

# Best Management Practice

## Sediment and dust management

Issued by Auckland Council, July 2015

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

### 1. When should I use this sheet?

This applies to all sites involving sediment and sites which have the potential to generate dust, regardless of site size or duration of works.

### 2. What's the aim?

#### *Stormwater systems must only drain rain*

To eliminate or minimise the amount of sediment and dust entering the receiving environment (stormwater drains, streams, the sea or air).

### 3. What's the problem with sediment and dust?

#### *It pollutes the environment*

Sediment (e.g. clay, dirt and sand) is a natural substance. However, it can have significant adverse effects on aquatic environments. Increased amounts of sediment in our waterways can:

- Clog the gills of fish and damage other sensitive tissues through abrasion.
- Suffocate aquatic plants, fish and insects by physically smothering them.
- Reduce the amount of light entering the water, which can stop plants and algae growing – thereby removing a major food source for fish and insects.
- Interfere with fish vision making them vulnerable to predators or unable to see their prey.
- Increase the risk of flooding.

Dust in the air can cause a nuisance to the public, and when it falls on the ground may be washed into natural receiving environments.

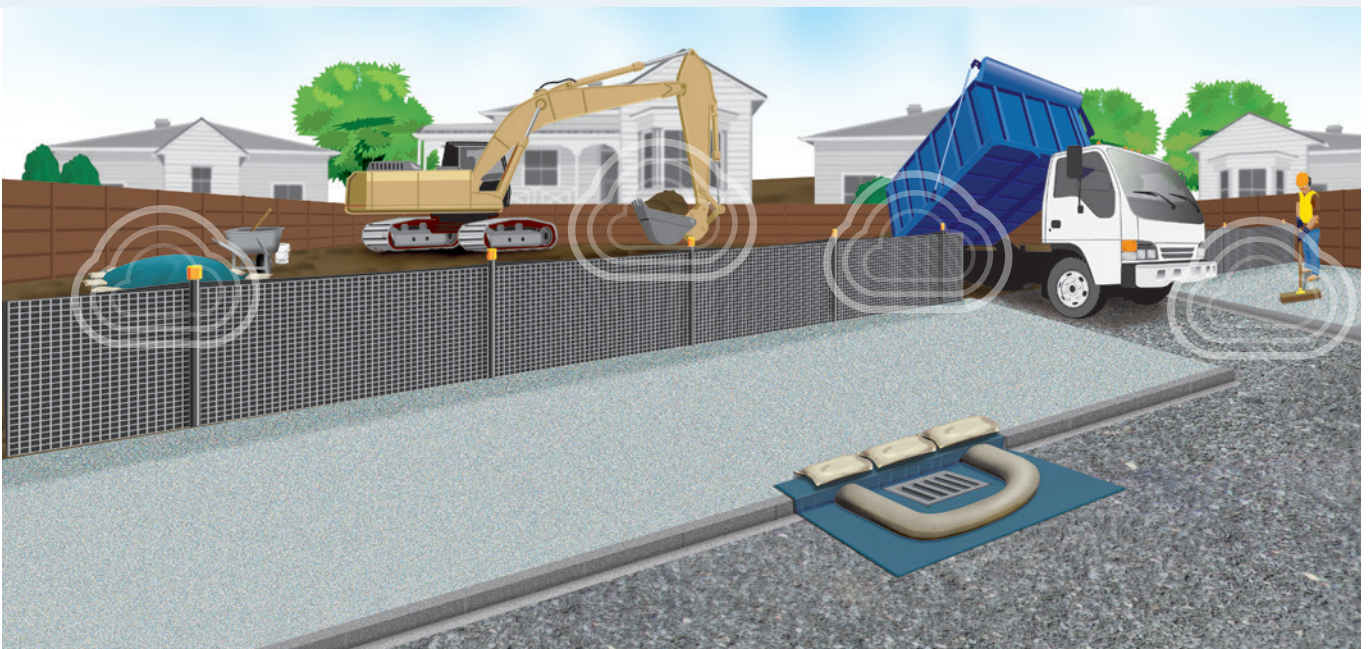
### 4. Site management and environmental controls

#### *Forward planning – before you start works*

- Time works that involve larger scale ground disturbance for dry weather.
- Complete the Environmental Task Analysis Form to identify potential environmental risks and define how environmental risks 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.
- Identify receiving environments (e.g. kerb channels, stormwater drains and natural water bodies).
- Make sure the person responsible (identified in Task Analysis) for ensuring environmental practices and controls has followed / implemented these prior to starting works.

