



Plant Pest Containment Level 2 Certification Checklist

The information provided in this checklist will help the Office of Biohazard Containment and Safety evaluate the physical and operational components of your facility as described in the *Containment Standards for Facilities Handling Plant Pests*. Biosafety Specialists will review the completed checklist to determine if your facility meets the Plant Pest Containment level 2 requirements (PPC-2).

Facility:

Postal Address:

Tel:

E-mail:

Fax:

Website:

Room(s) / Building(s):

Type of Facility:

Greenhouse

Laboratory

Other:

Contact Information:

1) Facility Supervisor

- **Name:**
- **Title:**
- **Department:**
- **Address:**
- **Phone number:**
- **Fax number:**
- **E-mail:**
- **Language preference:** English / Français
- **Signature:** _____ **Date:** _____

2) Biosafety Officer (or equivalent)

- **Name:**
 - **Title:**
 - **Department:**
 - **Address:**
 - **Phone number:**
 - **Fax number:**
 - **E-mail:**
 - **Language preference:** English / Français
 - **Signature:** _____ **Date:** _____
-

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Physical and Operational Components

The following tables describe physical and operational containment requirements for Plant Pest Containment (PPC) Level 2 facilities (e.g. laboratories, greenhouses) working with plant pests. The following symbols are used: ● **Required** ○ **Recommended**¹

| Physical Components | | | | | | |
|--------------------------------|-----------|--|-------|--------------------------|--------------------------|---|
| Structure, Location and Access | | | | | | |
| Q# | Reference | Components | PPC-2 | Yes | No | Comments |
| 1 | 3.7.1.1 | Is appropriate security provided for the building (e.g. fencing, motion sensors, physical barriers, patrols)? | ○ | <input type="checkbox"/> | <input type="checkbox"/> | |
| 2 | 3.7.1.2 | Is signage installed on entry doors within the containment zone indicating containment level, contact information, and entry requirements? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 3 | 3.7.1.3 | Is entrance to the containment zone via self-closing and lockable doors? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 4 | 3.7.1.4 | Is restricted access to the containment zone ensured through a controlled access system (e.g. electronic access card, code or equivalent)? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 5 | 3.7.1.5 | Is entrance and exit to the containment zone via an anteroom or a corridor? | ● | <input type="checkbox"/> | <input type="checkbox"/> | Specify : <input type="checkbox"/> anteroom <input type="checkbox"/> corridor |
| 6 | 3.7.1.7 | Are anteroom doors self-closing and never opened simultaneously (interlocking doors, and audible or visual alarms are acceptable)? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 7 | 3.7.1.15a | Can emergency exits be opened only from inside the containment zone? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 8 | 3.7.1.15b | Are emergency exits alarmed? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 9 | 3.7.1.15c | Are emergency exits identified as “Emergency Exit Only”? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |

¹ Recommended items are optional, depending upon the nature of the pest(s) requiring containment.



| Q# | Reference | Components | PPC-2 | Yes | No | Comments |
|--------------------------------------|-----------|---|-------|--------------------------|--------------------------|---|
| 10 | 3.7.1.16 | Are dedicated laboratory clothing and personal protective equipment stored separately from street clothing? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| Surface Finishes and Casework | | | | | | |
| 11 | 3.7.2.2 | In wet areas, are floors slip-resistant? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 12 | 3.7.2.3 | Are interior coatings easy to clean and resistant to gas and chemicals, as well as to repeated disinfection in accordance with function (e.g. will withstand disinfection, fumigation)? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 13 | 3.7.2.4a | Are bench tops non-absorptive, impervious to water, and resistant to acids, alkalis, organic solvents and moderate heat? | ○ | <input type="checkbox"/> | <input type="checkbox"/> | |
| 14 | 3.7.2.4b | Are backsplashes installed tight to wall and sealed at wall-bench junction? | ○ | <input type="checkbox"/> | <input type="checkbox"/> | |
| Containment Perimeter | | | | | | |
| 15 | 3.7.3.1 | Is an autoclave or other validated means of waste treatment/disposal located within the containment zone, or if not available in the containment zone, are procedures in place to safely transport waste for treatment/disposal ? | ● | <input type="checkbox"/> | <input type="checkbox"/> | Specify : <input type="checkbox"/> within PPC-2 zone <input type="checkbox"/> outside PPC-2 zone Method of waste treatment (include time and temperature parameters): |
| 16 | 3.7.3.3 | Is the autoclave equipped with a cycle log recorder to record time, temperature, and pressure? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 17 | 3.7.3.7 | Is the containment zone screened or sealed (including all windows, supply/exhaust air ducts)? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |



