

Vehicle and Machinery Washdown

Background Material and Council Rules

Version 2.0 | April 2026



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Prepared to support the Vehicle and Machinery Washdown Code of Practice.

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This background document supports the Vehicle and Machinery Washdown Code of Practice. It covers the existing literature on practices to minimise soil being transported offsite from vehicle and machinery movement, and council rules relating to discharge. Horticulture New Zealand and Agrilink NZ do not accept any responsibility or liability whatsoever for any error of fact, omission, interpretation or opinion that may be present, however it may have occurred.



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1 The Toolkit

Growers can use a range of practices to minimise soil movement from vehicles and machinery when moving between properties or onto public roads.

The Vehicle and Machinery Washdown Code of Practice includes a risk assessment to determine the practices that a grower implements to manage their risk. Table 1 summarises the key practices based on level of risk.

The following sections provide research and background information on several practices in Table 1. These focus on washdown pad design. Other practices are also included, as well as a summary of regional council rules relating to machinery washdown discharges.

Table 1: Key practices in the Vehicle and Machinery Washdown Code of practice to minimise the movement of soil offsite.

ELIMINATE	ISOLATE & MINIMISE	REMOVE
Avoid using agricultural machinery on roads	Install wheel cleaning devices on tractors and trailed equipment	Construct on site washdown areas / pads with access to a water blaster
	Install metalled farm tracks	
	Stabilise and raise all accessways	Construct a full washdown pad in a central depot
Construct loading pads/parking bays to prevent vehicle exposure to soil	Trans-shipping of produce between harvesting and transport machinery	
	Use road sweeping devices	

2 Washdown pad: Literature review

A washdown pad is an area on a property or depot dedicated to washing agricultural vehicles and machinery. Its purpose is to remove mud and other solids such as seeds and organic matter attached to a vehicle. They are often located near the entry and exit points of a site. Removing mud and organic debris can reduce the risk of spreading soil borne pests and diseases between properties. It can also reduce mud on public roads. Other benefits include improved vehicle maintenance. By removing mud from vehicles it helps to prevent rust and paint removal.

The outbreak of invasive pests and diseases in New Zealand can be significantly slowed with stronger biosecurity measures. Particularly through the effective use of washdown pads to reduce the transfer of soilborne pests and diseases. New Zealand has had rapidly spreading outbreaks causing significant damage to entire sectors. These include Psa (*Pseudomonas syringae* pv. *actinidiae*) in the kiwifruit industry, kauri dieback, and Chilean needlegrass. Improved biosecurity control is a co-benefit of many practices in the Code of Practice.

In 2019, the New Zealand horticulture industry prepared the 'Minimising Soil Movement by Vehicles Off Farm' Code of Practice. This has been updated to the Vehicle and Machinery Washdown Code of Practice. This drew on previous work by other organisations^{1,2}. In Australia, both Western Australia³ and Victoria⁴ have published advice on the design and use of washdown pads.

Removing soil from machinery on a washdown pad can include physical removal, pressure washing, and vacuum cleaning. The simplest and most effective measure is pressure washing with water. This can be in combination with the aid of a disinfectant.

Washing down with water is either with low volume/high pressure (LVHP) systems and high volume/low pressure (HVLV) systems. An ideal washdown system would have a combination of both⁵. Steam cleaning at >100°C alongside regular washdowns can decontaminate machinery without chemicals.

¹ National Pest Control Agencies (2015). *Keep it clean: Machinery and vehicle hygiene guidelines and logbook to prevent the spread of pests and weeds*. <https://www.bionet.nz/assets/Uploads/Publications/A16-KeptClean-2015-HR.pdf>

² New Zealand Winegrowers. *Vineyard Hygiene and Leafroll Virus*. August 2013. (not publicly available).

³ Government of Western Australia (2013). *Water quality protection note 68: Mechanical equipment wash down*. <https://www.wa.gov.au/government/publications/wqpn-68-mechanical-equipment-wash-down>

⁴ Agriculture Victoria. *Cleaning farm machinery*. May 2012.

⁵ Meat & Livestock Australia. (2016). *Beef cattle feedlots: design and construction, Chapter 42. Vehicle washdown*. https://www.mla.com.au/globalassets/mla-corporate/research-and-development/program-areas/feeding-finishing-and-nutrition/feedlot-design-manual/042-vehicle-cleandown-2016_04_01.pdf

A non-water-based sediment removal system is cattle-grate style shaker ramps. These are often installed at site entrances and exits⁶. Figure 1 provides an example of this type of sediment removal system. Shaker ramps are best for small quantities of dry material/soil. Use wheel washing for soil and material in tyre treads⁶.



