|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Date** | |  | | | | | |
| **Inspected By:** | |  | | | | | |
| **Lab Representative:** | |  | | | | | |
| **Lab Info** | | | | | | | |
| **Department/Building:** | |  | | | | | |
| **Lab #:** | |  | | | | | |
| **PI:** | |  | | | | | |
| **PI Phone:** | |  | | | | | |
| **Secondary Contact:** | |  | | | | | |
| **Secondary Phone:** | |  | | | | | |
| **Specials Lab Considerations (*check all that apply*):** | | | | | | | |
| BSL-1 |  | BSL-2 |  | BSL-2+ |  | BSL-3\* |  |
| ABSL-1 |  | ABSL-2 |  | PBSL-1 |  | PBSL-2 |  |
| ACL-1 |  | ACL-2 |  | Radiation |  | Lasers |  |
| Other |  | | | | | | |

\* Refer to the separate high biocontainment review checklist.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A.** | **Housekeeping** | | | | **Point**  **Value** |  | **Yes** | **No** | **N/A** |
| A01 | Floors are dry and free of slip, trip, or fall hazards. | | | | 2 |  |  |  |  |
| A02 | Work surfaces and storage areas are uncluttered and orderly. | | | | 2 |  |  |  |  |
| A03 | Shelves/cabinets are in good condition, and not overcrowded. | | | | 2 |  |  |  |  |
| A04 | Trashcans are not overfilled. | | | | 1 |  |  |  |  |
| A05 | Work area is free of food/drinks/dishes (including lab fridges). | | | | 2 |  |  |  |  |
| A06 | If pertinent, a food/drink zone is clearly designated. | | | | 2 |  |  |  |  |
| A07 | Step ladder available if injurious items stored above reach. | | | | 1 |  |  |  |  |
| **B.** | **General Laboratory Facilities/Practices** | | | | **Point Value** |  | **Yes** | **No** | **N/A** |
| B01 | Lab has a handwashing sink and is stocked with handwashing soap and paper towels. | | | | 2 |  |  |  |  |
| B02 | Lab door is locked when the lab is unoccupied. | | | | 1 |  |  |  |  |
| B03 | Lab door is kept closed at all times and is not propped open. | | | | 1 |  |  |  |  |
| B04 | Surfaces and fixtures (including chairs) in the lab are impermeable to liquids. | | | | 1 |  |  |  |  |
| B05 | An effective pest control program is in place (i.e. no indication of pest intrusion) | | | | 1 |  |  |  |  |
| B06 | Illumination is adequate in the laboratory space. | | | | 2 |  |  |  |  |
| B07 | Non-research animals or plants prohibited in the work area. | | | | 1 |  |  |  |  |
| B08 | Personnel wash hands after removing gloves and before exiting the laboratory. | | | | 2 |  |  |  |  |
| B09 | Mouth pipetting prohibited. | | | | 3 |  |  |  |  |
| **C.** | **Signage/Hazard Communication** | | | | **Point Value** |  | **Yes** | **No** | **N/A** |
| C01 | Lab door sign is posted and accurate. | | | | 2 |  |  |  |  |
| C02 | Lab Emergency Plan posted near door and is up-to-date. | | | | 2 |  |  |  |  |
| C03 | Fridges/freezers/microwaves are appropriately labeled (e.g. no flammable storage, no food/drink, etc.). | | | | 1 |  |  |  |  |
| C04 | Safety Data Sheets (SDS) are always available and accessible. | | | | 2 |  |  |  |  |
| C05 | Chemical storage areas are clearly labeled. | | | | 2 |  |  |  |  |
| **D.** | **Training and Documentation** | | | | **Point Value** |  | **Yes** | **No** | **N/A** |
| D01 | Lab personnel have current annual [Lab Safety training](https://www.ehs.msstate.edu/focus-areas/chemical-hygiene/training). | | | | 2 |  |  |  |  |
| D02 | Lab personnel have current annual [Hazardous Waste training](https://www.ehs.msstate.edu/focus-areas/hazardous-waste/training). | | | | 2 |  |  |  |  |
| D03 | If respirators used, personnel are enrolled in the [Respiratory Protection Program](https://www.ehs.msstate.edu/focus-areas/workplace-safety/respiratory-protection). | | | | 3 |  |  |  |  |
| D04 | An accurate chemical inventory is maintained for all hazardous compounds. | | | | 2 |  |  |  |  |
| D05 | Standard Operating Procedures (SOPs) are available for experiments/equipment/hazardous activities. | | | | 2 |  |  |  |  |
| **E.** | **Fire and Electrical Safety** | | | | **Point Value** |  | **Yes** | **No** | **N/A** |
| E01 | Fire extinguisher is present in accordance with IFC standards. | | | | 2 |  |  |  |  |
