

## Biohazardous Waste Disposal Standard Operating Procedure

1. Waste collected in laboratories must be held in EH&S approved clear autoclave bags (available from stores) within clearly labeled "Biohazardous Waste" bins. **Autoclave bags labeled with the biohazard symbol are NOT permitted for use.**
2. First bio-waste run each week will require the user to include a Biological Indicator test (see B.I. procedures).
3. The 4<sup>th</sup> floor Autoclave use will be reserved every Monday and Tuesday for bio-waste processing only. We request that you do your waste as early in the week as possible, and refrain from running waste as late as Thursday or Friday - unless you are the first run of the week and an indicator will be processed with your waste anyway.
4. If waste **MUST** be run on a Thursday or Friday and an indicator has already been recorded, please contact Heather Fifield (Hfifield@mun.ca) to see if a second indicator test is necessary with your waste.
5. **Cycle 4 (60-121-15)** is to be used for bio-waste autoclaving.
6. Autoclave bags must **NOT** be filled more than half full
7. Bags must be tied closed with EH&S approved biohazardous waste tags for transport.
8. Immediately before autoclaving biohazard bags;
  - i. remove and keep the biohazard waste tag
  - ii. loosely open the bag and place it in an autoclave pan (secondary containment vessel)
  - iii. place a piece of autoclave tape on the bag
9. After autoclaving place the bio-waste in one of the Biohazardous Waste bins in CSF42C2 along with the biohazardous waste tag. Placing the tag with the lab information on your bin is **REQUIRED** so we can track the waste if an indicator fails. **Put an unmarked garbage bag** (user supplied – available from stores) **in the bio-waste bin before placing your waste in the bin.**
10. Biological indicator test:
  - a. **IF the B.I. test is a pass** (see B.I. procedures)
    - i. remove the waste and the tag from the biohazardous waste bin in the unmarked black garbage bag
    - ii. place the tag in the Tag Disposal Box in CSF 42C2
    - iii. tie closed the unmarked garbage bag and place it in the regular garbage bin
  - b. **IF the B.I. test fails** then the bio-waste has to be autoclaved again with a new B.I. test run.
11. The user who initiates the B.I. test is tasked with following up the B.I. test and recording the results in the B.I. Log Book.
12. Other users need to refer to the B.I. log book to determine if a B.I. test has been run for that week and the status/result of the B.I. test.
13. An estimate of the biohazardous waste mass (kg) must be recorded in the Autoclave Logbook.

## **Biological Indicator (B.I.) Standard Operating Procedure**

1. A box of B.I.'s will be made available in CSF42C2 for user B.I. testing.
2. Attach a string (provided) to the B.I. ampule and place it in the center of the representative load within the autoclave.
3. Following the autoclave cycle completion wait 10 minutes for the B.I. to cool then crush the interior glass ampule of the test B.I. Also crush the ampule in a non-autoclaved control B.I.
4. Incubate both ampules at 55-60 °C in the incubator in CSF 4209 for 48 hours recording the test results in the B.I. Log.
5. A colour change in the test B.I., representing bacterial growth, indicates ineffective sterilization of the load. No color change indicates successful sterilization.
6. A colour change is expected in the non-autoclaved control. No colour change in the non-autoclaved control indicates a possible fault with the indicators and the bio-waste must be autoclaved again and a fresh B.I. test ran.
7. All B.I. test results are to be recorded in the B.I. Test Logbook.
8. Used BI's are to be brought back to your lab and processed with your next bio-waste run.