Surat Basin Rail Pty Ltd Joint Venture

Weed Management Plan

REV	Date	Document Status	Originator	CHKD	Project Manager	Legal Review	Project Sponsor
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EXPLANATORY STATEMENT

- This document has been prepared by the AureconHatch, PB, AECOM consortium on behalf of Surat Basin Rail Pty Ltd ABN 55 122 652 as agent for the Surat Basin Rail Joint Venture. In preparing this document, the authors have relied upon and presumed accurate certain information provided by Surat Basin Rail Pty Ltd and specialist subconsultants, and others identified herein. Except as otherwise stated in this document, the authors have not attempted to verify the accuracy or completeness of any such information.

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1. Introduction

1.1 Project Description

The Surat Basin Rail Project (SBR Project) is a new section of railway that will connect the Western Railway System (near Wandoan, 230 km west of Toowoomba) with the Moura Railway System (near Banana, located 130 km west of Gladstone), as shown on Figure 1.

The alignment will be generally within or parallel to a number of existing roads; most notably, Nathan Road, Eidsvold-Theodore Road and the Leichhardt Highway. Elsewhere the rail needs to deviate from the existing road reserves to accommodate the more stringent vertical and horizontal alignments required for rail.

The proposed rail will initially consist of a single track with up to eight passing loops and has been designed to accommodate trains of up to 2.5 km in length.

The Surat Basin Rail Joint Venture (SBRJV) is the proponent for the Project.

It is important to note that the Detailed Design has not been completed at the time of writing this Weed Management Plan and changes as a result of further design progress could occur.

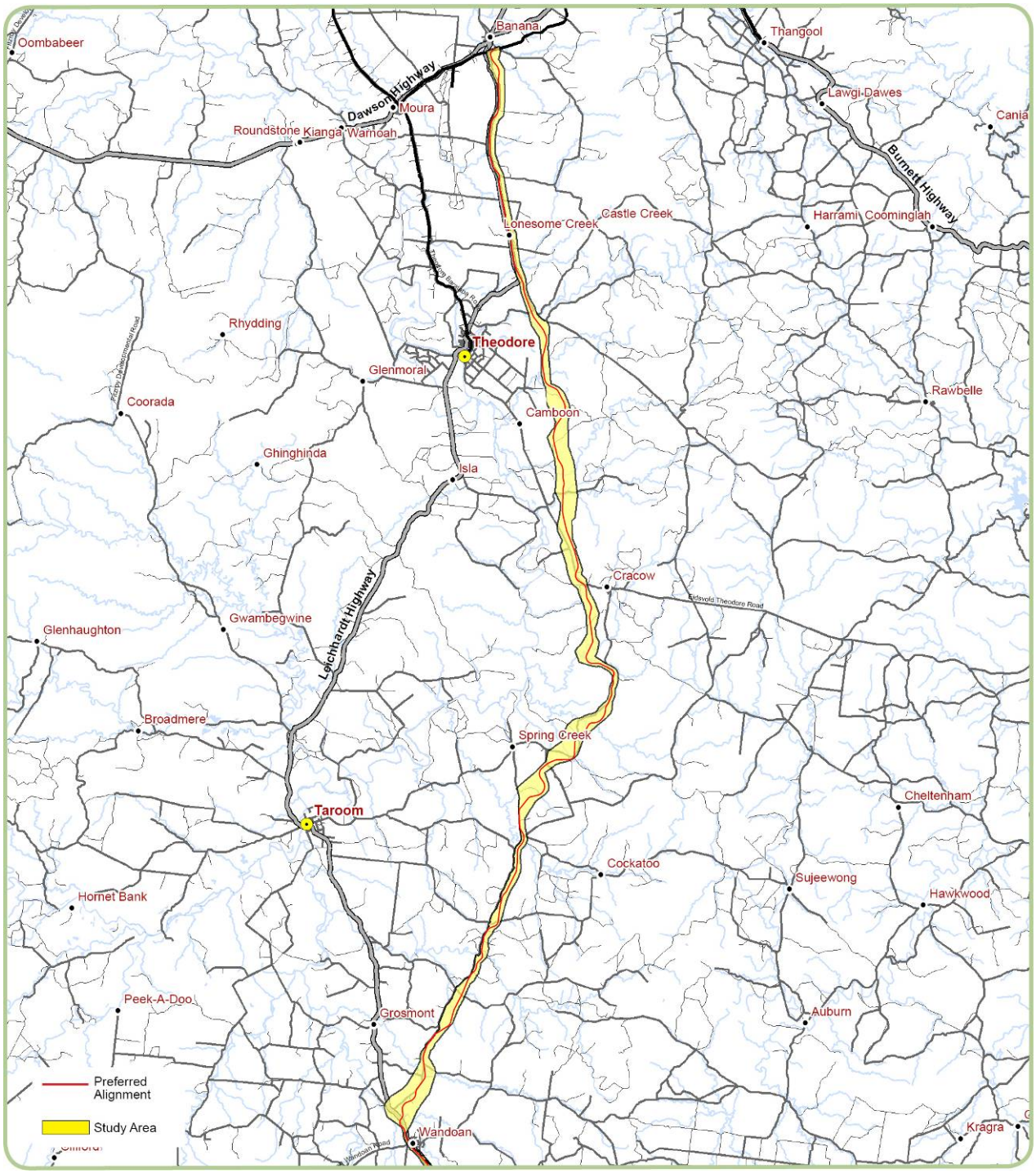

Figure 1: Surat Basin Rail Project Location

1.2 Potential Project Impacts

The SBR Project has the potential to contribute to the introduction or spread of weeds as a result of activities associated with construction and operation.

If left unmitigated, excessive weed growth may:

- Choke waterways and degrade water quality;
- Exclude native plants and animals;
- Increase the risk and severity of fire;
- Reduce grazing and agricultural productivity;
- Reduce the viability of Good Quality Agricultural Land (GQAL);
- Increase land management costs;
- Reduce amenity values; and
- Cause great concern to local councils and communities.

Construction activities that should be considered for their potential to spread weeds and weed seeds include:

- Earthworks;
- Movement of machinery and vehicles both from outside the Project boundaries (e.g. from other Council Shires) and within Project Boundaries (e.g. between properties);
- Dispersal by human access and movement through the area;
- Revegetation; and
- Slashing/mowing.

Operation of the SBR Project also has the potential to assist dispersal of weed species.

1.3 Purpose and Scope

The purpose of this plan is to provide a framework and overarching principles for effective weed management for the SBR Project with the intention of:

- Preventing the spread of existing weed species as a result of activities conducted as part of the SBR Project and for which the SBRJV is responsible;
- Preventing the introduction of new weed species to any area as a result of activities conducted as part of the SBR Project and for which the SBRJV is responsible;
- Fulfilling the statutory obligations outlined in Section 2 including the control and/or eradication of Class 1 and Class 2 pests; and
- Improving the effectiveness of weed control activities through identification, prioritisation and coordination.

This Plan provides broad guidance on how weeds should be managed on the Project site. At the time of writing (September 2009), Detailed Design and Construction Staging have yet to be finalised and as such this Plan is by necessity general and non-prescriptive. Once Detailed Design and Construction Staging have been finalised, this Plan should be reviewed by the SBRJV and /or the Principal Contractor (PC). Further, this should be considered a living document for the life of the SBR Project.

For the purposes of this Plan, weeds include:

- Plants declared under the *Land Protection (Pest and Stock Route Management) Act 2002* (Qld);
- Plants declared under the local laws relevant to the SBR Project area; and
- Plants considered by the relevant local councils to be prioritised in weed management for the SBR Project.

In this preliminary Plan, weed management includes:

- Identifying potential sources of weed infestations such as machinery movement;
- Spraying and destroying of weeds on rehabilitation sites, revegetated areas, batter slopes and around disturbed areas such as site compounds;
- Management of mulch and green waste suspected or known to contain weed species; and
- Disposal of weeds or green waste containing weeds.

2. Obligations

The SBRJV has a legal responsibility to prevent the spread of existing weeds and the incursion and spread of new weeds. The following references further detail these obligations:

- *Environmental Protection Act 1994*: Section 319 states the general environmental duty that persons not undertake activities which could cause environmental harm unless all practicable and reasonable measures are taken to minimise or prevent harm;
- *Land Protection (Pest and Stock Route Management) Act 2002*: A landowner must take reasonable steps to keep the following land free of Class 1 and Class 2 pests, unless the owner holds a declared pest permit allowing the pests to be kept on the land:
    - The owner's land;
    - Unfenced land comprising part of a road or stock route that adjoins or is within the owner's land;
    - Other land that is fenced in with the owner's land;
    - The bed, banks and water of a watercourse on the owner's land;
    - The bed, banks and water to the centre-line of a watercourse forming a boundary, or part of a boundary of the owner's land. (Section 77).
- *Land Protection (Pest and Stock Route Management) Act 2002*: A person must not introduce a declared pest other than under a declared pest permit (Section 39).
- *Land Protection (Pest and Stock Route Management) Act 2002*: A person must not move or transport a vehicle or thing on a road if they ought reasonably to know that soil or other organic material in or on the vehicle or thing is likely to contain the reproductive material of a declared pest plant, unless the person has taken reasonable steps to
    - Restrict the release of the reproductive material when the vehicle or thing is moved or transported; or
    - To ensure the vehicle or thing is free of the reproductive material (Section 46).
- *Land Protection (Pest and Stock Route Management) Act 2002*: A person must not supply any thing (including machinery, soil, vehicles or water) containing reproductive material of a plant that is a Class 1 pest or a Class 2 pest prescribed under a regulation (unless, in the case of a Class 2 pest, a written notice in accordance with the legislation is provided) (Section 45);
- To work in accordance with the pest management principles and desired outcomes of any applicable national, state, regional and local weed management strategies and plans shown in Figure 1.

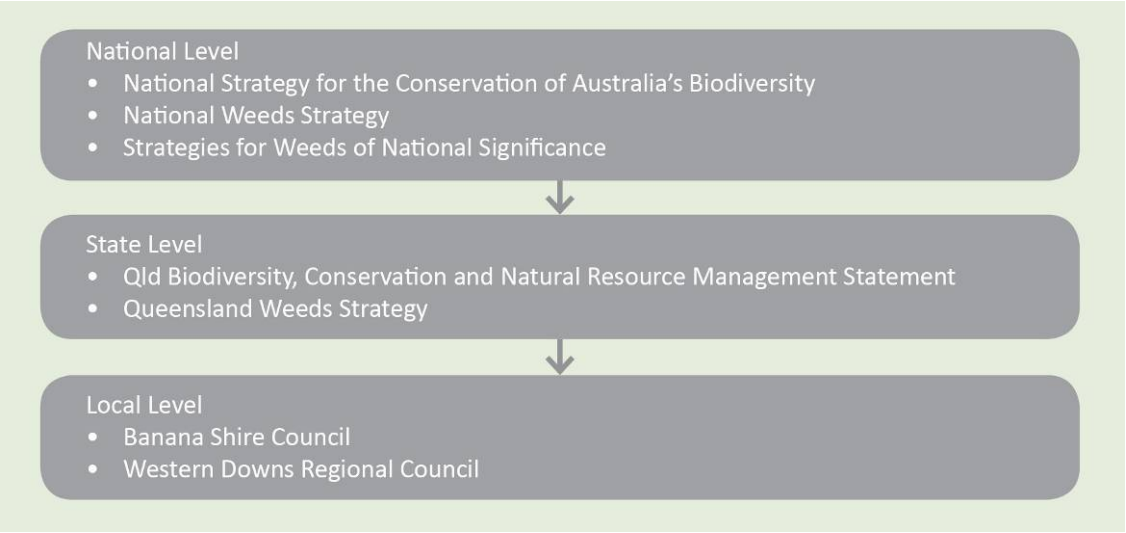

Figure 2: Weed Management Strategies and Plans

3. Weeds of Significance in Affected Areas

3.1 Species Declared Under the Land Protection (Pest and Stock Route Management) Act 2002

The *Land Protection (Pest and Stock Route Management) Act 2002* declares the following three categories of weeds:

- Class 1 - is not commonly present or established in Queensland and has the potential to cause an adverse economic, environmental or social impact in part of Queensland or another State. All landholders are required by law to keep their land free of Class 1 pests.
- Class 2 – is already established in Queensland and is causing or has the potential to cause an adverse economic, environmental or social impact but its impact is so serious that we need to try and control it and avoid further spread onto properties that are still free of the pest. All landholders are required by law to keep their land free of Class 2 pests.
- Class 3 – is already established in Queensland but its control by landowners is not deemed to be warranted unless the plant is impacting, or has the potential to impact, on a nearby 'environmentally significant area'.

Table 1 lists those Class 1, Class 2 and Class 3 pest species that are identified as being present within the Environmental Impact Statement (EIS) Study Area for the SBR Project.

Class 1	Class 2	Class 3
No species	Bryophyllum delagoense (Mother of millions) Baccharis halimifolia (Groundsel bush) Opuntia stricta (Prickly pear) Opuntia tomentosa (Velvety tree pear) Parthenium hystophorus (Parthenium) Jatropha gossypifolia (Bellyache bush)	Lantana camara (Lantana) Lantana montevidensis (Creeping lantana) Asparagus africanus (Climbing asparagus fern) Macfadyena unguis-cati (Cats claw creeper) Cardiospermum grandiflorum (Balloon vine)

Table 1: Pest species listed under the Land Protection (Pest and Stock Route Management) Act 2002 observed in the EIS Study Area for the SBR Project

Appendix 1 sets out information for each of the weed species listed in Table 1. Appendix 1 outlines for each species:

- Declaration Status;
- Description;
- Habitat and Distribution;
- Problem; and
- Control.

Note: For a full list of Class 1, 2 and 3 pests under Queensland law, refer to the Department of Primary Industries and Fisheries' website:

http://www.dpi.qld.gov.au/cps/rde/dpi/hs.xsl/4790_8331_ENA_HTML.htm

3.2 Species Declared Under Local Laws

3.2.1 Banana Shire Council

Banana Shire Council Local Law Policy No. 11 (Control of Pests) lists the following as declared pests:

- *Bryophyllum tubiflorum* and all other varieties of *Bryophyllum* (Mother of millions); and
- *Jatropha gossypifolia* (Bellyache bush).

These species are also Class 2 pests under the *Land Protection (Pest and Stock Route Management) Act 2002*.

3.2.2 Dalby Town Council (now part of Western Downs Regional Council)

Dalby Town Council Local Law Policy No. 13 (Control of Pests) lists the following as declared pests:

- *Melilotus indica* (Hexham Scent);
- *Lantana camara* (Lantana);
- *Argemone mexicana* (Mexican poppy);
- *Bryophyllum spp* (Mother of millions);
- *Caesalpinia septaria* (Wait-a-while);
- *Rapistrum rugosum* (Wild turnip); and
- *Nymphaea mexicana* (Yellow waterlily).

