

PRINCIPAL INVESTIGATOR/PERMIT HOLDER:



## **BIOSAFETY SELF AUDIT**

| SELF AUDIT COMPLETED BY:     |                |             |                            |   |   |
|------------------------------|----------------|-------------|----------------------------|---|---|
| LABORATORY ROOM NUMBER:      |                |             |                            |   |   |
| CONTAINMENT LEVEL:           | 1              | 2 (Shaded)  | RISK GROUP:                | 1 | 2 |
| DATE OF AUDIT:               | ı              | z (Griaded) | Mon Groot .                | ' | ۷ |
|                              | Λ <b>Τ</b> Γ\. |             |                            |   |   |
| AUDIT TO BE COMPLETED BY (D. | ATE):          |             |                            |   |   |
| BSO USE ONLY:                |                |             |                            |   |   |
| FOLLOW UP ACTIONS REQUIRE    | D: NO          | YES         | FOLLOW UP INSPECTION DATE: |   |   |
|                              |                |             |                            |   |   |
|                              |                |             |                            |   |   |

|     |  | Υ | N | N/A | Comments |  |  |
|-----|--|---|---|-----|----------|--|--|
| Acc | Access Control & Hazard Awareness  |   |   |     |          |  |  |
| 1   | Access to the laboratory is limited or restricted  |   |   |     |          |  |  |
| 2   | Proper lab hazard signs are posted. Emergency contact information is provided.                                     |   |   |     |          |  |  |
| 3   | All persons have met specific entry requirements and have been advised of the potential hazards in the laboratory. |   |   |     |          |  |  |
| 4   | Persons are informed that conditions such as pregnancy or compromised immune systems may increase risk.            |   |   |     |          |  |  |
| 5   | Individuals under the age of 16 are not permitted in the laboratory.   |   |   |     |          |  |  |
| 6   | New employees/students are thoroughly trained in good laboratory practices and techniques.                         |   |   |     |          |  |  |
| 7   | Employees work practices are monitored to ensure safety and adherence to protocols.                                |   |   |     |          |  |  |

|     | Appropriate protective equipment (as per protocols) is available to lab  |   |   |  |
|-----|--|---|---|--|
| 8   | workers and visitors.  |   |   |  |
| 9   | Workers are trained in post exposure protocols.  |   |   |  |
| 10  | Material Data Sheets are available and current.  |   |   |  |
| Lab | oratory Design   | 1 | T |  |
| 11  | The laboratory is designed to permit general cleaning and housekeeping and is clean, neat and organized.   |   |   |  |
| 12  | There is no evidence of cracked surfaces or need for general repair (leaking pipes, tiles lifted).   |   |   |  |
| 13  | Bench tops are impervious to liquids and resistant to alkali, acids, organic solvents and heat.  |   |   |  |
| 14  | The surfaces of walls, floors and ceilings are impervious to liquids and readily cleanable.  |   |   |  |
| 15  | Floors are slip resistant.   |   |   |  |
| 16  | Windows are closed and sealed (permanently or with a screen).  |   |   |  |
| 17  | All components of essential services requiring maintenance or replacement are located outside of the facility, (i.e. circuit breakers, gas shut off) or are easily accessible. |   |   |  |
| 18  | Dedicated hand washing facility is located near each laboratory exit (hands-free preferred).   |   |   |  |
| 19  | Air flow is sufficient to exhaust vapours of flammable liquids and dangerous chemicals.  |   |   |  |
| 20  | Fume hoods are not the sole means of air exhaust. Regular maintenance program is in place.   |   |   |  |
| 21  | Appropriate storage areas are available for lab coats, hazardous chemicals and to prevent build up of clutter.   |   |   |  |
| 22  | Alarmed equipment is identified and emergency contact information is affixed to the equipment.   |   |   |  |
| 23  | Office areas are located away from work area.  |   |   |  |
| 24  | Food and drink for consumption are stored outside of laboratory.   |   |   |  |

| 25  | Emergency systems are in place: fire, eyewash, and shower.  |  |  |
|-----|---|--|--|
|     |   |  |  |
| OPE | ERATIONAL PROCEDURES  |  |  |
| 26  | Long hair is tied back during laboratory work.  |  |  |
| 27  | Lab coats are worn, buttoned, with sleeves tucked into gloves when working with infectious material.  |  |  |
| 28  | Gloves are changed frequently when working with infectious material and before working with "clean" equipment and after possible contamination. |  |  |
| 29  | Hands are washed after removing gloves, routinely throughout the day, after possible exposure and prior to leaving the lab.                     |  |  |
| 30  | Received samples are inspected for damage, opened in the BSC, surfaces decontaminated and supporting documentation verified.                    |  |  |
| 31  | All procedures with a high potential for creating aerosols or using high concentrations of an infectious agent are performed in a BSC.          |  |  |
| 32  | Before work in a BSC is initiated, start up procedures including surface decontamination, inward air flow and purging are completed.            |  |  |
| 33  | Appropriate BSC shut down procedure is in place and followed.   |  |  |
| 34  | Equipment inside a BSC is such that air flow is not impeded. Air grilles are not obstructed.  |  |  |
| 35  | All manipulations are performed at least four inches inside a BSC. Rapid movements are avoided.   |  |  |
| 36  | When rotating or moving equipment in a BSC, it is prohibited to perform any other manipulations in the cabinet.                                 |  |  |
| 37  | Mechanical pipetting devices are used.  Mouth pipetting is never used and prohibited. All pipettes are "to deliver."                            |  |  |
| 38  | Used pipettes are submerged horizontally in a suitable disinfecting solution, inside a BSC, or are disposed after use.                          |  |  |

