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*Great Lakes Forestry Centre
Insect Production Services*

STANDARD OPERATING PROCEDURE

Number: IPS/030/002

Insect Quarantine Facility Access Authorization



Effective Date: 15 October 2013

Canada



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TITLE: *Insect Quarantine Facility Access Authorization*

APPROVING OFFICIAL:

Manager, Insect Production Services (IPS) _____ DD / MM / YY
_____ / ____ / ____

SIGNIFICANT CHANGES FROM PREVIOUS VERSION:

- This Standard Operating Procedure (SOP) has been modified for applicability to the newly constructed Great Lakes Forestry Centre (GLFC) Insect Quarantine (IQ) Facility.
- There are numerous minor changes, however the most significant changes relate to available IQ facilities specified on Insect Production Services (IPS) Form Number 0103/005 (Appendix 1).
- The title “Insect Quarantine Officer (IQO)” has been revised to “Bio-Safety Officer (BSO)” to match terminology used by the regulatory authority (i.e., Canadian Food Inspection Agency - CFIA).

1.0 INTRODUCTION

1.1 Purpose

This SOP has been established to delineate who is authorized to enter the GLFC IQ facility, to clearly define procedures for requesting approval for conducting research within the facility, and to identify training requirements for facility users.

1.2 Scope

This SOP shall be followed by all scientific personnel (GLFC, Canadian Forest Service - CFS, or otherwise) requesting authorization to conduct research with exotic and/or invasive forest insects within the GLFC IQ facility.

1.3 Definitions

Bio-Safety Manual – A manual containing only those IPS SOPs that relate specifically to the IQ facility.

Bio-Safety Officer (BSO) – A member of IPS who has supervisory authority over the daily operation of the IQ facility and who provides technical/research support to users of the facility.

Controlled Copy – A copy of an SOP distributed to select GLFC personnel having a unique copy number and dated signature of the IPS manager. Controlled copies are intended to ensure that GLFC personnel follow the most recent version of the SOP.



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Effective Date – The date from which the procedures given in an SOP are to be implemented.

Great Lakes Forestry Centre (GLFC) – One of five Canadian Forest Service (CFS) research facilities in Canada.

Insect Production Services (IPS) – A GLFC work team consisting of the Insect Production Unit (IPU), the Quality Control Unit (QCU) and Insect Quarantine (IQ) personnel who perform insect rearing, quality control and quarantine activities in support of forest pest research activities internal and external to the CFS.

Insect Production Services Manager – The individual who has overall responsibility for activities of the IPS team.

Insect Production Unit (IPU) – A work unit of IPS consisting of personnel who perform insect rearing, diet making and methods development activities at GLFC.

Insect Quarantine (IQ) – A general-use facility under the control of IPS used for rearing exotic forest insects and conducting associated research activities.

Invasive Insects – Insects that adversely affect the habitats and bioregions they invade economically, environmentally, and/or ecologically and have become newly established in that area. They can be domestic (i.e., native to Canada) or introduced (i.e., exotic, non-indigenous, alien).

Methods Development (MD) Lab – A research facility under the control of IPS used exclusively by the IPU for developing new rearing methods and for establishing new insect colonies.

Principal Investigator (PI) - An individual internal or external to GLFC who has the responsibility for the overall conduct of the phase(s) of a study performed within the IQ facility.

Quality Control Unit (QCU) – A work unit of IPS consisting of personnel who conduct routine production, process and product control testing and develop new QC methodology in support of IPU activities.

Standard Operating Procedures (SOPs) – Directives describing routine administrative or technical procedures conducted by IPS personnel or users of the IQ facility.

1.4 Safety

NA



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1.5 Materials

- 1.5.1 IPS Form Number 0103/005 (*Request to Use IQ Facility*, Appendix 1).
- 1.5.2 IPS Form Number 0104/003 (*IQ Facility User Agreement*, Appendix 2).

2.0 PROCEDURES

2.1 Potential Users of the Facility

- 2.1.1 Potential users of the IQ facility include GLFC researchers, IPU personnel, external CFS researchers and non-CFS personnel.
- 2.1.2 Priority for facility use will be assigned as specified in 2.2.