3.2.3 *Taroom Shire Council (which has now been split and incorporated into the Banana Shire Council and Western Downs Regional Council)*

There are no weed species declared under local laws applicable to the previous Taroom Shire Council however the *Taroom Shire Council Pest Management Plan 2005-2009* lists major pest species which have been identified as impacting on land protection in the Shire.

Table 2 lists these major pest species from the T*aroom Shire Council Pest Management Plan 2005-2009* which includes plants declared as Class 1, 2 and 3 under the *Land Protection (Pest and Stock Route Management) Act 2002* and species that the Taroom Shire Council were proposing to declare under local laws.

Class 1	**Class 2**	**Class 3**	**Non declared but significant to the Shire**
Gleditsia tracanthos (Honey locust)	*Parthenium hysterophorus* (Parthenium) *Parkinsonia aculeate* (Parkinsonia) *Sporobolus pyramidalus* (Giant rat's tail grass) *Eroicerus spp* (Harrisia cactus) *Lycium ferocissimum* (African box thorn) *Opuntia spp* (Prickly pears) *Bryphyllum spp* (Mother of millions)	*Asparagus aethiopicus, Sprengeri* (Asparagus fern) *Macfadyena unguis-cati* (Cat's claw vine)	*Silybum marianum* (Variegated thistle) *Argemone ochreleuca & Argemone mexicana* (Mexican poppy) *Eragrostis carvula* (African lovegrass) *Datura spp* (Thornapple) *Carthamus lanatus* (Saffron thistle) *Acacia farnesiana* (Mimosa) *Eremophila maculate* (Fuchsia bush)

Table 2: Major pest species listed in the Taroom Shire Council Pest Management Plan 2005-2009

3.3 Local Council Priority Weed Species for SBR Project

The following weeds have been identified by representatives of the Banana Shire Council and Western Downs Regional Council as being those species that should be prioritised for control measures in relation to the SBR Project.

3.3.1 Banana Shire Council

The Banana Shire Council has identified the following as priority weed species for the SBR Project:

- *Bryphyllum spp* (Mother of millions)
- *Cryptostegia* grandiflora (Rubber vine)
- *Eragrastis curvula* (African love grass)
- *Eroicerus spp* (Harrisia cactus)
- *Parthenium hysterophorus* (Parthenium weed)
- *Sporobolus pyramidalis* (Giant rat's tail grass)
- Cracow Pear (botanically, an un-identified species which has commonalities with Tiger-Pear)

3.3.2 Western Downs Regional Council

The Western Downs Regional Council has identified the following as priority weed species for the SBR Project:

- *Bryophyllum delagoense* (Mother of millions)
- *Parthenium hysterophorus* (Parthenium weed)
- *Harrisia martinii* (Harrisia cactus)

4. Proposed Weed Management Measures

4.1 General

Weed management measures for the SBR Project are set out in Table 3. Further design progression and construction staging will enable a refinement specific site issues such as requirements for moving between leasehold property boundaries.

In keeping with management measures set out in Table 3, a possible process to control the introduction of new weed species is outline in Figure 2.

General roles and responsibilities are highlighted in Table 3. However because measures will be site specific in many instances, further or fewer necessary responsibilities may be required and should be discussed and organised during formulation of the detailed Weed Management Plan.

All SBR Project staff have a responsibility to take every practical measure to avoid the introduction or spread of weed species on-site, through personal or construction activities.

Measure	Action Timing	Responsibility
Class 1 & 2 Weeds		
The presence of Class 1 and 2 weeds and their implications for the Project is to be communicated to all workers and subcontractors employed on the Project.	Clear & grub Earthworks	Site supervisors Site environmental staff
Management and identification of pests must be consistent with the Weed Strategy/Management Plan of the relevant local council.	Project duration	Site environmental staff
All Class 1 and 2 weeds will be removed from the project area in accordance with the Land Protection (Pest and Stock Route Management) Regulation 2003 best management practice for that particular weed. Any eradication works are to, where practically possible: Work from the least infested to most infested areas; Utilise a combination of physical and chemical methods; and Involve replanting desirable species for groundcover and to prevent reinfestation. Appendix 1 sets out control measures for all Class 1 and 2 weeds listed in Table 1.	Project duration Rehabilitation	Project manager Site environmental staff

Measure	Action Timing	Responsibility
Any observance of first occurrence of Class 1 or 2 species should be reported to the local Council to attempt to control species before the first seed set. Any significant Class 1 or 2 infestations are to be reported to the local council and the Queensland Primary Industries and Fisheries – Biosecurity Queensland Annual Pest Assessment (state wide mapping of all declared species) and PestInfo database.	Project duration	Site environmental staff
Any vehicles or machinery coming into the Shire or onto site, from an area known to contain Class 1 or 2 weeds is to be washed down prior to entry to the Shire or site at a Council approved wash down area and receive certification of being weed free via a wash down inspection.	Project duration	Site supervisor
Any vehicle leaving the Project is to be washed down thoroughly at an onsite facility prior to exit. Washdown should be undertaken at a designated and appropriately designed structure which incorporates filtration devices for the capture and containment of weed seeds during the washdown procedure. Design should give regard to the type, size and quantity of vehicles which will be washdown at these facilities. Vehicles must be free of large clods of dirt and free of soil or organic material that is likely to contain reproductive material of a declared weed. Once off-site, it is the subcontractors responsibility to adhere to further washdown requirements dependant on the location where machinery is demobilised.	Project duration	Sub contractors
All Weeds		
The appointed Principal Contractor, in consultation with the SBRJV, shall establish weed hygiene requirements through communication with local councils. These requirements should be highlighted to all sub-contractors via tender documents.	Project start-up Tender process Project Duration	PC PC PC
All suspected weed infestations will be reported to Site Environment Staff.	Project duration	All staff
All current and new infestations will be mapped and recorded with Council's Rural Coordinator, as well as	Project duration	Site environmental

Measure	Action Timing	Responsibility
maintained on a site-specific tracking Weed Register (to be developed upon appointment of the Principal Contractor). Weed Register to be updated as new species are discovered on site or improved weed control methods become available. A system of reviewing changes in weed declarations and control methods should be implemented.		staff
Site rehabilitation works are to include budget for weed removal and handover to the SBRJV to the satisfaction of the appropriate government agency.	Rehabilitation	Project manager Site environmental staff
Where practicably possible, avoid working in known weed infested areas.	Project duration	All staff
Fill and soil materials brought to site are to be declared weed free by an appropriately qualified person and accompanied by a Weed Seed Free Declaration or to be sourced from weed free areas.	Project duration	Site supervisor Site environmental staff
All staff are to be trained on awareness of weeds and their responsibilities and expected actions for weed management throughout the project duration through mechanisms such as: • Site inductions; • Toolbox talks; and • Pre-start meetings.	Project duration	Site supervisor Site environmental staff

Table 3 Proposed Weed Management Measures

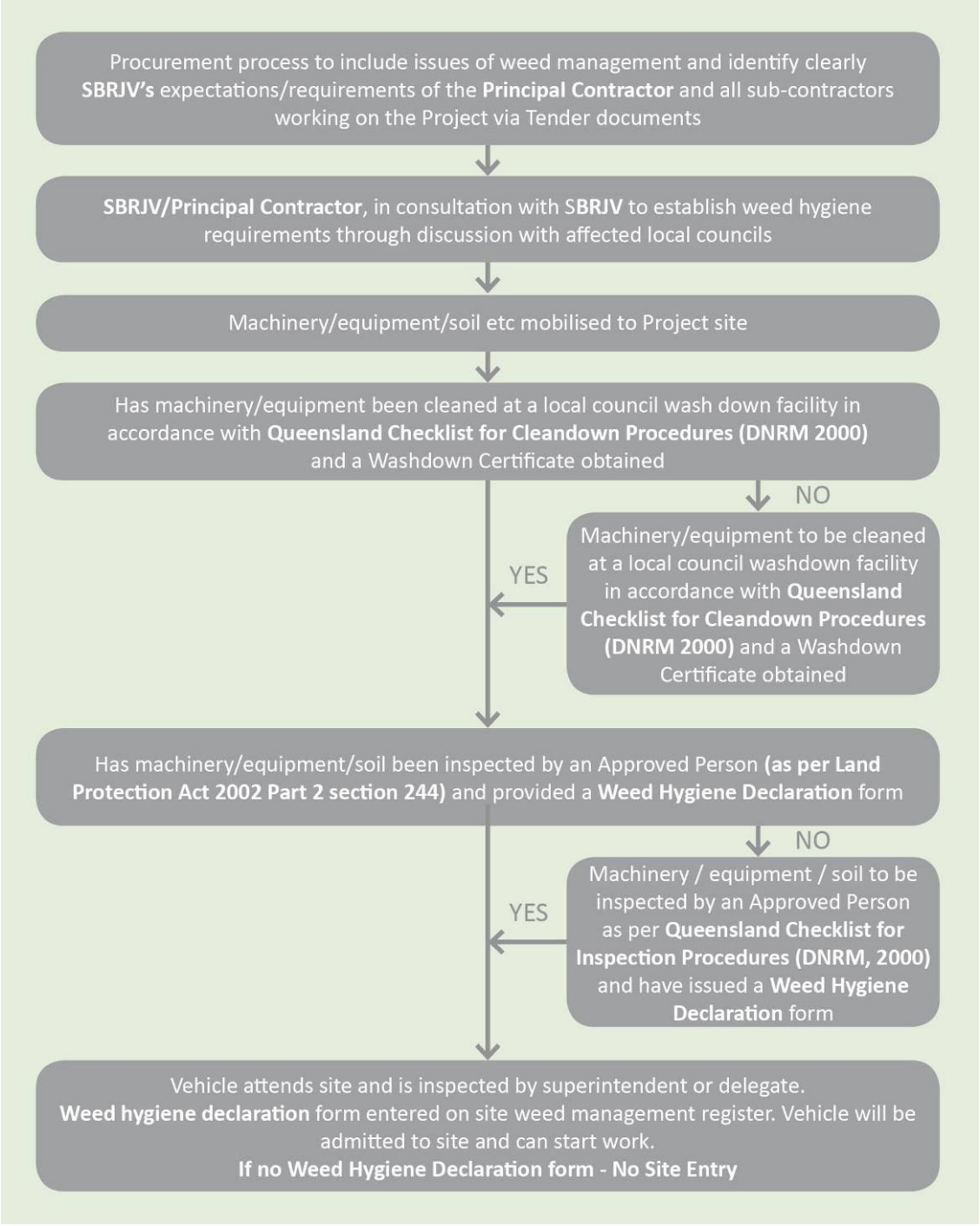

Figure 3: Process for the Prevention of Weed Spread Prior to Vehicles Entering the Project Area

Notes:

- Queensland Checklist for Inspection Procedures (DNRM 2000) is reproduced in Appendix 2.
- Queensland Checklist for Cleandown Procedures (DNRM 2000) is reproduced in Appendix 3.
- Weed Hygiene Declaration form is reproduced in Appendix 4.
- List of Central Queensland and South West Queensland Washdown Facilities are reproduced in Appendix 5.

5. Monitoring and Compliance

Site Environment Staff should observe and record the spread of existing weeds and/or new infestations when conducting routine site inspections. All observations of the project site are to be recorded within a project-specific Weed Register which is to be developed (as outlined in Section 4). Regular review of this Weed Register is to be carried out to monitor project performance.

While SBR Project staff are not expected to identify all key weeds, they are expected to comply with directions given by site environmental staff. Any breach to this Plan or non-compliance with a direction given by an environmental staff member should result in an incident report being raised via the Project's management system. Corrective actions may include further training (e.g. toolbox talks), the issue of a Site Instruction or disciplinary action, depending on the severity of the non-conformance. This process will be dependent on the Weed Management Plan adopted by the Project.

6. Contact Information

6.1 Banana Shire Council

Gordon Twiner

Noxious Weed Inspections - Biloela

gordon.twiner@banana.qld.gov.au

Phone: 0427 148 783

6.2 Western Downs Regional Council

To be confirmed

Appendix 1

Declared Weeds for Surat

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Contents

Source

Unless otherwise stated, all the information in this Appendix has been taken from the Queensland Primary Industries and Fisheries website http://www.dpi.qld.gov.au.

1.1 Acacia farnesiana (Mimosa bush)

Declaration Status

- Class 1

Description

- grows to 3 - 5 m
- branches grow in a zigzag shape and are usually grey-brown with prominent white spots
- leaves are ferny and are green or sometimes yellowish-green
- thorns up to 10 cm in pairs at the base of each leaf
- flowers are ball-shaped, about 1 cm wide, golden yellow to orange
- pods are dark brown or black and woody at maturity, with seeds embedded in the pith climber with narrow leaves and prickly stems that help it climb over other plants or supporting structure

Habitat and Distribution

- naturalised in Australia and widespread in Queensland
- prefers dry localities, and loamy or sandy soils
- withstands drought well, is readily eaten by stock, and has good regrowth after grazing

Problem

- Spread readily and grow quickly
- forms thickets along watercourses
- Hinders mustering stocks access to water

Control

- herbicides effective
- a combined approach of different control methods including chemical and mechanical with land management practices is most effective

Herbicide	Rate	Comments
Basal bark spray		
Fluroxypr eg. Starane 200, Tomigan 200 EC, Flagship 200	3 L/100 L diesel	Basal bark: for plants up to 5cm basal diameter
Triclpyr + picloram eg. Access	1 L/60L diesel	Basal bark: for plants up to 5cm basal diameter. Ensure all stems on multi-stemmed plants are treated
Bore drains		
Diuron 500 SC	64 L/ha	3 day withholding period
Diuron 900DF	35.5 kg/ha	
Diuron 900WG	35.5 kg/ha	

1.2 Asparagus africanus (Climbing asparagus fern)

Declaration Status

- Class 3

Description

- climber with narrow leaves and prickly stems that help it climb over other plants or supporting structure
- clusters of small white flowers
- green ripening to orange berries
- without a host can grow as a scrambling low shrub

Habitat and Distribution

- berries dispersed by birds
- naturalised in several coastal regions

Problem

- smothers trees and damages rainforests, vine scrubs and riparian vegetation

Control

- prevent birds from accessing berries
- dig out roots and dispose of at local council landfill site
- remove entire crown and underground stem to prevent regrowth
- The following herbicides are registered for control:

Herbicide	Rate	Comments
Basal bark spray		
Fluroxypyr (200 g/L)	35 mL per 1 L diesel/kerosene	PERMIT 7485
Paint or Spot spray crowns		
Diesel	Apply neat	PERMIT 7485 required. Chemical control trials suggest cutting all stems near ground level and spraying the entire central crown of the plant with undiluted diesel, to the point of runoff gives good control. Careful application will ensure

1.3 Baccharis halimifolia (Groundsel bush)

Photo: Obtained from CDROM: Suburban and Environmental Weeds of South East Queensland, version 2 (Navie 2008)

