



1. Hazards

Cleaning products and chemical hazards.
Ergonomic hazards e.g. lifting shifting equipment etc
Sharps waste
Biological hazards
Chemical hazards.
Electrical hazards

2. Protective & Emergency Equipment Required

Gloves, safety glasses and laboratory gown

3. Before You Start

Tasks that need to be performed are itemised on the appended forms; daily, weekly, monthly, quarterly and annual cleaning and maintenance. This procedure lists the requirements and refers to the SWP for the equipment for detailed maintenance instructions.

Ensure you have been trained for OGTR behavioural guidelines. This training is captured on your signed Facility Induction and Training form.

Ensure you have completed the online biosafety training modules and provided completion certificates to the facility manager. Both module 1 and 2 are required for all workers in PC2 and OGTR certified facilities.

Ensure you have been trained with other procedures referred to in this procedure, including:

- Preparation and use of disinfectants
- Waste disposal.

4. Always

Consult the procedures for more specific and safe instructions prior to proceeding.

Ask if you are unsure.

5. Never

Perform a task that you have not been trained for.

6. Job Steps

Daily Tasks

To be carried out by the individual lab user.

General areas, surfaces and equipment:

All workers are responsible for maintaining work areas in a clean and tidy state. Glassware and items shall be cleaned and put away at the end of every day.

All work areas used, including benches and equipment, must be decontaminated at the end of the task or the end of the day, if the task is not completed at the end of the working day.

.

Instructions for the preparation and use of disinfectants are detailed in the SWP for 'Preparation and Use of Disinfectants'. 80%v/v ethanol, hyperchlorite and Virkon powder are provided by technical staff. The preparation and use of Virkon and hyperchlorite solutions is the responsibility of the individual worker, as these solutions must be made fresh daily or weekly according to the SWP.

A summary of common disinfectants provided and contact time is detailed in the table below. Other appropriate solutions for decontamination can be found in Appendix F of AS2243.3:2010

	Disinfectant	Contact time
Bacteria	80%v/v Ethanol	30sec
Fungi and spore forming bacteria	Virkon or 10% hyperchlorite	10min
Body Fluids	Virkon	10min

When using a disinfectant that requires a long contact time, ensure the correct contact time by flooding the bench with enough disinfectant for bench to remain wet for 10min (or required contact time). Disinfectant products may change depending on price and availability but must always be suitable for the infectious agent present. Always follow the manufacturer's instructions. Also refer to Laboratory manual or CSU Biosafety Manual and Guidelines 2018

For disinfecting surfaces and areas using biological material not mentioned above, e.g. parasites. An appropriate decontamination method, including solution and contact time shall be developed using current published scientific literature. This decontamination method shall be included into any risk assessments and procedures involving this material.

Hand Washing Basins:

All hand wash basins are to be cleaned as required. This is a user responsibility. Scrub with a scourer and cleaning product if needed. Rinse clean.

Ensure chlorhexidine hand wash and paper towel are available. Technical staff refill stock cupboards with these supplies fortnightly. It is a user responsibility to ensure the supplies are at the sinks.

Sink and Drain Mesh Screens:

Workers are required to ensure mesh screens provided are in place and used in facilities where required, such as quarantine, plant and insect facilities. Workers are required to ensure these mesh screens are clean and not blocked with debris.

If the mesh screens are blocked with debris they shall be removed and rinsed clean with cold water into a bucket or other container. The debris in the bucket shall be treated as laboratory waste and decontaminated as per SWP before disposal.

Waste Segregation and Disposal:

All workers in PC2 and OGTR certified facilities must be trained for waste disposal by an appropriate assessor using the facility waste disposal SWP prior to commencing work.

All waste from PC2 and OGTR certified facilities must be decontaminated using an appropriate method, e.g. sterilisation via autoclave or chemical disinfection prior to disposal unless the final method of disposal is also an approved method of decontamination as mentioned in the OGTR guidelines, i.e. incineration.

All decontaminated waste must be disposed of at the end of the day or when reasonably practical, e.g. the next day if waste is decontaminating overnight. Waste must not be left to accumulate in the sinks or on the floor.