Figure 1: Example of a shaker ramp for physical sediment removal. Sourced from Auckland Council GD05.

Existing literature recommends that washdown pads be constructed from impervious, smooth, and easy-to-clean materials, such as concrete⁴. Various configurations are discussed, with some advanced systems resembling car washes at service stations. While these more complex setups may be impractical for most horticultural operations, it is important to consider functional design features. For example, access to the underside of vehicles and the direction of vehicle movement through the pad to avoid recontamination.

The size of the washdown pad should be based on the largest machine expected to use it. Guidelines recommend allowing a 2 m working area around the entire perimeter of the largest vehicle^{4,7}. Some guidelines⁵ specify bunded walls around this area. However, for horticultural operations the washdown water contains mostly soil and organic matter. Other chemicals or hydrocarbons are likely to be present in very small quantities. To increase the effectiveness of washdown activities, the entranceways should be stabilised to reduce sediment movement in high traffic zones⁶. Stabilised parking and turnaround areas⁶ can help prevent vehicles like cars and trucks being exposed to soil in the first place, reducing the overall spread risk.

The water from washing down machinery may pose a risk to freshwater as it can contain sediment and nutrients, and to a lesser extent hydrocarbons and other chemicals. Therefore, wash pads need to be correctly designed and maintained to not only be effective and prevent the transfer of soil onto roads and the transfer of pests and diseases, minimises potential for environmental risks. It is essential to locate washdown pads so that washdown water does not immediately enter a freshwater environment. This can be achieved by including sediment retention ponds, traps, or directing the washdown water to enter long stabilised drains with baffles. If the washdown water had been treated with a disinfectant or was contaminated with fuel or oil from the machinery, then further treatment may be required e.g. passing through an oil/water separator.

Generally, a washdown pad is constructed with a moderate slope of around 3-4% to ensure proper drainage of washdown water into a dropout pit or sediment trap. Slopes

⁶ Auckland Council. Guideline Document 05: Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region. June 2016. <https://www.aucklandcouncil.govt.nz/UnitaryPlanDocuments/mir-erosion-sediment-control-guide-auckland-region.pdf>

⁷ City of Swan. Guidelines for the design and operation of wash down bays.

less than 3% tend to drain poorly, especially when large amounts of solids accumulate on the pad.⁸

Health and safety must be a key consideration throughout all stages, from pad design to site selection. Agricultural machinery should be immobilised during washing. Raised implements must be lowered, and any free-moving parts secured to prevent injury. The pad should be located in a highly visible area, set slightly apart from entry and exit points to reduce risks from passing vehicle traffic. Major hazards such as high-pressure water, dust, and slip risks should be clearly marked with prominent signage.

In New Zealand, council regulations generally allow vehicle washdown as a permitted activity, provided certain minimum conditions are met. These conditions typically focus on protecting water quality in nearby water bodies by controlling washdown runoff. For a full list of conditions by councils in the main growing regions (Auckland, Waikato, Hawke's Bay and Canterbury), refer to the tables at the end of this document. For other regions, please contact the relevant local council directly.

