Cement, concrete and grout

Cement, workable concrete and grout are extremely alkaline and can cause pollution if they are released into the environment. Enforcement action may be taken against those who fail to prevent such pollution.

When working with these materials you must make sure you:

- **Contain** cement, concrete and grout within the working area, so that it does not enter the water environment or surface water drains
- Identify suitable wash down areas for equipment that has come into contact with cement, concrete or grout
- Use the **concrete washout hierarchy** for deciding the best way to deal with wash water
- **Collect** and where possible, re-use wash down water in the process
- **Dispose** of wash down water and excess cement-based products appropriately

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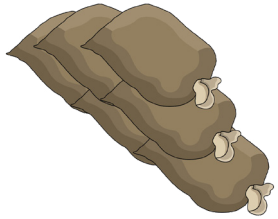
Contain cement, concrete and grout within working areas

Keep cement, concrete and grout contained within your working area so it does not enter the water environment or surface water drains.

Construct a suitable barrier, using materials such as sand bags around mixing areas, supply lines and working areas to prevent any material from escaping.

If pumping concrete or grout into the ground, keep records of the quantity that you are using. If you find that you are using larger quantities than you expected, it is possible that it may be escaping into the ground and potentially polluting groundwater.



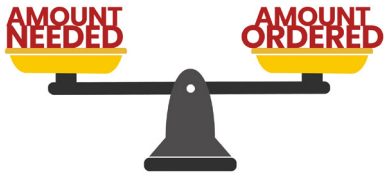
Use suitable barriers

Keep records

Excess cement products

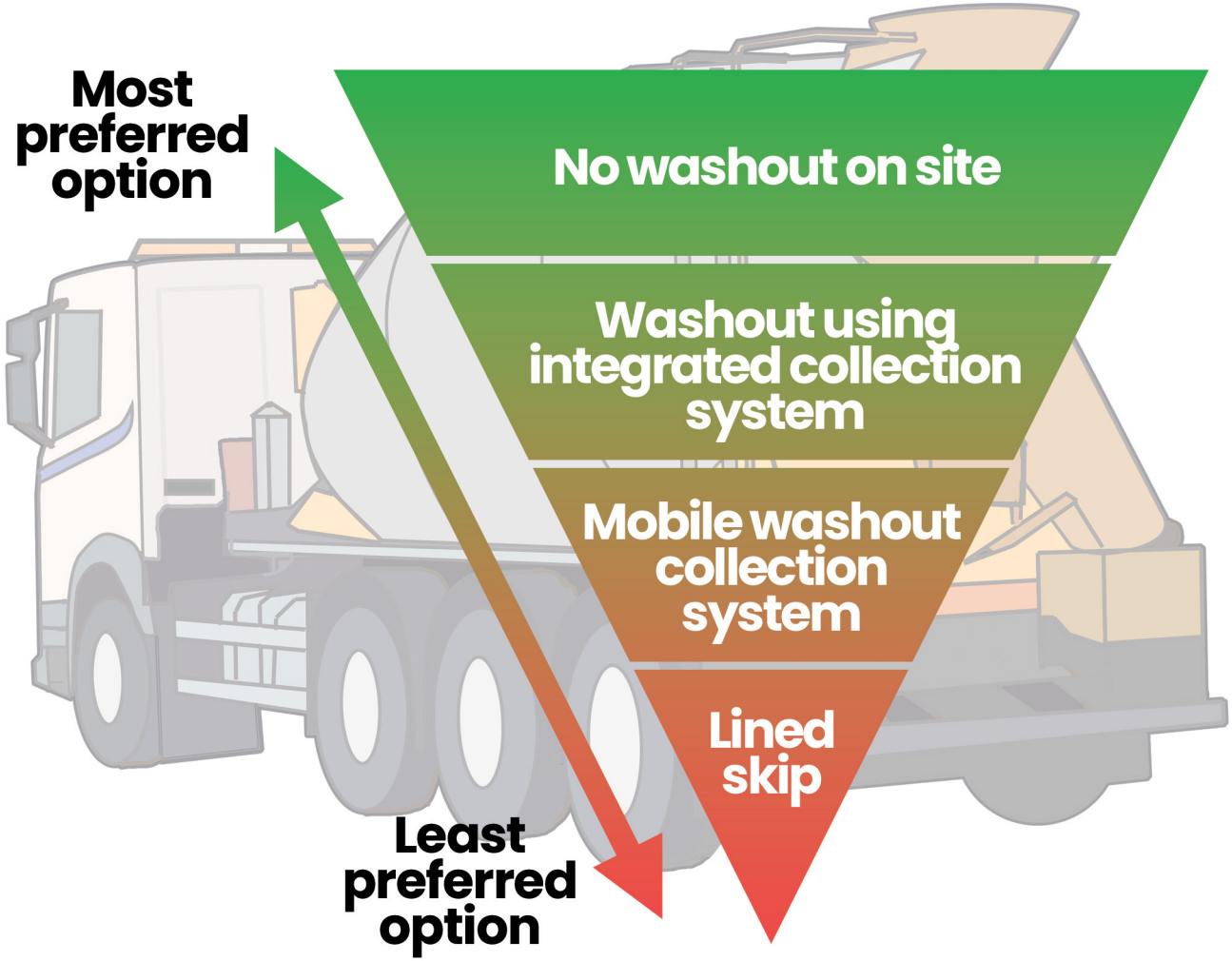
You should only order the amount of concrete or grout that you need.