Declaration Status

- Class 2

Description

- a densely-branched shrub, up to 3 m high
- stems are green and become brown and woody with maturity
- deep, branching taproot with numerous fibrous laterals in the upper soil
- leaves are dull green, alternate, wedge-shaped,2.5-5 cm long , 1-2.5 cm wide
- male flowers are pale yellow, opening mid to late March, slightly earlier than the female flowers
- female flowers are white and inconspicuous at the end of branches
- seeds have tufts of white hair and are fully developed in late March to early April

Habitat and Distribution

- particularly suited to moist gullies, salt marsh areas and wetlands
- seeds readily transported by wind, running water, vehicles and machinery
- wind-dispersed seed sticks to insect screens
- most germination occurs in the autumn/winter period

Problem

- competes with pasture species for water and nutrients
- replaces plants and destroys habitat for native wildlife
- can become abundant in the vegetation along watercourses, coastal woodlands and forest areas
- potential allergies caused by air-borne pollen and seed fluff

Control

- The following herbicides are registered for control:

Situation	Herbicide 1,2,3	Rate	Comments
Pastures; non-agricultural, commercial, industrial land; rights-of-way	2,4-D amine (500 g/L)	3.6-5.5 L/ha 0.4 L/100 L 300 mL/15 L 1.2 L/15 L	air - higher rate for bushes high volume foliar spray cut stump misting
Pastures; non-agricultural land	2,4-D acid	10 L/ha 33 mL/ 1 L kero or turps 100 mL/10 L 1 L/10 L	helicopter spraying basal bark or cut stump knapsack foliar spray sprinkler spray - 1 L/100 m2
Pastures	2,4-D ester 800 g/L 600 g/L e.g. AF rubbervine spray	0.25 L/ha 0.37 L/ha 1 L/40 L diesel	Do not spray in "hazardous areas" - consult local DPI office for further information Basal bark or cut stump
Commercial industrial	2,4-D sodium e.g.	0.275 kg/100 L	Spot spray

Situation	Herbicide 1,2,3	Rate	Comments
land, pastures, rights-of-way	Tornado DF		
Irrigation channels/banks, non-agricultural commercial industrial land; home gardens, pastures; rights of way; forests	glyphosate5 - IPA 360 g/L	0.7-1 L/100 L 100 - 150 mL/15 L 1:9 (2x2 mL dose/0.5 m bush height)	handgun - high rate in winter knapsack foliar spray splatter gun foliage
commercial industrial land; pastures; rights-of-way	picloram + 2,4-D 75 g + 300 g e.g. Tordon 75-DR	0.65 L/100 L	spot spray foliage
commercial industrial land; pastures; rights-of-way; forests	picloram + triclopyr (premix) e.g. Grazon DSR *Cannot be use in hazardous areas without a Department of Primary Industries Permit. Access	0.25-0.35 L/100 L 2.5 L/100 L 30 mL/15 L 1 L/60 L diesel	handgun foliage misting foliage knapsack foliage basal bark or cut stump
recreation commercial industrial land; pastures; rights-of-way; forests	Triclopyr 600g/L e.g. Garlon 600® home garden packs e.g. Defender, Chemspray (Garden King)	0.16-0.32 L/100 L water 1 L/120 L diesel 25-50 mL/15 L 50 g/L 120 g/L 0.1-0.2 L/5 L water 0.1 L/0.5 L kerosene	overall spray foliage basal bark or cut stump knapsack foliage overall spray foliage basal bark or cut stump knapsack foliage basal bark or cut stump
grass pasture	dicamba + MCPA (premix) (e.g. Banuel MR)	2.8-4 L/ha 0.19-0.27 L/100 L 60 mL/15 L	knapsack foliage
pastures; forests; rights-of-way	Clopyralid e.g. LontrelR	0.33-0.5 L/100 L	handgun foliage
pastures	Tebuthiuron 200g/kg e.g. Graslan®	1 gm/m2	hand application (use restrictions apply)

1.4 Bryophyllum delagoense (syn. B. tubiflorum and Kalanchoe delagoensis); Bryophyllum x houghtonii (syn. B. daigremontianum x delagoense, Kalanchoe x houghtonii (Mother of millions)

Declaration Status

- Class 2

Description

- an erect, smooth, fleshy, succulent plant growing to 1 m or more in height
- has tall flower spikes with clusters of bell-shaped flowers
- produces small plantlets along the edges of leaves
- flowers are orange-red in a cluster at the top of the stem

Habitat and Distribution

- establishes well in leaf litter or other debris and thrives in shaded areas where there is little competition
- found on roadsides, fence lines and around old rubbish dumps
- spreads by flood water and establishes if pastures are run down
- adaptable to a range of soils and dry conditions
- spreads by the dropping of plantlets from the end of the leaf

Problem

- highly toxic to stock
- difficult to eradicate

Control

- The following herbicides are registered for control:

Situation	Herbicide	Rate	Comments
Pastures, non-crop land	2,4-D acid (AF300)	7 L/1000 L/water/ha 70 mL/10 L water	Overall spray handgun Overall spray knapsack
Pastures, rights-of-way, non-crop land, forests, non-agricultural land, commercial/industrial areas	picloram + triclopyr (e.g. Grass-up, Grazon DS, Picker)	50 mL/10 L water	Overall spray knapsack Apply at flowering
Pastures, rights-of-way, non-crop land, forests, non-agricultural land, commercial/industrial areas	fluroxypyr	600 mL/100 L water+ sufactant	Apply to seedlings and young plants before flowering
Pastures, rights-of-way, non-crop land, forests, non-agricultural land, commercial/industrial areas	picloram + triclopyr+ aminopyralid (e.g. Grazon Extra)	50 ml/10 L water	Add 100% concentrate non-ionic surfactant (e.g. BS 1000) at 100 ml/100 L water. Apply at flowering

Notes: **1. Thorough even coverage of leaves and plantlets is necessary**

1.5 Cardiospermum grandiflorum (Balloon/heartseed vine)

Declaration Status

- Class 3

Description

- leaves made up of nine leaflets, which have toothed margins and are dark green
- small white flowers growing in clusters with tendrils at the base and in leaf axils

Habitat and Distribution

- found in South East Queensland along waterways, roadsides and disturbed sites
- grows at forest edges, often right into the canopy of trees establishes well in leaf litter or other debris and thrives in shaded areas where there is little competition
- found on roadsides, fence lines and around old rubbish dumps
- spreads by flood water and establishes if pastures are run down
- adaptable to a range of soils and dry conditions
- spreads by the dropping of plantlets from the end of the leaf

Problem

- smothers other plants
- prevents plants from receiving sunlight needed for photosynthesis

Control

- manual removal recommended for small infestations
- plants should be pulled out by roots
- combination of manual and chemical control may be required for regrowth
- The following herbicides are registered for control:

Herbicide	Rate	Comments
Cut Stump and paint		
glyphosate (360 g/L)	1 part to 2 parts water 10 mL in 20 mL water	PERMIT 7485 required. Apply in spring and summer. Apply second application if necessary.
Spot spray		
fluroxypyr (200 g/L)	500 mL per 100 L water	PERMIT 7485 required
2,4-D amine (500 g/L)	4 mL per 1 L water	
2,4-D amine (625 g/L)	3 mL per 1 L water	

1.6 Lantana camara (Lantana) and Lantana montevidensis (Creeping lantana)

Declaration Status

- Class 3

Lantana montevidensis

Description

- stems are square with small, re-curved prickles
- leaves are bright green, about 6 cm long, with round-toothed edges and grow opposite one another along the stem
- flowers vary in colour from pale cream to yellow, white, pink, orange, red, lilac and purple, about 2.5 cm in diameter
- fruits are glossy, rounded, fleshy, purplish-black when ripe

Habitat and Distribution

- grows in a wide variety of habitats, from exposed dry hillsides to wet, heavily-shaded gullies

Problem

- forms dense thickets that smother native vegetation
- thickets are impenetrable for animals, people and vehicles
- is spread mostly by people and fruit-eating birds
- poisonous to stock

Control

- size, density and geographic location of infestations are important considerations before choosing which control methods to use
- the following herbicides are registered for control:

Method of application active ingredient (trade name)a	**Rate**	**Optimum time**	**Remarks**
Foliar (overall) spray			
Fluroxypyr (Starane® 200)	0.5–1 L/100 L water	December to April	Thorough wetting of plants is required, higher rate should be used for larger plants.
Glyphosate (Roundup® 360, Glyphosate360®)	1 L/100 L water	October to April	Wet plant thoroughly. Glyphosate affects any green plant it comes into contact with. Glyphosate is available in a range of strengths.
Picloram + 2,4-D(Tordon® 75-D)	0.65 L/100 L water	February to April	Wet plant thoroughly. Legumes are affected if sprayed.
Dichlorprop (Lantana® 600)	0.5 L/100 L water	December to April	Must thoroughly wet all leaves. Please refer to product label for situation details.
Picloram + Triclopyr + Aminopyralid (Grazon Extra®)	0.35–0.5 L/100 L water	February to April	Wet plant thoroughly. Use the higher rate on larger plants. Legumes may be affected if sprayed.
2,4-D amine (Amicide® 625)	0.32 L/100 L water	March to May	Red-flowered lantanas are more resistant to 2,4-D. Will kill young legumes.
Metsulfuron methyl, (Brush-off®, Brushkiller® 600, Lynx® 600)	10 g/100 L water	March to May	Results variable. Not found effective in tropics. Follow-up sprays are necessary.
Metsulfuron methyl+	95 g/100 L water	March to May	Apply to bushes up to 2 m tall. Spray to

Method of application active ingredient (trade name)a	Rate	Optimum time	Remarks
glyphosate (Cutout®)			thoroughly wet all foliage and stems. Spray should penetrate throughout the bush.
Metsulfuron methyl+ glyphosate (Trounce®)	173 g/100 L water	March to May	Apply when actively growing. Do not apply during periods of stress.
Aminopyralid + Fluroxypyr(Hotshot®)	0.5–0.7 L/100 L water	October to April	Spray all foliage, including stems, to the point of run-off.
Basal bark and Cut stump			
Triclopyr (Garlon 600®)	1 L/60 L diesel	Any time. Best results when actively growing	(i) Apply to lower 40 cm of every stem. Must ensure complete coverage around stem. (ii) Cut close to ground level. Immediately apply herbicide.
2,4-D Ester (AF Rubber Vine Spray®)	2.5 L/100 L diesel	Any time. Best results when actively growing	As above
Picloram + Triclopyr (Access®)	1 L/60 L diesel	Any time. Best results when actively growing	As above
Picloram (Vigilant® Herbicide Gel)	3–5 mm gel	Any time. Best results when actively growing	(ii) If diameter of stump is > 20 mm, use a minimum of 5 mm gel thickness.
Glyphosate (Roundup®, Weedmaster Duo®)	Neat	Any time. Best results when actively growing	Off-label permit
Splatter gun.			
Glyphosate (Roundup® 360)	1:9 glyphosate + water	October to April	2 x 2 mL dose per 0.5 m height of lantana
Metsulfuron methyl (Brushkiller® 600, Lynx® 600)	2 g/L water	March to May	As above
Aerial			
Picloram + Triclopyr + 2,4-D(Grazon® DS + 2,4-D amine 625 g/L)	1.5 L + 6 L/ha or10 L/ha (Grazon®)	When plant actively growing	Helicopter only. Minimum of 200 L water per hectare. Follow-up re-spray will be required. Do not burn within six months of treatment.
Dichlorprop (Lantana® 600)	6-8 L/ha	When plant actively growing	As above

1.7 *Macfadyena unguis-cati (Cat's claw creeper)*

Declaration Status

- Class 3

Photo: Obtained from CDROM: Suburban and Environmental Weeds of South East Queensland, version 2 (Navie 2008)

Description

- a vine with large, bright yellow bell-shaped flowers in spring
- leaves have two leaflets, with a three-clawed tendril (the cat's claw) growing between them
- vine bears very long, narrow and flat pods containing many seeds
- vigorous root and tuber system

Habitat and Distribution

- many bushland areas (riparian) are seriously infested

Problem

- smothers native vegetation, even growing up over trees
- vigorous root and tuber system making the plant difficult to control

Control

- Mechanical control (digging tubers out) is not practical in most cases
- The following herbicides are registered for control:

Method	Herbicide	Rate	Comments
Cut stump	360 g/L glyphosate	83 mL/L water	Ensure vines are actively growing at time of treatment and not under stress of drought, waterlogging or cold
	500 g/L dicamba	33 mL/L water	
Foliar application	360 g/L glyphosate	10 mL/L water	
	500 g/L dicamba	4 mL/L water	
Basal bark spray	200 g/L fluroxypyr e.g. Starane 200	35 mL/L diesel/kerosene	

1.8 *Opuntia spp. other than O. ficus-indica (Prickly pear)*

Declaration Status

- Class 2

Description

- leafless succulent shrub
- has spiny and pear-shaped fruit
- stems are divided into segments (pads or joints)
- flowers are large and vary from yellow, orange, red, pink, purple to white seen during spring
- fruits vary from red, purple, orange, yellow to green

Photo: Obtained from CDROM: Suburban and Environmental Weeds of South East Queensland, version 2 (Navie 2008)

Habitat and Distribution

- spread by birds and animals eating the fruit and excreting viable seed

Problem

- invades pastures
- vigorous in hot, dry conditions causing other plants to lose vigour or die

Control

- The following herbicides are registered for control:

Herbicide	Situation	Rate	Method	Comments
Triclopyr	Forest-timber production; and commercial/industrial non-agricultural, pastures, rights of way	.8L/60L diesel	Overall spray	For use against Common Prickly Pear, Drooping Prickly Pear, Tiger Pear
Triclopyr	Forest-timber production, land commercial/industrial, non-agriculture, pastures, rights of way	3L/100L water	Overall spray	For use against Common Prickly Pear, Drooping Prickly Pear and Tiger Pear
Picloram + Triclopyr	Agricultural land –non-crop; forest timber production; and commercial and industrial, pastures, rights of way.	1L/60L diesel	Basal bark/cut stump	For use against Velvet Tree Pear, Tree Pears, Tiger Pear, Common Prickly Pear, Snake Cactus
Amitrole	Land around buildings, commercial/industrial, non-agricultural, rights of way	1mL/3cm	Inject	
		1L/25L	Overall spray	Small plants or regrowth

1.9 Parthenium hysterophorus (Parthenium)

Declaration Status

- Class 2

Description

- grows up to 5 m in height, developing many branches in its top half when mature
- pale-green leaves, deeply lobed and covered with fine soft hairs
- small creamy white flowers on stem tips
- flowers contain 4-5 black seeds that are wedge-shaped, 2 mm long with 2 thin, white scales

Habitat and Distribution

- grows in most soil types, most dominant in alkaline, clay and loam soils
- first recorded at Toogoolawah in 1955 and north of Clermont in 1960
- well-established in Central Queensland, west to Longreach and northern and southern Queensland
- infestations also found in New South Wales
- seeds can spread by water, vehicles, machinery, stock, feral and native animals and in feed and seed

Problem

- invades pastures, disturbed bare areas along roadsides, heavily stocked areas around yards and watering points
- reduces beef production
- costs cropping industries millions of dollars per year
- pollen contains potent allergens that can cause reactions such as dermatitis and hay fever

Control

- hand pulling of small areas is not recommended
- a combined approach of different control methods including chemical, biological, mechanical and herbicide integrated with land management practices is most effective
- The following herbicides are registered for control:

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Appendix 2

Queensland checklist for Inspection Procedures

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QUEENSLAND WEED SEED SPREAD PROJECT

July 2000

Queensland checklist for

INSPECTION PROCEDURES

Queensland Government

Department of Natural Resources

Contents

Inspection procedures

Training

All inspectors will complete the approved inspection course and receive a satisfactory assessment before inspecting any items.