| E02 | Fire extinguisher certification is current. | | | | 0 |  |  |  |  |
| E03 | Fire extinguisher has not been discharged or damaged. | | | | 2 |  |  |  |  |
| E04 | Sprinkler heads are unobstructed (at least 18” clearance). | | | | 2 |  |  |  |  |
| E05 | No flammable/combustible items stored within 24” of ceiling. | | | | 1 |  |  |  |  |
| E06 | Electrical panel is unobstructed (at least 36” D, 30” W, 78” H clearance). | | | | 1 |  |  |  |  |
| E07 | Electrical cords/outlets are in good condition. | | | | 2 |  |  |  |  |
| E08 | Extension cords/power strips (UL listed surge protectors are acceptable) are not used for permanent power. | | | | 1 |  |  |  |  |
| E09 | Extension cords/power strips/surge protectors are not connected in series (i.e. “daisy chained”) and are plugged directly into wall. | | | | 1 |  |  |  |  |
| E10 | Lab is free of any space heaters. | | | | 1 |  |  |  |  |
| E11 | No damaged or missing ceiling tiles are evident in the lab. | | | | 1 |  |  |  |  |
| E12 | Paths of egress are clear and unobstructed. Access to exit is clear (at least 36” clearance). | | | | 2 |  |  |  |  |
| **F.** | **Laboratory Apparel and Personal Protective Equipment:** | | | | **Point Value** |  | **Yes** | **No** | **N/A** |
| F01 | Long pants and full-coverage shoes required and worn in lab. | | | | 1 |  |  |  |  |
| F02 | Long hair is tied back. | | | | 1 |  |  |  |  |
| F03 | No loose-fitting clothing or jewelry/lanyards are worn in lab. | | | | 1 |  |  |  |  |
| F04 | Lab coats are available and worn while working in the lab. | | | | 3 |  |  |  |  |
| F05 | Lab coats are in good condition and cleaned, as needed. | | | | 2 |  |  |  |  |
| F06 | Eye protection (goggles, safety glasses, face shields) are available and worn while working. | | | | 3 |  |  |  |  |
| F07 | Appropriate gloves are available and worn while working. | | | | 3 |  |  |  |  |
| F08 | Disposable gloves are not reused. | | | | 2 |  |  |  |  |
| F09 | As applicable, respirators are used and stored appropriately. | | | | 3 |  |  |  |  |
| F10 | PPE is not worn outside of the lab. | | | | 2 |  |  |  |  |
| **G.** | **Laboratory Emergency Equipment** | | | | **Point Value** |  | **Yes** | **No** | **N/A** |
| G01 | If applicable, a [chemical spill kit](https://www.ehs.msstate.edu/sites/www.ehs.msstate.edu/files/2024-02/Chemical%20Spill%20Guidance.pdf) is maintained in the lab. | | | | 2 |  |  |  |  |
| G02 | Safety shower and eyewash are in the lab or within 10 seconds of the work area (approx. 55 feet). | | | | 2 |  |  |  |  |
| G03 | Safety shower and eyewash are unobstructed ( 36” X 36”) and clearly posted. | | | | 2 |  |  |  |  |
| G04 | Safety shower and eyewash are in good condition (no leaks, no cracks, etc.) | | | | 1 |  |  |  |  |
| G05 | Safety shower and eyewash have been certified within the last year by EH&S. | | | | 0 |  |  |  |  |
| G06 | A weekly test of the eyewash station is logged by lab personnel. EH&S has a suggested [weekly testing log](https://www.ehs.msstate.edu/sites/www.ehs.msstate.edu/files/2024-11/Weekly%20Eyewash%20Testing%20Log.pdf). | | | | 1 |  |  |  |  |
| G07 | If applicable, eyewash bottles are not expired and not refilled. | | | | 1 |  |  |  |  |
| G08 | Sufficient first aid materials are readily available, and personnel know where to find them. | | | | 1 |  |  |  |  |
| G09 | “Antidotes” or special first aid materials are available and accessible (calcium gluconate for HF use). | | | | 3 |  |  |  |  |
| G10 | [First aid kit](https://www.ehs.msstate.edu/training/cpr) components are not expired. | | | | 1 |  |  |  |  |
| G11 | First aid kits are free of drugs and prescription items. | | | | 1 |  |  |  |  |
| **H.** | **Compressed Gas and Cryogenics** | | | | **Point Value** |  | **Yes** | **No** | **N/A** |
| H01 | Gas tanks are standing upright and secured/mounted at all times. | | | | 3 |  |  |  |  |
| H02 | No more than 3 tanks are tethered together (must be in a row) or appropriately racked. | | | | 2 |  |  |  |  |
