# Hazardous Materials Emergency Response Plan

# University of Idaho

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# HAZARDOUS MATERIALS EMERGENCY RESPONSE PLAN
## Introduction

This plan addresses the procedures to be followed for a release involving a hazardous material. A hazardous material can be defined as a chemical, biological or radioactive material. Depending on the size of the release, Environmental Health and Safety (EHS) personnel have the training and resources to respond to a wide variety of hazardous materials incidents. For those incidents exceeding the capabilities of the Environmental Health and Safety Office, outside assistance will be requested. Explosive or incendiary devices are not included in this plan and require law enforcement, fire department, and specialized assistance to respond to these situations.

The Environmental Health and Safety Office has personnel who have received training in responding to, evaluating, containing, and decontaminating hazardous materials releases. EHS maintains an emergency response vehicle equipped with spill response materials, personal protective equipment, decontamination equipment, and reference materials. EHS has the capability to conduct air sampling, air monitoring and radiation monitoring. Material safety data sheets (MSDSs) and additional reference materials are also available at the EHS office.

The University of Idaho and the City of Moscow have developed an agreement on response to hazardous substance incidents within the city and university limits. Basically, this agreement states that the City of Moscow is responsible for responding to any hazardous materials incident occurring on City or University property and that the University will assist the City upon their request.

Terrorist activities can cause intentional releases of chemical, biological or radioactive agents and requires an increased awareness of the covert and criminal manner in which they are carried out.

This plan covers the requirements found in the Spill Prevention Control and Countermeasure (SPCC) Plan regulations of 40 CFR Part 112 - Oil Pollution Prevention. These regulations minimize or eliminate the environmental effects of a spill of oil products.

HAZARDOUS MATERIALS EMERGENCY RESPONSE PLAN
**Part A - Response by the University Community**

## I. Requesting Emergency Response Services for Hazardous Materials Releases:

A. For hazardous material releases occurring after normal working hours, that require evacuation of a building, are highly toxic or hazardous, or affect a large area, call 9-911.

B. For hazardous material releases occurring during normal working hours AND are small releases (e.g., a broken thermometer, a leaking light ballast, a broken fluorescent light tube, etc.) contact Environmental Health and Safety at 885-6524.

C. For facilities located outside of Moscow, contact your local emergency response services to determine their capability to respond to a hazardous material spill. Contact Environmental Health and Safety (208-885-6524) for assistance if needed.

## II. Determining Your Ability to Respond to a Hazardous Material Release

When working with hazardous materials, it is assumed that you are aware of the hazards and properties of the material, that you are aware of the risks in using or storing this material, that you have operational procedures and equipment in place for handling accidental release of hazardous materials, and that you are trained on how to respond to a release of hazardous materials.

You are expected to have the ability to manage small releases of hazardous materials. In deciding when you should or should not respond to a release of hazardous materials, please consider the following:

A. Quantity of hazardous material released.
B. Physical and chemical characteristics of the material - Is it a gas, liquid, solid, fine powder, volatile, flammable, reactive, radioactive, biohazardous, etc?
C. Health hazards - What is the degree of toxicity? What are the possible routes of exposure? Can it be inhaled, ingested, or absorbed thru the skin? Is it poisonous, corrosive, oxidizing, or irritating?
D. Spill location - Did it occur in a fume hood, in a storeroom, in the hallway, or in a populated area?

E. Evacuation considerations - Is the spill large enough or in an area that would require evacuation?
F. Level of personal protective equipment required - Do you have the proper equipment to protect you from inhaling or contacting the material?
G. Containment and diversion controls - Do you have the proper spill control materials to contain and clean-up a hazardous material release? Can you keep the release from reaching floor drains, electrical devices, heat sources, or to just keep it from spreading?
H. Training - You should have the training and knowledge to handle the material during normal work practices, but do you have the training and knowledge to clean-up a material in uncontrolled conditions?

Please think carefully before you respond to a hazardous materials release and make sure you are capable of handling the release. The important thing to remember concerning spill response is to not risk your health or safety. Property can be replaced, your life or health cannot. Environmental Health and Safety personnel have received training and have the equipment necessary to properly respond to a hazardous materials incident.

