








LOCATION :	WRITTEN BY:	APPROVED BY:	DATE:	LAST REVISION
All Schools	L. Carriere	Jeffrey Braun Mike Gardner	August 21, 2020	New

PERSONAL PROTECTION EQUIPMENT (PPE)

 Safety glasses with sealed gaskets or a face shield must be worn at all times dispensing chemicals.	 Long and loose hair must be tied back
 Appropriate footwear must be worn. Shoe must be fully enclosed. No open toed shoes.	 Long pants and long sleeved shirt or Tychem2000 body suit must be worn.
 Rings and jewelry (long necklaces / bracelets, etc.) must not be worn.	 ½ mask or full face respirator must be worn at all times when operating machine. Full face mask is required if entering bus while fog is present.
 Disposable gloves/reusable chemical resistant gloves must be worn at all times.	

HAZARDS PRESENT	ADDITIONAL REQUIREMENTS
<ul style="list-style-type: none"> Chemical splash Inhalation of fog Slip and trip Chemical spill Ergonomic hazards – lifting tank for long periods of time. 	<ul style="list-style-type: none"> Fogger Training by Provision Agro. Ltd. WHMIS Training Respirator fit testing

SAFE WORK PROCEDURE

PRE-OPERATIONAL SAFETY CHECKS:

- Staff must be respirator fit tested within the last 3 years.
- Inspect all PPE prior to wearing.
 - Inspect respirator – check elastic headband for wear and elasticity; check gaskets for dirt and debris; check mask for wear, cracks, tears, deformation due to storage. If damaged replace.
 - Chemical cartridges – always remove from mask once work is complete. Tape over the openings and store in a separate bag. Prior to use, remove tape and secure to mask. Prior to first use, write the current date on the cartridge. This will help to determine the life of the cartridge.
 - Inspect Tychem suit – check for signs of wear and tear at all seams; check the zipper; check the cuffs and hood for tears. If damaged replace.
 - Inspect safety glasses and face shield for cracks and signs of wear. If damaged replace.

3. For fogging busses via the back door – staff must wear, enclosed footwear appropriate for the weather conditions, long pants, long sleeved shirt, sealed safety glasses with gasket or face shield, full or ½ mask respirator with HEPA filter and OV cartridge or disposable P100 filter.
4. Ensure high vis vest is worn at all times as the bus compounds have continuous traffic.
5. Keep all other staff away from the fogging area.
6. Post signs on the bus doors with the time fogging was completed so drivers will not enter until fog has dissipated.

Hazard: Do not inhale the fog or aerosol when applying or prior to dissipation of fog. Micro-droplets can float in the air for up to 15 minutes and are quickly absorbed by the lungs which can result in significant injury.

7. Inspect machine to ensure there are no cracks/breaks in the plastic housing.
8. Inspect the C150 fogger's electrical cord and extension cord to ensure it is not frayed or cut.
9. Do not place any flammable liquids into the fogger's tank.
10. Check/inspect your tote to ensure all items are present:
 - 1-4L jug of Part 1 chemical
 - 1-4L jug of Part 2 chemical
 - Small bottle of Booster Chemical
 - 1 measuring cup
 - 1-4L measuring jug
 - 1 funnel
 - Gasket enclosed safety glasses/face shield
 - Full face/ ½ mask respirator with OV/P100 canister or P100 filter
 - Tychem 2000 full body suit.
 - 1 box of disposable nitrile gloves.
 - 1 roll duct tape
 - 1 roll hazard tape
 - Hazard: Do Not Enter Sign

SOLUTION PREP:

1. Don chemical resistant gloves and a full face shield or safety glasses with sealed gaskets.
2. Pour the small bottle of peroxide booster into the 4L jug marked Part 2. Once mixed this solution is good for approx. one year. Please mark the date of mixing on the 4L jug with a sharpie marker.
3. Calculate the amount of chemical (EasyDECON DF200) required based on the number of buses you will be disinfecting.

Note: Each bus uses approx. 175-200mL of solution. The tank on the C150 Fogger can hold approx. 6L of solution that will cover approximately 34 buses.

