

Directional drilling



If your day-to-day activities involve the use of drilling machinery, you should consider the potential your activity has to pollute the environment.

What causes pollution?

Poor work practices during directional drilling operations may cause some of these common environmental problems:

- Discharges of sediment into the stormwater system
- Discharges of drilling additives, leftover cement and bentonite grouts
- Copper drill lubricants discharging with drilling fluid
- The discolouration of natural water bodies
- The blockage of stormwater drains, causing flooding.

How your waste can pollute the environment

Any material or substance left uncovered or on the ground outside can flow or be washed by rainwater into a nearby stormwater drain where it will result in the pollution of the local stream and/or the coast.

Drill cuttings and slurry contain a number of substances that can pollute our environment. These include sediment and lubricants.

If discharged, these substances can cause harm to the environment by:

- Smothering small aquatic plants and animals and destroying where they live
- Preventing light from entering the water, making it difficult for animals to find food and for plants to get energy
- Irritating or clogging the gills of fish and increasing erosion in a stream.

Even a very small quantity of pollutant, or just one accidental discharge can drastically alter the quality of a stream. Fish, insects and plant life can be killed, habitats destroyed and the stream can take many years to recover.

You may think that your little bit of waste can't harm the environment but there are other people in the region carrying out activities similar to yours. Your waste when combined with that of others can amount to a significant amount of pollution occurring every day of the year. The cumulative effects of combined discharges can cause serious damage to our environment and must be prevented.

It is illegal to cause pollution

In New Zealand the Resource Management Act (1991) is the law that protects our environment. It clearly states that every person is responsible for ensuring that their activities and those of their employees do not contribute to pollution of our environment.

Specifically, it is illegal to allow any substance to enter water either directly, through the stormwater system or via the contamination of land without authorisation.

By making a few simple changes to your site and your daily practices you will be contributing to a pollution free environment for us all to enjoy both now and in the future.

Play it Safe – stop pollution from your activities

Contain all excess sediment and slurry from your drilling operations for appropriate disposal as a wastewater. Ensure that none enters stormwater drains or waterways by:

- Digging a containment pit of appropriate size at the site of your drilling operation. If there isn't enough room to dig a pit, use drums or barrels. Discharge all slurry from your operation into these pits or drums
- Allowing the slurry to settle
- Ensuring the settled slurry is:
 - recycled on site or at another drilling
 - spread onto land at an approved location; or
 - taken to a landfill.

Design a good spill contingency plan. Keep equipment handy and make sure your staff members are well trained:

- Have drain mats, small drums and absorbent material on site ready to contain and dispose of any spills.
- If a spill occurs and sediment enters a water body:
 - Cease drilling
 - Implement your spill contingency plan, and
 - Contact the Taranaki Regional Council.

For further advice or information contact: Taranaki Regional Council, Private Bag 713 Stratford Ph: 06 765 7127 Fax: 06 765 5097 Pollution Hotline: 0800 736 222 www.trc.govt.nz