**If there is any doubt about your ability to respond to a chemical release, evacuate the area and contact 9-911 or the Environmental Health and Safety Office at 885-6524.**

## III. Injuries and Medical Attention

A. Medical Emergency - If you or another person receives a serious injury that also involves exposure to a hazardous material, via inhalation, ingesting, or contacting the material, call 9-911. Provide first aid and remove any contaminated clothing if it is safe to do so and, if possible, rinse the material off of yourself or the person exposed. Use the emergency shower or eyewash if needed. Provide emergency responders with as much information about the exposure as possible.

If the injury is minor, remove any contaminated clothing and, if possible, rinse the material off of yourself or the person exposed. If it is safe to do so, seek medical attention at Gritman Medical Center by having someone accompany you to the back ambulance entrance, NOT the front door. Gritman has requested advanced notice via telephone (882-4511) before a contaminated person is brought to Gritman. Provide medical personnel with as much information (you should have a Material Safety Data Sheet, MSDS, available) about the exposure as possible.

B. Personnel Contamination Only - The contamination should be rinsed off or removed as quickly as possible. To minimize the spread of contamination, do not stay in the room where the incident occurred, but try to stay in the area, assuming

no other hazard(s) exists. Enlist the aid of another person if possible to assist you or to contact the appropriate response personnel. Go to another room or part of the building and use the telephone to call for help. Contact 9-911 or Environmental Health and Safety, 885-6524, in all situations.

## IV. Fires

If hazardous materials, such as radioactive, toxic or biohazardous material, are involved in a fire, do not attempt to fight the fire. The fire may cause the material to become airborne and, without proper respiratory protection, the possibility of inhaling or ingesting these materials exists. Call 9-911 and make sure response personnel are aware of the hazardous materials present.

## V. Specific Hazardous Materials Information

### A. Chemical

Refer to the *Hazardous Materials Management and Disposal Policy and Procedures Manual* for additional information on hazardous materials (http://www.uidaho.edu/safety/hazframe.htm). Contact the Environmental Health and Safety Office at 885-6524 if you have any questions.

Disposal of Clean-Up Material - The chemical spilled and the materials used for clean-up may need to be properly disposed of. Follow the procedures listed in the *Hazardous Materials Management and Disposal Policy and Procedures Manual* for disposal of hazardous materials.

### B. Radioactive

In an accident or incident involving radioactive materials, the primary safety concern is to prevent inhaling, ingesting or physically contacting radioactive materials. Careful planning, following proper safety procedures, using protective devices, and using personal protective equipment should help minimize or eliminate the hazards in a radiation accident or incident. These should have already been considered and planned for when authorization to use radioactive materials was approved by the Radiation Safety Committee. Please be aware that the chemical form of a radioactive material will determine its volatility, flammability, ability to be absorbed through the skin, and other chemical and physical properties.

An accident or incident involving radioactive materials can also be part of another hazard, such as a medical emergency, fire or chemical hazard. The radiation

hazard should be given the lowest priority in these situations. However, emergency response personnel should be informed if radioactive materials are involved so that the proper precautions can be taken. Contact 9-911 or Environmental Health and Safety at 885-6524 in all situations.

Releases - Please be aware of the reporting requirements for radiation incidents found in Part 800 of the *Radiation Safety Manual*, (http://www.uidaho.edu/safety/radframe.htm).

C. **Biological**

Biological agents, unlike chemical or radioactive materials, can be disinfected, and the hazard eliminated. Disinfection is a normal part of the handling and use of any biological agent.

Biological Hazard - The identity of the organism involved in a spill is usually known and, consequently, the hazards of that organism are known. Organisms that are infectious by airborne transmission or that have limited treatments available are more hazardous than those that are not. Biological agents are divided into Biosafety Levels depending on the degree of hazard presented. Biosafety Level 1 is the least hazardous and Biosafety Level 4 the most hazardous (refer to the Centers for Disease Control and Prevention=s latest edition of *Biosafety in Microbiological and Biomedical Laboratories* (http://www.cdc.gov/od/ohs/biosfty/bmbl4/bmbl4toc.htm) and the National Institutes of Health=s latest version of *NIH Guidelines for Research Involving Recombinant DNA Molecules* (http://www4.od.nih.gov/oba/rac/guidelines/guidelines.html)).

Releases - If a release occurs in the normal working environment, such as on the bench top or within a biological safety cabinet, the user should be able to control and disinfect the release. Procedures should already be in place by researchers on how to respond to these types of releases, including what personal protective equipment to wear, type of disinfectant to use, etc.