| Q# | Reference | Components | PPC-2 | Yes | No | Comments |
|--------------------------|-----------|---|-------|--------------------------|--------------------------|----------|
| Facility Services | | | | | | |
| 18 | 3.7.5.1 | Is a handwashing sink located within the containment zone and near the point of exit? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 19 | 3.7.5.2 | Is the handwashing sink provided with "hands-free" capability? | ○ | <input type="checkbox"/> | <input type="checkbox"/> | |
| 20 | 3.7.5.3 | Are appropriate primary containment devices available (e.g. BSCs) to minimize the potential contamination of the containment zone? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 21 | 3.7.5.4 | Are emergency eyewash facilities provided in the containment zone in accordance with activities and applicable regulations (i.e. ANSI Z358.1-2004)? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 22 | 3.7.5.5 | Is an emergency shower provided in the containment zone in accordance with activities and applicable regulations (i.e. ANSI Z358.1-2004)? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 23 | 3.7.5.6 | Are facility service supply controls located both inside and outside of the containment zone to facilitate servicing? | ○ | <input type="checkbox"/> | <input type="checkbox"/> | |
| 24 | 3.7.5.9 | Are soil traps installed in drains? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 25 | 3.7.5.13 | Is the laboratory adequately equipped (e.g. BSCs, thermocyclers, ELISA plate readers, centrifuges and microscopes) to avoid moving equipment into or out of the containment zone? | ○ | <input type="checkbox"/> | <input type="checkbox"/> | |
| 26 | 3.7.5.14 | Is an alarm system to be installed to detect loss of containment due to unauthorized entry or mechanical or power failure? | ○ | <input type="checkbox"/> | <input type="checkbox"/> | |
| 27 | 3.7.5.15 | Are monitoring and security systems installed to monitor critical containment systems? | ○ | <input type="checkbox"/> | <input type="checkbox"/> | |
| 28 | 3.7.5.16 | Is emergency power available for HVAC, lighting, BSCs, essential equipment and other safety systems? | ○ | <input type="checkbox"/> | <input type="checkbox"/> | |



| Q# | Reference | Components | PPC-2 | Yes | No | Comments |
|---|-----------|---|-----------------------|--------------------------|--------------------------|----------|
| 29 | 3.7.5.17 | Is vacuum pump contamination minimized by filtration of vacuum line and use of disinfectant traps? | <input type="radio"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Greenhouses – if facility is not a greenhouse, proceed to Q#40 | | | | | | |
| 30 | 3.7.1.18 | Are greenhouses designed to withstand extremes of local weather and anticipated maximum snow and ice loads, as well as wind, windborne debris and hail? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 31 | 3.7.1.19a | Are greenhouses constructed with a rigid reinforced frame with walls, floors and glazing to form a shell? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 32 | 3.7.1.19b | Are all perforations and joints in greenhouses and between the greenhouse and other contained structures sealed to provide a continuous containment barrier? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 33 | 3.7.2.5 | Are greenhouse floors impervious to water and easy to clean (e.g. concrete)? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 34 | 3.7.3.8 | Are spare greenhouse window panels, emergency glazing and screening stored nearby for emergency repairs? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 35 | 3.7.3.10 | Are greenhouse glazings sealed to the greenhouse framework with a sealant that provides a tight, flexible and continuous seal resistant to degradation by chemical disinfectants, UV radiation and temperature changes? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 36 | 3.7.4.16 | Are greenhouse vents and greenhouse HVAC penetrations screened with appropriate mesh screening to prevent pest escape? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 37 | 3.7.4.18 | Is the greenhouse ventilation system designed to allow for greenhouse fumigation and pesticide applications? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 38 | 4.1.5.21 | Are greenhouse personnel who apply pesticides appropriately trained and protected? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |



| Q# | Reference | Components | PPC-2 | Yes | No | Comments |
|-------------------------------|-----------|--|-------|--------------------------|--------------------------|----------|
| 39 | 4.2.5.16 | Are areas surrounding greenhouses kept free of debris, garbage, compost piles and overhanging shrubs and trees? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| Operational Components | | | | | | |
| Access | | | | | | |
| 40 | 4.1.1 | Is access to containment zone and support areas restricted to authorized personnel only? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| Documentation | | | | | | |
| 41 | 4.1.2.2 | Is an up-to-date inventory of all imported plant material and plant pests maintained? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 42 | 4.2.2.1a | Is a <i>Procedures Manual</i> covering safety and general laboratory and greenhouse operations, including entry and exit protocols and cleaning schedules available to all staff? <i>Note: if no, proceed to Q#44.</i> | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 43 | 4.2.2.1b | Is the <i>Procedures Manual</i> reviewed and updated regularly? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 44 | 4.2.2.2 | Is an Emergency Response Plan available that describes emergency procedures, including those for accidents, fires, chemical spills, air handling failure, BSC failure, power loss and containment loss? <i>Note: plan must cover emergency entry/exit procedures, corrective actions and notification of key personnel and government officials.</i> | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 45 | 4.2.2.4 | Are records of activities in the facility kept for three years, including records of all building and equipment maintenance, shipments received, confirmations of pest identification, dates of import, CFIA Permits to Import, associated imported plant material, associated organisms detected, decontamination of packaging materials and transfer of plant pests or organisms to other facilities where authorized by a CFIA inspector? <i>Note: records shall also be kept of all inoculations or infestations of plant material and the movement of plant material and plant pests into or out of containment.</i> | ● | <input type="checkbox"/> | <input type="checkbox"/> | |