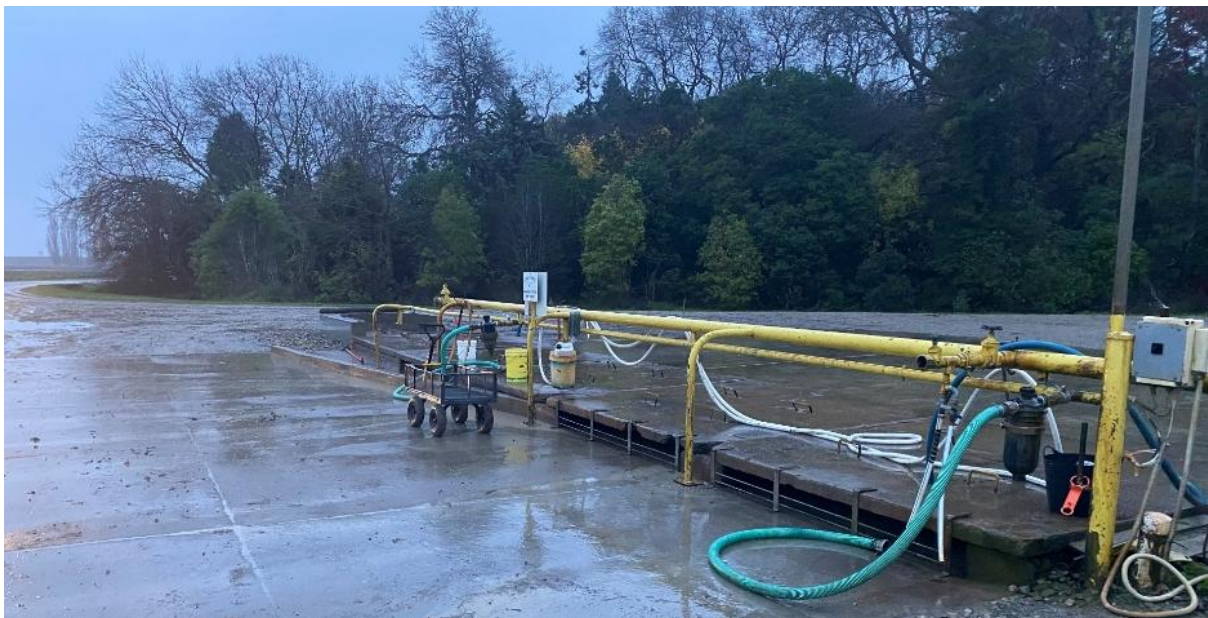


Figure 2: Washdown pad. Photo supplied by Leaderbrand Gisborne.

⁸ Meat & Livestock Australia. Beef cattle feedlots: design and construction, Chapter 42. Vehicle washdown. August 2016.

3 Washdown pad: Design considerations

Existing literature on washdown pads often outlines requirements that are more comprehensive than what's typically needed for horticultural operations. However, many design principles from other industries can still be valuable when planning washdown pads for horticulture.

Key factors to consider include:

Surface material

Most guidelines specify concrete or a similar impervious material⁹ that is durable, slip-free and easy to clean. Concrete is generally preferred as it requires no maintenance once installed¹⁰. Other options like metal or compacted aggregates are available but need more upkeep.

Water supply and cleaning equipment

A reliable water supply is essential to support both low volume/high pressure, and high volume/low pressure⁹. It is important to use cleaning wands and nozzles that are effective and designed with operator safety in mind.

Petrol and oil separators

Some guidelines recommend installing fuel interceptors or oil separators if the washdown water contains noticeable amounts of vehicle fuel or oil. These separators can be of several types, such as vertical gravity separators (VGS) and coalescing plate separators (CPS). More information can be found in multiple sources online¹¹. Their purpose is to reduce hydrocarbons in washdown water to a maximum level of 30 ppm (30 mg/L) and to help remove suspended solids like sediment.

In most horticultural settings, hydrocarbon levels in washdown water are already below this threshold. Effective operation of oil-water separators usually requires that the water spends time in a retention tank or settling pond before treatment.

Dropout pits and sediment traps

Washing soil from vehicles produces sediment-laden discharge water. When washdown activities are frequent or generate large volumes of sediment-rich water, a sediment trap should be installed in the drainage system downstream of the washdown pad.

⁹ <https://landcare.org.nz/wp-content/uploads/2022/10/Washdown-design-project-brief.pdf>

¹⁰ Wash-down designs to combat Panama disease tropical race 4. (2017). <https://era.dpi.qld.gov.au/id/eprint/9165/1/wash-down-panama-tr4-designs.pdf>

¹¹ <https://cleanawater.com.au/information-centre/what-methods-are-used-for-the-treatment-of-wastewater>

The size of the trap should be based on the volume and flow rate of water, as well as the sediment concentration. Sediment traps can range from simple mesh filters that catch large solids to more effective setups involving one or more holding ponds where suspended sediment can settle.

It's also important to prevent sediment from the area surrounding the washdown pad from entering the sediment trap, especially during rainfall, as this can reduce the trap's effectiveness in capturing soil from the washdown water.

Detergents

Detergents are unlikely to be necessary in a horticultural context, which is mostly focused on removing soil. However, if they are required to remove oil, quick break detergents are preferred. These help separate oil molecules before water reaches the oil-water separators.