Purpose

These procedures are designed to implement a consistent approach across Queensland for the Inspection of vehicles, equipment and machinery. This will allow authorised inspectors to carry out a thorough routine inspection of these items to reduce the potential for the spread of weeds and their seeds. This document may also assist users of the inspection service to understand and fulfil their requirements, comply with legislation and address their duty of care.

Background

The movement and transport of machinery, vehicles and equipment that are co ntaminated with weed seed is a source of spreading declared plants from infested areas to clean locations or areas with minimal infestations. Many isolated outbreaks throughout Qld are a result of poor vehicle, machinery and equipment hygiene. This metho d of spread has the potential to move declared plant's reproductive material long distances from the original source or a core infestation area. As a result there have been many new outbreaks that have now spread beyond controllable methods. Each year nu merous outbreaks of parthenium weed are discovered along roadsides after viable seeds have fallen from contaminated vehicles. There is an ongoing risk that weed seeds will fall from contaminated machinery or vehicles on private properties or remote locations and go undetected resulting in a major outbreak that cannot be contained.

There is a current demand for the continuation of this service from service providers, companies and industry to meet client demands and satisfy interstate legislation and addre ss their relevant duty of care and client requests.

Weeds cost Qld in lost production, land degradation, control costs and the spread of weed seed continually threatens our primary industries and environment.

The potential for litigation is a real thre at for industry groups and government departments as negligence has the potential to result in legal action or large compensation settlements.
Both parthenium weed and GRT are declared plants that require special consideration in regards to preventing their spread. Being prolific seed producers, highly competitive and forming dense infestations they are a high risk for contaminating vehicles and machinery that are driven through infested areas.

Criteria

After completing the competency based training, o ficers will be able to carry out the following:

- Handle enquires relating to vehicle, machinery and property inspections
- Arrange suitable venues and equipment required to carry out inspections of vehicles and machinery.
- Identify specific areas on a range o f vehicles and machinery that require careful examination for a thorough inspection.
- Complete a thorough inspection process for vehicles, machinery and property for weeds or weed seed contaminants.
- Complete inspection forms and record documentation for det ails of inspection.
- Provide advice on vehicle and machinery cleandowns, procedures and recommended equipment.

Possible sources of contamination

- Heavy machinery may contain weed seed contaminated mud on the tracks/tyres or implements (eg. dozers, excavators, graders)
- Farm machinery and vehicles that have been used in infested paddocks are at risk of contamination via mud on wheels, seeds trapped in radiators, cabin floor mats. (eg. tractors, 4WD)
- Implements such as slashers, ploughs, mulchers, post-hole diggers may be contaminated with weed seeds after being used in infested paddocks and should be cleaned prior to moving to other areas.
- Harvesting machinery and headers may contain weed seed in augers, bins, behind guards etc i harvesting crops that are infested with weeds.
- Wheeled loaders, mining and construction equipment may contain contaminated mud trapped on these items
- Cars, trucks and 4WD that have driven o -road through weed infestations may contain weed seed in radiators, mud guards, tyres and underbody.
- Trucks that have transported livestock from infested areas may contain viable seed that has fallen or been passed through stock. (eg. prickly acacia, giant rats tail grass)

Areas of high risk

Vehicles, machinery and equipment that have been used, driven or sourced from the Central Highlands are at greater risk of being contaminated with parthenium weed seed. Coastal and sub-coastal areas from the NSW border to Rockhampton, and areas near Moura, Mackay, Townsville, Ingham and Mareeba contain current infestations of giant rats tail grass.

How to minimise the risk of transporting weed seeds on vehicles and machiner

- Avoid driving off the road in areas known to contain giant rats tail grass, parthenium weed or other declared plants that present a risk of contamination.
- Do not drive through infested paddocks
- Ensure clothing and footwear are free of mud and seeds before stepping in vehicles
- Avoid driving or working in contaminated areas in wet or dewy conditions
- Clean vehicles, machinery and equipment suspected of carrying weed seed
- Work clean areas or start in areas with the least amount of infestation and work towards infested or high density areas.
- Keep roads, laneways and buffer zones free of weeds.
- Where possible work infested areas separately and cleandown prior to moving
- Avoid slashing and other works through infestation during peak seed production times.
- Clean down machinery and implements before proceeding into clean areas.
- Secure loads (eg. grain, fodder) if they are suspected of containing weed seed.
  (*Refer to Cleandown Procedures and Queensland Guideline for Weed Seed Spread)*

What is an inspection

Weed seeds such as parthenium weed seed is small and can lodge behind or within many mechanical or structural components of machines. The objective of the cleandown and inspection of vehicles, machinery and equipment is effective risk management. It cannot eliminate risk.

The inspection involves authorised officers examining the vehicle, machinery or equipment presented for inspection to ensure it has been adequately cleaned to reduce the potential for weed seed spread. An inspection cannot guarantee that an item is free of weed seed due to:

- Inaccessible areas that may not be visible during cleaning and inspection
- Holes or rusted parts where weed seed may be located and go undetected.

Why

- There is an ongoing demand for this service to be carried out to ensure adequate precautions have been taken to reduce the potential for introducing weeds and declared plants into areas with minimal or no infestations.
- Landholders and clients are demanding companies and industries complete cleandowns and inspection prior to commencing work or projects on their properties. Other companies and organisations demand their contractors cleandown prior to entering job sites.

Who

Authorised officers under the *Rural Lands Protection Act?*

Safety and location

- The area where the inspection is to be conducted must be a safe working area for the officer completing the inspection and others present.
- Consideration must also be given to surrounding traffic conditions.
- The inspector must wear adequate protective clothing (appropriate footwear, eye protection).
- This location must be free of mud and water to allow the inspection to be carried out and to avoid re-contamination of the item.

Process

1. The client must contact the inspector to arrange the date and time for the inspection and to provide details of the items being presented for inspection
2. The item must be cleaned prior to being presented for inspection
3. The client should be encouraged to clean down on site/farm or at an approved cleandown facility. (refer to cleandown procedures)
4. The inspector shall direct the person in charge of the item/s to an appropriate location for inspection taking into consideration traffic conditions and personal safety of those present.
5. The machine must be completely switched off and the inspector shall not attempt to enter or inspect machinery unless another person is present.
6. First confirm that the description and identification numbers of all items to be inspected are correct. Record the identification number on the inspection form
7. An Inspector may request the operator to remove guards or standard inspection plates or to position moving components of the item as necessary to facilitate inspection.
8. A separate inspection form shall be completed for each item to indicate parts of the item that have passed or failed the inspection.
9. Every relevant part listed on the inspection form must be checked to a sufficient degree to determine whether or not the part has been cleaned.
10. If the inspector is satisfied that the part has been cleaned the form should be completed.
11. If the inspector is not satisfied that the part has been sufficiently cleaned, the nature of the problem must be briefly noted on the Inspection Form.

12. If only minor additional work is required (material shaken down during transport) then the inspection may be completed once the contaminant has been removed.
13. If the item is in bad condition and requires further cleaning the inspection should stop and direct the operator to carry out further cleaning.
14. Should the item be failed, it must be cleaned and reinspected at a later convenient time/date for all parties. A new inspection checklist and inspection form will be issued.
15. On completion, an inspection form/certificate will be issued to the person in charge of the item and a duplicate retained by the inspector.

Property inspections

Product sales, such as hay, grain, seed, livestock, turf or the actual sale of the property often drives the demand for property inspections. An inspection of a paddock or entire property cannot guarantee that a particular weed or declared plant (eg. giant rats tail grass or parthenium) in not present. It is difficult to detect small seedlings or plants that are not in flower or have mature seed heads.

The main purpose of a property or paddock inspection is to identify established infestations or mature plants that contain viable seeds that may cause contamination.

This is particularly important for inspections requested prior to the sale or purchase of land. In this case an inspection may be required to determine the presence of weeds or declared plants and the extent of the infestation. Prospective buyers use this information to determine the potential impact of any weeds present and the cost of eradicating or controlling the weeds.

In ideal conditions weeds may germinate or reach maturity shortly after the inspection. Therefore inspections of properties or land are only valid for a short period surrounding the actual date of inspection. This must be explained and documented to avoid confusion and litigation.

Process

1. At the point of inquiry determine the reason for inspection and the declared plant/s that the property is being inspected for.
2. Arrange location and time for inspection.
3. Obtain a map of the property or parcel of land to be inspected (eg. Blin map).
4. Identify and mark the area to be inspected on the map.
5. Ensure the landholder or representative is present at the time of inspection.
6. Document or mark on the map declared plants located within the area of inspection.
7. It is recommended to take photos during the inspection for evidence of the area inspected, to document any declared plants found and to record the state of the land at the time of inspection (eg. a paddock of lucerne that was ready for cutting).

Cotton pickers

The following areas are provided as an initial guide:

1. Row units

- Examine the picking heads externally for cotton trash/plant residues/soil
- Open all picking head inspection doors to expose moisture racks, doffers, spindle bars and rotor assemblies
- Manually rotate and inspect the rotor assemblies
- Open rear inspection doors on air ducts located at rear of picking heads
- Raise picking heads to inspect underside.

Note: the picking heads are held up by hydraulics – DO NOT climb underneath unless heads are safely blocked in the raised position.

2. Drivers cab

- Check externally under and around drivers cab, check under mats in cab, check the air conditioning system (where fitted) including ducts and filters.

3. Horizontal air ducts

- Remove/open all cover inspection panels (these ducts convey cotton from the front picking section to the basket).

4. Basket

- Inspect basket roof.
- Access the internal parts of the basket through hinged door on the roof (ladder required to climb into the basket).
- Tip or elevate basket (depending on model) to inspect underside, drive shaft assemblies, blower fan, and hollow basket support frames located on the LHS of some models.

Note:
1. The meshed surface area of the basket will NOT support a person's weight – walk on the perforated metal walkways ONLY which run from back to front of the machine.
2. The basket is lifted by hydraulics – DO NOT climb under basket unless it is properly and safely secured in its raised position.

5. Inspect air ducts from the top.

6. Undercarriage/chassis

- Check all underside of machine, chassis rails, and telescopic rear axle if fitted.

7. Engine

- Remove cover panel to expose top of radiator (this can be done when basket is in raised position).
- Remove or open all screens on the engine, radiator and fuel bays.

8. Tyres

- Check for any soil or other contaminants.

Wheeled tractors

The following areas are provided as an initial guide:

1. **Tyres and Rims** – inspect all parts of tyres and rims, including inner side of rim.

    - Between dual wheels (if fitted).
    - Check for wheel mounted counter – weights.
    - Gashes or cuts in tyres.

2. **Engine**

    - Check radiator core and grill for residues.
    - Check for void between oil cooler and radiator (oil cooler may be hinged or on slide).
    - Remove and check air filters/cleaners, pre-cleaners and cyclone style dust separators (if unable to clean satisfactorily, these may require destruction).
    - Inspect sound deadening foams and heat shields for soil and trash (foams become impregnated with dust).

3. **Drivers cab** (where present)

    - Check externally under and around drivers cab.
    - Check under mats in cab and void space and skirt under suspended seats.
    - Check air conditioner filters (if fitted), (most large tractors will have a false cabin roof housing the air-con unit, remove or open false roof).
    - Check integrity of rubber door and window seals, if torn, trash and dirt will be sucked into them and trapped.
    - Check void space behind consoles and dash for trash and dirt residues.

4. **Chassis and vehicle body**

    - Check inside of chassis rail ledges and back axle -beam and undercarriage of this area.
    - Check for hollow sections in front axel tubes.
    - Inspect all tool boxes and battery boxes often under the cab steps or in engine bay.
    - Check for void spaces in rear brake assemblies.
    - Hollow sections in drawbars and hollow sections in retractable/extendable type three point linkages.
    - Inspect single counter-weights, multiples may need to be removed to facilitate cleaning of void spaces.
    - Inspect mud guards and wheel flares for hollows and crevices.
    - Inspect roll cages or roll over bars for holes and gaps where attached to the vehicle.
    - If 4WD drive, check for torque tube (front drive shaft guard) for holes or poor attachment.
    - Inspect PTO (Power Take Off) area, PTO shaft, universal joints, shaft covers/PTO tubes.
    - Inspect wiring looms in split protective conduit for trash and dirt residues.

Note: some agricultural tractors will have a rear carry-all mounted on the three point linkages or a forward mounted forklift or bucket/scoop attachment – these should be inspected carefully. Particular attention should be given to the following:

5. **Buckets, blades, scoops**

    - Inspect all areas of the blade for holes or double skins.
    - Inspect and remove cutting teeth, adaptors and wear plates on blades.
    - Inspect hydraulic arms and supports for hollows that may contain soil and trash.

6. **All areas**

    - Check if any sections or channels are hollow and determine if there is a possible entry point for contamination. Check if plates are covering a compartment or space that may have collected dirt/trash.

Mini tractors

The following areas are highlight some of the main areas of concern on mini-tractors:

1. **Tyres and rims** - inspect all parts of tyres and rims, including inner side of rim.

    - Check for gaps in split type rims.
    - Cuts and gashes in tyres.
    - Wheel mounted counterweights.

2. **Chassis** – check inside of chassis rail ledges.

    - Carefully inspect the chassis for hollow areas and cover plates that may conceal void spaces.
    - Void spaces in the area between gearbox and engine (several models have a large void opening accessible from underneath).
    - Void spaces in counter-weights, multiples may need to be removed to facilitate cleaning.
    - Hollow sections in subframe under motor linking the chassis rails.

3. **Engine**

    - Remove grill (usually 2 wing nuts) and clean, inspect and remove wire mesh screen from front of radiator and clean, inspect fan shroud at rear of radiator.
    - Remove and inspect air filter cover, remove dust dish from air filter cover, remove and check air filter/cleaner (if unable to clean satisfactorily, these may require destruction).
    - Check around fuel tank and brackets for dust and trash build ups.
    - Inspect all areas in bonnet and in engine bay for hollows.

4. **Other**

    - External rear brake assemblies and common shaft for brake and clutch pedals
    - Foot plates and mounting brackets.
    - Hollow sections in mudguards, joints between mud flaps and guard, wiring looms under guards.
    - Inspect tool box under seat or under fuel tank, remove contents to allow cleaning.
    - Inspect torn seats and exposed foam at rear of seat (seed and soil can become lodged in the cushioning).
    - Inspect rear axels for track width adjustment pin holes.
    - Inspect the drawbar and mounting.
    - Inspect the three point linkages and operating levers.

