Best Management Practice

Works within potentially contaminated sites

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If you have any questions about this procedures sheet contact Auckland Council on 09 301 0101.

1. When should I use this sheet?

This Best Management Practice (BMP) has been developed for work on sites that have been identified as contaminated or potentially contaminated.

2. What is a contaminated site?

A contaminated site is where hazardous substances occur at levels which could cause an immediate or long-term hazard to human health and/or the environment. These sites are usually associated with past industrial, agricultural or horticultural use. Land can become contaminated when hazardous substances are leaked, spilt or disposed of. Roads and railway corridors are also areas of potential contamination.

You should have been advised that the site you are working on is potentially contaminated. If you are concerned that the site may be contaminated and haven't received any information, contact the Stormwater Unit's Resource Management Team or a Contaminated Land Specialist.

It is important to recognise that we don't always know the locations of potentially contaminated sites. You will need to be prepared to stop work immediately if you come across any obvious signs of contamination.

3. What's the aim?

To make sure that the environment, communities and site workers are protected during works on potentially contaminated sites.

4. What's the problem with contaminated land?

Some contaminants break down in the soil very slowly, whereas some don't break down at all. Some contaminants pass through the food chain and concentrate in the tissues of fish, birds or humans. Exposure to contaminated land can have significant adverse effects on human health, surface water, groundwater and ecosystems.

5. Site management and environmental controls Forward planning – before you start works

 When a project is being scoped, an assessment should be carried out by an experienced Environmental Planner which will usually identify whether works are within or close to an area which is recorded as being potentially contaminated.

- It is important to recognise that we don't always know where potentially contaminated sites are located. You will need to be prepared to stop work immediately if you come across any contamination.
- Contamination may not be easy to identify while working on site. Keep a look-out for anything unusual, such as strangely coloured and textured soil and fill material, oily sheens and floating slicks, and be aware of unexpected odours.
- Any works to be carried out within potentially contaminated land will need to be well planned out, and will be typically authorised by regulatory controls, such as permitted activity rules or resource consents.
- These legal requirements will be defined in the project Compliance Management Plan - these may include resource consent conditions, permitted activities, other statutory requirements and best practice guidelines.
- Complete an Environmental Task Analysis Form to identify potential environmental risks and define how they can be mitigated or reduced through site practices or environmental controls – your 'environmental toolbox'. Remember your activities will need to be in accordance with the legal requirements defined in the Compliance Management Plan.
- Check the lay of the land and decide where any run-off is likely to go. Pay particular attention to receiving environments.
- Have a plan to deal with incidents and emergencies.
- Have a Contaminated Land Specialist available to help should you discover unexpected contamination on site.
- Identify a person who will be responsible for ensuring environmental practices and controls are followed and implemented prior to starting works.
- Identify the receiving environments (e.g. kerb channels, stormwater drains and natural water bodies).



Environmental practices and controls

- When possible, excavations are to be undertaken during dry weather.
- Put in place diversions (e.g. bunding, sandbags etc)
 at stages uphill of the site to divert clean stormwater
 around the works. This will help to reduce the amount
 of water that you have to manage.
- Install stormwater catchpit protection measures as a form of secondary control (refer to the Catchpit Protection BMP for more help). Often multiple catchpits will need to be protected.
- Identify and prepare an area on site which could act as a temporary store for any unforeseen contamination. This area should be contained and isolated from receiving environments.
- Excess soil should be loaded directly onto secure trucks, covered and transported to an appropriately licensed facility.
- Any loose soil on the side of the trucks and wheels should be brushed off before the trucks leave the site to minimise sediment deposits on the road.
- Accumulated water/groundwater should be managed appropriately. It should be treated on site, or transported off-site to an appropriately licensed facility, unless otherwise stipulated in a resource consent.
- Regularly sweep up any dust and dispose of it appropriately so that it will not become airborne or enter surface water.
- For large sites or work areas, especially when working close to a watercourse, install a silt fence around works area and stockpiles.

Stockpiling of soil and spoil

- Avoid stockpiling of potentially contaminated soil and spoil on site if possible.
- If stockpiling is required, as soon as practical, remove excess soil and spoil from the site and dispose of it to an appropriately licensed facility.
- Do not stockpile material near stormwater catchpits, kerb channels, near any surface water body or in overland flow paths or on gradients steeper than 15 per cent.
- · Divert surface water away from stockpiles.
- Cover excavations and stockpiles securely with impermeable material like a tarpaulin or polythene sheet.
- Regularly sweep up any dust and dispose of it properly so that it will not become airborne or enter surface water.

Monitoring and maintenance

Although this BMP presents a range of accepted best practice methods, there are many ways of achieving the above aim.

- Regularly assess site practices and environmental controls to make sure that they are mitigating or reducing environmental risk to an acceptable level.
- Regularly assess your compliance with regulatory controls where required. Collect compliance evidence, for example, disposal receipts for all material transferred to managed fill sites or licensed landfills.
- Once works are complete remove environmental controls. Inspect stormwater catchpits and remove and appropriately dispose of any contamination associated with site works.

6. Tips

- Inspect site controls at least once a day to ensure they are working properly.
- Have a spill response plan and a spill kit handy and make sure staff are well trained.

7. Useful links and information

- Go to aucklandcouncil.govt.nz and search for 'pollution', here you will find a range of helpful information and links to the range of pollution related resources and educational materials.
- Refer to the following Stormwater Unit BMPs:
 - Dewatering
 - Trenching
 - Catchpit protection
 - Spills and emergency management
 - General site management and housekeeping
 - Directonal drilling.



If a discharge occurs that has the potential to, or has entered the stormwater system or natural receiving environments, contact the Auckland Council 24 HOUR POLLUTION HOTLINE on 09 377 3107 immediately.



Find out more:

For access to this BMP and to find the other BMP information sheets, visit aucklandcouncil.govt.nz/stormwater

