



# Abrasive Blasting

## Pollution Prevention - actionSHEET 8

*If your activities involve abrasive blasting, it is really important that you consider the effects these activities may have on the environment, before you begin.*

*Dry abrasive blasting requires a resource consent. Wet abrasive blasting does not require a resource consent provided certain conditions are met. Please contact Environment Southland for more information.*

### What sort of things cause pollution?

Poor work practices while abrasive blasting are responsible for some common problems:

- Wash water contaminated with sediment, paint, oil, heavy metals, chemical cleaners and organic waste discharging onto the ground or into the stormwater system
- Blocking of stormwater grates and drains with waste material
- Discharges of dust to the air.

### How your waste can pollute the environment

Any material or waste left uncovered or on the ground outside can flow or be washed by rain into a nearby stormwater drain. Stormwater drains discharge into local streams or to the coast. Waste material that gets into the stormwater system can cause harm to the environment by:

- Poisoning animals and plants
- 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 from the sun
- Irritating and clogging the gills of fish
- Chemicals building up in the bodies of plants and animals, causing long-term health effects or rendering them unfit for human consumption.

Dust from abrasive blasting can get into the air and be inhaled, settle on plants, and get into water. Even a very small quantity of a pollutant, or just one accidental discharge, can drastically alter the quality of a stream. Fish, insects and plants can be killed and habitats destroyed. A waterway can take years to recover.

You may think that your little bit of waste can't harm the environment, but combine it with the waste produced by others doing the same sorts of things and it adds up to a significant amount of pollution occurring in Southland, every day of the year.

**The cumulative effects of these combined discharges 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 makes every person responsible for ensuring that their activities and those of their employees do not pollute 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 prior authorisation from Environment Southland.

Environment Southland is committed to caring for our environment and is responsible for both helping the residents of our region to prevent pollution and enforcing the Resource Management Act if necessary.

By making a few simple changes to your site and daily practices, you can help contribute to a pollution-free environment that everyone can enjoy, both now and in the future.



Please refer to the Ministry of Business, Innovation and Employment for information on health and safety requirements for abrasive blasting activities.



**ALWAYS** have a good Spill Response Procedure. Keep spill equipment handy and make sure your staff are well trained.

Environment Southland can help your company develop a Spill Response Procedure and provide guidance on these matters. Call 0800 76 88 45 and ask to speak to a Pollution Prevention Officer.

## Play it safe

### You can stop your activities causing pollution

#### Wet-abrasive blasting

- Wet abrasive blasting activities may require a resource consent. Please contact Environment Southland for more information.
- Use wet abrasive blasting in an area that will contain the waste water. Use bunds or another containment system. Allow the spent blasting material to dry before collecting up the material and disposing of it. Spent blasting material should be treated as a hazardous waste. Please contact Environment Southland for disposal options.
- Collect all waste water and dispose of it to the sewer with the approval of your local council. Use an appropriate drainage system or a wet vacuuming system.

**Dry sanding is a better option as it minimises the amount of waste produced.**

#### Stationary dry-abrasive blasting

- Dry abrasive blasting activities require a resource consent. Please contact Environment Southland for more information.
- Abrasive blasting must be carried out in a room/cabinet constructed to contain all emissions from the blasting operation.
- The room must be totally enclosed and vented to the atmosphere through an effective dust collector, like a fabric filter or paper cartridge.
- Spent blasting material should be treated as a hazardous waste. Please contact Environment Southland for disposal options.

#### Mobile dry-abrasive blasting

- Dry abrasive blasting activities require a resource consent. Please contact Environment Southland for more information.
- Use a tarpaulin or similar to collect used blasting media and other waste material so that it doesn't get onto soil or into water.
- Remove waste material on at least a daily basis. Do not allow waste material to accumulate on the ground or floor – spent blasting material should be treated as a hazardous waste. Please contact Environment Southland for disposal options.
- Use synthetic blasting materials that create less or no dust (e.g. synthetic carbides, plastic media and sodium carbonate).
- Use a vacuum blaster (the blast nozzle is surrounded by a vacuum extraction system).
- Try wet blasting or use a water curtain system around the edges of the structure (refer above).
- Use wind protection, or only operate in calm weather conditions.



Steel blasting material is collected in bags for filtering and reuse.

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## Further Information

For a copy of the **Pollution Prevention Guide** or more information on pollution prevention, contact Environment Southland, telephone 03 211 5115 or 0800 76 88 45 or visit our website at [www.es.govt.nz](http://www.es.govt.nz).