| H03 | Cylinders are segregated by compatibility (Ex: flammable gases segregated from oxygen) and stored away from other chemicals. | | | | 2 |  |  |  |  |
| H04 | Caps are in place on cylinders not in use. | | | | 2 |  |  |  |  |
| H05 | Toxic gas cylinders are stored in ventilated cabinets. | | | | 3 |  |  |  |  |
| H06 | Cryogenic cylinders are in good condition (no ribbing, excessive ice, cracked gaskets, rust, etc.). | | | | 2 |  |  |  |  |
| H07 | Pressure release valve on cryogenic cylinders is intact and in good condition. | | | | 3 |  |  |  |  |
| H08 | Hydrostatic test within last 10 years. | | | | 1 |  |  |  |  |
| **I.** | **Chemical Safety** | | | | **Point Value** |  | **Yes** | **No** | **N/A** |
| I01 | Hazardous liquid chemicals are not stored above eye level. | | | | 2 |  |  |  |  |
| I02 | Chemicals are not stored directly on floors. | | | | 2 |  |  |  |  |
| I03 | All chemical bottles (original or secondary containers) are [labeled properly](https://www.ehs.msstate.edu/focus-areas/chemical-hygiene/signage) (name, date, initials, hazards). | | | | 2 |  |  |  |  |
| I04 | Empty containers are triple rinsed, original labels defaced, labeled as “Empty”/”MT” before disposal or reuse. | | | | 2 |  |  |  |  |
| I05 | All chemical bottles are securely closed when not in use. | | | | 2 |  |  |  |  |
| I06 | Peroxide-forming chemicals are appropriately maintained in accordance with [EH&S guidance](https://www.ehs.msstate.edu/sites/www.ehs.msstate.edu/files/2024-04/Peroxide%20Forming%20Chemicals.pdf). | | | | 3 |  |  |  |  |
| I07 | Perchloric acid is labeled and maintained in accordance with [EH&S guidance](https://www.ehs.msstate.edu/sites/www.ehs.msstate.edu/files/2024-10/240627_MSU%20Chemical%20Hygiene%20Plan%202024.pdf). | | | | 3 |  |  |  |  |
| I08 | The lab is free of expired chemicals. | | | | 2 |  |  |  |  |
| I09 | Chemical bottles are of good condition and not compromised (e.g. damaged labels, rust, cracked, chipped, crystallization, leaks, crust on lid, etc.). | | | | 2 |  |  |  |  |
| I10 | Flammable chemicals stored in lab is kept below NFPA acceptable thresholds. | | | | 2 |  |  |  |  |
| I11 | No ignition sources present near where flammables are stored or in use. | | | | 2 |  |  |  |  |
| I12 | Flammables requiring refrigeration are only stored in labeled, explosion-proof/flammable-resistant fridge or freezer. | | | | 2 |  |  |  |  |
| I13 | Corrosives are stored in corrosives cabinet, minimal outside of cabinet, never under sinks. | | | | 2 |  |  |  |  |
| I14 | [Chemicals are segregated based on hazard class](https://www.ehs.msstate.edu/sites/www.ehs.msstate.edu/files/2023-12/Chemical%20Storage%20Guide.pdf) (flammable, corrosive, oxidizer, reactive, toxic, etc.) as further specified. | | | | - |  |  |  |  |
| I15 | Acids and bases are properly segregated. | | | | 2 |  |  |  |  |
| I16 | Inorganic acids and organic acids are properly segregated. | | | | 2 |  |  |  |  |
| I17 | Incompatible inorganic acids are properly segregated (Ex: Nitric acid and Perchloric acid stored by themselves). | | | | 2 |  |  |  |  |
| I18 | Water-reactive chemicals are segregated away from wet areas, in secondary containment, and storage locations labeled. | | | | 2 |  |  |  |  |
| I19 | Acutely toxic compounds are segregated and stored in designated areas with appropriate signage. | | | | 2 |  |  |  |  |
| I20 | Pyrophoric chemicals are segregated, in secondary containment, and labeled. | | | | 3 |  |  |  |  |
| I21 | Picric acid is sufficiently wet, stored in cool, well-ventilated area, and segregated from oxidizers and flammables. | | | | 3 |  |  |  |  |
| **J.** | **Chemical Hazardous Waste** | | | | **Point Value** |  | **Yes** | **No** | **N/A** |
| J01 | If applicable, Satellite Accumulation Area (SAA) is designated in the lab and posted with [EH&S signage](https://www.ehs.msstate.edu/sites/www.ehs.msstate.edu/files/2021-07/Satellite%20Accumulation%20Area%20Sign_acc%20%28002%29.pdf). | | | | 2 |  |  |  |  |