Implements – PTO rotary hoe

The following areas highlight some of the main areas of concern on Power Take-Off (PTO) driven rotary hoes:

- Inspect rotary tynes and mounting bolts for soil, tynes may need to be removed or loosened from their adaptors on the horizontal shaft to allow removal of soil from the void.
- Remove or loosen the skid/wear plate from the vertical gear casing (note that this casing is oil filled, thus remove or loosen only those bolts securing the plate).
- Inspect the body of the hoe for double skins or void spaces that could contain soil due to inadequate or incomplete weld joints etc.
- Inspect all areas where mud flaps are attached or plates overlap.
- Check for hollow section reinforcing ribs.
- Inspect the three point linkage attachment points and PTO knuckles and tube, universal joints and shafts.
- Inspect all ground engaging areas of the hoe for signs of wear for the ingress of soil or plant material.
- Rotate the rotary shaft and probe for plant material that may be caught in the bearing housings at the ends or middle if twin shafted.
- Inspect the frame and supports and mounts for the trailing wheels – these are often hollow sections.
- Inspect the trailing wheels for the rotary hoe, these wheels are usually hollow and made from two pieces of metal welded together – with wear the metal and welds crack and the wheels fill with soil.

Remember, the key to a successful cleaning is more than just checking the above areas – you must ensure that your inspection is thorough, systematic and consistent.

Track type dozers

1. **Drivers cab**

   - Check externally under and around driver's cab.
   - Check under mats in cab.
   - Remove/lift seat; remove/lift floor pans to allow checking to top of transmission.
   - Check air conditioner filter (if fitted) – shake/tap filter to check if clean.

2. **Tracks/track frame**

   - Examine tracks carefully.
   - Ensure inspection/cover plates are removed to allow inside track area.
   - Check idler wheels (these support the tracks).

3. **Belly plates** should be removed to allow inspection and cleaning.

4. **Rear plates** at back of dozer should be removed to allow inspection and cleaning.

5. **Hydraulic cover plates** should be removed to allow inspection and cleaning.

6. **Engine**

   - Check radiator core and engine area for residues.
   - Remove and check the air filter/cleaner (these often require destruction where they are clogged with QRM).
   - Check carefully the void space between the oil and radiator cores.

7. **Battery box**

   - Lift/remove the battery to check for contamination (battery box may be at side/rear or under seat).

8. **Fuel cells**

   - Are removable therefore dirt etc can pack between the tank and the frame.

9. **Blade**

   - Ensure that edge of blade top/bottom is not split – this allows soil to be packed very tightly in the hollow.
   - Check cutter points/wear blades.
   - Check trunction arms.
   - Check carefully the pivot points and adaptors at the rear of the front blade – these allow the blade to change height and angle. Sometimes soil has compacted and is difficult to dislodge.
   - Check all hollow sections.

10. **Ripper support frame** is usually hollow.

    - Check carefully i any contaminants have entered this section. The tynes may need to be remove.

11. **Tynes**

    - Tynes need careful inspection. Contamination may often be removed by water blasting, but tynes may need to be removed in some cases.

12. Ripper points

- A pin holds on the ripper points. Dirt can compact under the ripper points.

13. All areas

- Check if any sections or channels are hollow and determine if there is a possible entry point for contamination. Check if plates are covering a compartment or space that may have collected dirt/trash.

Remember, the key to a successful cleaning is more than just checking the above areas – you must ensure that your inspection is thorough, systematic and consistent.

Excavators

Check all areas, with special attention to:

1. **Hollow section chassis channels.**
2. **Turret pivot area.**
3. **Channels for hydraulic hoses from drive motor.**
4. **Counterweight void spaces.**
5. **Engine bay floor.**
6. **Fan shroud and radiator cores.**
7. **Glacier plate** (near radiator).
8. **Air filters** (shake/tap filters to determine if clean).
9. **Removable track adjuster guards and lubrication points.**
10. **Tool box**
11. **Arms/booms – usually the pivot points are the only area of concern.**
12. **Bucket/blade**

- Between teeth of adapters.
- Wear plates.

13. Rear blade (stabiliser)

- Wear plates.
- Hollow section arms.
- Hollow section blade.

14. Mini – excavator

- Hydraulics console.
- False floor.
- Turn table – running gear/tracks – internal gaps.

Wheeled loaders and compactors

Check all areas, with particular attention to the following:

1. **Feet of adaptors on compactors**
2. **Hydraulic points**
3. **Articulation points of hydraulics**
4. **Brake assemblies**
5. **Blade wear plates**
6. **Blade teeth and adaptors**
7. **FOPS and ROPS canopy**
    - Hollow channels.
    - Void space between cab and body (bird's nests have been found here).
8. **Air cleaner and air filters**
9. **Internal of cab, floor and mats**
10. **Air conditioner unit**
11. **Counterweight void spaces**
12. **Under and around removable fuel cells**
13. **Between dual wheels (where applicable)**

Dump trucks

Check all areas, with particular attention to the following:

1. **Internal of cab, floor and mats, behind and under seats.**
2. **Air cleaner**
3. **Air conditioner unit**
4. **Hollow channels in tray frame**
5. **Between dual wheels (where applicable)**

Cars 4WD, trucks and trailers

1. **Ensure that the vehicle is unlocked and you have access to the boot and bonnet.**

2. **Inspect the interior of the vehicle, especially:**

    - Footwells, check carpets and mats for burrs, seeds, mud.
    - Tool boxes

3. **Inspect inside the boot of the vehicle. Remove any contents if required to facilitate the inspection of the following:**

    - Carpet (deposits of hay, weed seeds, burrs and/or soil or water).
    - Spare tyre area.
    - Other recesses in the boot/rear of the vehicle.

4. **Inspect the engine bay, especially:**

    - Radiator
    - Grill
    - Top of transmission gearbox
    - Recess under windscreen wipers

5. **Inspect the underside of the vehicle, especially:**

    - Wheel arches, wheel trims, flares, step treads, bumpers
    - Mud flaps
    - Tyre rims (particularly the rear side)
    - Axels and diffs
    - Spare tyres on 4WD's and station wagons are often suspended underneath. **Note:** these are potentially a high risk area as contaminants collect inside the horizontally-positioned rim.

6. Inspect boxes and/or cartons present in the vehicle if you cannot ascertain their contents.

7. For utes and trucks, inspect the floor of the tray and channels of tai gates, side guards and under chassis rails. Gaps in the floor welds or boards and bolt holes.

8. Inspect trailers – check wheels, guards, trays, channels of draw bar and under body.

Checklist

Cotton pickers	Pass	Fail
The following areas are provided as an initial guide:		
1. Row units		
• Examine the picking heads externally for cotton trash/plant residues/soil • Open all picking head inspection doors to expose moisture racks, doffers, spindle bars and rotor assemblies • Manually rotate and inspect the rotor assemblies • Open rear inspection doors on air ducts located at rear of picking heads • Raise picking heads to inspect underside. ***Note:*** *the picking heads are held up by hydraulics – DO NOT climb underneath unless heads are safely blocked in the raised position.*		
2. Drivers cab		
• Check externally under and around drivers cab, check under mats in cab, check the air conditioning system (where fitted) including ducts and filters.		
3. Horizontal air ducts		
• Remove/open all cover inspection panels (these ducts convey cotton from the front picking section to the basket).		
4. Basket		
• Inspect basket roof. • Access the internal parts of the basket through hinged door on the roof (ladder required to climb into the basket). • Tip or elevate basket (depending on model) to inspect underside, drive shaft assemblies, blower fan, and hollow basket support frames located on the LHS of some models. ***Note:*** • *The meshed surface area of the basket will NOT support a person's weight – walk on the perforated metal walkways ONLY which run from back to front of the machine.* • *The basket is lifted by hydraulics – DO NOT climb under basket unless it is properly and safely secured in its raised position.*		
5. Inspect air ducts from the top		
6. Undercarriage/chassis		
7. Engine		
• Remove cover panel to expose top of radiator (this can be done when basket is in raised position). • Remove or open all screens on the engine, radiator and fuel bays.		
8. Tyres		
• Check for any soil or other contaminants.		

Wheeled tractors

Pass	Fail

The following areas are provided as an initial guide:

1. Tyres and rims – inspect all parts of tyres and rims, including inner side of rim

- Between dual wheels (if fitted).
- Check for wheel mounted counter – weights.
- Gashes or cuts in tyres.

2. Engine

- Check radiator core and grill for residues.
- Check for void between oil cooler and radiator (oil cooler may be hinged or on slide).
- Remove and check air filters/cleaners, pre-cleaners and cyclone style dust separators (if unable to clean satisfactorily, these may require destruction).
- Inspect sound deadening foams and heat shields for soil and trash (foams become impregnated with dust).

3. Drivers cab (where present)

- Check externally under and around drivers cab.
- Check under mats in cab and void space and skirt under suspended seats.
- Check air conditioner filters (if fitted), (most large tractors will have a false cabin roof housing the air-con unit, remove or open false roof).
- Check integrity of rubber door and window seals, if torn, trash and dirt will be sucked into them and trapped.
- Check void space behind consoles and dash for trash and dirt residues.

4. Chassis and vehicle body

- Check inside of chassis rail ledges and back axle -beam and undercarriage of this area.
- Check for hollow sections in front axel tubes.
- Inspect all tool boxes and battery boxes often under the cab steps or in engine bay.
- Check for void spaces in rear brake assemblies.
- Hollow sections in drawbars and hollow sections in retractable/extendable type three point linkages.
- Inspect single counter-weights, multiples may need to be removed to facilitate cleaning of void spaces.
- Inspect mud guards and wheel flares for hollows and crevices.
- Inspect roll cages or roll over bars for holes and gaps where attached to the vehicle.
- If 4WD drive, check for torque tube (front drive shaft guard) for holes or poor attachment.
- Inspect PTO (Power Take Off) area, PTO shaft, universal joints, shaft covers/PTO tubes.
- Inspect wiring looms in split protective conduit for trash and dirt residues.

Note: *some agricultural tractors will have a rear carry-all mounted on the three point linkages or a forward mounted forklift or bucket/scoop attachment – these should be inspected carefully. Particular attention should be given to the following:*

5. Buckets, blades, scoops, carry-all, forklift

- Inspect all areas of the blade for holes or double skins.
- Inspect and remove cutting teeth, adaptors and wear plates on blades.
- Inspect hydraulic arms and supports for hollows that may contain soil and trash.

6. All areas

- Check if any sections or channels are hollow and determine if there is a possible entry point for contamination. Check if plates are covering a compartment or space that may have collected dirt/trash.

Mini tractors

	Pass	Fail

The following areas are highlight some of the main areas of concern on mini-tractors:

1. Tyres and rims - inspect all parts of tyres and rims, including inner side of rim.

- Check for gaps in split type rims.
- Cuts and gashes in tyres.
- Wheel mounted counterweights.

2. Chassis - check inside of chassis rail ledges.

- Carefully inspect the chassis for hollow areas and cover plates that may conceal void spaces.
- Void spaces in the area between gearbox and engine (several models have a large void opening accessible from underneath).
- Void spaces in counter-weights, multiples may need to be removed to facilitate cleaning.
- Hollow sections in subframe under motor linking the chassis rails.

3. Engine

- Remove grill (usually 2 wing nuts) and clean, inspect and remove wire mesh screen from front of radiator and clean, inspect fan shroud at rear of radiator.
- Remove and inspect air filter cover, remove dust dish from air filter cover, remove and check air filter/cleaner (if unable to clean satisfactorily, these may require destruction).
- Check around fuel tank and brackets for dust and trash build ups.
- Inspect all areas in bonnet and in engine bay for hollows.

4. Other

- External rear brake assemblies and common shaft for brake and clutch pedals
- Foot plates and mounting brackets.
- Hollow sections in mudguards, joints between mud flaps and guard, wiring looms under guards.
- Inspect tool box under seat or under fuel tank, remove contents to allow cleaning.
- Inspect torn seats and exposed foam at rear of seat (seed and soil can become lodged in the cushioning).
- Inspect rear axels for track width adjustment pin holes.
- Inspect the drawbar and mounting.
- Inspect the three point linkages and operating levers.

Implements – PTO rotary hoe	Pass	Fail
The following areas highlight some of the main areas of concern on Power Take-Off (PTO) driven rotary hoes:		
• Inspect rotary tynes and mounting bolts for soil, tynes may need to be removed or loosened from their adaptors on the horizontal shaft to allow removal of soil from the void.		
• Remove or loosen the skid/wear plate from the vertical gear casing (note that this casing is oil filled, thus remove or loosen only those bolts securing the plate).		
• Inspect the body of the hoe for double skins or void spaces that could contain soil due to inadequate or incomplete weld joints etc.		
• Inspect all areas where mud flaps are attached or plates overlap.		
• Check for hollow section reinforcing ribs.		
• Inspect the three point linkage attachment points and PTO knuckles and tube, universal joints and shafts.		
• Inspect all ground engaging areas of the hoe for signs of wear for the ingress o soil or plant material.		
• Rotate the rotary shaft and probe for plant material that may be caught in the bearing housings at the ends or middle if twin shafted.		
• Inspect the frame and supports and mounts for the trailing wheels – these are often hollow sections.		
• Inspect the trailing wheels for the rotary hoe, these wheels are usually hollow and made from two pieces of metal welded together – with wear the metal and welds crack and the wheels fill with soil.		
Remember, the key to a successful cleaning is more than just checking the above areas – you must ensure that your inspection is thorough, systematic and consistent.		

Track type dozers

	Pass	Fail
1. Drivers cab		
• Check externally under and around driver's cab. • Check under mats in cab. • Remove/lift seat; remove/lift floor pans to allow checking to top of transmission. • Check air conditioner filter (if fitted) – shake/tap filter to check if clean		
2. Tracks/track frame		
• Examine tracks carefully. • Ensure inspection/cover plates are removed to allow inside track area. • Check idler wheels (these support the tracks).		
3. Belly plates should be removed to allow inspection and cleaning		
4. Rear plates at back of dozer should be removed to allow inspection and cleaning.		
5. Hydraulic cover plates should be removed to allow inspection and cleaning.		
6. Engine		
• Check radiator core and engine area for residues. • Remove and check the air filter/cleaner (these often require destruction where they are clogged with QRM). • Check carefully the void space between the oil and radiator cores.		
7. Battery box		
• Lift/remove the battery to check for contamination (battery box may be at side/rear or under seat).		
8. Fuel cells		
• Are removable therefore dirt etc can pack between the tank and the frame.		
9. Blade		
• Ensure that edge of blade top/bottom is not split – this allows soil to be packed very tightly in the hollow. • Check cutter points/wear blades. • Check trunction arms. • Check carefully the pivot points and adaptors at the rear of the front blade – these allow the blade to change height and angle. Sometimes soil has compacted and is difficult to dislodge. • Check all hollow sections.		
10. Ripper support frame is usually hollow		
• Check carefully if any contaminants have entered this section. The tynes may need to be remove.		
11. Tynes		
• Tynes need careful inspection. Contamination may often be removed by water blasting, but tynes may need to be removed in some cases.		
12. Ripper points		
• A pin holds on the ripper points. Dirt can compact under the ripper points.		

