

Decontamination of vehicles and equipment

All vehicles and equipment exiting a known or potentially contaminated site are to be decontaminated to prevent the spread of pests, weeds or diseases. Decontamination of vehicles and equipment remaining on a site may also be required as part of a biosecurity emergency operation.

The method, including type of detergent/disinfectant applied, and level of decontamination required should be based on a risk assessment.

Planning considerations

1. Prior to deployment, inform and reach agreement from suppliers/owners about the decontamination process including the requirement to arrive clean, the types of chemicals being used, and replacement of vehicle air filters.
2. Develop a decontamination plan (which may be part of the gate plan). This plan should include:
 - a. decontamination site type – temporary, permanent facility (e.g. at waste depot), commercial facility (e.g. truck wash)
 - b. level of decontamination required
 - c. scale/usage – consider engaging the Engineering Functional Area (for design and/or establish)
 - d. chemical type(s)
 - e. resources including personnel, PPE, equipment, water supply
 - f. topography and layout, including water systems
 - g. environmental impacts and mitigation e.g. liquid and PPE waste disposal, chemical spill plan
 - h. types and sizes of vehicles being contracted or used e.g. preference for enclosed cabins and non-tracked machinery (to reduce decontamination times)
 - i. organic status of site as use of decontamination chemicals may be restricted

Prior to use

1. Assess vehicles and equipment, including:
 - a. removal of any unnecessary items (internal and external)
 - b. pervious surfaces covered
 - c. removal of gross material prior to entry
 - d. replacement of items with disposable alternatives (e.g. tarps)
 - e. access to spare air filters (if required based on risk; sealed in plastic bag and leave in cabin of vehicle)
 - f. sufficient fuel (and ability to access fuel without exiting the site)
2. Drivers are required to:
 - a. be inducted and briefed on task, safety and biosecurity requirements
 - b. provided with and trained in use of PPE (based on risk) if alighting from the vehicle, or remain in vehicles from entry, keeping vents closed, until exiting the site, to minimise biosecurity risk

Preparation

1. Position vehicle/equipment safely and ensure stability e.g. chock wheels, brake applied
2. Remove excessive gross material – ideally done away from decontamination area and where material can be left or collected for disposal. Use dry cleaning methods before wet where possible.
3. Detach removable items/parts to decontaminate individually
4. Dispose of disposable items e.g. tarps

Decontamination – external surfaces

1. Start at top of the vehicle or equipment and work toward the ground
2. Moving parts of vehicles or equipment e.g. wheels, tracks, tipper tray, buckets have to be moved during decontamination to access all areas
3. Wet – apply disinfectant/detergent and leave for appropriate contact time, usually 10 minutes. Rinse with clean water
4. Other techniques e.g. heat, fumigation for tools, equipment and other things. Ensure exposure requirements are met as required by disease/pest guidelines

Decontamination – internal surfaces

1. Internal surfaces of vehicles will only require decontamination if they have been exposed to potential contamination whilst on site
2. Protective covers on internal surfaces e.g. seat covers should be removed and disposed/cleaned
3. Remove solid materials with a vacuum, cloth or brush
4. Air filters should be removed and replaced or cleaned (if required). A skilled technician may be required.
5. Surfaces can be wiped or sprayed with 70% alcohol or another appropriate disinfectant.
6. If heat is an effective decontaminant, seal internal compartments and monitor that they have reached the required temperature and duration.

Records

1. Record chemical use and update inventory
2. Record damage to and disposal of any item belonging to the vehicle/equipment
3. Vehicles and equipment exiting sites will be inspected and signed out in the gate log
4. Appendix 1 can be used as a guide to ensure all contamination points are checked

Resources

Listed are resources/facilities that may be required for decontaminating vehicles and equipment. Resource requirements will vary with task, location and risk assessment. Some resources (not unique to decontamination) may already be present at [established gates](#).

| Item | Description |
|---------------------------------------|---|
| PPE – standard | Suitable for site biosecurity and safety requirements. Refer to Decontamination kits for personnel . |
| PPE – for decontamination task | Wet weather gear (top and bottom); sturdy gloves; respiratory and eye protection as per SDS; goggles must be worn to protect eyes; Hi-Viz vest. |
| Chemical/s & SDS | Suitable chemical to decontaminate vehicles/equipment. Each chemical must have a safety data sheet (SDS) |
| Work area | Good drainage and/or liquid waste capture and holding capacity |
| Water supply | Varies with location e.g. mains supply, portable/inflatable storage tanks, mobile tankers |
| High pressure cleaner | High pressure cleaner with long hose, lance and fuel |
| Pumps & hoses | Volume pump, hose and nozzle for spraying disinfectant |
| Cleaning equipment | Equipment to remove gross debris e.g. broom, scraper, screwdriver Dry cleaning equipment e.g. vacuum, compressor & blower |
| Tools | To remove parts, covers or guards |
| Instructions | Operator or workshop manuals for guidance removing parts and cleaning |
| Wheel chocks | |
| Torch | Including batteries (and spares) |
| Lighting towers | If work after dark is required |
| First aid kit | Suitable for location/conditions, may include additions (e.g. snake bite kit) |
| Data collection forms | Event log , Gate log , Decontamination checklist (Appendix 1) |
| Waste disposal | Suitable for collection of decontamination waste e.g. tarps, PPE |

Safety

Risks to personnel involved in the decontamination process include:

- [Fatigue](#)
- [Manual handling](#)
- [Use of personal protective equipment](#)
- [Working around plant and equipment](#)

References

General

- [Visiting a farm: your general biosecurity duty](#)
- [Farm Biosecurity – People, vehicles & equipment - videos](#)

Animals

- AUSVETPLAN - [Decontamination operations manual](#)

Plants

- PLANTPLAN - [Disinfection and decontamination guidelines](#)

Aquatic

- AQUAVETPLAN - [Operational procedures manual - Decontamination](#)
- Primefact 1290 - [Make 'clean' part of your routine](#)
- Procedure - [Biosecurity – Aquatic fieldwork hygiene](#)

Appendix 1: Vehicle and machinery decontamination checklist

Instructions: Checklist can be used as a guide or completed as evidence of decontamination.

Site:

Vehicle/Equipment:

Date:

Decon team:

SAFETY – Flat ground Engine off & keys removed Wheels chocked Moving/raised parts secured

| | Contamination point | Decon | | Contamination point | Decon | |
|----------------|-------------------------------------|-------|---------------------------------|---|---------------------------------------|--|
| Body | Step treads | | Wheels & arches | Wheel arches | | |
| | Bumper/s | | | Wheel caps & rims | | |
| | Around fuel tank caps | | | Tyre tread/tracks | | |
| | Around tray body | | | Mudflaps | | |
| | | | | Brakes | | |
| Under carriage | Axles & differentials | | Interior / Cabin | <i>Remove items for disposal/cleaning</i> | | |
| | Struts & stabilisers | | | Foot wells | | |
| | Steering components | | | Seats | | |
| | Chassis rails, inc recesses & holes | | | Air vents | | |
| | Spare tyre & mounts | | | Glove box, centre console | | |
| | Fuel tank | | | Tool boxes | | |
| Engine bay | Front grill | | | Attachments | Boot or recesses, inc spare tyre well | |
| | Radiator, oil coolers | | | | Bull bar | |
| | Top of gearbox | | | | Tow ball | |
| | Battery recess & tray | | | | Winch | |
| | Air filters | | Bucket, blade, boom, ripper etc | | | |
| | Engine mounts | | Hydraulic arms | | | |
| | Engine recesses or manifold | | | | | |