| J02 | Only hazardous waste is stored in Satellite Accumulation Area. | | | | 2 |  |  |  |  |
| J03 | All hazardous waste containers are labeled “Hazardous Waste”. | | | | 2 |  |  |  |  |
| J04 | All waste containers are marked with the contents of the container. | | | | 2 |  |  |  |  |
| J05 | Generator indicates waste hazard classification | | | | 2 |  |  |  |  |
| J06 | All waste containers are closed when waste is not actively being added. | | | | 2 |  |  |  |  |
| J07 | All waste containers are in good condition (no leaks, rust, bulging, or damage). | | | | 3 |  |  |  |  |
| J08 | Secondary containers are in good condition. | | | | 2 |  |  |  |  |
| J09 | Waste containers are not overfilled (greater than 2” clearance for all bulk containers). | | | | 2 |  |  |  |  |
| J10 | Hazardous waste is not dated. | | | | 3 |  |  |  |  |
| J11 | Maximum SAA storage capacity is not exceeded (55 gal of total waste; 1 qt /2.2 lb of P-coded hazardous waste). | | | | 3 |  |  |  |  |
| J12 | Lab personnel are completing the SAA monthly self-inspection | | | | 1 |  |  |  |  |
| J13 | Waste oil is properly collected and disposed of. | | | | 2 |  |  |  |  |
| J14 | Bulbs are properly collected and disposed of. | | | | 2 |  |  |  |  |
| **K.** | **Sharps** | | | | **Point Value** |  | **Yes** | **No** | **N/A** |
| K01 | Broken glass box(es) present near work areas. | | | | 1 |  |  |  |  |
| K02 | Broken glass box is lined with a plastic bag. | | | | 1 |  |  |  |  |
| K03 | Broken glass box isn’t overfilled, compromised, or leaking. | | | | 2 |  |  |  |  |
| K04 | Broken glass box contains non-contaminated waste. | | | | 3 |  |  |  |  |
| K05 | No broken glassware is outside of broken glass box. | | | | 2 |  |  |  |  |
| K06 | Sharps box(es) are present near work areas. | | | | 2 |  |  |  |  |
| K07 | Sharp boxes are not stored directly on floor. | | | | 1 |  |  |  |  |
| K08 | Sharps box is not overfilled, compromised, or leaking. | | | | 3 |  |  |  |  |
| K09 | No uncapped/uncontained sharps are evident in the lab. | | | | 3 |  |  |  |  |
| **L.** | **Fume Hoods** | | | | **Point Value** |  | **Yes** | **No** | **N/A** |
| L01 | Chemical fume hood has been certified by EH&S or embedded safety professionals within the last year. | | | | 0 |  |  |  |  |
| L02 | No chemicals are stored in a fume hood while not currently in use. | | | | 1 |  |  |  |  |
| L03 | Items are not hung on control knobs. | | | | 1 |  |  |  |  |
| L04 | Fume hood is in good working order. | | | | 3 |  |  |  |  |
| L05 | Back baffles are not obstructed. | | | | 2 |  |  |  |  |
| L06 | No equipment blocking airflow in hood. | | | | 2 |  |  |  |  |
| L07 | Fume hood is in good condition, with no clutter or trash within. | | | | 1 |  |  |  |  |
| L08 | Fume hood sash is at a safe level. | | | | 3 |  |  |  |  |
| L09 | Fume hood sash lowered when not in use. | | | | 2 |  |  |  |  |
| L10 | “Out of Service” hoods are tagged and not in use. | | | | 3 |  |  |  |  |
| L11 | If Satellite Accumulation Area (SAA) is within a hood, it is tagged as “Out of Service” and the “SAA” sign is posted. | | | | 2 |  |  |  |  |
| L12 | No perchloric acid, either ≥70% or heated, is being used in a standard hood. | | | | 3 |  |  |  |  |
| L13 | Filtered fume hoods are properly maintained and sufficient for scope of work. | | | | 3 |  |  |  |  |
| **M.** | **Gloveboxes** | | | | **Point Value** |  | **Yes** | **No** | **N/A** |
| M01 | Glovebox has been inspected or certified in the last year. | | | | 3 |  |  |  |  |
| M02 | Out of service clearly posted if not certified | | | | 3 |  |  |  |  |
| M03 | Gloves are of good integrity. | | | | 3 |  |  |  |  |
| M04 | The windows are intact and not compromised. | | | | 3 |  |  |  |  |
| M05 | All pressure gauges and indicators are functioning and are within acceptable ranges. | | | | 3 |  |  |  |  |
| **N.** | **General Equipment/Physical Hazards** | | | | **Point Value** |  | **Yes** | **No** | **N/A** |
| N01 | Guards/shields are in place and secured. | | | | 3 |  |  |  |  |