If a release occurs outside of the normal working environment, such as dropping of a container of biological agent onto the floor, or a leaking shipping container or package, then the user may not be able to safely respond to this type of release. In the these situations, the user must evaluate whether or not they can safety control and disinfect the release or if 9-911 or Environmental Health and Safety should be contacted.

## I. Introduction

The university community must be prepared for the possibility of a terrorist event involving hazardous materials or Weapons of Mass Destruction. This preparation includes securing and accounting for hazardous materials used at the university, being observant and able to recognize a potential terrorist event, and having the capability of responding to a terrorist event.

Weapons of Mass Destruction are weapons or devices intended to cause death or serious injury to a significant number of people. Typically, this is thought to occur by the release of a highly toxic chemical agent, a highly infectious biological agent, or radioactive materials.

## II. Securing and Accounting for Hazardous Materials

The use of hazardous materials at the university requires safeguards and increased security. However remote the possibility, we should prevent the intentional removal of biological agents, radioactive materials, and hazardous chemicals. By using common sense and the following steps, we can greatly reduce the potential for problems:

A. Do not leave laboratories, or other areas where hazardous materials are present, open and unattended. If you leave the area, make sure the door is locked.

B. When not in use, return hazardous materials to their proper storage area. Storage areas in unattended spaces should be locked.

C. Maintain an inventory of hazardous materials and routinely check these materials.

D. Do not allow unauthorized personnel into your work space. Question people who enter your work space and who are unfamiliar to you.

E. If you notice any hazardous materials missing or believe they have been stolen, please contact the Moscow Police Department at 882-2677 and the Environmental Health and Safety Office at 885-6524.

## III. Recognizing a Potential Terrorist Event

It is difficult to know with certainty in what form a terrorist event will take place. It could be an obvious event involving an explosion and release of hazardous materials, or it could involve a covert method, such as mailing letters or packages containing hazardous materials.

The following are guidelines for generic suspicious activities that should be reported to the Moscow Police Department at 882-2677:

1) Anonymous tips, phone calls or notes indicating threatening events.

2) People watching officials or offices.

3) Unidentified or unattended packages left in or near offices.

4) Requests for plans, blueprints, or specifications for buildings by people who have no reason for this information.

5) People in places where they do not belong.

6) Packages or heavy mail which have a peculiar odor or appearance.

7) Confrontations with angry, aggressively belligerent or threatening persons.

8) Extremely threatening or violent behavior by co-workers who indicate they may resort to revenge or more violence.

## IV. Guidelines for Screening Suspicious Packages and Letters - Concerns for Biological or Chemical Threats

Recent events have heightened our concerns about exposure to biological or chemical agents, especially anthrax. Although any threatened use of a biological or chemical agent must be treated as though it is real, experience has demonstrated that these are likely to be a hoax. If the suspected biological agent is reported as anthrax, be assured that it is NOT generally contagious (i.e., spread from person to person) and that treatment is available and effective if administered before the onset of symptoms.

### A. What is a suspicious package or letter? Common features of suspect packages or letters are:

- Liquid leaking from package
- They tend to have hand-applied postage
- They have excessive postage

- They are addressed to a position, not a person
- No return address
- Hand written or poorly typed address
- They tend not to be in business format envelopes
- Misspelling of common words
- Restrictive markings such as "Confidential", "Personal", etc.
- Excessive weight and/or feel of a powdery or foreign substance
- Foreign post marks and/or writing
- Source of the letter/package is not recognized by recipient/addressee

**B. What to do if you believe you have received a suspect package or letter?**

1. Do not open the letter or package.
2. Contact Moscow Police at 882-2677.
3. Remain at the site until police arrive with instructions.

**C. What to do if you inadvertently open a suspect package/letter or if it is leaking liquid or an unknown substance?**

1. Immediately set the item down gently at the location where it was opened.
2. Contact Moscow Police at 9-911.
3. All potentially exposed persons should leave the area and wash exposed skin with soap and water.
4. Return to an area within the building adjacent to the initial exposure and wait for police (For example, a hallway outside the original room).
5. Do not allow others into the area. If anyone enters the area, they should stay in the area until instructed to leave by Moscow Police.
6. Remember that this is NOT a medical emergency yet, but it is a potential contamination problem.
7. This is also a potential crime scene - preserve evidence and pay attention to what you have seen or done.

