INDUSTRIAL STORMWATER MANAGEMENT POLICY

This policy applies to applications for:

- Industry.
- Warehouse.
- Subdivision for Industry and Warehouse.

This policy does not apply to an application for:

- An extension or alteration of an existing building of less than 50 square metres in floor area.
- Subdivision of an existing building.

Policy Basis

Industrial development and subdivision can result in greater hard surface area and changes to the volume, velocity and quality of stormwater drainage into natural waterways. Achieving improved stormwater quality is a key objective in reducing the environmental impact of industrial development on waterways and receiving water bodies. This policy implements the *Urban Stormwater Best Practice Environmental Management Guidelines*, CSIRO (1999) to achieve the objectives of the State Environment Protection Policy (Water of Victoria).

Waterways are an important environmental asset and measures that protect, or improve, water quality will be of significant benefit environmentally, socially and economically. Incorporating stormwater treatment measures into the design of development, including wetlands, bio-retention systems and porous pavements to filter pollutants, will help to protect and improve the condition of the natural waterways.

Water sensitive urban design (WSUD) is the design of buildings, subdivisions and works to minimise the hydrological impact of industrial development on the surrounding environment. WSUD provides the means for treating stormwater run-off in a variety of ways so that the flow is reduced, and the quality of run-off is improved. Stormwater management can take various forms in the urban environment including infrastructure upgrades, streetscape layout changes, piping reconfigurations, storage tanks, and the use of different paving.

Objectives

- To promote the use of water sensitive urban design, including stormwater re-use.
- To mitigate the detrimental effect of development on downstream waterways.
- To apply best practice stormwater management to industrial development and subdivision.
- To minimise peak stormwater flows and stormwater pollutants to improve the health of water bodies.
- To reintegrate urban water into the landscape.
- To ensure that ongoing management practices will prevent materials and waste from reaching groundwater and stormwater drains.

Policy

It is policy to:
Ensure compliance with the requirements for suspended solids, total phosphorus and total nitrogen, as set out in the *Urban Stormwater Best Practice Environmental Management Guidelines, CSIRO (1999)*. Currently, these water quality performance objectives require:

- Suspended Solids - 80% retention of typical urban annual load.
- Total Nitrogen - 45% retention of typical urban annual load.
- Total Phosphorus - 45% retention of typical urban annual load.
- Litter - 70% reduction of typical urban annual load.
- Maintaining flow discharges for the 1.5 ARI at pre-development (natural) level.

Ensure that development is designed to structurally isolate work areas and materials from groundwater and stormwater drains and flows.

Require the use of stormwater treatment measures that improve the quality and reduce the flow of water discharged to waterways, including, but not limited to:

- Collection and reuse of rainwater and stormwater on site.
- Vegetated swales and buffer strips.
- Rain gardens.
- Installation of water recycling systems.
- Multiple uses of water within a single manufacturing site.
- Direction of flow from impervious ground surfaces to landscaped areas.

Encourage the use of measures to prevent litter being carried off-site in stormwater flows, including:

- appropriately designed waste enclosures and storage bins, and
- the use of litter traps for developments with the potential to generate significant amounts of litter.

When appropriate, require approvals for use and development to include an environmental management plan that addresses at a minimum: materials selection and identification; materials handling, materials storage; cleaning, washdown and maintenance; storing and disposing of wastes; transporting materials and wastes; emergencies; and staff and contractor training to the satisfaction of the Responsible Authority.

### Application requirements

- An application must be accompanied by the following information as appropriate:
  - Site and building layout plans showing the location of proposed stormwater treatment measures.
  - A report including an industry accepted performance measurement tool.
  - Design details, such as cross sections, to assess the technical effectiveness of the proposed stormwater treatment measures.
  - Site and building management plans which detail how the site and buildings will be managed through construction and which sets out future operational and maintenance arrangements.

### Decision guidelines

Before deciding on an application, in addition to the decision guidelines of Clause 65, the responsible authority will consider, as appropriate:
• The extent to which the development meets the objectives and requirements of this policy
• Whether the proposal is designed and incorporates works to maintain, or improve, the quality of stormwater within or exiting the site.
• Whether the proposal will significantly add to the stormwater discharge or adversely affect water quality entering the drainage system.
• Opportunities for water conservation and reuse that influence the use of water sensitive urban design.
• The level of ongoing management required to achieve and maintain the desired stormwater quality measures that will be used during the construction phase to prevent a loss of stormwater quality as a result of building activities, such as silt traps.

22.19-6 Reference documents

Hume City Council Industrial Stormwater Code of Practice (2008)