If you do have excess concrete you should allow this to harden. This can then (potentially) be used as general fill on site as required. Alternatively, solid material can be sent off-site to a licensed waste management facility, in accordance with the duty of care for waste.



Only order the amount you need

Concrete washout hierarchy



Concrete washout hierarchy (continued)

Concrete washout refers to the process of managing and disposing of the wash water used to clean concrete wagons, chutes, pumps, mixers and equipment.

Concrete washout hierarchy

1. **No washout on site.** Where possible, concrete wagons should return to the batching plant for washout
2. **Washout using integrated collection systems.** Where concrete wagons have integrated washout collection systems use these to collect wash waters and dispose of these back at the batching plant
3. **Mobile washout collection/treatment systems.** These systems generally collect aggregates and fines, remove suspended solids and include a method of treatment to lower pH levels. These systems should only be used to collect the wash water from the chutes of wagons. Locate these systems on a hard standing, at least 10 metres away from watercourses and drainage channels
4. **Well managed, lined skips.** This method is only suitable for small volumes of untreated chute wash water. The skip must be suitably sized and impermeable. Located on a hard standing, at least 10 metres away from watercourses and drainage channels. Collected wash waters should be allowed to harden prior to the skip being removed, or disposed of appropriately

Dealing with wash water

You should put in place measures to control, store and treat concrete wash water and waste arising from any on-site washout process.

Wash water arising from the washing of equipment that has come into contact with concrete must be collected in a leak-proof container and, if possible, treated to enable recycling/re-use within the wash down area or batching process.

Recycled/re-used water must not be used for wheel washing or dust suppression.

Minimise the amount of concrete wash water produced on site and follow the concrete washout hierarchy.

Disposing of wash water

There are a number of options for disposal of **treated** wash water including:

- **Discharge to foul sewer** - Treated wash water can be discharged to the foul sewer with authorisation from the water or sewerage provider
- **Discharge to the water environment** - Under certain circumstances treated wash water may be discharged to the water environment with authorisation from your SEPA. This would be classed as a discharge of effluent either to water or to groundwater

Un-treated wash water should be sent off-site to a licensed facility for treatment and/or disposal, in accordance with the duty of care for waste.

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Other guidance notes within this series:

- Silt management
- Surface water management
- Waste duty of care
- Fuels and oils
- Ecology and biodiversity
- Air quality and nuisance
- Decarbonisation on site
- Materials sourcing and management

Scan the QR code to view the guidance notes and associated animations on the NetRegs website

Further information

Concrete and grout guidance

Scan (or click) the QR code to view the concrete and grout guidance on the NetRegs website.

These guidance notes have been developed by NetRegs in partnership with:

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