

Trade Waste Bulk Chemical Storage

Introduction

This document provides information on the risks presented by stored chemicals and Greater Western Water's trade waste requirements in relation to tank farms and other bulk chemical storage areas as well as any associated bunds.

What is a tank farm?

A tank farm is an area which has storage tanks or vessels that hold liquid products or raw materials within them.

What special risks do tank farms and other bulk chemical storages pose to the sewerage system?

Tank farms and bulk chemical storages can pose a significant risk to the sewerage system because of the large quantities of concentrated chemicals they can hold.

If allowed to enter the sewer, chemicals may:

- pose a health and safety risk to sewer workers
- cause accelerated sewer asset corrosion or create an explosive atmosphere within sewers
- upset or inhibit sewage treatment plant operations
- compromise the quality of recycled water and biosolids produced at treatment plants
- harm the environment if the chemical cannot be treated adequately at sewage treatment plants

If direct connections exist from tank farms and other bulk chemical storage areas to the sewerage system, undiluted chemicals can potentially enter the network undetected. This can occur over a long period of time from a slow leak or as a large, one-off volume discharge if a tank ruptures.

What are Greater Western Water's requirements for tank farms, bulk chemical storage areas and associated bunds?

To prevent uncontrolled chemicals entering its network Greater Western Water requires all tank farms to be bunded and for those bunds to have no drains, with or without valves, connected to sewer.

Note: Greater Western Water reserves the right to disallow any discharge from a bunded area to the sewer if the chemical(s) stored within the bunded area is deemed by Greater Western Water to pose an unacceptable risk. If this is the case, then an alternative means of disposal will need to be found for any waters collected in a bund.

Greater Western Water's requirements for tank farm bunds are as follows:

- » The base of the bunded area should be graded to drain to a collection pit or 'blind sump' so that rainwater can be pumped out of this area using a manually operated pump.
- » The removal of liquid from a bunded area should only be performed by a manually-operated portable pump or manually-operated fixed pump.
 - If using a portable pump, the operation is to be supervised and the pump is to be removed from the bunded area or tank farm area immediately upon completion of the discharge.
 - If using a fixed pump, it must not be able to start without manual intervention. The pump must have a low level switch to shut off the pump.
- » A flow metering device may be a requirement for larger tank farm areas that can potentially receive large volumes of rainwater that require disposal to sewer.
- » All tank farm areas must have provisions for spill recovery or disposal.

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*For guidance on bunding construction and sizing, refer to the Victorian EPA Bunding Guidelines, available at:
<http://www.epa.vic.gov.au/>*

What types of discharges will Greater Western Water accept to sewer from a tank farm?

The following table summarises Greater Western Water's requirements for managing wastes collected in bunds:

Disposal to sewer prohibited	Disposal into sewer permitted in accordance with a trade waste agreement
<p>Product or raw material spillages:</p> <ul style="list-style-type: none"> - must be retained and reclaimed for reprocessing or disposed of by an industrial waste contractor <p>Unpolluted rainwater (i.e. normal rainfall onto a clean tank farm area):</p> <ul style="list-style-type: none"> - must be directed to the stormwater drainage. Exceptions may be made as a result of EPA requirements 	<p>Slightly polluted water from the tank farm area eg.</p> <ul style="list-style-type: none"> - wash down waters following spill clean-ups, - water from general cleaning and hosing down of tank farm area - water containing traces of contaminants from minor spills, pump gland leakage or filler point leakage. <p>Disposal is only permitted if the water complies with the Trade Waste Acceptance Criteria contained in the trade waste agreement and any other requirements in the agreement are met. This may include analysing the composition of the wash water and/or receiving permission from Greater Western Water.</p>

What are Greater Western Water's operational requirements for emptying bund contents?

It is the customer's responsibility to ensure that the conditions of the trade waste agreement (or consent) are met and that appropriate processes are in place for testing, assessing and disposing of bund water in accordance with Greater Western Water's requirements as described in the trade waste agreement and this document.

Where can I get more information?

For more information call Greater Western Water on 131 691 or talk to your site's assigned Trade Waste Consultant.