Roofing

If oil or fuel and sediment separation is required, roofing the washdown pad can prevent clean rainwater from diluting the washdown water and reduce the effectiveness of separation systems. Roofing can also protect associated sediment traps from becoming overloaded in heavy rainfall and encourage use of the washdown pad in bad weather¹².

Washdown pad slope

Washdown pads should have a slope of 3-4% toward the outlet or drainage channel to ensure soil and water flow efficiently off the pad.

Washdown pad size

Washdown pads should be sized for the largest vehicle expected to use it with a minimum margin of at least 2 to 5 m around the vehicle's dimensions. For example, to wash a tractor measuring five by two metres, the pad should be approximately 9m by 6m.

Exterior bunding

If there is a risk of washdown pad water bypassing the sediment trap, install a bund (raised barrier) around the pad perimeter to direct flow towards the trap. Bunds should be at least 75mm high and 100mm wide¹³.

¹² Wash-down designs to combat Panama disease tropical race 4. (2017). <https://era.dpi.qld.gov.au/id/eprint/9165/1/wash-down-panama-tr4-designs.pdf>

¹³ City of Swan. Guidelines for the design and operation of wash down bays.

4 Other management practices

TO REDUCE SOIL MOVEMENT OFFSITE FROM MACHINERY

While washdown pads are effective for limiting soil transfer onto public roads and other properties, they can be costly, large and impractical for many sites. Fortunately, other practices can be used on horticulture operations to reduce soil trafficking.

Avoid using the road

The best method to reduce soil trafficking is to avoid using roads. Use interconnected farm tracks and reduce the frequency of vehicles moving from exposed soil to roads. To reduce exposure to cultivated soil, stabilise these tracks and loading pads through compaction or by surfacing with metal or other aggregates. This minimises the chance of vehicles picking up and carrying soil onto public roads.

Wheel scrapers

When vehicles must move between separate properties, and road use can't be avoided, the next best step is to minimise the amount of soil transported on wheels.

Wheel scrapers are a low-cost and effective option (Figure 3). These devices are attached to the outside of wheels and scrape off soil attached to the tyre surface. Whilst they may not clear all soil from deep tyre treads, they reduce the overall volume of soil carried offsite.

Trans-shipping

If it is not possible to eliminate the issue, try to isolate the machinery exposed to the soil. For instance, trans-shipping between harvesting machinery and a transport vehicle.

The transport vehicle should be located on a hard surface loading pad for further road transport. This can be done using pallets to transfer harvested produce. It helps prevent 'dirty' vehicles entering 'clean' zones, such as public roads or other properties if there is a biosecurity contamination issue.



Figure 3: Wheel scraper device attached to a farm vehicle.

Raised accessways

Raising site accessways can help to minimise soil movement caused by rainfall induced erosion and from vehicle trafficking (Figure 4). By elevating access routes, water is less likely to carry soil offsite. For technical details on raised stabilised accessways, refer to Auckland Council's Guideline Document 05¹⁴.

Metalled or compacted farm tracks

Using metalled or compacted farm tracks is another effective technique. These tracks help vehicles reach near-road speeds safely, allowing soil stuck to wheels to dislodge before reaching public roads.

To be effective, this requires the metalled farm track to be at least 50 - 100m long before the exit point. Whilst a safe speed is likely dictated by local conditions, at least 50 km/hr would be necessary to detach a significant volume of trapped soil. To safely reach this speed and avoid loss of vehicle control, the farm track should be well constructed and stabilised, level and as straight as possible. Note, vehicle safety is paramount, do not exceed operating speeds.

Portable water blasters

When the above methods are insufficient to reduce soil trafficking to acceptable levels, well-constructed washdown pads may be required. For instance, conditions such as pest and disease risk or in medium to large multi-site operations on sticky clay soils.

In cases where this is not practical, for economic or site-specific reasons, portable water blasters can be used on vehicles while sitting on metalled and stabilised pads.

Road sweepers

When soil does make it onto public roads, road sweeping devices mounted on agricultural vehicles (see Figure 5) can help. These can be used to brush aside and collect soil left by the vehicle and sweep aside previously deposited soil. However, these devices should only be used when road and traffic conditions allow safe operation.

¹⁴ Auckland Council. Guideline Document 05: Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region. June 2016.



Figure 5: Example of a raised accessway.



Figure 4. An example of road cleaning equipment attached to a tractor. Mud on the road poses a safety hazard making the road slippery.