| N02 | Damaged equipment is labeled and not in use. | | | | 2 |  |  |  |  |
| N03 | Hazardous equipment areas are designated, and access is restricted. | | | | 2 |  |  |  |  |
| N04 | No trip hazards were observed, and cords/cables are secured or taped down. | | | | 2 |  |  |  |  |
| N05 | Oil vacuum pump is stored in non-combustible secondary containment. | | | | 1 |  |  |  |  |
| N06 | Vacuum pump oil leaks are properly managed. | | | | 2 |  |  |  |  |
| N07 | Vacuum pump is venting exhaust properly. | | | | 2 |  |  |  |  |
| N08 | Rotovaps are in good condition | | | | 2 |  |  |  |  |
|  |  | | | |  |  |  |  |  |
| **O.** | **BSL Specific Items** | | | | **Point**  **Value** |  | **Yes** | **No** | **N/A** |
| O01 | (BSL-1 and above) Scopes of work involving biological materials are appropriately registered with the Institutional Biosafety Committee (IBC). | | | | 3 |  |  |  |  |
| O02 | (BSL-1 and above) Lab staff have completed the required Biosafety: Principles & Practices training. | | | | 2 |  |  |  |  |
| O03 | (BSL-1 and above) Lab staff have completed the required Effective Use of Biological Safety Cabinets (BSC) training. | | | | 2 |  |  |  |  |
| O04 | If applicable, staff have completed the NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acids training. | | | | 2 |  |  |  |  |
| O05 | If applicable, staff have completed the Bloodborne Pathogens training. | | | | 2 |  |  |  |  |
| O06 | (BSL-2 and above) Biohazard signs are posted on the lab as well as equipment used to manipulate or store infectious agents. | | | | 2 |  |  |  |  |
| O07 | (BSL-1 and above) Biosafety signs posted and up to date. | | | | 2 |  |  |  |  |
| O08 | Bleach, or an alternative suitable EPA-registered disinfectant (not ethanol), is being used to disinfect surfaces. | | | | 2 |  |  |  |  |
| O09 | (BSL-1 and above) Windows that open to the exterior have intact screens. | | | | 1 |  |  |  |  |
| O10 | (BSL-2 and above) The lab maintains inward (negative) directional airflow relative to the adjoining space. | | | | 1 |  |  |  |  |
| O11 | (BSL-1 and above) Liquid biohazardous waste is appropriately collected and stored. | | | | 3 |  |  |  |  |
| O12 | (BSL-1 and above) Liquid biohazardous waste is appropriately inactivated and disposed of. | | | | 3 |  |  |  |  |
| O13 | (BSL-1 and above) Solid biohazardous waste is appropriately collected and stored. | | | | 3 |  |  |  |  |
| O14 | (BSL-1 and above) Solid biohazardous waste is appropriately inactivated and disposed of. | | | | 3 |  |  |  |  |
| O15 | (BSL-1 and above) In accordance with the [IBC Autoclave Verification SOP](https://www.orc.msstate.edu/sites/www.orc.msstate.edu/files/2023-02/IBC-PP-019_Autoclave%20Verification%20Program_2021%20%28UC%29_1.pdf), autoclaves used to inactivate biohazardous waste are tested using a biological indicator on a monthly basis. | | | | 2 |  |  |  |  |
| O16 | (BSL-1 and above) A general autoclave use log is maintained. | | | | 1 |  |  |  |  |
| O17 | (BSL-2) Extra BSL-2+ precautions are adhered to. | | | | 2 |  |  |  |  |
| O18 | (BSL-1 and above) Labs that have biohazardous materials must maintain a biological spill kit in accordance with [EH&S guidance](https://www.ehs.msstate.edu/sites/www.ehs.msstate.edu/files/2024-02/Biological%20Spill%20Guidance.pdf). | | | | 2 |  |  |  |  |
| O19 | (BSL-2 and above) All gloves are collected and disposed of as biohazardous waste. | | | | 1 |  |  |  |  |
|  | **Biosafety Cabinets:** | | | |  |  |  |  |  |
| O20 | Biosafety cabinet (BSC) has been certified in the last year. | | | | 3 |  |  |  |  |
| O21 | BSCs are clean, orderly, and not overcrowded. | | | | 2 |  |  |  |  |
| O22 | No items/equipment are obstructing the front or rear grilles. | | | | 2 |  |  |  |  |
| O23 | The BSC is not overcrowded. | | | | 2 |  |  |  |  |
| O24 | Flames are prohibited in the BSC. | | | | 3 |  |  |  |  |
| O25 | UV light is not utilized as the primary means of decontamination. | | | | 2 |  |  |  |  |
