

## Job Safety Analysis/Risk Assessment/PPE Assessment

Location: Evergreen Lodge	Department: All Departments	Activity/Process being assessed: <b>Biohazard Release</b>
JSA Reference #: <b>FL018</b>		Assessors: Assistant General Manager

Exposure to biohazards released in laboratories and facilities can lead to adverse health effects. Exposure can be prevented among persons who clean up biohazard spills by using proper protective clothing and equipment, and by following prescribed/established protocols. This JSA is also applicable to cleanup of human blood and other bodily fluids.

ID	Job Tasks	Potential Hazard	How to Control Hazard
1	Assess the situation to determine the biohazard that was released, the amount and concentration of the active ingredient(s).	<p>Exposure to the biohazard and to other physical and chemical hazards in the vicinity of the release.</p> <p>Absence of a person who is familiar with the identity of the biohazard released, amount and concentration and other hazards present.</p>	<p>Meet with site contact person, preferably one familiar with the site, the biohazard released, its amount, its concentration, and its health effects. Meeting location should be away from the incident site. Also, inquire if chemicals may have been released and other possible hazards (chemical, biological and/or physical) that may be present near the release site. Keep room ventilation operating for at least half an hour before entering the release site, particularly for Risk Groups 2 and 3.</p> <p>Treat the spill like the release of a Risk Group 3 organism and observe the protocols and precautions appropriate for that class of organisms; plan an entry to exercise caution for possible chemicals released, chemicals in containers and other physical hazards in close proximity of the release site</p>
2	Select and don the appropriate PPE after planning response procedure and entry to the area of release	<p>Inadequate protection of chosen PPE</p> <p>Slipping and falling</p>	<p>Do not go near the release site or room until response protocol has been agreed upon and protective clothing, equipment and supplies are determined and double checked for adequacy with an expert.</p> <p>Double-check gloves and protective clothing to ensure they are devoid of failures such as pin holes and tears.</p> <p>Wear safety glasses with side shields or goggles that fit to prevent them slipping or falling off and, if warranted, wear a face shield to avoid splashes on the face.</p> <p>Wear boots that are in good condition and fit properly.</p>
3	Prepare disinfectant or 10% solution of bleach in water and absorbent (paper towel will do	<p>Skin exposure to concentrated bleach and possible inhalation.</p> <p>Release of concentrated and/or diluted solution of bleach and exposure to active ingredient.</p>	<p>Use an accurate measuring device to measure bleach and water to ensure accurate concentration of solution.</p> <p>Prepare solution in a well ventilated location and cover containers of concentrated bleach and diluted solutions when not in use.</p> <p>Wear the prescribed PPE when preparing the bleach solution needed for the response.</p> <p>Absorb spill immediately and double bag used absorbent to avoid and minimize exposure.</p> <p>Prepare enough supply of absorbent and place area where disinfectant solution is being prepared and near the cleanup site.</p>

4	Don prescribed personal protection and bring in enough neutralizer, absorbent and waste containers when entering spill area.	Exposure to the biohazard released and to a chemical(s) that may have been released with the biohazard.  Tripping over physical hazards or injury due to physical hazards in the way.	Wear adequate protection and make sure ventilation is operating.  If a chemical(s) was also released, depart the area, get to a clean and safe location and plan response to include the chemical released.  Absorb spill immediately and double bag used absorbent to avoid and minimize exposure.  If not familiar, approach cleanup area with caution and if possible, clear cleanup area of physical hazards present.  Make sure that cleanup area has adequate lighting.
5	Identify the perimeter of the cleanup area and equipment and other containers that are contaminated.	Impaired vision due to PPE  Impaired vision due to inadequate lighting of cleanup area.	PPE should not impair vision if properly fitted.  Take time in identifying contaminated surfaces and equipment.
6	Apply bleach solution or recommended disinfectant according to appropriate guidelines	Increase of the area of contamination due to splattering of the applied disinfectant solution.  Inhalation and/or contact exposure to the biohazard.	Before application of bleach solution or disinfectant, carefully cover the cleanup area with a wide paper towel moistened with disinfectant  Wear adequate protective clothing, eye protection and foot protection.
7	Search for other contaminated locations.	Contact with biohazard released and other chemicals  Electrical hazards  Other physical hazards	Approach spill area cautiously.  Clean and decontaminate containers and equipment nearby that may hinder cleanup and then set them away from the spill area.  Search and clean other contaminated areas, furniture and equipment.  Disconnect or de-energize equipment prior to handling.  Avoid contact with heat sources.  Use tongs to pick up broken glass and other small items contaminated with the biohazard and collect in appropriate container.  Properly dispose of used absorbents in a red biohazard bag.
8	Collect and contain the generated waste.	Body injury due to lifting, twisting, and bending  Cuts  Slipping and/or falling while handling generated waste	Use proper lifting techniques when handling waste container.  Do not handle containers that weigh more than you can carry or handle  Use tongs to pick up broken glass and other small items contaminated with the biohazard and collect in appropriate container.  Properly dispose of used absorbents in a red biohazard bag.  Be sure footing is secure while moving equipment and supplies

9	Final cleanup	Discovery of new sites of biohazard  Slips and falls	Begin the process of disinfecting and cleanup starting with Task 6.  Use appropriate and adequate PPE. The same PPE may be used but be aware that cartridges have saturation points and need to be changed.  Practice caution when handling waste. Be sure footing is secure and keep away from physical hazards that impair movement.  Respond with a "buddy" who can assist in the handling of heavy or bulky waste containers.
10	Reporting Accidents/Injuries:	None	Immediately report all accidents to Management.
<b>Required Training:</b>		1. Biohazard risk	
<b>Required Personal Protective Equipment (PPE):</b>		1. Eyewear 2. Closed toe footwear (boots) 3. Boot covers 4. Nitrile gloves	
<b>Persons Affected:</b> Operator Other Worker (including leased labor) Outside Contractor			

I understand and will adhere to the steps, hazards and controls as described in this JSA.

I understand that performing steps out of sequence may pose hazards that have not been evaluated, nor authorized.

I will contact my supervisor prior to continuing work, if the scope of work changes or new hazards are introduced.

I understand I have the authority and responsibility to stop work I believe to be unsafe.