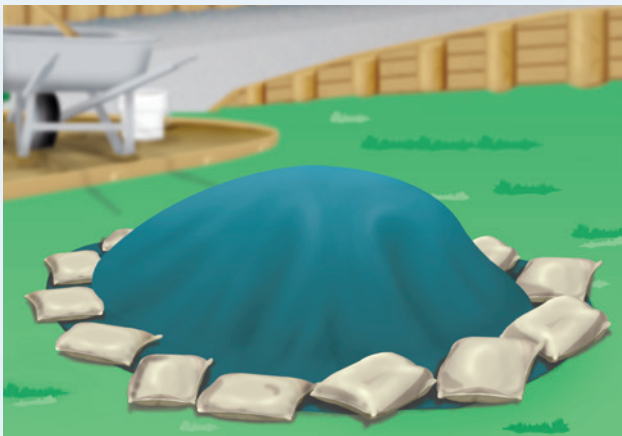
#### *Environmental practices and controls*

- Minimise the area of disturbance by staging works where possible.
- If possible remove soil and spoil from the site.
- Rehabilitate all disturbed areas as soon as possible.
- Retain existing vegetation wherever possible, as grass and shrubs do an excellent job of catching sediment.



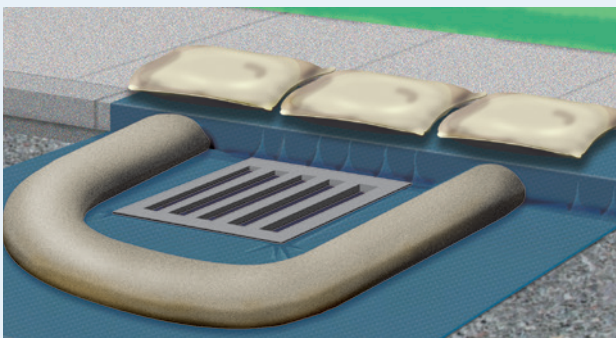
### Erosion controls

- Install clean water diversion measures (e.g. sandbags or bunding) to divert surface water around the work site. This will prevent run off from washing through the site and transporting sediment.
- Cover stockpiled material completely and securely with impermeable material like a tarpaulin or polythene sheet. Re-vegetate stockpiles that will be kept on site long term.
- Do not stockpile material near stormwater catchpits, kerb channels, in over land flow paths or on gradients steeper than 15 per cent.



### Sediment controls

- Regularly sweep up any dust and dispose of it properly so that it will not become airborne or enter surface water.
- Install stormwater catchpit protection measures (filter bags, geotextile material, silt fences, filter socks etc.) as a form of secondary control.
- For large sites or works areas, especially when working close to a watercourse, install a silt fence around works area and stockpiles.

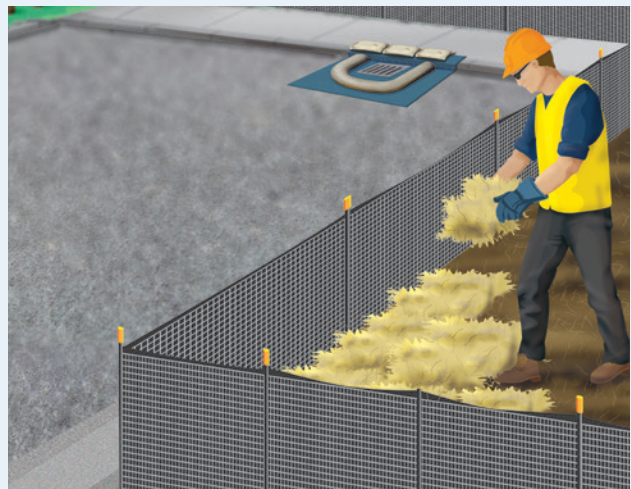


### Monitoring and maintenance

- Regularly assess site practices and environmental controls to make sure that they are mitigating or reducing environmental risk to an acceptable level.
- Clean out sediment control measures before they are 50% full. This is so sediment caught does not become resuspended when it rains.
- Clean up sediment discharges to surrounding area, road, kerb-side or stormwater system.

### 5. Tips

- Try to stage works to limit the amount of earth exposed to the minimum at any one time.
- Inspect environmental controls daily to ensure they are working properly.
- Keep the site tidy and sweep up any spilled soil or excavated materials regularly.
- Remember that inlet protection measures are secondary sediment control devices. They must only be used in conjunction with other erosion and sediment control measures.
- Monitor the weather and be prepared.
- Have a site specific spill response plan with equipment handy and make sure all staff are well trained.



*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](http://aucklandcouncil.govt.nz/stormwater)