

Controlling dust from development sites



This guide has been developed to educate developers on the different methods of reducing dust emissions from construction sites and clarifying the expectations council has when it comes to industry best practice.

Published data has shown that on average dust emission rates of over 2.5 tonnes per hectare per month occur at urban construction sites; therefore it is important that developers, contractors and builders are aware of their responsibilities and obligations when it comes to controlling dust emissions.

What is a dust nuisance?

Dust can be considered to be a nuisance when it is settling on surfaces and possessions, affecting visibility, contaminating tank water supplies and or the movement of a material into a waterway or the negative impact upon human health or wellbeing.

The level of dust nuisance on site is generally influenced by four main factors:

- weather conditions;
- the size and scale of the development;
- topography and location of the development; and
- the actions of site workers.

Responsibilities

Companies and property owners have a general environmental duty to take all reasonable and practicable measures which is considered industry best practice in the case of sediment and erosion controls to prevent or minimise the emissions from construction sites under the *Environmental Protection Act 1994*.

Fraser Coast Regional Council has adopted IECA International Erosion Control Association Australasia Best Practice Erosion & Sediment Control 2008.

An environmental nuisance is unreasonable interference with an environmental value which may be caused by, airborne particles such as dust or the unhealthy, offensive or unsightly condition caused by a contaminate such as dust.

The Environmental Protection (Air) Policy 2008 defines Environmental air values as the qualities of the air environment that are conducive to:

- a) protecting the health and biodiversity of ecosystems;
 and
- b) human health and wellbeing; and
- c) protecting the aesthetics of the environment, including the appearance of buildings, structures and other property; and
- d) protecting agricultural use of the environment.

What is best practice?

Best practice for the control of wind erosion and dust involves the identification of sensitive receptors such as residential dwellings and waterways and tailoring control measures to eliminate, minimise and control dust emissions through appropriate measures such as:

- limiting the amount of exposed land;
- phasing the works;
- the application or provision of protective ground cover including but not limited to vegetation, mulch,
- organic binders and dust retardants;
- leaving the ground surface in a rough cloddy condition;
- limiting traffic movements on disturbed areas;
- stabilising access tracks;
- keeping the ground surface damp;
- limiting stockpiled material height to 2 metres or less;
- temporary stabilising long term stockpiles;
- the installation of wind breaks or barriers to either reduce the wind speed or capture dust emissions onsite; and
- promptly revegetating or sealing exposed soils once finished levels reached.

	Treatment options							
Site condition	Permanent vegetation	Protective ground covers	Watering	Chemical surface stabilisation	Gravel tracks	Stabilised entry/exit	Haul truck covers	Minimise site disturbance
Areas not subject to traffic	✓	✓	✓	✓	✓			~
Areas subject to traffic			✓	~	✓	√		~
Material stockpiles		✓	✓	✓				✓
Unpaved tracks			√	✓	✓	√	√	
Earth transport			✓		✓	✓		

Source: International Erosion Control Association Australasia Best Practice Erosion & Sediment Control 2008, Section 6.13, Table 6.4 – Dust Control Practices

Possible treatment options for activities that generally cause dust are set out in the table above.

It is also really important that the level of control on the site is appropriate to the size and scale of the exposed areas of the site. If control measures are not able to effectively control the dust then further controls need to be implemented.

It is highly recommended that dust suppression measures be incorporated into the sediment and erosion control plan for developments and that measures are used in conjunction with each other.

Enforcement / Fines / Penalties

Any site that causes a dust nuisance that is not implementing industry best practice could be subject to a range of offences related to causing an environmental nuisance under the Environmental Protection Act and/or be a breach of a condition of the development permit. Where a developer is determined to be negligent in their 'general environmental duty' or in breach of a condition of their development permit it can result in the issue of on the spot fines and/or issue of compliance notices.

Recycled Water Locations

'Class B' Recycled Water Fill Point Stations are located at the following sites for dust suppression in non-built up areas subject to application to Wide Bay Water and Waste Services (WBWWS).

- Cane Dam #2 (Class B) Recycled Water Fill Point Station – Location: Amos Road, West Booral
- Toogoom (Class B) Recycled Water Fill Point Station
 Location: Toogoom WWTP Morris Road,
 Toogoom
- Hebblewhite (Class B) Recycled Water Fill Point
 Station Location: Hebblewhite Plantation
 boundary, Booral Road, Nikenbah.
- Nikenbah ('High' Class B) Recycled Water Fill Point Station – Location: Nikenbah Wastewater Treatment Plant, Piggford Lane, Nikenbah.

For more details and to download application forms please go to the WBWWS website via

<u>www.frasercoast.qld.gov.au/wide-bay-water</u> or request an application via email

WBWCEnvironmentalServicesCRM@frasercoast.gld.gov.au

Need Further Information or Assistance?

Councils Officers are available between 8:15am and 4:45pm Monday to Friday via telephone on 1300 794 929, via email enquiry@frasercoast.qld.gov.au or in person at the Hervey Bay or Maryborough Customer Service Centres.









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