| O26 | BSCs are staged in a manner that does not compromise function (not immediately underneath HVAC supply, impacted by doorways, in a high traffic area, etc.). | | | | 2 |  |  |  |  |
| O27 | BSCs have an intact drain valve or cap. | | | | 1 |  |  |  |  |
| **P.** | **ACL Specific Items** | | | | **Point**  **Value** |  | **Yes** | **No** | **N/A** |
| P01 | (ACL-1 and above) The insectary separated from the areas that are open to unrestricted personnel traffic within the building. | | | | 1 |  |  |  |  |
| P02 | (ACL-2) The ceiling is contiguous or sealed/affixed (either locked or adhered) drop tile ceiling. | | | | 2 |  |  |  |  |
| P03 | (ACL-2) If applicable, supply/exhaust vents are adequately screened to prevent the environmental release of flying insects. | | | | 3 |  |  |  |  |
| P04 | (ACL-2) Sink drains are adequately screened to prevent the environmental release of experimental arthropods. | | | | 2 |  |  |  |  |
| P05 | (ACL-2) Opportunities for incidental harborage are minimized in the laboratory setting. | | | | 2 |  |  |  |  |
| P06 | (ACL-2) Windows are not recommended, but if present, they must be resistant to breakage (e.g. double paned or wire reinforced) and adequately sealed. | | | | 2 |  |  |  |  |
| P07 | (ACL-2) The entrance to the insectary via a double-door vestibule that prevents flying and crawling arthropod escape. The vestibule doors are either procedurally or physically interlocked. | | | | 2 |  |  |  |  |
| P08 | (ACL-2) Interior walls, floors, and surfaces are light-colored so that a loose arthropod can be readily located. | | | | 1 |  |  |  |  |
| P09 | (ACL-2) Internal facility appurtenances (e.g., light fixtures, pipes and ducting) are minimized, and penetrations of walls, floors, and ceilings are sealed/caulked. | | | | 1 |  |  |  |  |
| P10 | (ACL-2) Exotic or infected arthropods are sedated prior to manipulation in either a static “dead-air” glovebox or certified biosafety cabinet, as appropriate. | | | | 2 |  |  |  |  |
| P11 | (ACL-2) Mouth aspiration of arthropods is prohibited -mechanical aspirators must be utilized. | | | | 2 |  |  |  |  |
| P12 | (ACL-2) Traps present to capture potential escapees. | | | | 1 |  |  |  |  |
| P13 | (ACL-2) Arthropods properly contained, and primary containment devices are appropriately labeled. | | | | 3 |  |  |  |  |
| P14 | (ACL-2) Arthropods properly devitalized/inactivated. | | | | 3 |  |  |  |  |
| **Q.** | **ABSL Specific Items** | | | | **Point**  **Value** |  | **Yes** | **No** | **N/A** |
| Q01 | (ABSL-1 and above) Scopes of work involving animals are appropriately registered with the Institutional Animal Care and Use Committee (IACUC). | | | | 3 |  |  |  |  |
| Q02 | (ABSL-1 and above) Animals shall be confined to securely fenced areas or be in enclosed structures (animal rooms) to minimize the possibility of theft or unintentional release. | | | | 1 |  |  |  |  |
| Q03 | (ABSL-1 and above) The containment building shall be controlled and have a locking access. The containment area shall be locked. | | | | 2 |  |  |  |  |
| Q04 | (ABSL-1 and above) The containment area shall be patrolled or monitored at frequent intervals. | | | | 1 |  |  |  |  |
| Q05 | (ABSL-2) When the animal research requires special provisions for entry (e.g., vaccination), a warning sign incorporating the universal biosafety symbol shall be posted on all access doors to the animal work area. The sign shall indicate: (i) the agent, (ii) the animal species, (iii) the name and telephone number of the Animal Facility Director or other responsible individual, and (iv) any special requirements for entering the laboratory. | | | | 2 |  |  |  |  |
| Q06 | (ABSL-2) Animals of the same or different species, which are not involved in the work being performed, shall not be permitted in the animal area. | | | | 1 |  |  |  |  |
| Q07 | (ABSL-2) Contaminated materials that are decontaminated at a site away from the laboratory shall be placed in a closed durable leak-proof container prior to removal from the laboratory | | | | 3 |  |  |  |  |