13. All areas		

- Check if any sections or channels are hollow and determine if there is a possible entry point for contamination. Check if plates are covering a compartment or space that may have collected dirt/trash.

Remember, the key to a successful cleaning is more than just checking the above areas – you must ensure that your inspection is thorough, systematic and consistent .

Excavators	Pass	Fail
Check all areas, with special attention to:		
1. Hollow section chassis channels		
2. Turret pivot area		
3. Channels for hydraulic hoses from driver motor		
4. Counterweight void spaces		
5. Engine bay floor		
6. Fan shroud and radiator cores		
7. Glacier plate (near radiator)		
8. Air filters (shake/tap filters to determine if clean)		
9. Removable track adjuster guards and lubrication points		
10. Tool box		
11. Arms/booms – usually the pivot points are the only area of concern		
12. Bucket/blade		

- Between teeth of adapters
- Wear plates

13. Rear blade (stabiliser)		

- Wear plates
- Hollow section arms
- Hollow section blade

14. Mini – excavator		

- Hydraulics console
- False floor
- Turn table – running gear/tracks – internal gaps

Wheeled loaders and compactors	Pass	Fail
Check all areas, with particular attention to the following:		
1. Feet of adaptors on compactors		
2. Hydraulic points		
3. Articulation points of hydraulics		
4. Brake assemblies		
5. Blade wear plates		
6. Blade teeth and adaptors		
7. Canopy • Hollow channels • Void space between cab and body (bird's nests have been found here)		
8. Air cleaner and air filters		
9. Internal of cab, floor and mats		
10. Air conditioner unit		
11. Counterweight void spaces		
12. Under and around removable fuel cells		
13. Between dual wheels (where applicable)		

Dump trucks	Pass	Fail
Check all areas, with particular attention to the following:		
1. Internal of cab, floor and mats, behind and under seats		
2. Air cleaner		
3. Air conditioner unit		
4. Hollow channels in tray frame		
5. Between dual wheels (where applicable)		

Cars, 4WD, trucks and trailers	Pass	Fail
1. Ensure that the vehicle is unlocked and you have access to the boot and bonnet.		
2. Inspect the interior of the vehicle, especially:		
• Footwells, check carpets and mats for burrs, seeds, mud. • Tool boxes		
3. Inspect inside the boot of the vehicle. Remove any contents if required to facilitate the inspection of the following:		
• Carpet (deposits of hay, weed seeds, burrs and/or soil or water). • Spare tyre area. • Other recesses in the boot/rear of the vehicle.		
4. Inspect the engine bay, especially:		
• Radiator • Grill • Top of transmission gearbox • Recess under windscreen wipers		
5. Inspect the underside of the vehicle, especially:		
• Wheel arches, wheel trims, flares, step treads, bumpers • Mud flaps • Tyre rims (particularly the rear side) • Axels and diffs • Spare tyres on 4WD's and station wagons are often suspended underneath. **Note:** these are potentially a high risk area as contaminants collect inside the horizontally-positioned rim.		
6. Inspect boxes and/or cartons present in the vehicle if you cannot ascertain their contents		
7. For utes and trucks, inspect the floor of the tray and channels of tai gates, side guards and under chassis rails. Gaps in the floor welds or boards and bolt holes.		
8. Inspect trailers – check wheels, guards, trays, channels of draw bar and under body.		

Appendix 3

Queensland checklist for Cleandown Procedures

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QUEENSLAND WEED SEED SPREAD PROJECT

July 2000

Queensland checklist for

CLEANDOWN PROCEDURES

Queensland Government

Department of Natural Resources

Contents

Cleandown procedures

Mobile/on site

The cleaning of vehicles and machinery on site prevents weed seed contaminants being spread to an adjoining weed free or less infested area/property/road.

Mobile/field site selection

- The most important point to consider is run off. Ensure the site is away from watercourses and drains. This will prevent weed seeds, grease and detergents polluting the stream.
- The site should be relatively flat (a slight slope or railway sleepers may prevent water logging) to help prevent run off and for safety reasons.
- The site must be easily identified for future reference as this location will need monitoring for future outbreaks in the following seasons. The landholder/trustee of the land should also be notified o this location. (a painted post, tree, distinguished landmark or GPS recording is ideal)
- An area that is well grassed will reduce mud during cleaning down and assist as competition for any weed seed that later germinates.
- Landholders should be consulted to determine a suitable cleandown site
- The site should be close to the infested area to prevent further spread.
- Avoid crossing the property boundary prior to cleaning-down (unless the infestation is also located on the adjoining property at similar or higher densities)
- Small cleandowns may be conducted at the landholders shed facilities (with permission) prior to leaving the property.

Suggested equipment

- A mobile water tanker or spray unit is ideal
- Water may also be pumped from a dam or cattle trough/tank
- High pressure water from a gurney or pump
- An air compressor for removing dry material (radiators and grain headers)
- Broom/dust pan (cleaning cabins)
- A garden hose may be adequate for small cleandowns

Public cleandown facilities

- Throughout Queensland there are numerous cleandown facilities available for public/industry use for the purpose of cleaning vehicles and machinery to prevent weed seed spread.
- Some facilities are of suitable standard (listed below) and contain high pressure water and air compressors.
- Where possible these facilities should be utilised as they are equipped with grease and silt traps for environmental protection.
- Most towns have a wash-down pad (eg at saleyards/ council depots) that may be of adequate standard to cleandown machinery and vehicles. (**NB – Council permission may be required)**

Washdown facilities

Location	Standard	Shire
Emerald – saleyards	New Facility – suitable standard	Emerald
Biloela – saleyards	New facility being built	Banana
Rolleston – water treatment works	Suitable Standard – possible upgrade	Bauhinia
Gracemere – saleyards	New facility being built	Fitzroy
Alpha	New facility being built	Jericho
Monto – water treatment works	Unknown Standard	Monto
Charters Towers – Dalrymple saleyards	Suitable Standard	Dalrymple
Springsure – saleyards	Suitable standard – possible upgrade	Bauhinia
Baralaba – saleyards	Suitable Standard	Banana
Moura – water treatment works	Suitable Standard	Banana
Injune – saleyards	New Facility – suitable standard	Bungil
Taroom – saleyards	New Facility – suitable standard	Taroom
Bedourie	Suitable standard	Diamantina
Barcaldine	Suitable standard	Barcaldine
Dululu	Suitable standard	Banana
Theodore	Suitable standard	Banana
Charleville	New facility	Murweh
Roma	Suitable	Roma Town
Stanthorpe	Suitable	Stanthorpe
Pomona	Suitable	Noosa
Eumundi	Suitable	Noosa
Mareeba	Washdown pad	Mareeba
Richmond	Washdown pad	Richmond
Cloncurry	Washdown pad	Cloncurry
Tambo	Washdown pad	Tambo
Eromanga	Washdown pad	Quilpie
Quilpie	Washdown pad	Quilpie
Mitchell	Washdown pad	Booringa
Surat	Washdown pad	Warroo
Chinchilla	Washdown pad	Chinchilla
Gympie	Washdown pad	Cooloola
Kingaroy	Washdown pad	Kingaroy
Dalby	Washdown pad	Dalby Town
Crow's Nest	Washdown pad	Crow's Nest
Carlovers and other private facilities	Suitable for cars and light trucks only	Various

For further information or for permission to use these facilities contact should be made with the respective shires.

Cleaning procedure

(guide only) – ensure all safety precautions are taken (read vehicle/machine/equipment operating manual prior to cleaning).

- Place vehicle/machine in a safe position - stable and immobile
- Stop engine, apply park brake, chock wheels and lower all implements or secure/chock them if they are required up for cleaning (eg slasher)
- Ensure the area is free of obstructions/objects that may cause injury (logs, powerlines etc)
- Examine the item for cleaning to determine extent of mud, dust and plant material build up.
- Identify any points that require specific attention eg behind guards and protective plates, radiato rs, spare tyres etc these may be difficult to locate and access.
- Remove necessary guards/belly plates to access areas for cleaning.
- Identify areas that may require cleaning with compressed air rather than water. Do these first.
- Clean under guards and underneath machinery/vehicle and then do the cabin, upper body and implements.
- Tool boxes and storage compartments may also require cleaning.
- Move vehicle/machine with caution. Avoid re-contamination, wash remaining mud etc o tyres/tracks.
- Carry out final inspection to ensure all areas have been cleaned.
- Replace guards (belly plates and other guards on heavy machinery may need to be replaced prior to moving the machinery).

Maintenance work

- A hard surfaced area such as a gravel area beside the property owner's shed is ideal for this situation as it allows work to be carried out, parts may be removed and the area can be monitored.
- If the maintenance work is to be done in the field/paddock, the area should also be noted or marked as a reference for future monitoring.
- During maintenance, weed seeds may fall off the machinery as a result of guards etc being removed.

Machinery and vehicle cleandown

Points to consider when cleaning-down vehicles and machinery:

No procedure or work instruction can list all the parts to consider during cleandown of vehicle, machinery and equipment due to factors such as:

- Numerous different models and new models
- Different attachments (eg. Different types of blades on dozers)
- Different modifications, either in the factory or frequently by the previous owner
- Varying condition of the machinery, eg. Rusted parts allowing entry of contaminants into sections usually sealed etc.

The following areas are provided as an initial guide only to be considered as a minimum when cleaning down the following:

Headers and harvesters

All harvesters

1. The area under the skid plate
2. Each header knife and finger
3. The auger located horizontally across the header
4. The area behind any cover on the header
5. The area within any belts on any draper front (if fitted)
6. The feeder house
7. The driver's cab compartment floor area
8. The cleaning fan and the area between the bottom of the fan housing and any shield under the fan housing
9. The chassis, including the inside of any chassis rail ledges, back axle-beam and undercarriage areas
10. Any tailing auger
11. Any sieve area, including the full length and width of the grain pan
12. Any grain bin area, including any auger
13. The engine compartment, including the radiator core
14. Any grain or repeat elevator including any cups and rubber flights
15. Any straw spreader or chopper
16. Any tyres and rims.

Conventional harvester

17. The threshing or separating area, including the drum and concaves behind the rasp bars and lead-in plates and around concave wires.
18. The beater drum, including the area between the drum and walkers.
19. The straw walkers, including the beater and the chaff pan, underneath any straw walker and any concealed areas under rubber air flaps.

Rotary harvesters

20. The external top and sides of the conical section of the rotor cage
21. The areas inside the top of the conical section
22. The threshing or separating area, including along the rotor cage.

Cotton pickers

The following areas are provided as an initial guide:

1. Row units

- Examine the picking heads externally for cotton trash/plant residues/soil
- Open all picking head inspection doors to expose moisture racks, doffers, spindle bars and rotor assemblies
- Manually rotate and inspect the rotor assemblies
- Open rear inspection doors on air ducts located at rear of picking heads
- Raise picking heads to inspect underside.

Note: the picking heads are held up by hydraulics – DO NOT climb underneath unless heads are safely blocked
in the raised position.

2. Drivers cab

- Check externally under and around drivers cab, check under mats in cab, check the air conditioning system (where fitted) including ducts and filters.

3. Horizontal air ducts

- Remove/open all cover inspection panels (these ducts convey cotton from the front picking section to the basket).

4. Basket

- Inspect basket roof.
- Access the internal parts of the basket through hinged door on the roof (ladder required to climb into the basket).
- Tip or elevate basket (depending on model) to inspect underside, drive shaft assemblies, blower fan, and hollow basket support frames located on the LHS of some models.

Note:
1. The meshed surface area of the basket will NOT support a person's weight – walk on the perforated metal walkways ONLY which run from back to front of the machine.
2. The basket is lifted by hydraulics – DO NOT climb under basket unless it is properly and safely secured in its raised position.

5. Inspect air ducts from the top.

6. Undercarriage/chassis

- Check all underside of machine, chassis rails, and telescopic rear axle if fitted.

7. Engine

- Remove cover panel to expose top of radiator (this can be done when basket is in raised position).
- Remove or open all screens on the engine, radiator and fuel bays.

8. Tyres

- Check for any soil or other contaminants.

Wheeled tractors

The following areas are provided as an initial guide:

1. **Tyres and Rims** – inspect all parts of tyres and rims, including inner side of rim.

    - Between dual wheels (if fitted).
    - Check for wheel mounted counter – weights.
    - Gashes or cuts in tyres.

2. **Engine**

    - Check radiator core and grill for residues.
    - Check for void between oil cooler and radiator (oil cooler may be hinged or on slide).
    - Remove and check air filters/cleaners, pre-cleaners and cyclone style dust separators (if unable to clean satisfactorily, these may require destruction).
    - Inspect sound deadening foams and heat shields for soil and trash (foams become impregnated with dust).

3. **Drivers cab** (where present)

    - Check externally under and around drivers cab.
    - Check under mats in cab and void space and skirt under suspended seats.
    - Check air conditioner filters (i fitted), (most large tractors will have a false cabin roof housing the air-con unit, remove or open false roof).
    - Check integrity of rubber door and window seals, if torn, trash and dirt will be sucked into them and trapped.
    - Check void space behind consoles and dash for trash and dirt residues.

4. **Chassis and vehicle body**

    - Check inside of chassis rail ledges and back axle -beam and undercarriage of this area.
    - Check for hollow sections in front axel tubes.
    - Inspect all tool boxes and battery boxes often under the cab steps or in engine bay.
    - Check for void spaces in rear brake assemblies.
    - Hollow sections in drawbars and hollow sections in retractable/extendable type three point linkages.
    - Inspect single counter-weights, multiples may need to be removed to facilitate cleaning of void spaces.
    - Inspect mud guards and wheel flares for hollows and crevices.
    - Inspect roll cages or roll over bars for holes and gaps where attached to the vehicle.
    - If 4WD drive, check for torque tube (front drive shaft guard) for holes or poor attachment.
    - Inspect PTO (Power Take Off) area, PTO shaft, universal joints, shaft covers/PTO tubes.
    - Inspect wiring looms in split protective conduit for trash and dirt residues.

Note: some agricultural tractors will have a rear carry-all mounted on the three point linkages or a forward mounted forklift or bucket/scoop attachment – these should be inspected carefully. Particular attention should be given to the following:

5. **Buckets, blades, scoops**

    - Inspect all areas of the blade for holes or double skins.
    - Inspect and remove cutting teeth, adaptors and wear plates on blades.
    - Inspect hydraulic arms and supports for hollows that may contain soil and trash.

6. **All areas**

    - Check if any sections or channels are hollow and determine if there is a possible entry point for contamination. Check if plates are covering a compartment or space that may have collected dirt/trash.

Mini tractors

The following areas are highlight some of the main areas of concern on mini-tractors:

1. **Tyres and rims** - inspect all parts of tyres and rims, including inner side of rim.

    - Check for gaps in split type rims.
    - Cuts and gashes in tyres.
    - Wheel mounted counterweights.