4. Mix an equal amount of Part 1 with an equal amount of Part 2, using a measuring cup or jug, to get the desired final quantity needed (based on calculation in #2 above).
5. Gently mix for 30 seconds.
6. Fill tank using a funnel. Close the tank cap firmly making sure an air tight seal is achieved.

Note: Not closing it firmly could affect the machine's performance i.e. will not produce enough fog or fog will be trickling out of the nozzle.

7. Wet contact time is 30 seconds. Fog dwell time is 15-30 minutes - before the fog will dissipate. For immediate use, ventilate the bus (opening windows/doors) to remove any excess fog, wipe down any wet areas.

Note: Over time, build-up of surfactant (soap) will occur on glass and metal surfaces. When this happens, simply spray with a non-ammonia based glass cleaner and wipe dry.

PROCEDURE:

1. Don all PPE including, a full face respirator or ½ mask respirator with HEPA (P100) and/or OV cartridges (#60926 dual canister), chemical resistant gloves, long pants and long sleeved shirt (minimum). Note: if you will be entering the bus you must wear the Tychem 2000 body suit, otherwise the long pants/shirt are sufficient.

Hazard: Perform a positive/negative fit test on your respirator once donned. Not doing so can result in an improper fit and allow chemicals to enter the mask while working.

2. Plug the power cord into an electric supply. Ensure the plug is securely connected to the machine.
Note: a loose connection at the machine will result in no power.
3. Open rear bus door and check for traffic in the parking lot. In the wintertime, be cautious of icy spots.

Hazard: if icy spots are present, sand and salt the ground at the back of the buses prior to starting. Working on ice will result in slip and falls resulting in serious injury.

4. Turn on the machine by sliding the switch, on the top of the machine, to the high setting.
5. Adjust the droplet size by rotating the nozzle clockwise, to 40 microns.
6. Using the shoulder strap place it diagonally over your body to offset the weight of the full machine.

Hazard: working with a full machine with all the weight on one shoulder or arm will result in an ergonomic injury over time. Always wear the strap diagonally over the shoulders to distribute the weight over the full body. Switch shoulders back and forth.

7. Point the fogger up and to the front of the bus, fog for 30 seconds. You should be able to see the fog rolling towards the back of the bus.
8. Lower the fogger and point under seats to the left, for 15 seconds and then to the right, for 15 seconds.

9. Close the doors once the fog reaches the back of the doors.
10. Tape a note on the front bus doors with the time the fogging finished and let bus to sit approx. 30 minutes before allowing bus drivers to enter.

Hazard: entering the bus too early while fog is still dissipating and while not wearing a respirator will results in serious injury.

11. For cold weather application below 0 degrees – follow the steps above. Fog immediately after a run returns to the yard as the bus will still be warm. Do not apply disinfectant to a cold bus.

CLEAN-UP PROCEDURE:

1. Clean the fogger after every use. This will prolong the life of the machine.
2. When fogging is complete, pour any liquid left in the tank into a collection bottle using a funnel.
3. Rinse the tank 3 times with warm or hot water and discard. Replace the cap and tighten.
4. Operate the fogger for approx. 1 minute with the nozzle opened to the largest droplet size setting (turn anti-clock wise to the lowest number). This will remove any existing liquid remaining in the fogger's internal tubes.
5. Fill the fogger with approx. 2 cups of warm water. Replace the cap and tighten. Operate the fogger for approx. 1 minute to clean the lines. Remove any excess water from the tank. Close the cap and store.
6. Wipe down the outside of the machine and power cord. Store machine in a warm, dry location. Note: Do not store the machine in a vehicle or unheated areas. Doing so will damage the machine.
7. Remove your respirator and wipe down with respirator wipes. Remove the cartridges, tape over openings and store in a separate zip lock bag.

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 16, Sections 16.1 – 16.18, Machine & Tool Safety
 - Part 35.0 WHMIS
 - Part 36.0 Chemical Biological Substances
- Operators Manual C20, C100 Plus, C150 Plus ULV Fogger