Autoclaves:

All workers in PC2 and OGTR certified facilities must be trained to use the autoclaves correctly by an appropriate assessor using the facility autoclave SWP prior to commencing work. Due to the risks with high temperature, pressure and to ensure all workers are disposing sterilised waste correctly the process for autoclave training is detailed below:

- Training in the lab with an approved assessor using the SWP for operating the autoclaves. The assessor will run the autoclave with waste in this training session.
- Complete two supervised runs of the autoclave by a trained assessor, including final disposal of waste outside the laboratory. The assessor will provide prompts to the trainee to help if needed. On the last supervised run of the autoclave, workers are expected to use the autoclave and dispose of the waste without any prompts.

Laundry:

Laboratory coats, gowns and other linen that require washing are to be placed in the laundry basket ready to be sent to the laundry.

Laboratory coats that are contaminated, or suspected to be contaminated with chemical or biological material shall be decontaminated appropriately for the contamination prior to laundering.

- Biological contamination shall be treated via autoclaving or chemical decontamination as mentioned above in 'general areas, surfaces and equipment'.
- Chemical contamination:
 - Refer to the chemical SDS.
 - Solvents – leave coat in fume cupboard to evaporate.
 - Corrosives – neutralise chemical and wash off with water.
 - Toxic – treat as chemical waste.

Laboratory coats are autoclaved by technical staff before taking to the laundry. Laundry is conducted once a fortnight.

All laboratory coats are labelled with a name tag. Coats without a name tag are autoclaved by technical staff and placed into the laundry.

All laboratory coats are stored on designated coat hooks in the facility. Coats found on benches or chairs are autoclaved by technical staff and placed into the laundry.

Fridge and freezer:

Workers are responsible to update manifests on the front of each unit when new items are brought into the unit or delete when discarded.

Remove any ice built up any time you open the freezer using a scraper. Clean up floor and display wet floor sign as required.

Storage:

All items must be stored in containers that are easily decontaminated.

Plastic tubs for storing items are provided by the technical staff for the facility and can be collected by workers from the laboratory store.

Cardboard, polystyrene and packing materials shall be disposed of as waste.

Chemical SDS's:

All workers must complete ChemFFX training prior to commencing work and are responsible for maintaining their chemical manifest on ChemFFX.

Research groups are responsible for maintaining their own physical copy in the laboratory of chemical SDS's used in their team.

Technical staff provide a folder containing ChemFFX mini SDS's which is accessible to all workers in the laboratory. This folder is updated annually.

Equipment:

Workers are to report any faults with equipment or the building to technical staff and the facility manager as soon as the fault is identified.

If necessary an accident/incident report may be submitting using SCRIM.

Fortnightly Tasks

To be carried out by facility manager or delegate.

The form in Appendix II is to be completed and filed for laboratory records.

General Areas:

Check general areas and surfaces are clean. Follow up with workers if required.

Check stocks of hyperchlorite, 80%v/v ethanol and virkon powder, refill stocks and order if required.

Conduct laboratory induction for workers.

Hand Washing Basins:

Refill stock cupboards with chlorhexidine hand wash and paper towel supplies..

Laundry:

Collect any coats without a name tag or those not stored on designated hooks and place in laundry basket.

Autoclave all laundry before sending off for washing. Pack laundry bag. Deliver to laundering service. Unpack and put away any clean laundry that has been returned.

Autoclave:

Check that the autoclave is clean and functioning well. Refer to log sheet. Check log book has been filled. Report any errors.

Print new autoclave log book sheets if required.

Conduct autoclave training for workers according to SWP.

Waste Disposal:

Conduct waste disposal training for workers according to SWP.

Place clinical waste bins out at designated collection site. Ensure clinical waste bins are locked and secure.

Monitoring for Pests:

Inspect the floors for evidence of insect/rodent infestation. If insects are noticed spray a barrier spray inside and outside of each exit door and record on the pest control record sheet in Appendix VI. Submit BIEMS for

any pest control required e.g. baits. Any live insects should be killed with a fast acting insecticide and disposed of.

Inspect high areas for signs of insects, e.g. cobwebs. Log BEIMS for cleaners to treat high areas.

