Chemical Spill Response Procedure

Initial Response
1. Advise lab occupants of the spill and evacuate the area.
2. Notify your supervisor and/or lab coordinator of the spill providing details such as quantity spilled and chemical name.

Risk Assessment
3. Conduct an initial risk assessment to determine if:
   a. a building evacuation is required. If yes, pull the fire alarm and contact Campus Security at 2-4500.
   b. external resources are required to contain and clean-up the spill contact Campus Security at 2-4500. If not, continue with step 4.

Clean-Up
4. Ensure the spill area has adequate ventilation to clear gases or vapors generated during the neutralization process. If there is a potential for gases to concentrate in the area, or if odors are overpowering, leave, mark the door, and contact Campus Security at 2-4500.
5. Wear appropriate personal safety equipment such as safety glasses and gloves.
6. Select the appropriate neutralizer or vapor inhibitor.
   a. Spill-X-A for acid spills
   b. Spill-X-C for caustic spills
   c. Spill-X-S for solvent spills
7. Liberally apply the powder around the edge of the liquid, working it in towards the center.
8. With a plastic dustpan and brush, push the powder toward the center until all liquid is absorbed. If necessary, add more neutralizing powder.
9. If cleaning up a solvent, proceed to step 13.
10. For acids and caustics, using a spatula, place a small quantity of mixture into a 100 ml beaker of water.
11. Stir the mixture and test with pH paper. The pH should be between 3 and 10. If not, add more neutralizer until the appropriate pH is reached.

Disposal
12. When neutralization is achieved, scoop the mixture with a dustpan into a disposal bag.
13. Rinse the spill area with water and wipe up.
14. If uncertain about disposal, contact your supervisor or Environmental Health and Safety.
15. Disposal will vary depending on the liquid neutralized. After neutralization, some liquids produce a mixture, which can go to the landfill. Other liquids retain toxic properties and must be handled as hazardous waste, for example, chromic acid can be neutralized but not detoxified.

Documentation/ Follow up
17. File an online eAlert - incident report form, highlighting what contributed to the chemical spill. This link can be found at the bottom of the Campus Security homepage, http://www.sfu.ca/security/.
18. If an employee visited a physician, or was absent beyond the day of the incident (due to the incident), then the supervisor must complete a WorkSafeBC Form 7.