Warning signs

In regions with a high concentration of horticultural activity in a small geographic area, such as around Pukekohe, some level of soil movement onto public roads is often unavoidable. Whilst this is not ideal, it is often the reality. To help ensure the safety of both horticultural workers and the public, it may be appropriate to install warning signs on roads that are frequently affected by trafficked mud.

Before installing a roadside sign, permission from the relevant Road Controlling Authority (RCA) is required. The RCA is 'the authority, body, or person having control of the road'¹⁵. This may include the council or the New Zealand Transport Agency (NZTA). Some councils or NZTA may require you to establish temporary traffic management whilst erecting the sign, if the installation interferes with the normal operation of the road and any footpaths. Vehicle movement on some roads may require a traffic management plan. This is a highly regulated process that requires permission, training and a careful planning¹⁶.

It is important that permission and advice from the relevant regional council and or the NZTA is sought before installing road signs.



¹⁵ New Zealand Transport Agency. 2010. Traffic control devices manual.

<https://nzta.govt.nz/assets/resources/traffic-control-devices-manual/docs/part-1-general-requirements.pdf>

¹⁶ <https://www.nzta.govt.nz/assets/Roads-and-Rail/nzgttm/docs/New-Zealand-guide-to-temporary-traffic-management.pdf>

5 Council rules

DISCHARGE OF WATER FROM MACHINERY WASHDOWN PADS (Auckland, Hawke’s Bay, Waikato & Canterbury)

Auckland

Council	Auckland Council
Document	Auckland Unitary Plan
Activity status	Permitted
Details	<u>Table E4.4.1 Activity A1: Discharge of water and/or contaminants (including washwater into land and/or into water from any of the following activities: (d) washing vehicles, plant or machinery</u>
Conditions	<p>E4.6.1. General standards for all permitted activities, controlled activities and restricted discretionary activities.</p> <p>(1) The discharge must not, after reasonable mixing, give rise to any of the following:</p> <ul style="list-style-type: none"> a. the production of any conspicuous oil or grease film, scum or foam, or b. floatable or suspended materials; c. any conspicuous change in the colour or visual clarity; d. any emission of objectionable odour; e. the rendering of freshwater unsuitable for consumption by farm animals; f. a change to the natural temperature of the receiving water by more than 3 degrees celsius; g. a change in the natural pH of the water by more than 1pH unit; and h. any significant adverse effect on aquatic life. <p>(2) The discharge must not enter into any water supply catchment, or any areas identified in D8 Wetland Management Areas Overlay (excluding Wetland Management Area Number 450 Lake Pupuke), D5 Natural Lake Management Areas Overlay or D4Natural Stream Management Areas Overlay except in the case of a discharge by a network utility operator carried out for maintenance, routine operations, or emergency works, provided there are no adverse effects on a Wetland Management Area, Natural Lake Management Area or Natural Stream Management Area.</p> <p>(3) The discharge must not cause erosion or scouring at the point of discharge or alter the natural course of the water body.</p> <p>(4) The discharge must not include washwater used for the external cleaning of a reticulated water supply system.</p> <p>(5) The discharge must be in accordance with best management practice to minimize the contaminants to the extent practicable.</p>