Check glasshouses and growth chambers for insects or signs of unintended infestation. If there are signs of insect infestation, place sticky traps in glasshouse or growth chamber. Report any signs of unintended plant infestation to the facility manager or delegate. Treat infested material appropriately, e.g. biological waste which can be sterilised in an autoclave. Check that all unwanted plant/soil material has been removed to discourage and prevent the spread of infestation.

Reverse Osmosis (RO) Water Unit:

Check the RO water unit panel and ensure it is operating within the correct parameters. Use a conductivity meter to test conductivity if required.

Report any faults to the facility manager or delegate to arrange for a service.

Monthly Tasks

To be coordinated by facility manager or delegate – in addition to weekly tasks.

The form in Appendix III is to be completed and filed for laboratory records.

Autoclave:

Complete spore testing as per SWP. Ensure spore test records in Appendix VII are completed. Report any faults to facility manager.

Dishwashers and Glasswashers:

Check neutraliser quality and ensure there are no crystal formations. Replace neutraliser if expired or if crystals have formed.

Quarterly Tasks

To be coordinated by facility manager or delegate – in addition to weekly tasks.

The form in Appendix IV is to be completed and filed for laboratory records.

General Areas:

Check surfaces and areas (walls, floor and ceiling) are sealed and in good condition. Report any areas of damage to the facility manager and submit a BEIMS to have the damage rectified.

Autoclave Cleaning and Maintenance:

Clean door seal as per SWP.

Centrifuge Cleaning and Maintenance:

The centrifuges should be checked and cleaned by users if necessary. Minor preventative maintenance, e.g. lubricating O rings can be actioned by technical staff if required.

Fridge and Freezer Inspection:

Inspect and report any problems to facility manager

Safety Showers and Eye Wash Stations:

Activate safety showers and eye wash stations, unless risk assessed for a different time frame.

Spill Kit Check

Check that all spill kits are complete and in good order, i.e. have not expired.

Monitoring for Pests

Check for evidence of rodents and insects. Spray a barrier spray of surface insecticide inside and outside of each exit door. Record in pest control record sheet in Appendix VI. If pests are detected, submit a BEIMS for pest control outside the facility, e.g. insect spray or baits.

Check operation and condition of bug zappers in ante rooms. Report all faults to facility manager.

Check growth chambers and glasshouses for unintended pests. Ensure sticky insect traps are replaced if required.

Growth Chambers:

Check operation and condition of growth chambers. Report any faults to facility manager.

Screens and filters:

Check screens for build-up and debris. Report any damaged screens to the facility manager. Submit a BEIMS to have screens repaired.

Clean small removable screens if required e.g. screen between QAP and corridor.

- Remove screen, rinse with cold water, shake dry or pat dry with a paper towel. Put screen back in place.

Clean large removable screens, e.g. large screens over vents and in glasshouses.

- For large screens that are difficult to reach – report and submit a BEIMS for cleaning in high areas if required.
- For large screens that are easily accessible. Remove screen and use a hose to rinse clean with water. Allow to dry before putting back in place.

Ensure mesh pots for sinks and drains are in place and in good condition.

Trade waste treatment of water in chemical pits

This is the responsibility of DFM. Subcontractors are employed to restock the chemicals which treat the water in the plant rooms. Report any trade waste smells as a BEIMS to DFM.

Annual Tasks

To be coordinated by facility manager or delegate – in addition to quarterly and weekly tasks.

The form in Appendix IV is to be completed and filed for laboratory records.

Inspection of the chairs/ stools:

All laboratory chairs are to be inspected for cracks in the upholstery and removed if cracked.

Electrical appliance testing:

Testing of all portable electrical appliances is to be done annually according to the Electrical Safety Policy.

Safety Showers and Eye Wash Stations:

Complete flow rate testing for safety showers and eye wash stations. Record results on Faculty of Science & Health Safety Shower and Eye Wash Flow Testing Record Sheet.

Report any faults to laboratory manager and submit a BEIMS request to DFM.

Autoclaves:

Ensure compliance records are up to date.

Annual service and calibration is provided by a qualified service agent. Ensure calibration certificate is displayed clearly on the wall closest to the autoclave.

Biosafety cabinets:

Annual service and maintenance provided by a qualified service agent. Ensure test results are displayed clearly on the unit.

Cold Storage:

Check cold storage to ensure items are stored and labelled correctly.

