



# Prevent Pollution from Commercial Developments

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Without erosion and sediment control measures, large amounts of soil/sediment can be lost from a site and enter the stormwater system. The loss of soil/sediment affects not only the environment, but also the developer/construction manager. A site without adequate sediment control increases costs e.g. replacement of washed away stockpiles, clean up costs, fines, and loss of business reputation.

Sediment in our waterways pollutes our creeks, lakes and rivers and has a major impact on water quality, aquatic plants and animals. Commercial developments have the potential to create more pollution than individual residential sites. Therefore more stringent measures are required.

Under the *Environment Protection Act 1997* (the Act) it is a requirement that you enter into an Environmental Protection Agreement with the Environment Protection Authority (EPA) or hold an Environmental Authorisation for land development or construction activities on sites of 0.3 ha or greater, **prior to works commencing**.

An Environmental Protection Agreement covers all your sites, is valid for three years and requires no fee. The Environmental Protection Agreement addresses erosion and sediment control, noise and air pollution issues and spoil disposal for each of your commercial developments of 0.3 ha or greater for the three year period (or until an environment protection agreement is withdrawn). You will need to provide plans to the EPA for each commercial development addressing these issues. The plans should be considered at the design stage for in principle approval prior to tenders being called in order to allow contractors to incorporate the cost of sediment and erosion control measures.

The plans for a site of 0.3 to 1 ha should include:

- proposed activities;
- existing topography including contour lines, catchment boundaries, catchment areas, adjacent areas including creeks and buildings;

- location of permanent stormwater inlets, pipes, outlets and other permanent drainage facilities;
- vegetative buffer areas to be protected by fencing;
- details of proposed erosion and sediment control measures in accordance with Environment ACT's *Erosion and Sediment Control During Land Development Guidelines*; and
- proposed timetable for construction activities; installation of erosion and sediment controls; and surface stabilisation measures.

The plans for a site over 1 ha should include:

- proposed activities;
- existing topography including contour lines, catchment boundaries, catchment areas, adjacent areas including creeks and buildings;
- existing and final drainage patterns;
- proposed shaping;
- staging of the development;
- limits of clearing and grading, including vegetative buffer areas to be fenced off;
- details and specifications of proposed erosion and sediment control measures including retention ponds, spillways; outlet pipes; diversion channels and sediment traps;
- location of permanent stormwater inlets, pipes, outlets and other permanent drainage facilities;
- proposed timetable for construction activities; installation of erosion and sediment controls; and surface stabilisation measures; and
- surface stabilisation measures including seeding and mulching rates.

In addition to the above controls, sites over 1 ha **must** have a sediment erosion control pond of adequate size constructed to control all runoff from the site (i.e. 150

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cubic metres per hectare of catchment). Site drawing and details must be provided to the EPA for approval prior to works commencing. Also keep in mind that:

- Discharge from a sediment erosion control pond is only allowed when the water is clarified to below 60 mg/litre (suspended solids). (Refer to Discharge from Sediment Erosion Control Ponds Information Sheet.)
- Water level must not exceed 20% capacity so you can catch the runoff from the next rain event. (A level marker must be installed and maintained in all sediment ponds.)
- Regular dredging of the dam must be carried out to remove silt to retain the dam's design capacity.

Temporary erosion and sediment control ponds must be incorporated into each stage of development. The size of the ponds must be a minimum of 150 m<sup>3</sup> per hectare and the temporary ponds shall not be removed until 85% of the developments are complete, or all the disturbed areas are stabilised. The ponds must be located within the construction site.

If there is poor environmental performance on site, the EPA may withdraw the Environmental Protection Agreement. If an Environmental Protection Agreement is withdrawn or not entered into, there is a requirement under the Act to apply for an Environmental Authorisation for **each** site of 0.3 ha or greater. There is an application fee and annual fee for an Environmental Authorisation.

## DURING DEVELOPMENT

Construction and development works must be in accordance with Environment ACT's *Erosion and Sediment Control During Land Development Guidelines, 1998*.

There is also a series of seven information sheets outlining best practice to prevent pollution from residential building sites. The examples are based on a typical building site in Canberra, however some sites may need more control measures in place depending on slope, size, or other characteristics specific to your site. The information sheets are available by contacting Canberra Connect on 13 22 81.

Information in the guidelines and the information sheets include:

### ■ Erosion and Sediment Control Measures

It is the *responsibility of the developer/construction manager* to ensure that erosion and sediment control

measures are in place before work commences and are adequately maintained throughout construction.

The developer/construction manager must ensure all workers (including builders, subcontractors, delivery drivers, etc) are aware of their responsibilities to minimise pollution. (Refer to Information Sheet 2.)

### ■ Geotextile Fencing and Straw Bale Filters

Geotextile fencing, on its own or incorporating straw bale filters, must be installed along the lower side/s of the site to prevent discharge of soil/sediment off site. (Refer to Information Sheet 4.)

### ■ Stabilised Access Point

Under the Act, it is a requirement that you establish and maintain a stabilised access point, on your site. It helps you to protect the surface of your site, and assists in preventing soil from leaving the site and tracking onto the road and into the stormwater system. It provides a clean, stable surface for vehicles to unload and should be used for all deliveries if possible. It is recommended, where practical, to restrict access to one point for ease of maintenance. For larger or more complex commercial development sites, additional measures such as cattle grates or washdown facilities may be required. (Refer to Information Sheet 5.)

### ■ Stockpiles

All soil, building material and waste stockpiles must be located on the site and not on the verge unless separate approval has been granted. (Refer to Information Sheet 6.)

### ■ Noise

Maintain and operate equipment in accordance with the manufacturer's specifications. Ensure all building work that generates noise is conducted within the time periods detailed in the Act.

Building Work Details	Monday to Saturday	Sunday and Public Holidays
Industrial, city and town centre areas	6 am to 8 pm	6 am to 8 pm
Any other area when work completed within two weeks	7 am to 8 pm	8 am to 8 pm
Any other area when work not completed within two weeks	7 am to 6 pm	Building work must not exceed Zone Noise Standard

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■ **Dust**

Where building work generates dust, all reasonable and practicable measures must be taken to minimise that dust. This can often be achieved by dampening the ground with a light water spray. This same approach should be utilised during demolition.

■ **Fire**

Burning of waste materials on site, such as plastics, chemicals or wood that is painted, chemically treated or contaminated with chemicals is illegal. A fire may be permitted for heating purposes provided it is in a brazier or constructed fireplace. Only seasoned untreated timber can be burnt for heating purposes.

■ **Waste**

Install onsite waste collection. Material must be stored in such a way that it does not or is not likely to escape. Locking the bin will assist in preventing illegal use. (Refer to Information Sheet 6.)

## **THE ENVIRONMENT PROTECTION ACT 1997**

Under the *Environment Protection Act 1997* (the Act) it is an offence for a person to allow any substance other than rainwater to enter the stormwater system. Contraventions of the Act can lead to an on-the-spot fine of up to \$175 for an individual and \$875 for a company. More serious offences can lead to penalties of up to \$50,000, six months in jail and a criminal record.

In the case of excessive noise a complaint may be lodged with the EPA. A complaint regarding noise pollution will be considered by the EPA, only if it is made by a person affected by the noise. The EPA will investigate the problem and a warning letter, on-the-spot fine, or depending on the circumstances, an Environment Protection Order (EPO) may be issued. If the noise continues to be a problem, it is a serious offence and could lead to prosecution in court.

**For more information contact the Environment Protection Authority by calling Canberra Connect on 13 22 81.**