**D. What NOT to do:**

1. DO NOT pass the letter or package to others to look at.
2. DO NOT disturb any contents in the letter or package. Handling the letter/package may only spread the substance contained inside and increase the chances of it getting into the air.
3. DO NOT ignore the threat, it must be treated as real until properly evaluated.
4. DO NOT leave the building until instructed to do so.

Following the procedures above will promote the highest level of safety while minimizing the disruption associated with these incidents. Public safety/healthcare responders can evaluate the

risk to those in the room at the time of potential exposure, as well as any impact on the remainder of the building. Based upon that risk assessment, further emergency measures may be implemented as necessary. If the risk is found to be minimal, other areas of the facility will not be disrupted and any necessary actions to return the affected area to normal activity will begin as soon as possible.

**If you have further questions, contact the Moscow Police Department (882-2677) or Environmental Health and Safety Office (885-6524).**

The storing and handling of oil products on campus involves the possibility of spills and the potential of those spills reaching Paradise Creek via water drains or surface run-off.

Oil products are used and stored throughout campus -- in electrical transformers; in hydraulic elevators; in gasoline and diesel fuel tanks; in used oil drums; for research, maintenance, and facility activities; and in a variety of other situations. These products can be stored in one quart sized containers up to 2,000 gallon fuel tanks.

Oil products are defined as oil of any kind, including petroleum and petroleum refined products, gasoline, diesel fuel, fuel oil, sludge, oil wastes, crude oil, mineral oil, animal fat and grease, and vegetable oils.

The EPA requires facilities storing and handling oil products above certain quantities to prepare a Spill Prevention Control and Countermeasure Plan (SPCC) and to be prepared to respond to spills from the various sources of oil on campus (40 CFR Part 112).

The SPCC plan describes the inventory and location of oil sources on campus, the security, inspection and training requirements, and the secondary containment features or emergency response provisions for these oil sources. Where emergency response is indicated in lieu of secondary containment, then this Oil Spill Contingency Plan is to be followed for situations involving spills of oil products.

## I. Notification of Incidents

A. For small leaks or spills (<25 gallons) of oil products occurring during normal work hours, contact Environmental Health and Safety at 885-6524.

B. For large leaks or spills ($25 gallons) of oil products, or leaks or spills occurring after normal work hours, call 9-911.

## II. Response

A. Source Containment/Leak Repair -

1. Initial response - For an oil product spill or leak, the first response is to try

and contain the product and/or stop the leak. This can be accomplished by using absorbent or diking materials, plug and patch materials, moving the leaking container, etc. Initial responses can be performed by University employees, first responders and/or EHS personnel. With the exception of gasoline, most oil products can be responded to with minimal personal protection equipment.

2. Continued response - EHS personnel can finish the containment of a spill and/or respond to the leak that could not be stopped by the initial response. Clean-up of the oil product can also be completed by EHS personnel.

B. Drain Protection - Spills of oil products need to be prevented from entering storm water and sanitary sewer drains. Drain protector mats, plugs, dikes or absorbent materials can be used to protect drains.

C. Product Reaching Paradise Creek - If an oil product does enter Paradise Creek, either by surface runoff or by drain, procedures to contain and collect the material include use of oil-only absorbent materials and/or damming. Oil-only absorbent booms and pads can collect the oil product from the surface of the water. Depending on the amount of oil product, temporary damming may be necessary to collect the oil.

## III. Response Capabilities

A. University/City

Environmental Health and Safety (EHS) personnel will respond to an incident involving the release of an oil product at the request of a City of Moscow incident commander or if contacted by a university employee.

B. Emergency Coordinator

1. The **Emergency Coordinator** is responsible for managing an oil product spill if it is a university response or to assist the City of Moscow incident commander if it is a city response.

2. The **Emergency Coordinator** has the authority to commit any resources available at the University of Idaho that are necessary to carry out this plan.

C. University Resources

1. Personnel and Training - Members of the university's hazardous materials response team are required to complete an 8-hour hazardous materials awareness course, a 16-24 hour hazardous materials operations course, a 40-hour hazardous materials technician course, and a 16-hour incident command system course. Various members also have specialized training and knowledge in chemical, radioactive, and biological hazards. This training includes assessing hazards, containing spills, clean-up and decontamination methods, use of monitoring equipment, and use of all levels of personal protection.

2. Equipment - EHS maintains an emergency response vehicle (ERV) equipped with personal protective equipment, spill containment and clean-up materials, decontamination equipment, and reference materials

3. Materials - EHS maintains spill control and clean-up materials for oil products including oil-only absorbent pads and booms for land or water, drain protectors, and spill dikes. Enough material to absorb about 500 gallons of oil products are maintained at the University.

