5. **Structural Isolation**

Structural isolation involves physically separating the materials used in production and water products in active work areas from groundwater and stormwater.

Industrial pollution is common to industrial sites. It includes dangerous and hazardous chemicals, oils and residues, and solid materials that can leach pollutants into water. Even products found on industrial sites that are not considered dangerous can cause significant environmental damage if they reach local waterways, wetlands and bays.

Industrial pollution can happen in processing, when storing raw and finished materials, through spills and by carrying small amounts around the site on equipment, vehicle tyres and shoes. It is difficult to remove from stormwater and, therefore, should be kept away from areas where it can move into stormwater drains.

Structural isolation is preferred over other responses because it eliminates pollution risk at the source. Structural isolation is most effective when also using environmentally sound operational practices, which are documented in an environmental management plan.

In an existing site there may be opportunities to retrofit structural isolation features. Where proper structural isolation cannot be achieved, there are some types of interim treatment devices which can be installed to help prevent industrial pollution from entering the stormwater drain.

At a minimum, structurally isolated areas need to have a roof and sealed floor that extends beyond the active works area. Engineered structural devices are then used to prevent pollution from these work areas entering stormwater pathways.

Different examples of structural isolation devises can include:

- Recessed floor area with sump
- Trench grate
- Isolation valves and spill control.

Interim pollutant capture and treatment devices where structural isolation cannot be achieved can include:

- Oil, grease and water separators (triple interceptors)
- Sand and media filters.

Further information on these devices can be found in Council’s Industrial Stormwater Code of Practice [www.hume.vic.gov.au/industrialstormwater](http://www.hume.vic.gov.au/industrialstormwater)

For any enquiries in relation to these guidelines, contact Council’s Sustainable Environment Department on 9205 2200.

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