line and the restricted line. The cold zone is considered to be a safe and uncontaminated area in which the majority of emergency responders operate. The general public is not permitted in this area. The incident command post is located within this zone near the outer restricted line. The hazardous materials team control point is located within this zone adjacent to the warm

zone entry point. Medical triage, treatment, and loading areas are also located in this area.

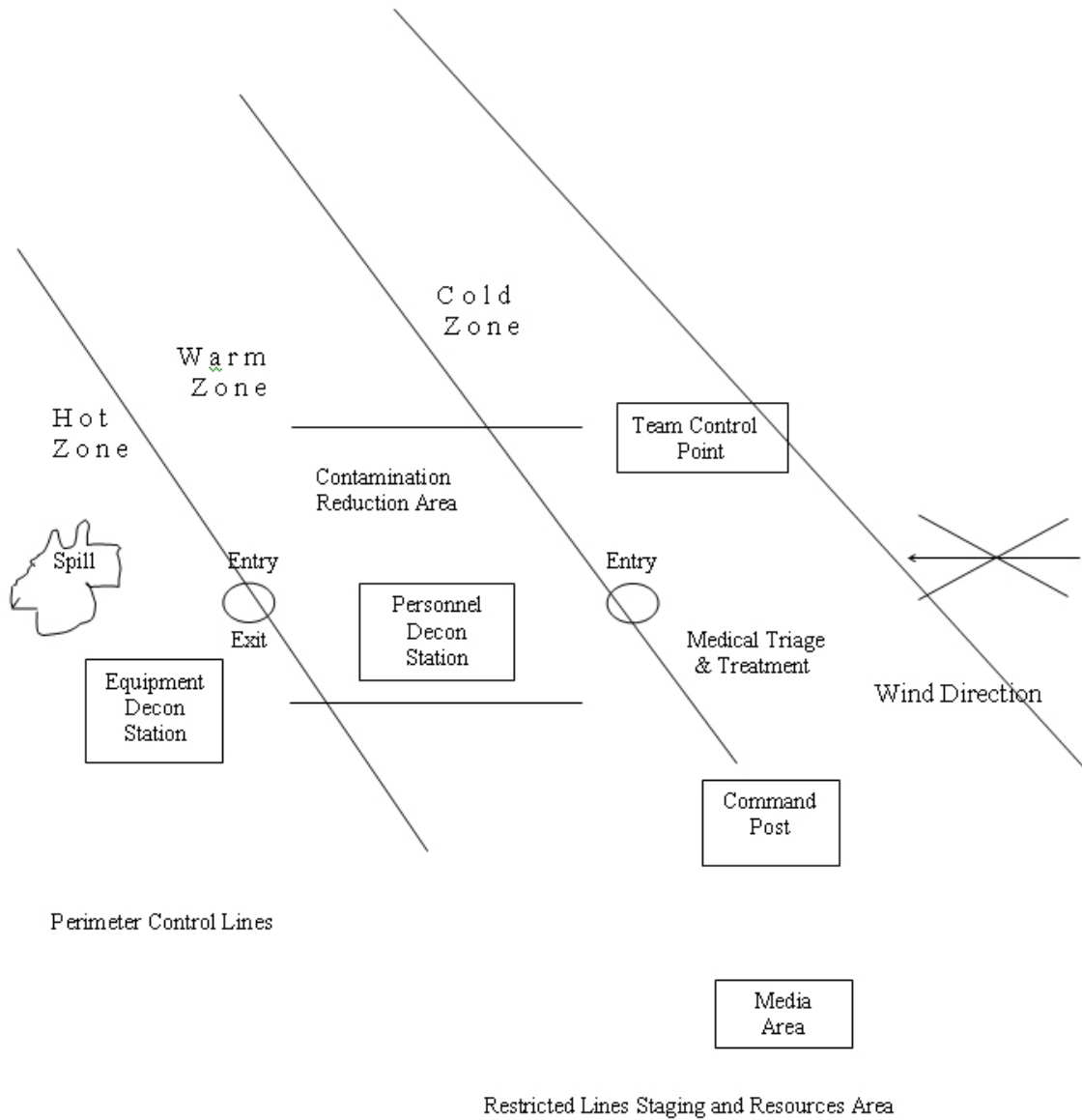
- **Unrestricted Area:** The area surrounding the hazardous material incident will be designated as an unrestricted area. The unrestricted area is outside the cold zone. The public is allowed access to this area. Designated points which may also be established in this area include the media briefing area, evacuation marshalling areas, emergency vehicle staging area, and shelters. To the extent possible, these incident management areas should be located up wind and far enough away from the incident to be safe, even with substantial changes in wind direction.