4. Individual Site Response Materials - Those sites using and/or storing 55 gallons or more of oil products are required to maintain a spill response kit containing, at a minimum:

    a) Five, 3-foot, 3-inch diameter absorbent socks (1 gallon capacity each, or equivalent).
    b) Fifteen oil-only pads (0.25 gallon capacity each, or equivalent).
    c) One pair, chemical eye goggles.
    d) Two pairs, nitrile gloves.
    e) Five 26" x 40", 4-mil polyethylene bags.

    In addition, those areas using and/or storing 100 gallons or more of oil products and having an unprotected drain will be required to provide drain protection, either by using a drain plug, drain mat, or other equivalent device.

D. Regional Hazardous Materials Response Teams/Idaho State Communications

The State of Idaho has established regional hazardous materials response teams throughout Idaho. A hazardous materials response team resides in Lewiston (35 miles) and in Coeur d=Alene (90 miles) that could respond to an incident if the situation exceeds the capacity of the resources of the University and the City of Moscow.

Additionally, **Idaho State Communications** can identify other resources that could provide material and technical expertise for an incident at the University of

Idaho.

## IV. Regulatory Notification

A. For oil product spills of 25 gallons or more and which do not reach Paradise Creek, City of Moscow or Environmental Health and Safety response personnel will contact **Idaho State Communications** to report the spill and have them contact the Idaho Department of Environmental Quality.

B. For oil product spills which reach Paradise Creek, City of Moscow or Environmental Health and Safety response personnel will contact the **National Response Center** and **Idaho State Communications**.

## I. General

Environmental Health and Safety (EHS) personnel will respond to a hazardous materials incident involving the release of chemical, radioactive or biological material at the request of a City of Moscow incident commander or if contacted by a university employee.

## II. Response

A. EHS personnel will use the Master Checklist and/or Basic Site Entry Plan when responding to a hazardous materials incident.

B. EHS personnel will assess the situation, determine the level of protection needed for responders, establish zones, establish decontamination controls, assist the incident commander in determining if evacuation is necessary, contain and/or clean-up the materials released, and request additional hazardous materials response assistance if necessary.

## III. Equipment

EHS maintains an emergency response vehicle (ERV) equipped with personal protective equipment, spill containment and clean-up materials, decontamination equipment, and reference materials.

## IV. Monitoring

Monitoring equipment available from EHS includes air sampling equipment, air monitoring equipment, and radiation detection equipment.

## V. Communications

EHS maintains a radio repeater in the UHF range and has portable radios for each hazardous materials response team member. These multi-channel radios are capable of transmitting to the Moscow Police Department, Facilities, and on the state-wide

emergency (OSCCR) frequency. The radios are also designed to be used with voice-activated (VOX) equipment for use with totally encapsulating suits and self-contained breathing apparatus.

## VI. Training

Members of the hazardous materials response team are required to complete an 8-hour hazardous materials awareness course, a 16-24 hour hazardous materials operations course, a 40-hour hazardous materials technician course, and a 16-hour incident command system course. Various members also have specialized training and knowledge in chemical, radioactive, and biological hazards.

## VII. Reportable Quantities

A. CERCLA Reportable Quantities:

If any **hazardous substance** listed in 40 CFR Part 302.4 is released to the environment in amounts equal to or greater than the listed final reportable quantity (RQ), the **National Response Center** and **Idaho State Communications** must be immediately notified.

B. SARA, Title III Reportable Quantities:

If any **extremely hazardous substance** listed in 40 CFR Part 355, Appendix A is released to the environment in amounts equal to or greater than the listed reportable quantity, **Idaho State Communications** and the **Local Emergency Planning Committee** must be immediately notified.

**NOTE:** A chemical could be on both lists and would need to be reported to all listed agencies.

## VIII. Coordination with Local and State Agencies

University response activities, when needed, will be coordinated with local agency emergency response plans. Specifically, the Latah County Emergency Operations Plan, Annex N - Hazardous Materials Incident Response Plan and Annex M - Radioactive Materials Incident Response Plan contain procedures and guidelines for responding to these types of incidents.

Idaho State Communications, Idaho Department of Environmental Quality, and the regional hazardous materials response teams may also be contacted for assistance, technical information, and resources.