-80 freezers thawed and filters cleaned. Other annual service and maintenance requirements are performed by an appropriate service agent.

Update insurance values. Contents valuation for cold storage and other temperature controlled environments is reviewed and submitted to the facility manager.

Compliance testing records:

All paper work relating to compliance testing, e.g. for autoclaves, Biological Safety Cabinets (BSC) and fume cupboards should be filed in the Laboratory Manual.

Chemical and SDS checks:

Check that the SDS folders and ChemFFX manifest is up to date.

Secure all chemical storage areas during university closure over Christmas Break.

Clean out cabinets and inspect, discard unwanted chemicals, report faults with cabinets to Facility Manager.

Glasshouse screens and filters

Filters in the glasshouse are replaced on an annual basis. This is a DFM responsibility to organise with a contractor. This service must also include appropriate decontamination and disposal of the filters.

Screens in the glasshouse are cleaned on an annual basis or when a project finishes by the individual users. If required, appropriate disinfectants shall be used (Appendix F in ASNZS2243.3:2010).

7. When You Finish

Sign off all completed tasks on appropriate record sheets.

8. References

Faculty of Science & Health Cleaning and Maintenance Guidelines.

AS/NZ Standard 3760:2003 In-service safety inspection and testing of electrical equipment.

AS/NZ Standard 2243.3:2010 Safety in Laboratories

Electrical Safety Policy and Procedures-Policy Library

SWP Waste disposal

SWP Preparation and use of disinfectants.

SWP Biological spill

SWP Chemical spill

SWP Autoclave Operation

SWP Autoclave Spore Strip Test


SWP Centrifuges

Risk assessment for safety shower testing

Faculty of Science Safety Shower and Eye Wash maintenance

OGTR Behavioural Guidelines

APPENDIX I: Daily Maintenance and Cleaning Schedule for PC2 and OGTR Certified Facilities – Record Sheet.

 <p>Charles Sturt University</p>	<p>Faculty of Science & Health</p> <p>DAILY MAINTENANCE AND CLEANING SCHEDULE FOR PC2 AND OGTR CERTIFIED FACILITIES</p> <p>Building: _____ Rooms/Area: _____</p>
--	---

Item	Task	Procedure or list the SWP identifier	Person Responsible
Work area including sink	Disinfect after biological material has been used or spot clean as necessary. Ensure work areas are clean and tidy. All glassware and items cleaned and put away.	OGTR behavioural guidelines Facility induction SWP Maintenance and cleaning in PC2 and OGTR certified facilities. SWP Preparation and use of disinfectants.	Each user
Hand washing basins	Clean as required. Replace chlorhexidine hand wash and paper towel as required. Identify items that need reordering to technical staff.	Facility induction OGTR behavioural guidelines	Each user
Autoclave	Verify the effectiveness of each cycle using a Thermolog strip or spore test (1 st of each month) with each cycle. Ensure all autoclave runs are recorded in the autoclave log sheet. Operate the autoclave in accordance with SWP and training.	Autoclave SWP	Each user
Sink and drain mesh screens	Ensure mesh screens are in place and clean.	SWP Preparation and use of disinfectants.	Each user
Decontaminated waste disposal	After disinfection discard the decontaminated waste into the appropriate waste bin.	Waste disposal SWP OGTR behavioural guidelines	Each User
Chemical waste	Collect all waste in appropriate container, label and store as per SWP.	Waste disposal SWP	Each User

Decontaminate laundry and put out for collection	Autoclave or disinfect any contaminated laundry. Place in the anteroom laundry bag.	Facility induction. OGTR behavioural guidelines.	Each User
Faults with building or equipment reported to Facility Manager		Facility induction. As per Laboratory Manual General Laboratory Maintenance	Each User Facility Manager to initiate appropriate action
Update Fridge and Freezer manifests as necessary	Update logs on front of each unit as changes are made.	Facility induction	Each User
Freezer door ice build up	Scrape ice off with scraper. Clean any ice and or water from floor. Display wet floor sign if the floor is wet.	Facility induction	Each User
Storing items	Store items in plastic tubs. Ensure all cardboard, polystyrene and packing materials are disposed of.	Facility induction OGTR behavioural guidelines	Each User
Print and file SDS's for any new chemical introduced into the facility	Print SDS from ChemFFX and file in the research group SDS folder. Update ChemFFX manifest	ChemFFX training Facility induction	Each User

APPENDIX II: Fortnightly Maintenance and Cleaning Schedule for PC2 and OGTR Certified Facilities – Record Sheet.