Hawke's Bay

Council	Hawke's Bay Regional Council
Document	Hawke's Bay Resource Management Plan
Activity status	Permitted
Details	<p>6.6.7 Rule 47: Discharges to surface water</p> <p>The discharge of contaminants into surface water, pursuant to section 15 (1) (a) RMA, except as expressly regulated by other rules in this Plan.</p> <p>6.6.7 Rule 49: Discharges to land that may enter water</p> <p>The discharge of contaminants onto or into land, in circumstances which may result in those contaminants (or any other contaminant emanating as a result of natural processes from those contaminants) entering water, pursuant to section 15 (1) (b) RMA, except as expressly regulated by other rules in this Plan.</p>
Conditions	<p>Rule 47 Conditions</p> <ol style="list-style-type: none"> a. The rate of discharge shall be no greater than 50 m³/day. b. There shall be no adverse flooding effects on any property owned or occupied by another person, as a result of the discharge activity. c. There shall be no scouring or erosion of any land or any water course beyond the point of discharge. d. The discharge shall not cause the natural temperature¹²¹ of any receiving water to be changed by more than 3°C from normal seasonal water temperature fluctuations, after reasonable mixing or cause an exceedance of the temperature limit in Table 5.9.1A (Tukituki River catchment). e. The discharge shall not cause the pH to change by more than 0.2 units, or to extend outside the range 6.5 to 9.0 units, after reasonable mixing. f. There shall be no production of conspicuous oil or grease films, scums or foams, or floatable or suspended materials, or any emission of objectionable odour, in any receiving water after reasonable mixing¹²². g. There shall be no conspicuous change in the colour or visual clarity of any receiving water after reasonable mixing or cause an exceedance of the water clarity limits in Policy TT3(1) (Tukituki River catchment). h. The discharge shall not cause the biochemical oxygen demand to increase by more than 2 g/m³ in any receiving water body after reasonable mixing or cause an exceedance of the biochemical oxygen demand limit in Policy TT3(1) (Tukituki River catchment). i. The discharge shall not cause any increase in the concentration of pathogenic organisms or cause an exceedance of the E.coli limits in Table 5.9.1A (Tukituki River catchment). j. The discharge shall not cause the concentration of dissolved oxygen in any river or lake to drop below 80% after reasonable mixing or cause an exceedance of the dissolved oxygen limit in Table 5.9.1A (Tukituki River catchment). k. The discharge shall not cause the concentration of ammoniacal nitrogen (NH₄⁺) in any river or lake to exceed 0.1 mg/l after reasonable mixing or cause an exceedance of the acute total ammoniacal nitrogen limits in Policy TT3(1) or the chronic ammoniacal nitrogen limits in Table 5.9.1A (Tukituki River catchment). l. The discharge shall not cause the concentration of dissolve inorganic nitrogen (DIN) in any river to exceed 0.8 mg/l as set out in Table 5.9.1B (Tukituki River catchment) after reasonable mixing. m. The discharge shall not cause the concentration of soluble reactive phosphorus in any river or lake to exceed 0.015 mg/l or cause an exceedance of the dissolved reactive phosphorus limits in Table 5.9.1B (Tukituki River catchment) after reasonable mixing. n. The discharge shall not cause the concentration of any other contaminant

(including other nutrients, heavy metals, hazardous substances and indicator bacteria), after reasonable mixing, to:

- i. Increase by more than 5% in any natural or modified receiving water body or 10% in any artificial receiving water body;
- ii. Exceed the following standards:
 - a. The contact recreation guidelines contained in "Bacteriological Water Quality: Guidelines for Marine and Fresh Water" (Ministry of Health and Ministry for the Environment, December 1998).
 - b. The guidelines for the protection of freshwater aquatic ecosystems contained in the "Australian Water Quality Guidelines for Fresh and Marine Waters" (ANZECC, 1992).
- iii. Exceed limits for other toxicants in Table 5.9.1A (Tukituki River catchment).

Rule 49 Conditions

- a. The rate of discharge shall be no greater than 50 m³/day.
- b. The discharge shall not result in a breach of any of the conditions set out in Rule 47.
- c. The discharge shall not result in a breach of any of the conditions set out in Rule 48.
- d. The point of discharge shall occur no less than 600 mm above the winter ground water table.
- e. There shall be no surface water ponding in the area of discharge, or runoff of any contaminant into a surface water body as a result of the discharge.
- f. The discharge shall not result in any airborne liquid contaminant being carried beyond the boundary of the subject property.
- g. There shall be no discharge within 20 m of any surface water body, or over the Heretaunga Plains or Ruataniwha Plains unconfined aquifers as shown in Schedule IV, except for material extracted from a surface water body associated with the maintenance of legally established structures.
- h. There shall be no surface ponding in the area used to store, mix or use the organic material, and no runoff of contaminants into any surface water body.
 - i. There shall be no discharge within 30 m of any bore drawing groundwater from an unconfined aquifer into which any contaminant may enter as a result of the discharge.
 - j. The discharge shall not cause any degradation of existing ground water quality in confined aquifers in the Heretaunga Plains and Ruataniwha Plains aquifer systems.
 - k. For other aquifers, the discharge shall not cause or contribute to a breach of the following guidelines after reasonable mixing:
 - i. The "Drinking Water Quality Standards for New Zealand" (Ministry of Health, 1995).
 - ii. The guideline for irrigation contained in the "Australian Water Quality Guidelines for Fresh and Marine Waters" (Australian and New Zealand Environment and Conservation Council, 1998).
 - i. Where the quality of ground water in any aquifer encompassed by condition (k) breaches the standards specified in that condition prior to the discharge occurring, the discharge shall not cause any further degradation of the quality of ground water in any such aquifer after reasonable mixing.