| Q08 | (ABSL-2) The facility separated from areas that are open to unrestricted personnel traffic within the building and are external doors self-closing and lockable | | | | 2 |  |  |  |  |
| Q09 | (ABSL-2) Doors to animal rooms inward opening, self-closing, and kept closed when experimental animals are present | | | | 2 |  |  |  |  |
| Q10 | (ABSL-2) Windows, if present, are sealed and resistant to breakage | | | | 1 |  |  |  |  |
| Q11 | (ABSL-2) Facility walls, ceilings and floors impervious to water and resistant to heat, organic solvents, acids, alkalis, and other chemicals, slip resistant and constructed for easy cleaning and decontamination. | | | | 1 |  |  |  |  |
| Q12 | (ABSL-2) Internal facility appurtenances, such as light fixtures, air ducts, and utility pipes, arranged to minimize horizontal surface areas to facilitate cleaning and minimize the accumulation of debris or fomites. | | | | 1 |  |  |  |  |
| Q13 | (ABSL-2) If arthropods are used in the experiment or the agent under study can be transmitted by an arthropod, interior work areas shall be appropriately screened (52 mesh). All perimeter  joints and openings shall be sealed and additional arthropod control mechanisms used to minimize arthropod entry and propagation, including appropriate screening of access doors or the equivalent | | | | 2 |  |  |  |  |
| Q14 | (ABSL-2) Biological materials removed from the animal containment area in a viable or intact state shall be transferred to a non-breakable sealed primary container and then enclosed in a nonbreakable sealed secondary container. All containers, primary and secondary, shall be disinfected before removal from the animal facility. | | | | 3 |  |  |  |  |
| Q15 | (ABSL-2) Active or passive safety needles must be utilized for the injection or aspiration of fluids containing organisms that contain infectious agents and/or recombinant/synthetic nucleic acid molecules. | | | | 3 |  |  |  |  |
| Q16 | (ABSL-2) Needles and syringes shall be promptly placed in a puncture-resistant container and decontaminated, preferably by autoclaving, before discard or reuse. | | | | 3 |  |  |  |  |
| **R.** | **PBSL Specific Items** | | | | **Point**  **Value** |  | **Yes** | **No** | **N/A** |
| R01 | (PBSL-1) The greenhouse floor may be composed of gravel or other porous material. At a minimum, impervious (e.g., concrete) walkways are recommended. | | | | 1 |  |  |  |  |
| R02 | (PBSL-1) Windows and other openings in the walls and roof of the greenhouse facility may be open for ventilation as needed for proper operation and do not require any special barrier to contain or exclude pollen, microorganisms, or small flying animals (e.g., arthropods and birds); however, screens are recommended. | | | | 1 |  |  |  |  |
| R03 | (PBSL-1 and above) A record shall be kept of experiments currently in progress in the greenhouse facility. | | | | 2 |  |  |  |  |
| R04 | (PBSL-1 and above) Experimental organisms shall be rendered biologically inactive by appropriate methods before disposal outside of the greenhouse facility. | | | | 2 |  |  |  |  |
| R05 | (PBSL-1 and above) A program shall be implemented to control undesired species (e.g., weed, rodent, or arthropod pests and pathogens), by methods appropriate to the organisms | | | | 1 |  |  |  |  |
| R06 | (PBSL-1) Arthropods and other motile macroorganisms shall be housed in appropriate cages. If macroorganisms (e.g., flying arthropods or nematodes) are released within the greenhouse, precautions shall be taken to minimize escape from the greenhouse facility. | | | | 1 |  |  |  |  |
| R07 | (PBSL-2) A sign shall be posted indicating that a restricted experiment is in progress. The sign shall indicate the following: (i) the name of the responsible individual, (ii) the plants in use, and (iii) any special requirements for using the area. If organisms are used that have a recognized potential for causing serious detrimental impacts on managed or natural ecosystems, their presence shall be indicated on a sign posted on the greenhouse access doors. If organisms are used that have a recognized potential for causing serious detrimental impacts on managed or natural ecosystems, their presence shall be indicated on a sign posted on the greenhouse access doors. | | | | 2 |  |  |  |  |
