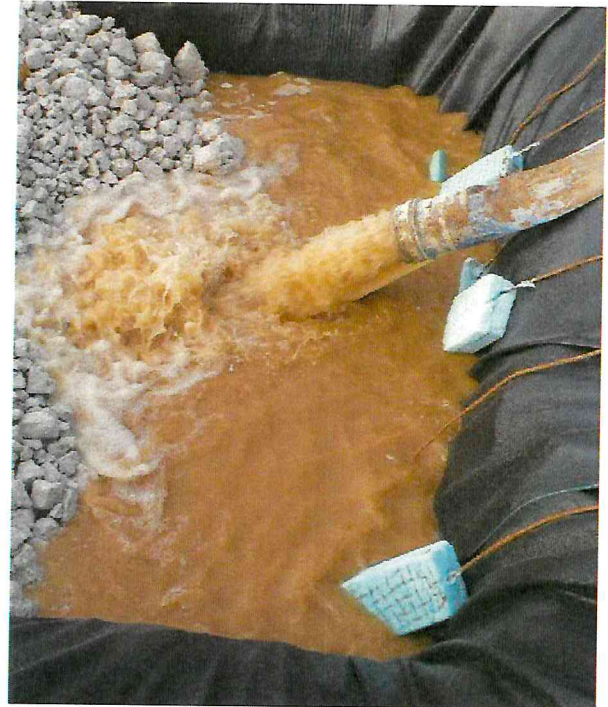


## Pumping, over-pumping and washing down plant

<b>Reason</b>	Construction activities often create water contaminated with content harmful to the environment. If you know how to contain and manage contaminated water you will avoid causing pollution.
<b>Outline</b>	This talk covers the types of activity and some control measures.



*Using a silt trap*



*Make sure contaminated water is contained*



**If you know how to contain and manage contaminated water you will avoid causing pollution and damage to the environment.**

## Pumping, over-pumping and washing down plant

<b>Reason</b>	Construction activities often create water contaminated with content harmful to the environment. If you know how to contain and manage contaminated water you will avoid causing pollution.
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### Contaminated water

1. Excavations often require dewatering, such as the removal of ground or rainwater, which may contain silt and other contaminants (for example, chemicals left over from previously developed brownfield sites).
2. Silt is composed of fine particles of soil that, when mixed with water, create mud that can be washed off sites into nearby watercourses, harming wildlife and humans.
3. Bentonite is a type of clay that swells and gels when dispersed in water. The use of bentonite can lead to spillage around operational and mixing areas. Bentonite, in a liquid form, is highly polluting if it enters watercourses.
4. Water from washing down plant and machinery is likely to contain not only contaminants from site movements but also oils and greases from under the vehicles and, if invasive plants are present, it may help to carry them elsewhere.

### Control measures

1. Plan all activities carefully, including the use of settlement tanks, lagoons, grassed areas, hay bales or silt socks, and always have contingency plans in place. Check with your supervisor that consent has been given to discharge liquids to the proposed location.
2. Regular monitoring arrangements should be put in place and followed to ensure control measures are fully implemented.
3. Consider installing cut-off trenches or silt fences to prevent run-off.
4. Wash-down water must be contained, treated, and checked to prevent a pollution incident.
5. When using bentonite ensure there are no spills of the dry powder or granules, or leakage onto the ground of the mixed material. If it does spill, it must be cleaned up immediately.
6. Monitor weather forecasts and check regularly to ensure there are no leaks or build-ups of contaminants in the system being used.

### Precautions

1. Do not pump, over-pump or discharge without prior approval from the relevant environment agency, and do not alter discharge arrangements without approval.
2. Do not leave pumping operations unattended unless you are authorised to do so by your supervisor.
3. Do not strip land, unless it is absolutely necessary, as vegetation reduces silt run-off.
4. Do not leave bentonite in the open air or ignore spillages.
5. Do not wash down vehicles, except in designated areas, or release water through grips.
6. Do not allow water into drains, gullies, ditches or watercourses, without approval.



**When do you need a consent to discharge?**

**What activities on this site would generate silt, dust or mud?**

**Where and how can bentonite cause pollution?**



**Now inform your workers of the company provision for water discharge from the site.**