2.2 Scheduling Facility Use

- 2.2.1 The BSO will schedule facility use based on:
 - a) Space available.
 - b) CFS research needs.
 - c) Potential for conflicting activities (e.g., research with insect pathogens may conflict with experiments/rearing of healthy insects).
 - d) Facility maintenance requirements (i.e., periodic shut-down of the facility or environmental chambers may be required for conducting maintenance and/or sanitation procedures).
 - e) Training needs of proposed researchers (refer to 2.3.1).
- 2.2.2 When space or conflicting activities within the facility become problematic, the IPS manager will assign priority. Disagreements will be resolved by the Director, Integrated Pest Management.

2.3 Request to Use IQ Facility

- 2.3.1 Any individual or group of researchers wanting to conduct research within the IQ facility shall complete a *Request to Use IQ Facility* form (IPS Form Number 0103/005, Appendix 1) and submit it to the BSO for approval, prior to making arrangements for a movement certificate or import permit. The form shall contain the following information:
 - a) Project description (i.e., a brief outline of the work to be performed within the IQ facility).
 - b) Proposed start and end dates for using the facility.
 - c) Names of people associated with the project who will need access to the facility; these individuals must be trained in quarantine procedures as specified in 2.5.1.
 - d) Identification of the insect species that will be brought into the facility, including the scientific name, the life stage(s) that will be brought in, and the anticipated date(s) of arrival at the facility.



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- e) Other materials to be brought into the IQ facility, including equipment, plant materials, soils, pathogens, etc.
 - f) Materials to be removed from the facility during or at completion of experimentation, including dead insects, equipment, etc.
 - g) Facilities requested, including module numbers, walk-in and reach-in environmental rearing chambers, general work area, refrigerator and/or, freezer. Parameters for temperature, relative humidity and light cycle must be specified for each chamber/room (refer to the Insect Quarantine Facility Floor Plan in Appendix 3). To facilitate scheduling of concurrent use of the facility by multiple research groups, dates shall be provided for periods of time when facility equipment will not be required for the entire duration that facility access was requested. [Note: Some work spaces (e.g., cold room) may need to be shared with other facility users as determined by the BSO. Also, some modules can accommodate the installation of additional reach-in chambers, if required].
 - h) Expected work hours on weekdays, nights, weekends and holidays.
 - i) Other special requirements, including a description of assistance requested from the BSO.
 - j) Dated name and signature of the PI. Only one individual shall be designated as the PI for the project.
- 2.3.2 Request forms will be reviewed by the BSO and approved if criteria specified in 2.2.1 are met. The BSO may request a meeting/discussion with the PI to modify the request in order to better accommodate multiple users of the facility. The BSO will provide a copy of the approved form to the PI, along with agreed modifications. Individuals identified on the approved form will be granted access to the IQ facility for the stated project only and access privileges will expire at the end date of the stated project. Individuals may be required to undergo further quarantine-related training when submitting subsequent *Request to Use IQ Facility* forms due to the availability of new or revised SOPs.
- 2.3.3 Facility users shall only enter research modules for which access was approved as specified on IPS Form Number 0103/005 (Request to Use IQ Facility, Appendix 1).
- 2.3.4 Users of the facility may request changes to their original request at any time and the BSO will try to accommodate their needs.
- 2.3.5 The BSO may revoke access privileges at any time.

2.4 IQ Facility User Agreement

- 2.4.1 Upon return of a copy of the approved *Request to Use IQ Facility* form by the BSO to the PI, the PI shall ensure that each person identified as being a potential user of the facility provides a signed copy of the *IQ Facility User Agreement* (IPS Form Number 0104/003, Appendix 2) to



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the BSO indicating that they have read the *Bio-Safety Manual*, will abide by all of the protocols contained within the SOPs, and will immediately report any mishaps to the BSO. (Failure to comply may result in revocation of access privileges). The BSO will then schedule and administer the required quarantine related training before these persons are allowed entry into the facility.

