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Drawings Review Checklist for Plant Pest Containment Facilities

Facility: _____

Rooms: _____

Items to Consider		Yes	No	N/A	Plan #
Overall Design					
1	Containment barrier outlined and appropriate				
2	Office area located outside of laboratory				
3	Entry and exit is to be via an anteroom.				
4	Insect traps to be provided in the anteroom of the containment zone.				
5	Clean/Dirty change area separated by a walk-through shower (if required)				
6	Double door pass-through autoclave with interlocking doors or visual/audible alarm (if required)				
7	Tight-fitting doors to be provided to deter ingress or egress of arthropods.				
8	Large door to allow entry of equipment				
9	Interlocking door system (with manual override) or SOPs				
10	Decontamination ports (optional)				
11	Airlock area for gaseous decontamination (optional)				
12	Dunk tank (optional)				
13	Pass through (optional)				
Surfaces (Specifications)					
1	Able to withstand disinfectants				
2	Continuous (can have welded seams)				
3	Seal maintained between floor and walls (cove floor finish 15cm up the wall is recommended)				
4	Floor slip resistant				



Perimeter					
1	Containment zone to be screened or sealed for PPC-1 and PPC-2, and sealed for PPC-3 and PPC-2 arthropod containment zones.				
2	All penetrations are sealed or screened at the containment perimeter (verify the specification for product detail) -Water plumbing -Gas, etc.				
3	Windows (if present) to be sealed or screened and provide the proper level of security				
Air Handling					
1	Pressure monitoring devices provided at the laboratory zone entrance to monitor negative pressure between containment zones.				
2	Pressure point reference (to what?; corridor, clean change area)				
3	Room static pressure monitoring lines provided with filters of at least equal efficiency to HEPA filter.				
4	Alarm to be provided inside/outside the laboratory to signal air handling systems failure				
A) Supply					
1	Separate from other areas of lower containment or, if combined with areas of lower containment provided with a bubble tight damper or HEPA filter after the connection (e.g. downstream from the connection)				
2	Equipped with motorized bubble tight damper or HEPA filter for backdraft protection				
3	Equipped with bubble tight dampers to permit gaseous decontamination – can be same bubble tight dampers as required for backdraft protection and for isolation of HEPA filters				
4	Bubble tight damper and HEPA filter to be located close to containment barrier				
5	Supply ducts located at least 1.5m from BSC or equipped with diffusers				
6	Location of supply does not interfere with inward directional airflow				
7	Interlocked with exhaust to prevent positive pressurization				
8	Ductwork between the room perimeter and bubble tight damper sealed with Class A (SMACNA)				
9	Air flow control device and duct sensor located upstream of the supply bubble tight damper or HEPA filter				
B) Exhaust					
1	Separate from other areas of lower containment or, if combined with areas of lower containment provided with a bubble tight damper or				



	HEPA filter before the connection (e.g. upstream from the connection)				
2	HEPA filtered				
3	Equipped with bubble tight dampers to permit gaseous decontamination – can be same bubble tight dampers as required for backdraft protection and for isolation of HEPA filters				
4	Bubble tight damper and HEPA filter to be located as close to containment barrier				
5	Exhaust ducts located at least 1.5m from BSC or equipped with diffusers				
6	Interlocked with supply to prevent positive pressurization				
7	Ductwork between the room perimeter and bubble tight damper sealed with Class A (SMACNA)				
8	Air flow control device and duct sensor located downstream of the bubble tight damper or HEPA filter				

Laboratory Services

1	Communication system between containment area and outside support area				
2	Water supply control located outside of containment				
3	Hands-free hand washing sink located at point of exit				
4	Emergency eyewash facility in accordance with applicable regulations				
5	Emergency shower (if applicable)				
6	Drainage traps required to be deep seal depth in considerations of air pressure differentials (15 cm P-traps are recommended)				
7	Dedicated drainage systems				
8	Drains connected to validated treatment system must be sloped towards sterilization system to ensure gravity flow; consideration should be given to the installation of valves to isolate sections for decontamination; piping to be heat and chemical resistant consistent with application; joints should be by thermo/chemical fusible means or welding to ensure integrity of entire system				
9	Plumbing vent lines (including effluent sterilization system) to be appropriately screened or filtered to prevent ingress and egress of arthropods.				
10	Plumbing vent lines to be independent of lower containment plumbing lines or to be provided with HEPA filters when connected with laboratories of lower containment				
11	Plumbing vent lines to be heat resistant				
12	Power circuit breaker outside containment				



13	Autoclave condensate drain located on dirty side (or clean side, when provided with a closed connection)				
14	Autoclave to be equipped with a cycle log recorder (to record time, temperature and pressure)				
15	Critical equipment supported by the emergency generator				
16	Emergency lighting to be provided				
HEPA Filter Housings					
1	Provided with a bubble tight damper for isolation on the air inlet and outlets				
2	Provided with fumigation ports upstream and downstream				
3	Provided with upstream injection port and downstream access port for scanning purposes				
4	Leak tight				