The delineation of control zones will be accomplished on a case-by-case basis. For spills that occur within University buildings; rooms, corridors, wings and floors will be used to designate specific control zones. Barricade tape may also be used to differentiate the specific zones.

For spills that occur outside University buildings, barricade tape, traffic cones, traffic barricades and plastic barricade fencing will be used to designate specific zones. The following University departments routinely maintain an inventory of the following supplies

<u>ITEM</u>	<u>DEPARTMENT</u>
Barricade Tape	Campus Facility Services Environmental Health & Safety Fire Protection Services Parking Services
Traffic Barricades	Parking Services
Plastic Barricade Fence	Campus Facility Services Parking Services
Traffic Cones	Parking Services

FIGURE 1-3
ORGANIZATION OF HAZARDOUS MATERIALS
INCIDENT CONTROL AREA



FIRE CONTROL

In the event the released material is flammable, IUPUI emergency response personnel will respond with the appropriate firefighting equipment. Firefighting tactics will be evaluated, implemented and executed under the direction and coordination of the Director of Fire Protection Services or his designee and the Emergency Coordinator.

In the event the incident involves highly flammable or explosive materials, the Incident Commander in conjunction with the Emergency Coordinator will evaluate the need for notifications or evacuations.

All ignition sources within the area will be eliminated or restricted. Use of motor vehicles will also be restricted or eliminated.

E. OUTSIDE RESOURCES

In the event the hazardous materials incident is determined to lie within IUPUI's emergency response capabilities, the Incident Commander will deploy the necessary trained emergency response personnel. If, after consultation with the appropriate sector chief(s), the Incident Commander determines the incident is beyond University capabilities, the Incident Commander will authorize notification of the appropriate agencies or organizations for assistance.

A list of emergency contacts and phone numbers can be found in Appendix A.

F. EVACUATION PROCEDURES

An area evacuation is anticipated only in the event of facility fire or other significant chemical release. Once the decision is made by the Incident Commander to evacuate the area, the fire alarm will be utilized as the official evacuation signal. Buildings not served by fire alarm systems are to be manually evacuated.

To the fullest extent possible, buildings are to be evacuated in accordance with the procedures of the Indiana University/Purdue University at Indianapolis Emergency Evacuation Action Plan appropriate for the building(s) impacted by the hazardous materials emergency.

Emergency personnel conducting the evacuation in known or suspected chemically-contaminated areas are to don an appropriate level of personal protective equipment while conducting the evacuation. Partial evacuation, if appropriate, can be signaled through the use of a mobile public announcement system.

Personnel are to evacuate in an orderly manner according to the fire evacuation routes specified for each building or as outlined in the Indiana University/Purdue University at Indianapolis Emergency Evacuation Action Plan. Alternate routes are to be utilized if primary routes are blocked.

The Incident Commander will be responsible for designating safe distances and places-of-refuge for those evacuated. In the event of large-scale evacuations (e.g. multiple buildings, hospitals, etc.), the Incident Commander will ensure such areas are designated by the responding jurisdictional agency (fire or police).

Personnel are to reassemble at a designated place-of refuge. Supervisory personnel are to account for all employees under their supervision. The Incident Commander and the Emergency Coordinator are to be notified of any employees, visitors, or contractors that are unaccounted for.

The option of sheltering-in-place is to be considered in those instances where the safe evacuation of personnel is questionable.

Personnel are not to return to the affected area until approval is granted by the Incident Commander or his designated representative.

G. EMERGENCY MEDICAL SERVICES

The Incident Commander, after consultation with the designated Safety Officer(s), will determine the need for additional, non-University emergency medical services.

The Incident Commander will insure that contaminated or potentially contaminated individuals in need of hospital evaluation and treatment are transported to an area hospital equipped, staffed and trained to accept such patients. Table 1-7 (page 27) specifies area hospitals and outlines their current capabilities for handling chemically-contaminated patients.