2.5 Training

- 2.5.1 All scientific and maintenance personnel must be trained/approved by the BSO in the use of applicable SOPs (as determined by the BSO) before being allowed to work in the facility. Additional training will be provided by the BSO upon the implementation of new or revised SOPs.

2.6 Level of Access

- 2.6.1 Users of the IQ facility will be identified by the BSO as *Newcomers*, having *Restricted Access*, or having *Full Access*, based on their level of training and experience in quarantine procedures. The BSO and the IPS manager have *Full Access* to the facility.
- 2.6.2 Users identified as having *Full Access* will be given swipe card access to applicable portions of the IQ facility, as determined by the BSO. Users with *Full Access* may enter/leave the facility as needed.
- 2.6.3 *Newcomers* and *Restricted Access* facility users will not be granted swipe card access, must contact the BSO each time they need facility access, and must make prior arrangements with the BSO to gain facility access outside of normal working hours.
- 2.6.4 *Restricted Access* users (but not *Newcomers* except as stated in 2.6.6) may also gain entry to the facility via *Full Access* users within the same working group.
- 2.6.5 *Restricted Access* users will be escorted into the facility each time they require entry. The BSO (or *Full Access* user as specified in 2.6.4) shall monitor their activities as needed (i.e., they may be left unattended for short periods of time).
- 2.6.6 *Newcomers* will be continuously monitored by the BSO until they become designated by the BSO as having *Restricted Access*. The BSO may assign a *Full Access* user to monitor/accompany a *Newcomer*.
- 2.6.7 Facility access will be denied to all users identified on the *Request to Use IQ Facility* form upon completion of the project. Subsequent access privileges may be reinstated upon the approval of a new research project in the IQ facility.



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- 2.6.8 Researchers will not normally be given access to the upper level of the IQ facility (i.e., swipe card access through door AA250) unless deemed necessary by the BSO.

2.7 Access by Cleaning Personnel

- 2.7.1 GLFC cleaning staff are not permitted to enter the IQ facility at any time.

2.8 Access by Maintenance Personnel

- 2.8.1 Facility maintenance personnel and external contractors may enter the IQ facility as specified in the current version of SOP Number 0034 (Maintenance Personnel Responsibilities).

2.9 Visitor Access

- 2.9.1 Scientific personnel who have been authorized by the BSO to use the facility shall not provide access to anyone not identified on the previously submitted *Request to Use the IQ Facility* form (IPS Form Number 0103/005, Appendix 1). Requests for access by others shall be made directly to the BSO. The BSO (or the IPS manager) may provide tours for visitors to the facility. PIs having full facility access privileges may provide tours upon notification/approval of the BSO prior to each event.
- 2.9.2 The BSO (or the IPS manager, or PI as stated in 2.9.1) shall instruct visitors (i.e., tours) on entry/exit procedures and shall escort them during the entire time that they are present in the facility.

2.10 Calculations

NA

2.11 Documentation and Reporting

- 2.11.1 Compliance to this SOP shall include completion of the following forms:
- a) IPS Form Number 0103/005 (*Request to Use IQ Facility*, Appendix 1).
 - b) IPS Form Number 0104/003 (*IQ Facility User Agreement*, Appendix 2).

3.0 DISTRIBUTION AND ARCHIVING

3.1 Distribution



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This SOP shall be distributed by the IPS manager to IPS personnel who are required to work in the IQ facility and to any other potential facility users (e.g., GLFC personnel) who request a controlled copy. Controlled copies are monitored for chain of custody to ensure that current versions are distributed timely and that outdated versions are destroyed. A current version of this SOP may be viewed in the *Bio-Safety Manual* maintained within the IQ facility or through the GLFC intranet.

3.2 Archiving

- 3.2.1 The IPS manager shall maintain a historical file of this SOP when it is replaced by a new version.
- 3.2.2 The BSO shall maintain historical files of submitted forms, including the *Request to Use IQ Facility* (IPS Form Number 0103/005, Appendix 1) and the *IQ Facility User Agreement* (IPS Form Number 0104/003, Appendix 2).

3.3 Destruction of Outdated SOPs

When a new version of this SOP is available for distribution, all persons in possession of a controlled copy shall ensure that the retired version is returned to the IPS manager upon request.

