

Protection of Site Stormwater Pits



'Do it right on site' is a project to help the construction industry protect the environment and achieve the many benefits that come from doing so.

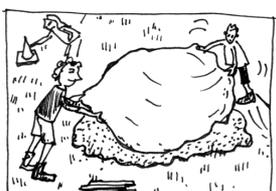
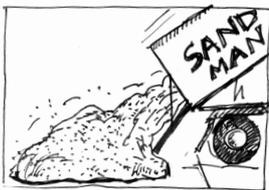
Protection of Site Stormwater Pits

What is it?

This refers to placement of sediment collection devices around any existing stormwater drains on the site.

Why is it important?

Stormwater drains on the construction site are at high risk of having pollutants such as dirt, stockpiled soil, mulch and barkchips washed straight into them. The environmental impact of these materials is significant. Mulch and woodchip decompose absorbing all the oxygen in the water resulting in suffocation of animals. Sediment settles making creeks shallower, smothering animals and plants that live on the creek beds. Many native plants and animals can not survive this and die.



What do I need to do?

Before building commences:

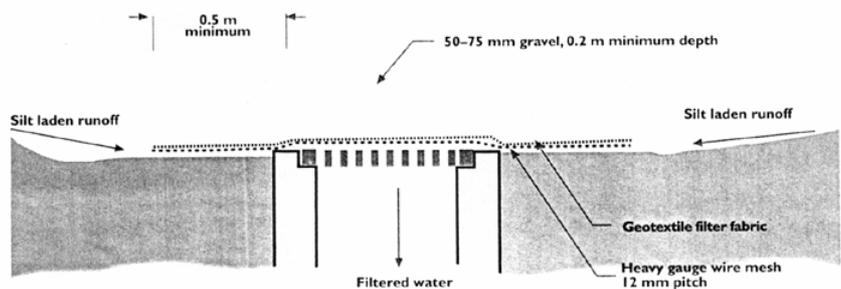
Identify any stormwater drains on the site. Plan the layout of the work site so that any wash down areas, tile or brick cutting areas are not near these drains. Clearly mark the stormwater drains on the site and choose a method of protection for them. Install the protective controls prior to building work commencing. Document all of this on your Soil and Water Management Plan and ensure staff are aware of its importance.

Installing the controls:

There are a range of sediment traps to choose from.

Drop inlet sediment Trap:

Three layers on top of the drain to trap the sediment. 1) heavy gauge wire netting or mesh 2) geotextile filter fabric with 3) a layer of prewashed 50-75mm gravel on top.

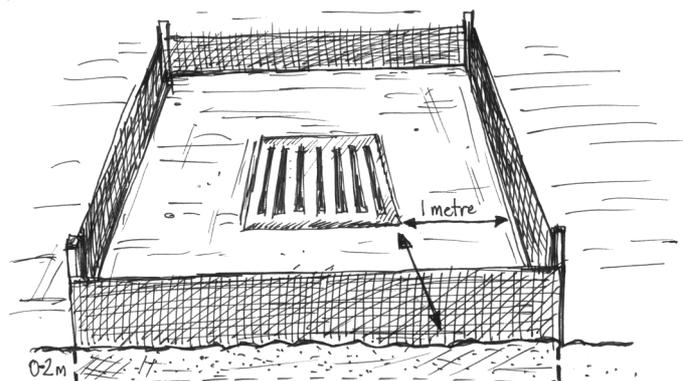


Alternatively, drop inlet may be surrounded by hay bale barriers or a silt fence. Refer to relevant details

Source: EPA (SA) 1999 'Stormwater Pollution Prevention Code of Practice for the Building and Construction Industry.'

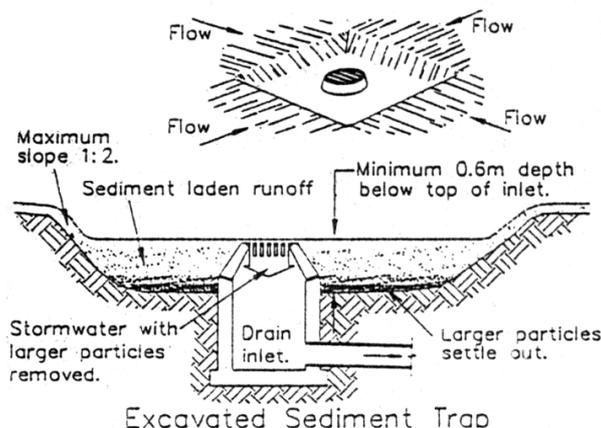
Sediment Fence drop inlet sediment trap:

Sediment fence staked around the drain to trap sediment. Note: It is important to partially bury the fabric so that water and sediment can not just flow underneath. The more space between the fence and the drain, the more chance of sediment settling and the greater the capacity of the trap.



Geotextile Filter Fabric Drop Inlet Sediment Trap

Excavated sediment trap: This is a detention basin technique for on-site drains. The basin depth needs to be at least 0.6m to ensure that water is held in place and sediment can settle out.



Source: Department of Conservation and Land Management (1995) 'Preparing an Erosion and Sediment Control Plan'.

Maintenance of the controls:

All sediment collection devices need regular maintenance to stay effective. Remove the built up sediment and check for holes or other breaks in the controls. Repair and replace them. Built up material can be re-stockpiled, used on site or collected by an Earth Moving Company.

List of fact sheets available from Council:

1. Diversion of Upslope Water
2. Dust Control
3. Early installation of Roof Drainage
4. Excavation Pump Out
5. Protected Concrete, Brick and Tile Cutting
6. Protected Concrete Delivery
7. Protected Service Trenches
8. Protected Stockpiles
9. Protected Wash Areas
10. Protected Waste Management and Chemical Storage
11. Protecting Vegetation
12. Protection of Gutter and Street Stormwater Drains

13. Protection of Site Stormwater Pits

14. Sediment Controls
15. Soil and Water Management Plans
16. Stabilised Site Access

For further information on preventing pollution from building and construction sites contact your local council:

Remember:

Everyone has a responsibility to protect the environment. The site supervisor is required to make sure that all workers, including sub-contractors are doing the right thing and all workers are required to notify their supervisors and Council if they see pollution occurring.

It is illegal for any substance other than rainwater to enter the stormwater system. If you do have an accident and pollution occurs you are required by law to notify the Council so that they can work with you to minimise any harm to the environment.

Penalties for polluting the stormwater system range from \$750 on the spot fines to \$1 million and seven years in gaol. Both companies and individuals can be fined.

Council Officers and the EPA enforce the environmental legislation and do routine inspections of building sites. They can issue notices to make companies clean up sites, change the way they are managing the sites and if necessary, cease work. They will attempt to work with you but penalties will be issued if a satisfactory environmental outcome is not achieved.

'Do it right on site' is funded by the Natural Heritage Trust and the Southern Sydney Regional Organisation of Councils – Bankstown, Botany Bay, Canterbury, Hurstville, Kogarah, Marrickville, Randwick, Rockdale, South Sydney, Sutherland Shire, Waverley and Woollahra.

THE DRAIN IS JUST FOR RAIN



Southern Sydney Regional Organisation of Councils