

FS\_ITA07



## Industrial and Trade Activities

# Onsite refuelling (non-service station)

#### **Permitted ITA standards**

Land use E33.4.1.1.(12)

"All on-site vehicle re-fuelling areas must be segregated and housed under cover, and/or surrounded by a drain that drains to an appropriately designed and sized stormwater treatment and spill containment device fitted with a shut-off valve."

## **Discharges E33.6.1.2.(1)**

"The discharges of contaminants from an industrial or trade activity area must result in less than minor adverse environmental effects on the receiving environment without the need for stormwater treatment (with the exception of on-site vehicle refuelling areas requiring stormwater treatment and spill contaminant devices under the permitted activity Standard E33.6.1.1(12)."

Standards E33.4.1.1(2) and (5) – Spill Response and Chemical storage are also relevant, see factsheets ITA03.1 and ITA06.1 for further information.

Many ITA sites, especially those with fleet vehicles or plant machinery have dedicate fuel storage and refuelling areas. Just as the storage of environmental hazardous substances needs to be undertaken with due care and attention, so does the decanting, refilling, and refuelling of vehicles/plant machinery. Information relating to environmental hazardous substance storage is provided in factsheet FS\_ITA06 Above ground EHS storage and should be referred to for further information specific to fuel and additive storage.

This factsheet highlights the controls sites need in place to meet the permitted activity criteria of the Auckland Unitary Plan. These requirements are based on the MfE

Environmental Guidelines for Water

Discharges from Petroleum Industry Sites in

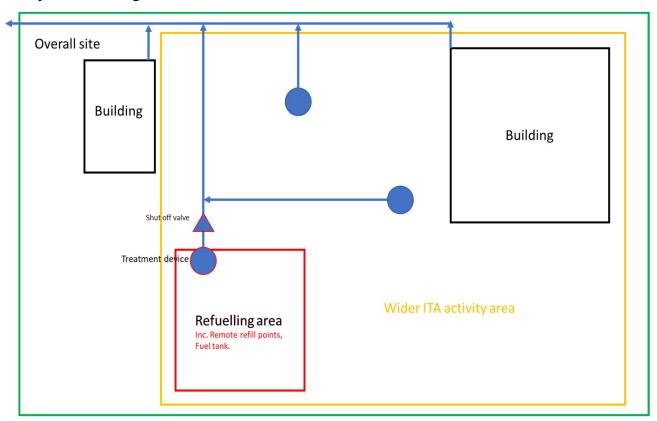
New Zealand but take into account that refuelling is generally ancillary to the main business of the sites operations.

**Infrastructure installation**: While we provide advice on what needs to be done to be compliant with the ITA provisions, the design and installation of refuelling infrastructure and devices requires input from engineering specialists, and you should seek additional advice on these requirements.

#### What does this look like?

Ideally, onsite refuelling is undertaken in a dedicated area, set back and designed to avoid or minimise discharges from spills, incidental discharges (drips etc) and poor practices. Best practice includes covering the area, sealing it to prevent discharges contaminating ground and segregated from stormwater systems by a bund or slot drains that, if connected to the site stormwater system, drain via an appropriate device designed to remove hydrocarbons.

#### Site layout for refuelling activities



We understand that some sites have mobile refuelling tankers that visit sites as and when required. There are many factors to consider in managing this approach and it is best to have this assessed by an Auckland Council ITA specialist. Please contact us on the details below to discuss your site-specific refuelling management and your requirements under this standard.

## Using controls and procedures

The following summarises information in appendix 3 – forecourt best management of the MfE Environmental guidelines and builds on it as the practices relate to onsite refuelling.

While ITA provisions require the installation of structures to help avoid the discharge of contaminants from refuelling practices, they do not work in isolation, and it is important that staff are trained and understand procedures and obligations to further reduce risks.

Do not pour fuel down drains or sumps . Separators can only remove so much oil. If too much enters, they start to pass it out rather than remove it and the need for maintenance increases along with associated costs.

**Do not introduce detergents into the drainage system** . Detergents promote the formation of an oil/water emulsion (mixture) which does not separate under the influence of gravity, this significantly reduces the

ability of separators to achieve required levels of treatment. Detergents are also a pollutant and should not be discharged to the wider environment.

Standard practice requires the regular inspection by site staff of refuelling areas and associated structural controls. This should include visually inspections for signs of free product after deliveries and after any spill events on site. Free product and contaminated materials must be disposed of in an appropriate manner. Containment/treatment device cleaning should be undertaken by contractor with appropriate authorisation to collect and dispose of hazardous waste.