4.0 ASSURING SOP VALIDATION AND COMPLIANCE

4.1 Responsible Individual

- 4.1.1 The BSO is responsible for assuring that this SOP is valid.
- 4.1.2 The BSO is responsible for assuring that this SOP is followed by anyone requiring access to the GLFC Insect Quarantine facility to conduct research activities and that these persons have been appropriately trained in the use of this SOP.
- 4.1.3 IQ facility users are responsible for complying with procedures specified on a *Controlled Copy* of this SOP and shall never use non-controlled copies (which could be outdated).

5.0 REVISION OF THE SOP

5.1 Responsible Individual

The BSO is responsible for assuring that this SOP is current. If necessary, the BSO shall initiate the revision process.

5.2 Revision Schedule

This SOP shall be revised when its provisions no longer agree with current practices or GLFC policies, and shall be approved by the IPS manager and the CFIA Office of Biohazard Containment and Safety.

6.0 CONTINGENCIES



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When facility users find circumstances that do not permit compliance with this SOP, the BSO shall be consulted.

7.0 CONFIDENTIALITY

IPS SOPs are not considered to be confidential documents and may be distributed to outside parties. *Controlled Copies* shall not be reproduced.

8.0 REFERENCES

Bio-Safety Manual

Current version of SOP Number 0034 (Maintenance Personnel Responsibilities)

9.0 APPENDICES

Appendix 1: IPS Form Number 0103/005 (*Request to Use IQ Facility*).

Appendix 2: IPS Form Number 0104/003 (*IQ Facility User Agreement*).

Appendix 3: Insect Quarantine Facility Floor Plan.



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Appendix 1

Request to Use IQ Facility

SECTION A – TO BE COMPLETED BY THE APPLICANT*							
Project Description:							
Facility Use Start Date: (DD/MM/YY)				Facility Use End Date: (DD/MM/YY)			
Names of Potential Users:							
Insect species to be brought into facility							
Scientific Name:		Life Stage(s):		Date(s) of Arrival: (DD/MM/YY)		Source:	
Materials to be brought into facility (e.g., equipment, plant materials, soil, pathogens, etc.):							
Materials to be removed from facility (e.g., dead insects, equipment, etc.):							
Facilities Requested:							
✓	Module/Room Name	✓	Chamber	°C	%RH	Lights On	Lights Off
	Cold Room AA128				NA	NA	NA
	Module AA127		Reach-in				
			Walk-in				
	Module AA126		Reach-in				
			Walk-in				
	Module AA123 (Electrophysiology Lab)		Reach-in				
			Room				
	Module AA121 (Flushing Room)		Room				
	General Work Area AA125		Reach-in				
			Fridge	NA	NA	NA	NA
			Freezer	NA	NA	NA	NA
			Oven		NA	NA	NA
			Counters	NA	NA	NA	NA
	Module AA227		Reach-in				
			Walk-in				
	Module AA228		Reach-in				
			Walk-in				
Indicate dates required if different than facility use start and end dates specified above:							
Expected Work Hours							
Weekdays:		Nights:		Weekends:		Holidays:	
Other Special Requirements (e.g., description of assistance requested from Bio-Safety Officer):							
Principal Investigator Name:				Signature:		Date: (DD/MM/YY)	
SECTION B – TO BE COMPLETED BY THE BIO-SAFETY OFFICER							
Approved** <input type="checkbox"/>		Disapproved <input type="checkbox"/>		BSO Signature:		Date: (DD/MM/YY)	
**Lab wear to be worn: <input type="checkbox"/> Lab coats <input type="checkbox"/> Bunny suit, shoe covers, head cover, beard cover (if applicable)							
*Submit the completed form to the GLFC Bio-Safety Officer							
IPS Form Number 0103/005							



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Appendix 2

IQ Facility User Agreement

My signature below stipulates that I have read the *Bio-Safety Manual* for users of the GLFC Insect Quarantine facility, agree to abide by all of the protocols contained within and will report any mishaps to the BioSafety Officer. Failure to comply may result in revocation of facility access privileges.

