LOCATION:	WRITTEN BY:	APPROVED BY:	DATE:	LAST REVISION:
All Schools	L. Carriere	S&H Committee	March 14, 2013	July 7, 2017

HAZARDS PRESENT	PERSONAL PROTECTIVE EQUIPMENT (PPE)	ADDITIONAL REQUIREMENTS
• Mercury • Cuts from broken glass	• Rubber or nitrile gloves • Safety glasses • Protective clothing	• none

SAFE WORK PROCEDURE

PRE-JOB STEPS:

Notify the divisional safety officer prior to proceeding. Equipment you will need. Any items used to clean up a mercury spill must be properly disposed of afterward)

1. Eyedropper
2. Hazardous waste bags – see the caretaker
3. Large tray or box
4. Plastic bags with a zipper seal
5. Paper towels, facial tissues or toilet paper
6. Rags
7. Tape - duct, masking or packing
8. Stiff paper
9. Plastic dust pan
10. Wide-mouth containers with tight fitting lids
11. Flashlight
12. Powdered sulfur (optional)
13. commercially available mercury spill kit (optional)

PROCEDURE:

Step 1: Determine the Extent of the Spill

1. If the spill is small and on a non-porous area such as linoleum or hardwood flooring, or on a porous item that you can throw away (like a small rug or mat), you can attempt to clean it up yourself.

2. If the spill is large, or on a rug that cannot be discarded, on upholstery or in cracks or crevices, it will be necessary to hire a professional. Large spills involving more than the amount of mercury found in a typical school product should be reported to local environmental health authorities.

3. If a fluorescent light bulb or mercury thermometer is broken, it is not likely that any mercury will be visible. However, the broken glass should be treated as a hazard and the procedures below should still be followed.

Step 2: Contain the Spill

1. Check to see if anyone or their apparel has been splashed with mercury. If so, contaminated items should be removed and double or triple wrapped in a plastic or sealable bag and sealed before leaving the spill site. Mercury on the skin should be wiped off gently and also placed in the plastic bag.

2. Evacuate the area and ensure that students are kept well away from the spill.

3. Seek additional assistance with the clean-up of the spill, contact the Divisional S&H Officer

4. Open widows and exterior doors to ventilate the area - the danger of mercury exposure is much greater in poorly ventilated areas.

Step 3: Clean-Up

1. Remove jewelry because it can form bonds with the mercury (amalgamate)

2. Put on rubber gloves and safety glasses

3. DO NOT

- **Do Not Put Contaminated Items in the Washing Machine** - mercury may contaminate the machine and pollute the sewage system. See Step 5 for disposal instructions.

- **Do Not Vacuum** - vacuuming a mercury spill may increase the mercury vapor in the air and increase the risk of inhalation. If used, vacuums may become contaminated and therefore may need to be discarded.

- **Do Not Use a Broom or Brush** - sweeping or brushing up a spill will scatter mercury droplets, making them harder to find and clean up.

- **Do Not Pour Mercury Down the Drain** - mercury may settle in the S-trap of your drain and may pollute the sewage system or your septic tank.

- **Do Not Throw Mercury or Contaminated Items in the Garbage** - mercury may be emitted as a vapour from landfill sites or from waste incinerators

4. Follow the instructions on a mercury spill kit. Contact the divisional safety officer for the spill kit.

5. Stop the spread of the spill by blocking it off with rags. Mercury droplets should be prevented from entering cracks in the floor, crevices and drains.

6. Carefully clean up any broken glass. Wear rubber gloves to avoid contact with mercury and to prevent cuts. Place the glass in a rigid, wide mouth container that can be sealed with a lid.

7. Work from the outside of the spill area towards the center. Using stiff paper slide any droplets of liquid mercury onto a plastic dustpan, and away from any carpet or other porous material.

8. Use a flashlight to illuminate the mercury spill and to help spot small droplets. An eyedropper or an adhesive strip can be used to pick up small droplets.

9. Pour collected mercury into a large mouth container slowly and carefully. This should be done over a box or tray lined with plastic to prevent spillage. Close the container with an air tight lid, and seal with tape. Place inside a sealable bag and seal.

10. Residual mercury can be removed by wiping with a vinegar-soaked swab followed by peroxide. The swabs should then be placed in an air tight container or sealable bag. Sulphur powder can be sprinkled onto the spill area after cleaning to determine if more clean-up is required - a color change from yellow to brown indicates that mercury is still present. Sprinkle zinc flakes or copper flakes to amalgamate any small amounts of mercury which remain.

11. Remove clothing worn during clean up and all other items that may have come into contact with mercury such as shoes, carpeting and clean-up materials. Double or triple wrap all of the above using plastic or sealable bags.

12. Thoroughly wash and rinse any body parts that came into contact with the mercury with an alkaline soap.

    Note: If you are on a city sewer, your local wastewater treatment plant can handle small amounts of mercury from rinsing the skin.

13. Ventilate the spill area for 24 hours prior to allowing students / staff back into the room.
    Note: Mercury may have seeped into porous surfaces and be impossible to remove. If this is the case, seal with epoxy paint or another sealing agent.

Step 5: Disposal

1. Dispose of all items that came in contact with the mercury. Items such as the tray or box,
2. Make sure that all Biohazard bags with contaminated items and mercury are double or triple wrapped. Label the bags with a hazardous waste label stating: "Elemental Mercury
3. Label any containers with contaminated washing water in the same fashion.
4. Contact the divisional Safety Officer for further disposal instructions.

REGULATORY REQUIREMENTS

- WS&H Act W210, Section 4, 5, 7, 7.1
- MB. Regulations 217/2006,
  - Part 2, Section 2.1 Safe Work Procedures
  - Part 6, Section 6.1 PPE
  - Part 35.0 WHMIS
  - Part 36.0 Chemical Biological Substances
- Instruction Manual for Mercury Spill Kit