TABLE 1-6

GENERAL EMERGENCY RESPONSE PROCEDURES FOR EMERGENCY RESPONSE PERSONNEL

A. Leaking Drum

Responding personnel are to:

1. Isolate the affected area from general access;
2. Notify the Emergency Coordinator. The Emergency Coordinator will monitor and direct cleanup and will document the incident;
3. The released material will be recovered utilizing the appropriate personal protective equipment and containment or recovery equipment as specified by the Emergency Coordinator.

C. Fire - IUPUI Emergency Response Personnel are to:

1. Initiate University fire emergency procedures as specified in the IUPUI STAFF AND FACULTY EMERGENCY PROCEDURES HANDBOOK.
2. Evacuate the area.
3. Oversee the evacuation or other personnel from the affected area.
4. Personnel from the Department of Fire Protection Services direct internal firefighting activities.
5. Take all measures possible to limit flushing spilled and contaminated materials to the sewer.
6. Notify Indianapolis Department of Public Works if chemicals flushed out during firefighting activities enter the sewer system.
7. If possible, plug storm drains to prevent discharge to the storm sewer.

D. Spill Response Activities

1. Contain the hazardous materials involved (IUPUI Emergency Response Team or contractor).
2. Collect runoff (if possible), for treatment and disposal.

3. Notify, if necessary, Region V, Environmental Protection Agency (EPA), Indiana Department of Environmental Management (IDEM) and the Marion County Hazardous Materials Planning Committee (MCHMPC). Describe the incident and actions taken. (See Section 1.25, page 31)
4. Recover, containerize and properly dispose of the released material.
5. Replace spent or discarded spill response equipment and supplies.

TABLE 1-7

RECEIVING HOSPITALS

(Source: City of Indianapolis/Marion County, Indiana Emergency Operations Plan, 2003 Hazardous Materials Annex).

The following Marion County hospital facilities have decontamination capabilities for hazardous materials victim handling and treatment, and are prepared to handle patients regardless of whether the patient was field decontaminated or not:

- Methodist Hospital
- St. Francis Hospital, Beech Grove
- St. Vincent, W. 86th St.
- Wishard Memorial Hospital

1.17 PREVENTION OF RECURRENCE OR SPREAD OF FIRES, EXPLOSIONS OR RELEASES

Actions to prevent the recurrence or spread of fires, explosion or releases include: (a) shut down of processes and operations, (b) collecting and containing released materials or wastes, and (c) recovering or isolating containers.

1.18 INCOMPATIBLE MATERIALS

The Emergency Coordinator will ensure that hazardous materials which may be incompatible with the released material are (a) segregated until cleanup procedures are completed and (b) treated, stored or disposed at an approved facility.

1.19 STORAGE AND TREATMENT OF RELEASED MATERIAL

Immediately after an emergency, the Environmental Control Manager or a designated replacement will make arrangements for proper treatment, storage, or disposal of recovered waste, contaminated soil, surface water, or any other contaminated material.

1.20 DECONTAMINATION

The Incident Commander, through discussions with the Emergency Coordinator and the Safety Officer, will determine the need for decontamination of personnel or equipment. Decontamination will be coordinated by the Emergency Coordinator and Safety Officer. The Safety Officer will determine the resources necessary to implement decontamination procedures.

The decontamination solutions specified in Table 1-8 (page 29) are to be considered for use in decontamination procedures.

The Emergency Coordinator will determine which decontamination solutions are to be captured and containerized for subsequent treatment and disposal.

1.21 POST-EMERGENCY EQUIPMENT MAINTENANCE

After an emergency event, all emergency equipment is to be serviced or replaced. Before operations are resumed, an inspection of all safety equipment will be conducted to determine its emergency response readiness.

TABLE 1-8

DECONTAMINATION SOLUTIONS

The following chart should be used as a guideline for selecting solutions for the type of hazard identified:

1. Inorganic acids, metal processing wastes - Solution A
2. Heavy metals: mercury, lead, and cadmium - Solution B
3. Pesticides, chlorinated phenols, dioxins, and PCBs - Solution B
4. Cyanides, ammonia, and other nonacidic inorganic wastes - Solution B
5. Solvents and organic compounds such as trichlorethylene, chloroform, and toluene - Solution A or C
6. Oily, greasy, nonspecific wastes not suspected to be contaminated with pesticides - Solution C
7. Inorganic bases, alkali, and caustic wastes - Solution D
8. Radioactive materials - Solution E
9. Etiologic materials - Solution F

For known products within the 10 hazard classes:

Solution A: 5% sodium carbonate and 5% trisodium phosphate. Mix 4 pounds of commercial-grade trisodium phosphate and 4 pounds of sodium carbonate with 10 gallons of water.