Printed Name: _____
(Quarantine User)

Signature: _____

Date: _____
(DD/MM/YY)



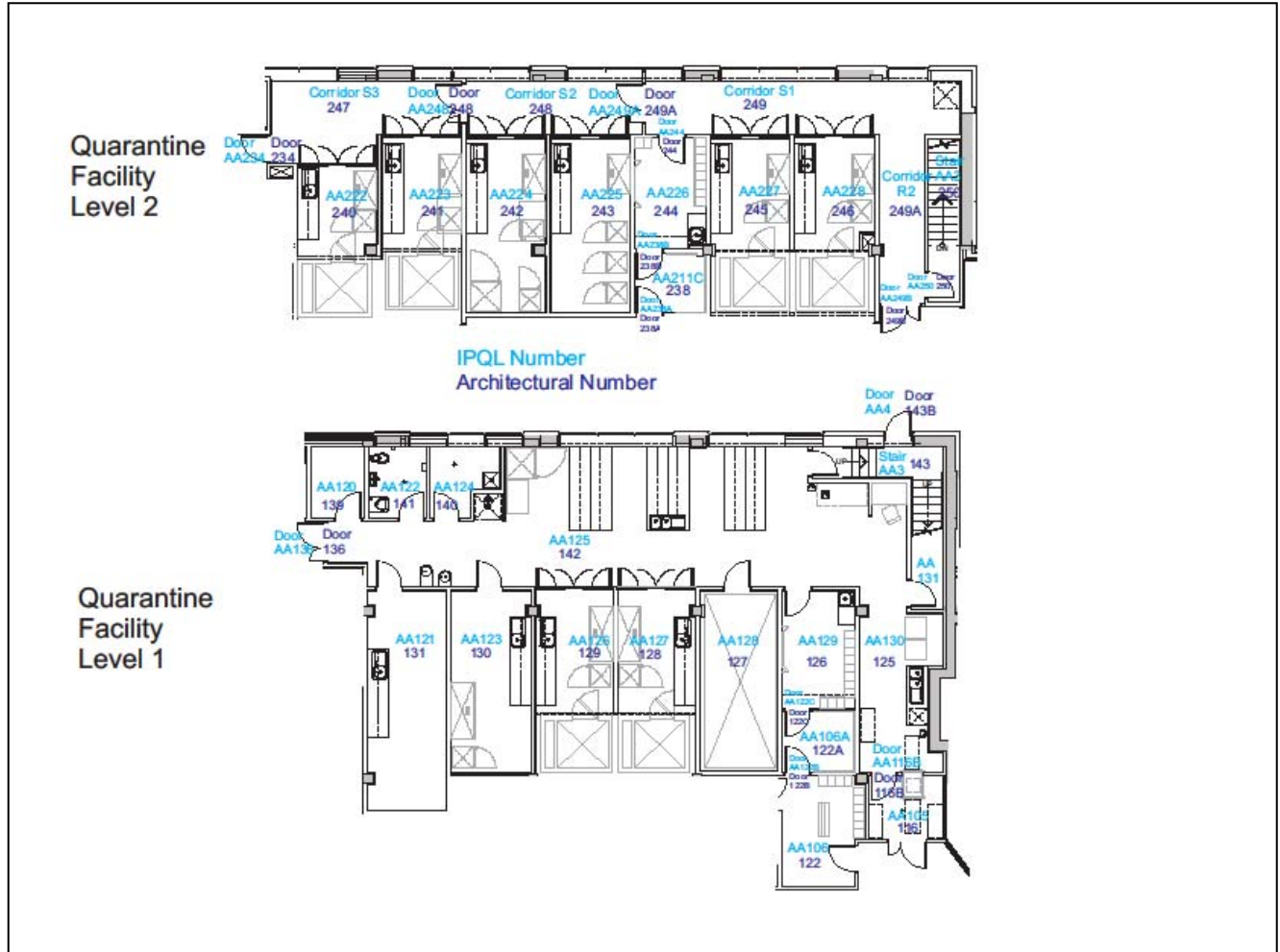
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Appendix 3





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