2. **Chassis** – check inside of chassis rail ledges.

    - Carefully inspect the chassis for hollow areas and cover plates that may conceal void spaces.
    - Void spaces in the area between gearbox and engine (several models have a large void opening accessible from underneath).
    - Void spaces in counter-weights, multiples may need to be removed to facilitate cleaning.
    - Hollow sections in subframe under motor linking the chassis rails.

3. **Engine**

    - Remove grill (usually 2 wing nuts) and clean, inspect and remove wire mesh screen from front of radiator and clean, inspect fan shroud at rear of radiator.
    - Remove and inspect air filter cover, remove dust dish from air filter cover, remove and check air filter/cleaner (if unable to clean satisfactorily, these may require destruction).
    - Check around fuel tank and brackets for dust and trash build ups.
    - Inspect all areas in bonnet and in engine bay for hollows.

4. **Other**

    - External rear brake assemblies and common shaft for brake and clutch pedals
    - Foot plates and mounting brackets.
    - Hollow sections in mudguards, joints between mud flaps and guard, wiring looms under guards.
    - Inspect tool box under seat or under fuel tank, remove contents to allow cleaning.
    - Inspect torn seats and exposed foam at rear of seat (seed and soil can become lodged in the cushioning).
    - Inspect rear axels for track width adjustment pin holes.
    - Inspect the drawbar and mounting.
    - Inspect the three point linkages and operating levers.

Implements – PTO rotary hoe

The following areas highlight some of the main areas of concern on Power Take-Off (PTO) driven rotary hoes:

- Inspect rotary tynes and mounting bolts for soil, tynes may need to be removed or loosened from their adaptors on the horizontal shaft to allow removal of soil from the void.
- Remove or loosen the skid/wear plate from the vertical gear casing (note that this casing is oil filled, thus remove or loosen only those bolts securing the plate).
- Inspect the body of the hoe for double skins or void spaces that could contain soil due to inadequate or incomplete weld joints etc.
- Inspect all areas where mud flaps are attached or plates overlap.
- Check for hollow section reinforcing ribs.
- Inspect the three point linkage attachment points and PTO knuckles and tube, universal joints and shafts.
- Inspect all ground engaging areas of the hoe for signs of wear for the ingress of soil or plant material.
- Rotate the rotary shaft and probe for plant material that may be caught in the bearing housings at the ends or middle if twin shafted.
- Inspect the frame and supports and mounts for the trailing wheels – these are often hollow sections.
- Inspect the trailing wheels for the rotary hoe, these wheels are usually hollow and made from two pieces of metal welded together – with wear the metal and welds crack and the wheels fill with soil.

Remember, the key to a successful cleaning is more than just checking the above areas – you must ensure that your inspection is thorough, systematic and consistent.

Track type dozers

1. **Drivers cab**

   - Check externally under and around driver's cab.
   - Check under mats in cab.
   - Remove/lift seat; remove/lift floor pans to allow checking to top of transmission.
   - Check air conditioner filter (i fitted) – shake/tap filter to check if clean.

2. **Tracks/track frame**

   - Examine tracks carefully.
   - Ensure inspection/cover plates are removed to allow inside track area.
   - Check idler wheels (these support the tracks).

3. **Belly plates** should be removed to allow inspection and cleaning.

4. **Rear plates** at back of dozer should be removed to allow inspection and cleaning.

5. **Hydraulic cover plates** should be removed to allow inspection and cleaning.

6. **Engine**

   - Check radiator core and engine area for residues.
   - Remove and check the air filter/cleaner (these often require replacement where they are clogged with contaminants).
   - Check carefully the void space between the oil and radiator cores.

7. **Battery box**

   - Lift/remove the battery to check for contamination (battery box may be at side/rear or under seat).

8. **Fuel cells**

   - Are removable therefore dirt etc can pack between the tank and the frame.

9. **Blade**

   - Ensure that edge of blade top/bottom is not split – this allows soil to be packed very tightly in the hollow.
   - Check cutter points/wear blades.
   - Check trunction arms.
   - Check carefully the pivot points and adaptors at the rear of the front blade – these allow the blade to change height and angle. Sometimes soil has compacted and is difficult to dislodge.
   - Check all hollow sections.

10. **Ripper support frame** is usually hollow.

    - Check carefully if any contaminants have entered this section. The tynes may need to be remove.

11. **Tynes**

    - Tynes need careful inspection. Contamination may often be removed by water blasting, but tynes may need to be removed in some cases.

12. Ripper points

- A pin holds on the ripper points. Dirt can compact under the ripper points.

13. All areas

- Check if any sections or channels are hollow and determine if there is a possible entry point for contamination. Check if plates are covering a compartment or space that may have collected dirt/trash.

Remember, the key to a successful cleaning is more than just checking the above areas – you must ensure that your inspection is thorough, systematic and consistent.

Excavators

Check all areas, with special attention to:

1. **Hollow section chassis channels.**
2. **Turret pivot area.**
3. **Channels for hydraulic hoses from drive motor.**
4. **Counterweight void spaces.**
5. **Engine bay floor.**
6. **Fan shroud and radiator cores.**
7. **Glacier plate (near radiator).**
8. **Air filters (shake/tap filters to determine if clean).**
9. **Removable track adjuster guards and lubrication points.**
10. **Tool box**
11. **Arms/booms – usually the pivot points are the only area of concern.**
12. **Bucket/blade**

- Between teeth of adapters.
- Wear plates.

13. Rear blade (stabiliser)

- Wear plates.
- Hollow section arms.
- Hollow section blade.

14. Mini – excavator

- Hydraulics console.
- False floor.
- Turn table – running gear/tracks – internal gaps.

Wheeled loaders and compactors

Check all areas, with particular attention to the following:

1. **Feet of adaptors on compactors**
2. **Hydraulic points**
3. **Articulation points of hydraulics**
4. **Brake assemblies**
5. **Blade wear plates**
6. **Blade teeth and adaptors**
7. **FOPS and ROPS canopy**
    - Hollow channels.
    - Void space between cab and body (bird's nests have been foun d here).
8. **Air cleaner and air filters**
9. **Internal of cab, floor and mats**
10. **Air conditioner unit**
11. **Counterweight void spaces**
12. **Under and around removable fuel cells**
13. **Between dual wheels (where applicable)**
14. **Check for water filled between wheels or drums**

Dump trucks

Check all areas, with particular attention to the following:

1. **Internal of cab, floor and mats, behind and under seats.**
2. **Air cleaner**
3. **Air conditioner unit**
4. **Hollow channels in tray frame**
5. **Between dual wheels (where applicable)**
6. **Body and tipper**

Cars, trucks and 4WD

1. **Inspect the interior of the vehicle, especially:**

    - Footwells, check carpets and mats for burrs, seeds, mud, water etc.

2. **Inspect inside the boot of the vehicle.**

    - Carpet (deposits of hay, weed seeds, burrs and/or soil or water).
    - Spare tyre area.
    - Other recesses in the boot/rear of the vehicle.

3. **Inspect the engine bay, especially:**

    - Radiator
    - Grill
    - Top of transmission gearbox
    - Recess under windscreen wipers
    - Air filters

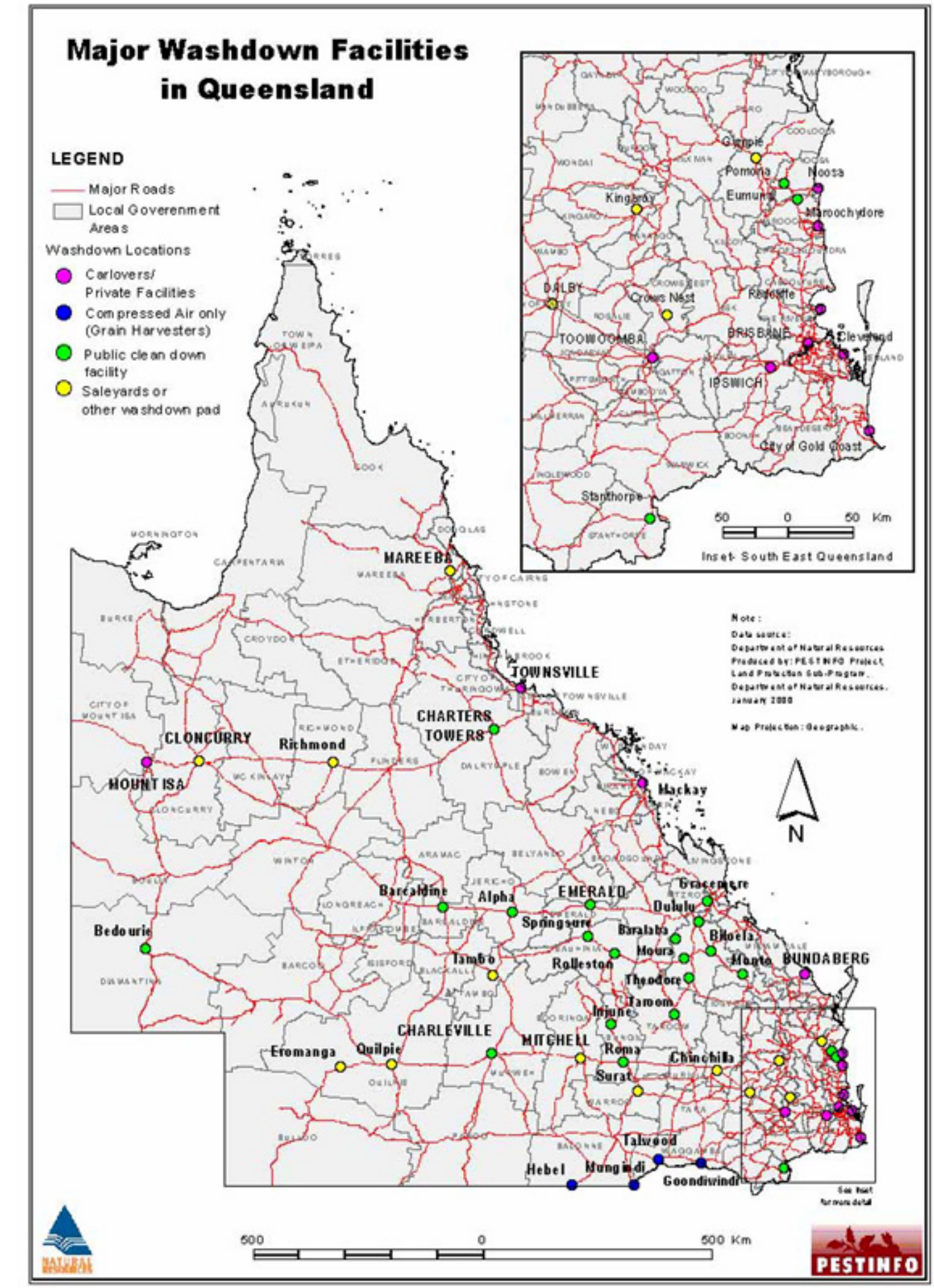
4. **Inspect the underside of the vehicle, especially:**

    - Wheel arches, wheel trims, flares, step treads, bumpers
    - Mud flaps
    - Tyre rims (particularly the rear side)
    - Axels and diffs
    - Spare tyres on 4WD's and station wagons are often suspended underneath. **Note:** these are potentially a high risk area as contaminants collect inside the horizontally-positioned rim.

5. Inspect tool boxes, ladders and storage compartments.

6. Inspect the back/tray of trucks and 4WD for soil, seed and plant material.

Major Washdown Facilities in Queensland



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Appendix 4

Weed Hygiene Declaration Form

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Weed hygiene declaration

Part 1 – Sale or supply of things

(Examples of 'thing' include fodder, grain, seed, livestock, gravel, sand, soil, mulch, packing material, machinery, vehicles, or water)

This declaration is valid for supplying thing/things specified below from ☐ to ☐ (please provide dates)

1. Thing (please tick the relevant box and provide a brief description)

☐ Fodder ☐ Grain/seeds ☐ Sand/gravel ☐ Machinery ☐ Mulch ☐ Livestock ☐ Other

Amount ☐ (e.g. weight, size of load, number of items) Description ☐ (e.g. cattle, hay, dozer)

2. Has the 'thing' been moved through, stored in, come from, or used in a place infested with:

	Yes	No	Maybe
Parthenium	☐	☐	☐
Giant rat's tail grass, American rat's tail grass, giant Parramatta grass, Parramatta grass	☐	☐	☐
Prickly acacia	☐	☐	☐
Other (provide details)	☐	☐	☐

3. If you answered 'yes' or 'maybe' in question 2, then what actions have been taken to remove or ensure that there is no reproductive material (please tick the relevant boxes and specify steps taken)

☐ Nil ☐ Washing/cleaning ☐ Quarantine period ☐ Chemical treatment ☐ Certified clean ☐ Other

Steps taken ☐

4. To the best of my knowledge the 'thing' described above: still contains a weed listed in 2 above

Yes	No	Maybe
☐	☐	☐

I ☐ of ☐

Town ☐ State ☐ Telephone ☐

Declare that the information that I have provided in this declaration is true and correct and I have read the accompanying explanatory notes before completing this Declaration.

Signature ☐ Date ☐

Part 2 – Transport of contaminated things

(Vehicle includes anything used for carrying anything or any person by land, water or air, and includes equipment or machinery capable of moving on land).

This declaration is valid for transport and movement of vehicles and other things from ☐ to ☐ (please provide locations)

1. Movement of vehicles. The vehicle described as: Make ☐

Registration no. or engine/frame no. ☐ Was *clean prior to entry to ☐ (destination)

*Please refer to the definition of clean in the explanatory notes

2. Transport of contaminated things. If you are transporting anything contaminated or possibly contaminated with any declared weed, what actions are being used to contain the weed reproductive material:

☐ Nil ☐ Covered with tarpaulin ☐ Enclosed within container ☐ Chemically treated ☐ Other

Actions: ☐

I* ☐ of ☐

Town ☐ State ☐ Telephone ☐

*If same as Part 1 please write 'as above'

Declare that the information that I have provided in this declaration is true and correct and I have read the accompanying explanatory notes before completing this Declaration.

Signature ☐ Date ☐

Explanatory notes

This declaration was developed in response to landholders, rural industry, community and government desire to minimise the impact of weeds on their business and on the environment. It has been developed to assist in preventing the spread of weeds and other contaminants, and to meet the requirements of Section 45 of the *Land Protection Act (Pest and Stock Route Management) Act 2002*. Completed it provides information on the status of a 'thing', whether it is contaminated or free of weedy material. Part 1 – Sale or Supply of Things of the declaration should be completed by the supplier then given to the receiver before they receive the 'thing'. The receiver can then make an informed decision and take precautions to prevent new infestations. It can also provide written assurance that a vehicle is clean before entering a property.

Why use this declaration?

