Toolbox Talk - Environment

Pumping Water

DID YOU KNOW?

Water from construction activities has the potential to have significant impact on water quality. Planning how you intend to manage water in advance of works will ensure activities do not pose a pollution risk.

Prior to any pumping activity a Permit to Pump must be obtained from the site management team.

PUMPING

Excavations often require dewatering (i.e. pumping out of any rainwater or groundwater).

- This water may contain silt and/or other contaminants that, if disposed of incorrectly, could result in pollution of controlled waters (rivers, streams, groundwater, lakes and the sea)
- pumped water, unless it is absolutely clean rain or ground water, must not be discharged into watercourses, gullies drains or sewers without a permit/authorisation or consent granted by the appropriate regulator or local sewerage undertaker

OVERPUMPING

Sections of existing sewers and pipelines are sometimes taken out of service construction or repair works can be maintained by installing temporary pumps and 'overpumping' those sections if not controlled correctly overpumping can cause pollution.

WHY?

Avoid environmental harm: water pumped from excavations can be muddy (silty) and, when in previously developed or brownfield land, can be contaminated. The improper discharge of polluted water can cause serious pollution to watercourses

Avoid environmental harm: overpumping is often required in maintaining the flows of foul sewage that, if it is allowed to escape to find its way into a watercourse, can have a devastating effect on wildlife

Avoid prosecution: it is illegal to allow polluted or silty water to enter watercourses, gullies or drains

Avoid flooding: if water is discharged into a sewer or gully of insufficient capacity then flooding will occur, potentially causing pollutants to enter watercourses or creating nuisance to site operations and neighbours.

Anyone found guilty of allowing contaminated water into a watercourse can face imprisonment and/or an unlimited fine.

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DO'S & DON'TS

- ✓ Obtain a Permit to Pump from the site management team
- ✓ Before pumping, check with site management what treatment systems are required (eg settlement tanks or lagoons, discharge over grassed areas, through silt socks or hay bales)
- ✓ Check that the point of discharge is in the correct location
- ✓ Check that all couplings and other pipework fittings are secure
- ✓ Regularly check that any treatment systems are working and that water being finally discharged is clear of silt or solids that may cause pollution and is not causing damage to the bed or banks of any watercourse
- ✓ Carry out regular monitoring
- ✓ **IMMEDIATELY** stop work and inform site management if it is noticed that:
  - pollution (muddy water, oils etc.) is occurring
  - The discharge is causing flooding
  - Any pipework is damaged or connections have broken or are leaking.

- ✗ pump without prior approval from a line manager
- ✗ leave pumping operations unattended for long periods
- ✗ unless authorised to do so by a site management
- ✗ continue with overpumping if the receiving sewer or pipeline cannot cope with the capacity
- ✗ ignore signs that pollution is occurring (e.g. muddy water entering watercourses or gullies)
- ✗ change pipework or discharge points without the authorisation of site management

Report evidence of silty/dirty water to site management immediately