| Q# | Reference | Components | PPC-2 | Yes | No | Comments |
|--------------------------------------|-----------|--|-------|--------------------------|--------------------------|----------|
| Training | | | | | | |
| 46 | 4.1.3a | Is personnel provided with training on pest-associated hazards and the precautions necessary to prevent the release of contained pests? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 47 | 4.1.3b | Is personnel required to show evidence that they know and understand the required precautions? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 48 | 4.1.3c | Is the training documented? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 49 | 4.1.3d | Are refresher and retraining programs implemented? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 50 | 4.2.3.1a | Is personnel working in the containment zone trained in, and follow the Standard Operating Procedures for the area? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 51 | 4.2.3.1b | Are trainees supervised by a trained staff member? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 52 | 4.2.3.1c | Are visitors, maintenance staff, janitorial staff and others provided with training and/or supervision commensurate with their anticipated activities in the containment zone? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| Personal Protective Equipment | | | | | | |
| 53 | 4.2.4.1a | Are personnel and visitors entering the containment zone required to wear protective clothing up to and including full coverage protective clothing? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 54 | 4.2.4.1b | Is protective clothing removed prior to exiting the containment zone? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 55 | 4.2.4.2a | Are dedicated or disposable footwear (e.g. rubber boots, shoe covers) worn when working with soil or soilborne pests in situations where the floor may be contaminated with infested plant material or soil? | ○ | <input type="checkbox"/> | <input type="checkbox"/> | |
| 56 | 4.2.4.2b | Is dedicated or disposable footwear removed for reuse or decontamination prior to exiting the containment zone? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 57 | 4.2.4.3 | Are BSCs or other primary containment devices used for procedures that involve high concentrations or large volumes of plant pests or their propagules? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |



| Q# | Reference | Components | PPC-2 | Yes | No | Comments |
|-----------------------|-----------|--|-------|--------------------------|--------------------------|------------------------|
| Work Practices | | | | | | |
| 58 | 4.1.5.2 | Are all organisms rendered non-viable prior to disposal? | ● | <input type="checkbox"/> | <input type="checkbox"/> | <i>Specify method:</i> |
| 59 | 4.1.5.3 | Are good laboratory practices employed to prevent the escape of pests? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 60 | 4.1.5.4 | Are doors kept closed to reduce the potential movement of plant pests? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 61 | 4.1.5.5 | Is eating, chewing gum, drinking, smoking, storing of food and utensils, storing of personal belongings, applying cosmetics, and inserting or removing contact lenses prohibited in the containment zone? <i>Note: the wearing of contact lenses is recommended only when other forms of corrective eyewear are not suitable.</i> | ○ | <input type="checkbox"/> | <input type="checkbox"/> | |
| 62 | 4.1.5.6 | Is long hair tied back or restrained so that it cannot come into contact with hands, specimens, containers or equipment? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 63 | 4.1.5.7 | Are all pests and materials in a containment zone treated in accordance with the highest containment requirement for that area (e.g. if PPC-1 and PPC-2 pests are in the same room, PPC-2 practices must be followed)? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 64 | 4.1.5.8 | Are all pests and material infested or suspected of being infested with a pest moved or transported in containers that are secure, leak-proof and not easily broken? <i>Note: the containers may only be opened within a facility that provides the appropriate containment level for the pest in question.</i> | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 65 | 4.1.5.9 | Are all work areas within a containment zone, including dedicated clerical work stations, clean and tidy? <i>Note: storage of materials should be minimized, and paperwork should be done outside of containment zones if this presents a risk of disseminating pests.</i> | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 66 | 4.1.5.11 | Are cultures stored in sealed, preferably break-resistant, containers such as screw-top vials? <i>Note: cultures are to be clearly identified and dated. Where possible, petri dish cultures of sporulating fungi should be sealed with stretch film.</i> | ● | <input type="checkbox"/> | <input type="checkbox"/> | |