This declaration can provide:

- A supplier a way of meeting the requirements of section 45 (2) of the Act, if they are supplying any thing that is, or could be contaminated with the weeds listed below.
- A person obtaining a 'thing', information on whether the thing is clean of weed reproductive material or has been infested.
- Assurance that a vehicle was *clean prior to entry onto a property.
- Assurance that any contaminated or potentially contaminated thing is being moved so as not to spread the contaminant.
- Assurance that a product is free of other weedy reproductive material.

Section 45 of the Act makes it an offence to supply a 'thing' that is contaminated with a Class 1 or any of the Class 2 weeds listed below. However, for the Class 2 weeds, a person does not breach Section 45, if they provide a written notice (Part 1 of this declaration) that states that the 'thing' is or may be contaminated. The written notice must be filled and given to the receiver before the 'thing' is supplied.

List of Class 2 species

The following class 2 pests are prescribed for section 45(1)(b) of the Act. These weeds are readily able to infest a wide range of products, from livestock to grain and vehicles. These weeds have a major effect on pasture production and have the capacity to invade large areas of Queensland.

Common name	Species
American rat's tail grass	*Sporobolus jacquemontii*
Giant Parramatta grass	*Sporobolus fertilis*
Giant rat's tail grass	*Sporobolus pyramidalis* and *S. natalensis*
Parramatta grass	*Sporobolus africanus*
Parthenium	*Parthenium hysterophorus*
Prickly acacia	*Acacia nilotica*

Across Queensland, isolated outbreaks of declared plants such as those listed above are found on properties and roadsides each year. Outbreaks of these declared plants are often located hundreds of kilometres from core infestations. These outbreaks occur as a result of machinery, livestock, vehicles, fodder, grain, material and equipment contaminated with weed seeds being transported across the state. A high percentage of seed from prickly acacia and giant rats tail grass remains viable after being eaten and excreted by cattle.

***Definitions**

Clean

- For vehicles, machinery and equipment, clean means that no soil and/or, organic matter that may contain weed reproductive material, is on or in areas that are accessible during cleaning and maintenance work. A checklist and guidelines that show areas that are required to be clean are located on www.dpi.qld.gov.au.
- A vehicle is considered to remain clean if it leaves its point of origin clean and only travels on sealed roads or well maintained unsealed roads.
- For livestock, clean means that animals are internally and externally free of the reproductive material of any declared plant listed in the Land Protection (Pest and Stock Route Management) Regulation 2003. If livestock are suspected to be infested with a declared weed then they should be quarantined within a weed free paddock or pen for a 14-day period.

Weed reproductive material: means any part of the plant that is capable of producing another plant, this can be by sexual and asexual reproduction. Examples include seeds, bulbs, rhizomes, tuber, stem or leaf cutting and the whole plant.

Well-maintained unsealed road: means roads that do not have vegetation growing on or encroaching onto the area occupied by traffic.

For further information: Please contact the relevant Local Government Weeds Officer or the local office of the Department of Primary Industries and Fisheries.

Queensland Government
Department of Primary Industries and Fisheries

Appendix 5

Location of Central Queensland and South-west Queensland Washdown Facilities

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Central Queensland washdown facilities

Washdown facilities are located at:

- Baralaba
- Biloela
- Bingegang
- Calliope
- Clermont
- Duaringa
- Dysart
- Emerald
- Gladstone
- Glenden
- Gracemere
- Mackay
- Middlemount
- Moura
- Nebo
- Rockhampton
- Rolleston
- Springsure
- St Lawrence
- Taroom
- Theodore
- Yeppoon

Baralaba

Landmark: near showground and old saleyards

Address: Rannes Road

Contact: Banana Shire Council

Telephone: (07) 4992 9512

Maximum vehicle size: machinery

Height limit: no

Hose detail: high pressure; high volume hose

Cost: $2 for 15 minutes

Surface: concrete slab with tilt

Hours: n/a

Biloela

Landmark: adjacent to water treatment plant

Address: Quarry Road

Contact: Gordon Twiner, Banana Shire Council

Telephone: 0427 148783
Maximum vehicle size: road train
Height limit: no
Hose detail: high pressure; high volume hose
Cost: $2 for 15 minutes
Surface: concrete slab with tilt
Hours: n/a

Bingegang

Landmark: near substation and pump station
Address: Mackenzie River Capella Road
Maximum vehicle size: semitrailer
Height limit: no
Hose detail: high pressure hose
Cost: free
Surface: concrete slab
Hours: 24 hours

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Calliope

Landmark: Country Club turnoff
Address: Stowe Road
Contact: Gladstone Regional Council
Telephone: (07) 4975 8100
Maximum vehicle size: semitrailer
Height limit: no
Hose detail: high volume hose
Cost: tokens ($2 for 15 minutes) available from Choice Service Station: Calliope Cross Roads CQP service station
Gladstone Regional Council
Surface: concrete slab/bitumen
Hours: n/a

Clermont

Landmark: saleyards (signposted)
Address: Herschell Street
Contact: Charlie Stranks, Isaac Shire Council
Telephone: 0417 732845
Maximum vehicle size: road train type-two
Height limit: no
Hose detail: n/a
Cost: free

Surface: bitumen/concrete slab
Hours: 24 Hours

Duaringa
Landmark: opposite saleyards (golf course, airport)
Address: Aerodrome Road
Contact: Don Carrol, Central Highlands Regional Council
Telephone: (07) 4935 7101
Operational End 2003
Maximum vehicle size: road train
Height limit: no
Hose detail: high pressure; high volume hose
Cost: $2 for 30 minutes
Surface: concrete slab
Hours: n/a

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Dysart
Landmark: Dysart compound
Address: n/a
Contact: Graeme Wehmeier, Isaac Regional Council
Telephone: (07) 4958 1166; 0488 100 631
Maximum vehicle size: body truck or semitrailer
Height limit: no
Hose detail: high pressure spray; guerney on request
Cost: free
Surface: concrete slab
Hours: 7 am to 3 pm

Emerald
Landmark: saleyards
Address: Batts Street
Contact: John Hooper, Central Highlands Regional Council
Telephone: (07) 4982 8333
Maximum vehicle size: road train
Height limit: no
Hose detail: high pressure; low flow hoses; has an oil separator
Cost: $30 deposit for key available from CHRC officer during office hours OR pre-paid key is $30; $30 for 1 hour
Surface: concrete slab
Hours: 24 hours

Gladstone
Landmark: Gladstone Superwash
Address: 154 Goondoon Street
Telephone: (07) 4972 9202
Maximum vehicle size: cars and 4WDs
Height limit: n/a
Hose detail: high pressure spray
Cost: $1 for 2 minutes
Surface: n/a
Hours: n/a

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Glenden
Landmark: council depot
Address: Currawong Street
Contact: Neville Bell, Isaac Regional Council
Telephone: 0418 729 620
Maximum vehicle size: heavy vehicle
Height limit: n/a
Hose detail: high pressure; high volume hose
Cost: free
Surface: concrete
Hours: 7.30 am - 3.30 pm (week days)

Gracemere
Landmark: saleyards
Address: Saleyards Road/ Capricorn Highway
Contact: Rockhampton Regional Council
Telephone: (07) 4931 5400
Contact: Gracemere Saleyards
Telephone: (07) 4931 7300
Maximum vehicle size: B-double; not for low loaders
Height limit: no
Hose detail: bring your own hose (1 inch coupling)
Cost: need a key (available from Gracemere Saleyards 8 am - 4 pm Monday to Friday). $33.50 plus billing at $0.20 per minute (minimum 2 minutes) or $0.25 per minute after hours)
Surface: bow-shaped concrete slab
Hours: 24 hours

Mackay
Landmark: Mackay Carlovers
Address: Kay Street, North Mackay

Telephone: (07) 4942 6127
Maximum vehicle size: n/a
Height limit: n/a
Hose detail: high pressure spray
Cost: $1 for 2-3 minutes
Surface: n/a
Hours: n/a

Mackay

Landmark: Mackay Superwash
Address: 2 Malcolmson Street (Corner Evans Avenue)
Telephone: (07) 4953 4512
Maximum vehicle size: n/a
Height limit: n/a
Hose detail: high pressure spray
Cost: $1 for 2-3 minutes
Surface: n/a
Hours: n/a

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Middlemount

Landmark: Middlemount compound
Address: Nolan Drive
Contact: Gordon Webley, Isaac Regional Council
Telephone: (07) 4964 5402
Maximum vehicle size: n/a
Height limit: n/a
Hose detail: garden hose; high pressure spray
Cost: free
Surface: n/a
Hours: n/a

Moura

Landmark: west of town near water treatment plant
Address: Dawson Highway
Contact: Gordon Twiner, Banana Shire Council
Telephone: 0427 148783
Maximum vehicle size: road train (also has a facility for smaller vehicles)
Height limit: no
Hose detail: high pressure; high volume hose
Cost: $2 for 15 minutes
Surface: concrete slab with tilt
Hours: n/a

Nebo
(new facility available by June 2009)

Rockhampton
Landmark: Rockhampton Carlovers
Address: Corner High Street and Musgrave Street
Telephone: (07) 4926 3800
Maximum vehicle size: n/a
Height limit: n/a
Hose detail: high pressure spray
Cost: $1 for 2 minutes
Surface: n/a
Hours: n/a

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Rolleston
Landmark: near sports ground; cattle dip and old saleyards
Address: One Mile Road
Contact: Central Highlands Regional Council
Telephone: (07) 4984 1166
Maximum vehicle size: semitrailer with prime mover
Height limit: no
Hose detail: high pressure low volume hose 20 L per minute
Cost: $2 per 30 minutes
Surface: 23 m concrete slab
Hours: 24 hours

Springsure
Landmark: saleyards
Address: Dip Road
Contact: Central Highlands Regional Council
Telephone: (07) 4984 1166
Maximum vehicle size: semitrailer with prime mover
Height limit: no
Hose detail: hose on fixed reel
Cost: $2 for 20 minutes
Surface: 23 m concrete slab
Hours: n/a

St Lawrence
Landmark: Council compound
Address: Kinnaird Street
Contact: Graham Wehmeier, Isaac Shire Council

Telephone: (07) 4964 5400
Maximum vehicle size: prime mover or body truck
Height limit: no
Hose detail: high volume, high pressure; guerney on request
Cost: free
Surface: concrete slab
Hours: office hours

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Taroom

Landmark: adjacent to dip yards
Address: Roma-Taroom Road
Contact: Gordon Twiner, Banana Shire Council
Telephone: 0427 148783
Maximum vehicle size: road train; machinery
Height limit: no
Hose detail: high pressure; high volume hose plus air pressure
Cost: $2 for 20 minutes
Surface: concrete slab with tilt
Hours: n/a

Theodore

Landmark: across from showground and old saleyards
Address: Leichardt Highway
Contact: Gordon Twiner, Banana Shire Council
Telephone: 0427 148783
Maximum vehicle size: road train; machinery
Height limit: no
Hose detail: high pressure; high volume hose plus air pressure
Cost: $2 for 15 minutes
Surface: concrete slab with tilt
Hours: n/a

Yeppoon

Landmark: Yeppoon Car Wash
Address: 9 Queen Street
Telephone: (07) 4939 2322
Maximum vehicle size: n/a
Height limit: n/a
Hose detail: high pressure spray
Cost: coin operated
Surface: n/a
Hours: n/a

South-west Queensland washdown facilities

Chinchilla

Landmark: saleyards
Address: Slessar Street
Contact: Geoff Frame, Dalby Shire Council
Telephone: (07) 4662 7056 Mobile: 0429 898 351
Maximum vehicle size: road train
Height limit: no
Hose detail: need to supply own hose, 1 - 1 1/4 inch fitting
Cost: For cost please contact Dalby Shire Council for more information
Surface: Concrete slab
Hours: 7 am - 4 pm

Dalby

Address: 15 Drayton Street
Maximum vehicle size: cars and 4WDs
Height limit: yes
Hose detail: automatic car wash facility
Cost: current fees apply
Surface: n/a
Hours: n/a

Eidsvold

Landmark: Eidsvold Shire Council depot (towards airstrip on left-hand side)
Address: Mt Rose Street
Contact: Andrew Sama, Eidsvold Shire Council
Telephone: 0447 657
um vehicle size: all sizes
Height limit: no
Hose detail: guerney
Cost: nil
Surface: bitumen/concrete slab
Hours: 7 am - 4 pm

Injune

Landmark: saleyards
Address: Roma Road, Injune
Contact: Steve Murray, Roma Regional Council
Telephone: (07) 4622 1144 Mobile: 0428 261290
Maximum vehicle size: body truck and car (side-by-side); road trains or headers
Height limit: no

Hose detail: high pressure water; high pressure air and Town pressure
Cost: 50 cents per minute
Surface: cement slab with ramp
Hours: 7 am - 5 pm with key access operational 24 hours

Mitchell

Landmark: old saleyards 3 km east of Mitchell
Address: Warrego Highawy
Contact: Coll Castle, Roma Regional Council
Telephone: (07) 4623 3811
Maximum vehicle size: No limit
Height limit: no
Hose detail: high pressure hose
Cost: nil
Surface: concrete slab
Hours: 7 am - 6 pm

Landmark: Council depot
Address: St George Road
Contact: Sam Mackay
Telephone: (07) 4623 8165
Maximum vehicle size: No limit
Height limit: No
Hose detail: Gurney
Cost: nil
Surface: concrete slab
Hours: 7 am - 4.30 pm

Monto

Landmark: south of Monto
Address: Saleyards Road; adjacent to Burnett Hwy/Monto
Contact: Monto Shire Council
Telephone: (07) 4166 9999
Maximum vehicle size: B-double: prime mover with two trailers
Height limit: no
Hose detail: high pressure; high volume hose
Cost: Coin operated $1 for 10 mins (11,000 L)
Surface: concrete slab with tilt
Hours: 24 hours

Landmark: north of township; near sewage treatment plant
Address: Monto-Biloela Road
Contact: Monto Shire Council

Telephone: +61 7 4166 9999
Maximum vehicle size: B-double: prime mover with with trailers
Height limit: no
Hose detail: high pressure; high volume hose
Cost: $1 for 10 mins (11,000 L)
Surface: concrete slab with tilt
Hours: n/a

Mundubbera

Landmark: saleyards
Address: McIndoe Road
Contact: Neile Jenson, Mundubbera Shire Council
Telephone: (07) 4165 5700
Maximum vehicle size: large trucks
Height limit: no
Hose detail: n/a
Cost: nil
Surface: dirt access; concrete slab
Hours: 24 Hrs

Roma

Landmark: saleyards
Address: Warrego Highway
Contact: Paul Qlar, Roma Regional Council
Telephone: (07) 4622 1201
Maximum vehicle size: Large semi-trailers
Height limit: no
Hose detail: high pressure water; no hose supplied
Cost: $30 for key; $12 per hour for water
Surface: concrete slab
Hours: 24 Hrs

Taroom

Landmark: saleyards
Address: Roma Road
Contact: Banana Shire Council
Telephone: (07) 4628 9555
Maximum vehicle size: semi trailer
Height limit: no
Hose detail: high pressure water; high pressure air
Cost: $1 for 20 mins
Surface: concrete slab
Hours: n/a