If these conditions cannot be met it becomes a Discretionary activity under section **6.6.8 Rule 52.**

Waikato

Growers in the Waikato should contact WRC for a more detailed understanding of what rules may apply to vehicle washing, as depending on the situation, washdown activities may be classed as discretionary, instead of permitted. Discharges of water to water (below), is permitted, however, if water is contaminated (for example, detergent is added), then this falls under 3.5.4.5 i.e. a discretionary activity, requiring resource consent.

Council	Waikato Regional Council
Document	Waikato Regional Plan
Activity status	Permitted
Details	3.5.4.4 Permitted Activity Rule - Discharges of water to water - General rule
Conditions	<p>Except as expressly provided for by other rules in this Plan any discharge of water (excluding geothermal water), into water is a permitted activity subject to the following conditions:</p> <ul style="list-style-type: none">a. There shall be no adverse effect on water quality of the receiving water body.b. Any adverse erosion effects occurring as a result of the discharge to be remedied as soon as practicable.c. There shall be no adverse effects from increased water levels downstream of the discharge point.d. The Waikato Regional Council shall be notified in writing of the discharge, its volume, contaminant concentrations and the water quality of the receiving water body 10 working days prior to the discharge commencing. <p>Exclusion to Rule 3.5.4.4</p> <p>Discharges of geothermal water are excluded from this rule. The effects of these activities are managed by the rules in Chapter 7 of this Plan.</p>

Canterbury

Council	Environment Canterbury
Document	Canterbury Land and Water Regional Plan
Activity status	Permitted
Details	5.98 (application to land) Or 5.99 (application to surface water)
Conditions	<p>5.98 Any discharge of water or contaminants onto or into land in circumstances where a contaminant may enter groundwater that is not classified by any of the above rules, is a permitted activity, provided the following conditions are met:</p> <ol style="list-style-type: none"> 1. The volume of the discharge does not exceed 10m³ per day and the application rate does not exceed 10mm per day; and 2. The discharge is not directly into groundwater; and 3. The discharge does not result in any overflow or runoff into any surface water body or onto neighbouring site; and 4. The discharge does not, in groundwater, render fresh water unsuitable or unpalatable for consumption by animals or humans; and 5. The discharge does not contain any hazardous substance, hazardous waste or added radioactive isotope; and 6. The discharge does not occur when the soil moisture exceeds field capacity; and 7. The discharge is not from or into contaminated or potentially contaminated land; and 8. The discharge is not within <ol style="list-style-type: none"> (a). 50m of a bore used for water abstraction; or (b). within a Community Drinking-water Protection Zone as set out in Schedule 1; and <p>5.99 Any discharge of water or contaminants into surface water or onto or into land in circumstances where it may enter surface water that is not classified by any of the above rules, is a permitted activity, provided the following conditions are met:</p> <ol style="list-style-type: none"> 1 The discharge is not from or into contaminated or potentially contaminated land; and 2 The discharge is not into a Natural State water body; and 3 The discharge meets the water quality standards in Schedule 5 after reasonable mixing with the receiving waters, in accordance with Schedule 5; and 4 The concentration of total suspended solids in the discharge shall not exceed: <ol style="list-style-type: none"> a. 50 g/m³, where the discharge is to any Spring-fed river, Banks Peninsula river, or to a lake; or b. 100 g/m³ where the discharge is to any other river or to an artificial watercourse; and c. The discharge does not result in more than a 20% change in the rate of flow of the receiving surface water body; and d. The discharge does not contain any hazardous substance, hazardous waste or added radioactive isotope.

6 References

The resources used throughout this document, referenced in the footnotes, are summarised in the list below:

- Agriculture Victoria. (2012). *Cleaning farm machinery*. Webpage download available on request (no longer online).
- City of Swan. (n.d.). *Guidelines for the design and operation of wash down bays*.
[https://www.swan.wa.gov.au/awcontent/Web/Documents/Services%20and%20Community/Public%20health/AP Guidelines for the design and operation of washdown bays.pdf](https://www.swan.wa.gov.au/awcontent/Web/Documents/Services%20and%20Community/Public%20health/AP%20Guidelines%20for%20the%20design%20and%20operation%20of%20washdown%20bays.pdf)
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