|    |  | 1 |      |
|----|--|---|------|
|    | Needles are not bent, sheared or           |   |      |
|    | recapped prior to disposal. Used           |   |      |
| 39 | needles are not reused.                    |   |      |
|    | When transferring infectious material      |   |      |
|    | from pipette to petri dish or bottle, the  |   |      |
|    | liquid is released as close as possible to |   |      |
|    | the receptacle, or allowed to run down     |   |      |
| 40 | the wall, never from a height.             |   |      |
|    |  |   |      |
| 44 | Sharp containers are never filled past     |   |      |
| 41 | the marked line.                           |   |      |
|    | When possible, capped leak proof tubes     |   |      |
|    | and bottles are used when working          |   |      |
|    | with/or storing infectious agents. The     |   |      |
| 42 | use of glass is minimized.                 |   |      |
|    | All infectious agents are transported in   |   | <br> |
|    | unbreakable, leak proof containers         |   |      |
| 43 | suitable for decontamination.              |   |      |
|    | Magnetic stir bars are added before        |   |      |
| 44 | liquid.                                    |   |      |
| 77 | ilquiu.                                    |   |      |
|    | Inoculating loops are cooled before        |   |      |
|    | they are inserted into a liquid culture.   |   |      |
|    | Micro incinerators or pre-sterilized       |   |      |
| 45 | loops are used.                            |   |      |
|    | When withdrawing a needle from a           |   |      |
|    | stoppered bottle, the needle and bottle    |   |      |
|    | are wrapped with a disinfectant soaked     |   |      |
|    | absorbent. Air bubbles are expelled        |   |      |
| 46 | into such absorbent.                       |   |      |
|    | Sonicating, mixing, grinding and           |   |      |
|    | blending utilize equipment with gasket     |   |      |
|    | lids and leak proof bearings. Vortexing    |   |      |
|    | is used instead of tipping to mix.         |   |      |
|    | Aerosols are allowed to settle prior to    |   |      |
| 47 | opening.                                   |   |      |
|    | Centrifuges are: properly serviced,        |   |      |
|    | maintained, interlocked and balanced.      |   |      |
|    | Regularly checked for stress, damage       |   |      |
| 48 | and decontaminated. Checks recorded.       |   |      |
| 40 | When working with cryogenic materials      |   |      |
|    | appropriate PPE is used: face shields,     |   |      |
|    | • • •                                      |   |      |
|    | apron, insulated gloves. Samples are       |   |      |
| 40 | introduced slowly to prevent splatter,     |   |      |
| 49 | containers are not over-filled.            |   |      |
|    | Compressed gas cylinders are securely      |   |      |
|    | stored away from exits, leak tested and    |   |      |
| 50 | correct gauges used.                       |   |      |
|    | Radioactive work is undertaken in          |   | <br> |
|    | compliance with the Radiation Safety       |   |      |
| 51 | Program and permit requirements.           |   |      |
|    |  | • | ·    |

|     | Animal work is approved by the Animal    |  |  |
|-----|--|--|--|
|     | Care Committee. All individuals are      |  |  |
|     | trained to minimize exposure e.g.        |  |  |
|     | scrapes, bites, needle sticks and other  |  |  |
| 52  | unique hazards.                          |  |  |
|     | Electrical hazards are identified and    |  |  |
|     | addressed. CSA approved, no frayed       |  |  |
|     | wires or use of electricity near sources |  |  |
| 53  | of water.                                |  |  |
|     | Appropriate waste containers are used    |  |  |
|     | and do not pose a tipping risk. Surfaces |  |  |
| - 4 | are decontaminated or double bagged      |  |  |
| 54  | to permit transfer for decontamination.  |  |  |
|     | Waste procedures are available and       |  |  |
| 55  | followed.                                |  |  |
|     | Autoclave procedures are available.      |  |  |
|     | Efficacy testing is undertaken regularly |  |  |
| 56  | and records maintained.                  |  |  |
|     | All specimens of unknown status are      |  |  |
| 57  | autoclaved or sent for incineration.     |  |  |
|     | All equipment exposed to infectious      |  |  |
|     | materials is disinfected prior to repair |  |  |
| 58  | or servicing.                            |  |  |
|     | Written protocols outlining              |  |  |
|     | decontamination of work surfaces, spills |  |  |
| 59  | and wastes are available and followed.   |  |  |
|     | All spills and accidents which result in |  |  |
|     | exposures to infectious materials are    |  |  |
|     | immediately reported, recorded and       |  |  |
| 60  | investigated.                            |  |  |
|     |  |  |  |

| As Principal Investigator/Permit Holder I attest to having read this inspection report. |      |  |  |  |
|---|------|--|--|--|
| Principal Investigator/Permit Holder Signature  | Date |  |  |  |

Return completed form to the Office of Human Resources – Attention Tiffany Moore