Solution B: Solution of 10% calcium hypochlorite. Mix 8 pounds of calcium hypochlorite with 10 gallons of water.

Solution C: A solution of water and 5% trisodium phosphate which can also be used as a general-purpose rinse.

Solution D: Mix 1 pint of concentrated HCl into 10 gallons of water (always add acid to water, never add water to acid) to produce a dilute solution of hypochlorous acid - HClO (a very weak acid). Stir with wood or plastic stirrer.

Solution E: A concentrated solution of detergent and water. Mix into a paste and scrub with a brush. Rinse with water.

Solution F: A solution of 1 cup household bleach for every 10 cups of water **OR** 1 cup of hydrogen peroxide (3-4%) for every 10 cups of water.

Caution: The decontamination solutions listed above are recommended for 10 general groups of hazardous materials. Always seek expert assistance from manufacturers, a poison control center, or medical specialists, etc., to determine the best solution to use.

1.22 INCIDENT CRITIQUE

All team members which respond and participate in any hazardous materials incident that requires activation of this plan shall gather to critique the response within 30 days of the termination of the response. The critique is to include deficiencies noted with the plan, command structure, equipment, support, communications, and mitigation of the release and discussions of how future response can best be improved. The primary Emergency Coordinator specified in Table 1-3 (page 12) will be responsible for scheduling and coordinating the critique.

1.23 EMERGENCY EQUIPMENT

The primary Emergency Coordinator as specified in Table 1-3 (page 12) will maintain a current inventory of emergency equipment available through the Department of Environmental Health and Safety and Fire Protection Services (Appendix B). The inventory will be updated on an annual basis. Copies of the inventory will be maintained in Fire Protection Services, the Department of Environmental Health and Safety, in response vehicles and at the University hazardous waste accumulation area.

FIRE CONTROL EQUIPMENT

Fire extinguishers are conspicuously located at numerous location across campus. The extinguishers comply with the standards of The Indiana Fire Prevention Code, the Occupational Safety and Health Administration (OSHA), and the National Fire Prevention Association (NFPA).

EMERGENCY EYEWASH FOUNTAIN AND SHOWER

Emergency eyewash fountains and showers are conspicuously located in most laboratories and other critical locations across campus. Each unit consists of a drench shower head with "panic bar" - operated frost-proof valve and an eyewash with a dirt cover and "panic bar" - operated frost-proof valve.

1.24 COORDINATION AGREEMENTS

IUPUI has arranged for assistance in response to emergency situations from the Indianapolis Fire Department and the IUPUI Police Department. Emergency medical services are provided by the Department of Fire Protection Services, Indianapolis Fire Department and Wishard Ambulance Service.

1.25 REPORTING REQUIREMENTS

In the event;

- A. The waste material is released into the environment (air, water, soil) outside a designated containment structure and
- B. The material is believed to have been released in amounts above the following established reportable quantities (In the case of mixtures; the lowest quantity would apply) as specified in Appendix C.

The Emergency Coordinator is to contact the following agencies;

- A. The **National Response Center** at (800) 424-8802.
- B. The **Office of Environmental Response**, the Department of Environmental Management at (800) 233-7745.
- C. The **Marion County Hazardous Materials Planning Committee** as specified in Appendix D.

The notification must include:

- Name and telephone number of reporter.
- Name and address of facility.
- Time and type of incident, e.g. release, fire.
- Name and quantity of material(s) involved, to the extent known.
- The possible hazards to human health, or the environment, outside the facility.

Within ten (10) days of an incident, the Environmental Control Manager is to file a written report with the Marion County Hazardous Materials Planning Committee as specified in Appendix D.

The Emergency Coordinator will document in departmental records the time, date, and details of any incident that requires implementation of the Contingency Plan.

In addition, any spill outside the confines of a campus building in an area located in a designated wellhead protection district (see locator map within Appendix E) must be reported to the Indianapolis Water Company as specified in Appendix E.