 <p>Charles Sturt University</p>	<p>Faculty of Science & Health</p> <p>FORTNIGHTLY MAINTENANCE AND CLEANING SCHEDULE FOR PC2 AND OGTR CERTIFIED FACILITIES</p> <p>Building: _____ Rooms/Area: _____</p>
--	---

Fortnightly tasks are to be performed in addition to daily tasks.

Week Beginning:	
------------------------	--

Item	Requirement	Procedure or list the SWP identifier	Action Required	Initial as completed
General Areas	General areas are clean and tidy Check disinfectant stocks. Order if required. Induction and laboratory training completed. Training records signed.	Facility induction		
Hand wash basin	Restock cupboards with hand washing supplies	Facility induction OGTR behavioural requirements		
Laundry	Collect coats and autoclave before delivering to laundry service provider. Put away any clean laundry as received.	SWP Cleaning and Maintenance of PC2 and OGTR certified facilities.	Autoclave prior to sending out. Fill out form and attach to bag.	
Put all full clinical waste bins out for collection. Replace with new bins	Secure full bin with padlock or cable tie. Place bins out for collection at designated area	SWP: Waste disposal		
Autoclave	Check and clean if necessary. Check log books are up to date Print new log book sheets if required. Complete autoclave training provided and ensure individual training records are signed.	SWP: Autoclave operation		

Item	Requirement	Procedure or list the SWP identifier	Action Required	Initial as completed
Inspection for pests	Inspect the facility for evidence of insect pests. Fill in pest control record sheet for any products applied. Any live insects should be killed with a fast acting insecticide and disposed of.			
Monitoring of RO water unit	Look at screen on unit and check conductivity - report any alarms.			

APPENDIX III: Monthly Maintenance and Cleaning Schedule for PC2 and OGTR Certified Facilities – Record Sheet.

 <p>Charles Sturt University</p>	<p>Faculty of Science & Health</p> <p>MONTHLY MAINTENANCE AND CLEANING SCHEDULE FOR PC2 AND OGTR CERTIFIED FACILITIES</p> <p>Building: _____ Rooms/Area: _____</p>
--	---

Month	
--------------	--

Monthly tasks are to be performed in addition to fortnightly tasks.

Item	Requirement	Procedure or list the SWP identifier	Action Required	Initial as completed
Autoclave spore testing	Complete spore testing and fill in 'monthly spore test' record sheet.	SWP Spore Testing		
Dishwashers and Glasswashers	Check neutraliser and replace if expired or crystals have formed			

APPENDIX IV: Quarterly Maintenance and Cleaning Schedule for PC2 and OGTR Certified Facilities – Record Sheet.

 <p>Charles Sturt University</p>	<p>Faculty of Science & Health</p> <p>QUARTERLY MAINTENANCE AND CLEANING SCHEDULE FOR PC2 AND OGTR CERTIFIED FACILITIES</p> <p>Building: _____ Rooms/Area: _____</p>
--	---


Month	
--------------	--

Quarterly tasks are to be performed in addition to monthly and fortnightly tasks.

Item	Requirement	Procedure or list the SWP identifier	Action Required	Initial as completed
General Areas	Check surfaces are sealed and in good condition.	OGTR requirements		
Safety shower and eye wash stations	Activate safety shower/face wash check	SWP Safety Shower and Eye Wash Testing RA: Safety Shower and Eye Wash Testing	Fill in checklist log	
Centrifuge cleaning	Minor maintenance, e.g. lubricating O rings	SWP Centrifuge		
Inspection of chairs/stools	Inspect for cracks in upholstery, remove if cracked			
Autoclave	Clean autoclave chamber Clean door seal	SWP Autoclave		
Fridge and freezer	Inspect			

Item	Requirement	Procedure or list the SWP identifier	Action Required	Initial as completed
Spill kit check	Check that spill kits are complete and in good order			
Pest monitoring.	Inspect the facility for evidence of insect pests. Record in pest control record sheet any products applied, Check operation of bug zappers.		Barrier spray of surface insecticide inside and outside of each exit door note dates sprayed.	
Growth chambers	Check operation and condition	Growth chamber operation manuals		
Mesh Screens and filters	Check and clean as required. Check condition and report any damaged screens to facility manager.			
Trade waste	Check with DFM that trade waste equipment is serviced. Submit BEIMS for any bad smells.			