| R08 | (PBSL-2) Experiments involving other organisms that require a containment level lower than BL2-P may be conducted in the greenhouse concurrently with experiments that require BL2-P containment provided that all work is conducted in accordance with BL2-P greenhouse practices. | | | | 2 |  |  |  |  |
| R09 | (PBSL-2) A greenhouse floor composed of an impervious material. Concrete is recommended, but gravel or other porous material under benches is acceptable unless propagules of experimental organisms are readily disseminated through soil. Soil beds are acceptable unless propagules of experimental organisms are readily disseminated through soil. | | | | 1 |  |  |  |  |
| R10 | (PBSL-2) Windows that open require screens to exclude small flying animals (e.g., arthropods and birds). | | | | 1 |  |  |  |  |
| R11 | (PBSL-2) An autoclave shall be available for the treatment of contaminated greenhouse materials. | | | | 2 |  |  |  |  |
| R12 | (PBSL-2) If intake fans are used, measures shall be taken to minimize the ingress of arthropods. Louvers or fans shall be constructed such that they can only be opened when the fan is in operation. | | | | 1 |  |  |  |  |
| R13 | (PBSL-2) Materials containing experimental microorganisms, which are brought into or removed from the greenhouse facility in a viable or intact state, shall be transferred in a closed non-breakable container. | | | | 3 |  |  |  |  |
| **S.** | **Radiation/Laser Safety** | | | | **Point Value** |  | **Yes** | **No** | **N/A** |
|  | **Radioactive Materials Safety:** | | | |  |  |  |  |  |
| S01 | Radiation safety signs posted and up to date. (RAM, Notice to Employees, Lab Emergencies, Spills) | | | | 2 |  |  |  |  |
| S02 | Rad materials areas are clearly labeled. | | | | 2 |  |  |  |  |
| S03 | All areas and items (benchtops, equipment, glassware, pipettes, pens, markers, etc.) are labeled “Radioactive Materials” | | | | 2 |  |  |  |  |
| S04 | Radioactive materials are secured and only accessible to authorized users. | | | | 3 |  |  |  |  |
| S05 | Radioactive and/or mixed waste containers are properly labeled. | | | | 3 |  |  |  |  |
| S06 | Appropriate shielding available for the type of radioisotope used, where applicable. | | | | 3 |  |  |  |  |
| S07 | Appropriate survey meters available and calibrated for radioactive material use. | | | | 2 |  |  |  |  |
| S08 | All personnel are wearing dosimeters, where applicable. | | | | 2 |  |  |  |  |
| S09 | Items labeled “Radioactive” in posted areas only. | | | | 2 |  |  |  |  |
| S10 | Lab personnel current on radioactive materials or x-ray safety training. | | | | 2 |  |  |  |  |
| S11 | Lab door closed and secured against unauthorized entry. | | | | 3 |  |  |  |  |
| S12 | Food, drink, or cosmetic application observed in the lab. | | | | 2 |  |  |  |  |
|  | **X-ray Safety:** | | | |  |  |  |  |  |
| S13 | Radiation safety signs posted and up to date. (X-ray, Notice to Employees) | | | | 2 |  |  |  |  |
| S14 | All personnel are wearing dosimeters, where applicable. | | | | 2 |  |  |  |  |
| S15 | Lab door closed and secured against unauthorized entry. | | | | 3 |  |  |  |  |
|  | **Laser Safety:** | | | |  |  |  |  |  |
| S16 | Laser signs posted outside lab, and “Laser in Use” sign posted. | | | | 2 |  |  |  |  |
| S17 | Appropriate PPE and eye protection or shielding is available and in use when working with lasers. | | | | 3 |  |  |  |  |
| S18 | Appropriate engineering controls are in place. | | | | 2 |  |  |  |  |
| S19 | All Class IIIB and Class IV lasers are registered with EH&S. | | | | 2 |  |  |  |  |
|  |  | | | |  |  |  |  |  |
| **Other Concern(s)** | |  |  | **Description(s)** | | | | | |
| **What You Got Right!** | |  |  | **Comments** | | | | | |