1.26 REVISION OF THE PLAN

Amendment of Contingency Plan

IUPUI will review and amend this Contingency Plan whenever: applicable regulations are revised; the plan fails in an emergency; the facility changes in its design, construction, operation, maintenance, or other circumstances in a way that materially increases the potential for fires, explosions, or releases; the list of Emergency Coordinators changes; or the list of emergency equipment changes.

IUPUI HAZARDOUS WASTE CONTINGENCY PLAN AND EMERGENCY PROCEDURES

2.0 GENERAL INFORMATION

This plan has been prepared in accordance and compliance with Title 329 of the Indiana Administrative Code, Article 3, Rule 9, Section 5; Contingency Plan and Emergency Procedures. The plan describes actions which will be taken by IUPUI personnel in response to fire, explosions or other releases of hazardous waste into the surrounding environment.

2.1 WASTE TYPES AND SOURCES

Hazardous wastes are generated as the result of various activities conducted within the University Community. Such wastes are routinely collected from various generation points at the University by personnel from the Department of Environmental Health and Safety. The wastes are accumulated at the central storage and processing area prior to being sent off campus for treatment and disposal.

This plan primary addresses emergencies that could occur at the accumulation site. However, the provisions of the plan may be implemented in response to emergencies that may occur at the various locations throughout the University where hazardous wastes are actually produced.

Figure 1-1 (page 2) illustrates the sources and types of hazardous wastes (as virgin hazardous materials) generated at IUPUI.

Table 2-1 (page 34) specifies the types of hazardous waste produced and accumulated at IUPUI, their associated hazards and the basis for the hazardous classification.

2.2 HAZARDOUS WASTE EMERGENCY RESPONSE, PROCEDURES AND OPERATIONS

All responses to emergencies involving hazardous waste are to be coordinated as specified in Sections 1.2 through 1.25 of this plan.

TABLE 2-1

IUPUI HAZARDOUS WASTES AND BASIS FOR HAZARD DESIGNATION

<u>Waste Type</u>	<u>Hazard</u>	<u>Basis for Hazard Designation</u>
Spent Solvents	Toxicity	Listed wastes F001, F002, F003, F005; numerous "U" and some "P" wastes
Flammable Liquids	Ignitable	Flash point less than characteristic waste D001
Corrosive Liquids (Acids, Bases)	Corrosive, Toxic	pH less than 2.0 or greater than 12.0; characteristic waste D002
Reactive Wastes (Cyanide & Sulfide Bearing, Sodium, Potassium or other Reactive)	Reactive, Toxic	Under certain conditions, can react to form toxic gases or mixtures capable of detonation or explosion Water Reactive Metals
Toxicity Characteristics Wastes (Paints, Sludges)	Toxicity	Toxicity characteristics
Hazardous Waste N.O.S. (e.g. Poison B)	Toxicity	Potential acute or chronic effects

**CLARIAN HEALTH, INC. , INDIANA STATE DEPARTMENT OF HEALTH AND
WISHARD HEALTH SERVICES, INC.
HAZARDOUS MATERIALS AND WASTE ANNEX**

3.0 GENERAL INFORMATION

The IUPUI Department of Environmental Health and Safety (EHS) provides contractual environmental and safety consulting services to Clarian Health, Inc., the Indiana State Department of Health and Wishard Health Partners, Inc. Chemical spill response is included in the services provided under existing contracts.

3.1 SERVICE LOCATIONS

EHS responds to chemical spills at the request the contractual entity at facilities located on both the IUPUI campus and to non-campus locations. A comprehensive listing of facilities covered on the chemical spill response provisions of existing contracts is not available.

3.2 INTERFACE WITH ORGANIZATIONAL EMERGENCY RESPONSE PLANS

In the event a chemical spill or release occurs within the confines of a contractual facility that maintains its own emergency response plan, the provisions of the contractual entity's plan take precedence over that of the IUPUI plan with the exception of those provisions directly related to the control, stabilization and mitigation of the chemical spill. In particular, Sections 1.16 through 1.23 remain in effect unless in direct conflict with facility's plan at the time of this revision.

In the event a chemical spill occurs within the confines of a contractual facility that does not maintain its own emergency response plan, all appropriate sections of the IUPUI plan will go into effect.