| Q# | Reference | Components | PPC-2 | Yes | No | Comments |
|----|-----------|---|-------|--------------------------|--------------------------|--|
| 67 | 4.1.5.12 | Are contaminated materials and equipment properly cleaned and decontaminated before leaving the facility for servicing or disposal? | ● | <input type="checkbox"/> | <input type="checkbox"/> | <i>Specify method of decontamination:</i> |
| 68 | 4.1.5.13 | Are all unintentionally introduced pests rendered non-viable, including those contaminating cultures, as soon as they are detected? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 69 | 4.1.5.15 | Are disinfectants effective against the organisms in use available at all times when plant pests are handled or stored? | ● | <input type="checkbox"/> | <input type="checkbox"/> | <i>Specify disinfectant used and contact time:</i> |
| 70 | 4.1.5.16 | Are sanitation practices implemented when working with plants and plant pests? <i>Note: refer to page 37 of the Containment Standards for Facilities Handling Plant Pests for more details.</i> | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 71 | 4.1.5.18 | Are autoclaves used for decontamination monitored regularly using biological indicators to ensure efficacy (e.g. consider weekly or monthly monitoring, depending on the frequency of use of the autoclave). <i>Note: monitoring records must be kept for three years.</i> | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 72 | 4.1.5.19a | Are losses of containment reported immediately to the laboratory supervisor and remedied as soon as possible? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 73 | 4.1.5.19b | Are written reports of such incidents maintained for three years, and the results of incident investigations used for continuing education? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 74 | 4.1.5.20 | Is an effective bird, rodent, weed and plant pest control program maintained to prevent entry and eliminate undesired pests from the containment zone? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 75 | 4.2.5.1 | Are personnel instructed not to bring personal belongings (e.g. hats, coats, purses) into the containment zone? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 76 | 4.2.5.4 | Is a basic tool kit available inside the containment zone? | ○ | <input type="checkbox"/> | <input type="checkbox"/> | |



| Q# | Reference | Components | PPC-2 | Yes | No | Comments |
|----|-----------|--|-------|--------------------------|--------------------------|----------|
| 77 | 4.2.5.5 | Are all packages of pests from foreign sources opened in a BSC or a sleeved cage, and packaging material decontaminated as soon as possible? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 78 | 4.2.5.6 | Are footbaths (e.g. trays containing cloth pads soaked in disinfectant) provided in the anteroom of facilities containing soilborne pests, to disinfect footwear, shoe covers or dedicated footwear? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 79 | 4.2.5.7 | Is protective clothing decontaminated (e.g. heat-treated, frozen, autoclaved or soaked in a 5% bleach solution) before laundering? <i>Note: clothing does not need to be decontaminated if there are laundering facilities within the containment zone and the facilities have been proven to be effective in killing the pests in use.</i> | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 80 | 4.2.5.8 | If there is a risk of disseminating pests with the movement of paper, is an electronic communication system used to transfer information and data from the containment zone? | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 81 | 4.2.5.10 | Are all liquids potentially contaminated by pests decontaminated? <i>Note: liquids must be collected and treated with steam, heat, chemicals or other proven and validated treatment technology prior to discharge into sewer or septic systems.</i> | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 82 | 4.2.5.11 | Are periodic inspections of the containment zone made by facility staff to check for faults and deterioration (e.g. deteriorated door seals and brushes, screens or caulking)? <i>Note: corrective action must be taken and records kept for three years. Such inspections shall occur at least every six months</i> | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 83 | 4.2.5.12 | Are supply and exhaust filters, pre-filters and screens inspected and cleaned or replaced by a designated person on a regular basis? <i>Note: if no filters are installed, proceed to Q#84.</i> | ● | <input type="checkbox"/> | <input type="checkbox"/> | |
| 84 | 4.2.5.13 | Is inward directional airflow confirmed on a regular basis using a smoke pencil, tape, tissue or other suitable means? <i>Note: if no inward directional airflow, proceed to Q#85.</i> | ○ | <input type="checkbox"/> | <input type="checkbox"/> | |
| 85 | 4.2.5.15 | Are all plant material and insect traps inspected on a regular basis? <i>Note: all debris and dead plant material should be removed so that it does not act as a refuge for plant pests.</i> | ● | <input type="checkbox"/> | <input type="checkbox"/> | |



❖ **Internal Use Only**

Additional Comments:

Reviewed by: _____ **Date:** _____

Rooms: _____

Certified as: PPC-2 Greenhouse PPC-2 Laboratory PPC-2 Other **Date:** _____

Certification due date: _____ **Letter faxed/mailed to facility**