Activity	Structural	Procedural <sup>i</sup>
Refilling/dispensing	Current fuel dispensing equipment incorporates a range of in-built safety features designed to avoid or limit accidental spills.	<ul> <li>The practice of "topping off" fuel tanks during fuelling should be avoided.</li> <li>The proper use of "hold open" latches can facilitate automated filling and can minimise spills. Improper fuelling methods should be guarded against.</li> </ul>
Spill/leak	Close all emergency/vehicle shut off valves Close shut off valve in the separator/treatment device to aid contaminant of the spill and close off any nearby SW drains unless the discharge via the refuelling areas treatment device.	<ul> <li>Large spills (i.e from refilling): Stop all operation in the immediate area of concern; remove or shut down ignition sources; isolate all electrics.</li> <li>Further isolate the spill area and contain any spill to recover as much product from containment area using industrial absorbents or rags as possible.</li> <li>If gasoline is spilled, vapour generation may become the prime hazard source.</li> <li>If diesel is spilled, evaporation is minimal, so the driveway surface may be hazardous until it is thoroughly cleaned.</li> <li>Spot clean of the area with rags or absorbents and hosing into collection pits for effluent separator treatment.<sup>ii</sup></li> <li>Avoid any flushing creating overload conditions and escape of product off-site.</li> <li>Alert emergency contact personnel and relevant authorities.</li> </ul>

<sup>&</sup>lt;sup>i</sup> See factsheet ITA03.1 Spill Preparedness

## Designing and installation requirements of treatment options

Devices installed specifically for the treatment of refuelling areas (only) do not trigger the need for a discharge consent under the ITA provisions. This only applies for the refuelling areas; the remainder of your site ITA activity area may still trigger consent for the treatment approach. Regardless, devices treating refuelling areas need to be designed and installed appropriately as well as be regularly maintained. Appropriate design requirements include:

- Capacity to treat 90-95% of flows from refuelling area (noting that covering and/or diverting external flows from refuelling areas reduces volumes requiring treatment)
- Capacity to retain 2500l spill event (ideally passively)
- discharge quality of 15mg/l or better.
- Emergency shut of valves

Examples of appropriate device design incorporate the design and performance principles of Corrugated Plate Separators, API separators or Vertical Gravity Separators.

<sup>&</sup>quot;If hosing is involved, the volume of water used should be kept to a minimum and be directed into on-site drainage which leads to an interceptor. No product should enter drains and escape to stormwater or off-site.

## Refuelling area requirements checklist

Aspect	Permitted activity requirement	Approvals required	Best Management Practice/Observations?	✓ or ×
Undercover	<ul> <li>Preferable</li> <li>Not essential - provided draining to appropriate device.</li> </ul>	May require building consent <sup>iii</sup>	Covered	
Sealed pad/area	<ul> <li>Covered and bunded/segregated; or,</li> <li>Bunded and or segregated, draining to appropriate device with shut off valve</li> </ul>	<ul> <li>Ensure device is designed to accommodate runoff volumes from uncovered areas, including refill points.</li> <li>Review, approval and confirmation from Council ITA Specialist</li> </ul>	<ul> <li>Covered with controls to prevent rain or through flow of stormwater entering</li> <li>Sump to collect spills</li> </ul>	
Fuel storage	<ul> <li>Secondary containment (110% largest container) see Factsheet ITA06</li> <li>And/or</li> <li>Housed within segregated pad area</li> </ul>	<ul> <li>Check HSNO requirements based on volumes stored<sup>iv</sup></li> <li>Check out Worksafes Hazardous Substances toolbox, here.</li> <li>Review, approval and confirmation from Council ITA</li> </ul>	<ul> <li>Covered bunded area also containing refill points and housing for bouser</li> <li>Within immediate bunded area of fuel tank</li> </ul>	
Refill points  Bouser points	House and/or located     within segregated area	Specialist		
Spill Response <sup>v</sup>	As per standards E33.4.1.1 (2) (5). See factsheets	Review, approval and confirmation from Council ITA Specialist		

iii In cases where building consent is required, we will seek to use the same information to assess compliance with the ITA provisions. You may already hold this information on the properties LIM.

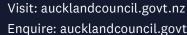
### Contact an ITA Specialist

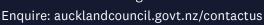
In our experience it helps to work proactively and collaboratively. Call our contact centre and ask to speak to an Industrial and Trade Activity Specialist in the Proactive Compliance or Specialist Unit of Regulatory Services or email your enquiry to the address below and we'll be happy to get in touch to provide assistance and advice.



Need help?









Email: ITAPP@aucklandcouncil.govt.nz



iv Chapter E31 of the AUP - Hazardous substances. There are additional triggers based on the volumes stored. It is your responsibility to assess your sites requirements.

v Your spill response plan should include as-builts of the drainage system and the controls in place around the refuelling area. These are required by Council to confirm that the structural controls meet the required permitted activity standards. They also make it easier for you to implement your plan in case of a spill.