APPENDIX V: Annual Maintenance and Cleaning Schedule for PC2 and OGTR Certified Facilities – Record Sheet.

 Charles Sturt University	Faculty of Science & Health ANNUAL MAINTENANCE AND CLEANING SCHEDULE FOR PC2 AND OGTR CERTIFIED FACILITIES
	Building: _____ Rooms/Area: _____

Annual tasks are to be performed in addition to other scheduled tasks.

Item	Requirement	Procedure or list the SWP identifier	Comments	Action Required (Request in BEIMS if needed)	signature	Date
Electrical appliance testing	As per Electrical Safety Policy and Procedure					
Autoclave pressure vessel testing and certification	Annual inspection of all pressure vessels	Inspection by approved boiler inspector	Display each certificate near the pressure vessel	Facility manager to arrange inspection, and will display certification near the pressure vessel and local laboratory manual as per regulations		
Fume cupboard certification	Annual inspection and certification of all Fume cupboards	Inspection by NATA accredited body		Certification paperwork to be filed in local Lab manual		
Biosafety cabinet certification	Annual service	Provided by appropriate service agent.	Display test results on unit.			
Checking contents of fridges and freezers against cold storage logs.	Each person responsible for items in the fridge must view the items and update the cold storage log.		Facility manager to coordinate.			
- 80 freezer maintenance	Thaw Clean filter	Annual service provided by				

Item	Requirement	Procedure or list the SWP identifier	Comments	Action Required (Request in BEIMS if needed)	signature	Date
	Alarm battery check. Annual service	appropriate service agent.				
Check compliance testing records and file	Check compliance testing completed and file certification documents in Laboratory Manuals		Testing will be conducted by external contractor			
Chemical check	Check chemical storage areas and ensure items are stored and labelled correctly. Manifests and mini SDS folder updated.					
Inspection of chairs/stools	Inspect for cracks in upholstery, remove if cracked					
Safety Shower and Eye Wash station	Check flow rates and complete records.					
Inspect dangerous goods cabinets	Inspect all DG cabinets . report faults to facility manager					
Glasshouse screens and filters	Clean screens. Submit BEIMS for filter replacement.					
Review this document	Add any new cleaning and maintenance tasks and delete those no longer required					

APPENDIX VI: Pest Control Record Sheet.



Pest Control Record Sheet

Building:

Room Area:

Date	Pest Check – record any evidence of pests	Products Applied	Product Expiry Date	Name of person applying product	BEIMS Reference #	Date BEIMS completed

APPENDIX VII: Monthly Autoclave Spore Test – Record Sheet.



**Faculty of Science
& Health**

Monthly Autoclave Spore Test

Version 1

Autoclave Details:		Autoclave Location and Facility Certification Details	Year of Testing:
Make:	Common Name:	Building/room number:	
Model:	Serial Number:	OGTR CoA:	

Month	Spore Test & Brand type	Batch No. & expiry date	Incubation conditions	Date of test	Results	Test Performed by:	Signature	Additional Comments
Jan								
Feb								
March								
April								
May								
June								
July								
Aug								
Sept								
Oct								
Nov								
Dec								

VERSION CONTROL

Version number	Date	Short description of amendment	Author	
1.0	2012	Creation and implementation of Procedure	L. Diment	
2.0	2012	Implementation for Building 30	K.Munn	
3.0	2013	Implementation of procedure for building 289	C Carlisle	
3.1	2018	Implementation of procedure for all Faculty of Science & H PC2 and OGTR certified laboratories	C Carlisle	
3.2	2018	Incorporate live insects sprayed and removed in fortnightly check on advice from IBC PO	K Munn	
3.3	2019	Added monthly checks for dishwashers and glasswashers	C Carlisle	
