

A preventative and proactive best practice approach to controlling sand drift and dust from subdivision, building and construction sites

Our success factors for preventing and managing sediment loss from building, subdivision and A successful

80% of building sites in the City of Cockburn are estimated to be compliant with the City's local law for dust control from subdivision and building sites. This is due to:

construction sites

- 1. A preventative and proactive approach at the planning phase of subdivision and commercial and residential building applications
- 2. A strong commitment to ensuring compliance with our local law, plans and policies and guidelines; and
- 3. Strong support from Senior Management means Local Government Officers can easily and efficiently administer the City of Cockburn's local law.



Sand drifting onto the road from a vacant residential block



A marked decrease in sand leaving this block after a sediment control fence was installed.

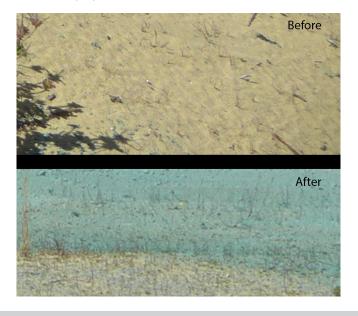
A successful initiative to combat sand drift/ dust from building sites: Voluntary hydro-mulching of vacant blocks at a North Coogee subdivision

In order to prevent and minimise the impact of sand drift on air and water quality and to prevent nuisance for neighbouring residents, the City of Cockburn implemented a new initiative in 2013 whereby land owners of vacant blocks in a North Coogee beach residential development were invited to participate in a voluntary scheme.

This voluntary scheme was coordinated by the City. Land owners made a commitment to have their vacant sites hydro-mulched immediately after they were subdivided to prevent sand drift and dust nuisance. The City of Cockburn secured a discount from the supplier for residents who contributed in the scheme and organised hydro-mulching of approximately 70% of blocks on behalf of the landowners, greatly reducing the occurrence of sand drift and dust from building sites in this area.

Land owners who choose not to participate in the scheme will be required to pay the full cost of hydro mulching and cleaning up costs if complaints are received.

Not only has this initiative helped protect the environment and reduced complaints about sand drift, the community sees this initiative as a proactive approach by the City to assist its ratepayers.



Street sweeping, hydro-mulching and sediment fences are the key tools used by developers and builders in the City of Cockburn to prevent sand drift and dust nuisance

Dust from subdivision and building sites is a nuisance, environmental, health and safety concern experienced by the City of Cockburn due to sand being blown onto the roads and pathways, and onto housing developments.

The City of Cockburn received 69 dust complaints relating to dust nuisance from building sites in the 2017-18 financial year, with 98 complaints being received during 2016/2017, the majority of sites being vacant blocks. A common complaint is sand being blown onto driveways and gardens, and sand filling gutters and window and door tracks in neighbouring properties. This sand then blows onto the road and travels into drains after rain events, ultimately ending up in wetlands or the ocean.

A multi-pronged approach to controlling dust from subdivision and building sites

The City of Cockburn's Consolidated Local Laws 2000 (amended 12 October 2017) deals with the issue of dust control from subdivision and building sites under a 'nuisance' type provision.

This local law states that if you own or occupy land in the City of Cockburn and are intending to undertake any clearing works that have the potential to create dust, you will need to submit a *Dust Management Plan* to the City that includes a detailed description of proposed earthworks including the sequence of site disturbance, topsoil handling and storage, measurements that will be put in place to prevent dust and/ or sand leaving the site and creating a nuisance and the expected duration and timing of earthworks. This Plan must be approved before any works begin.

Dust management plans must comply with City Policy SPD7 – Prevention of Sand Drift from Subdivision and Development Sites and the Department of Water and Environmental Regulation's Guidelines for the Prevention of Dust and Smoke Pollution from Land Development Sites.

The City of Cockburn has developed guidelines and standards for the Design, Construction and Handover of Subdivision within the Municipality and Construction Management Guidelines that deal with health and safety concerns, dust as a nuisance, storm water management, including sediment laden runoff along roads, drains and footpaths and measures that will be put in place to prevent unauthorised discharges from site.

The City of Cockburn also has a moratorium on land clearing on large scale development (greater than one hectare) during the summer months. This moratorium was established because in summer months for larger development areas even the implementation of best practice procedures cannot prevent windblown sand and dust leaving development sites due to strong seasonal winds.



Monitoring

All five Local Government District Environmental Health Officers employed by the City of Cockburn are empowered to undertake action through the issuing of infringements for dust nuisance.

Non-compliance with the City of Cockburn's local law is identified by:

- periodic monitoring of building sites by Local Government Officers;
- 2. responding to complaints received; and
- 3. Local Government Officer surveillance.

Non-compliances with the City of Cockburn's local law are managed by:

- verbal direction to the offender to address the noncompliance;
- 2. formal written warning;
- 3. statutory notice to address the non-compliance; prevention notices; and/or
- 4. infringement notices.

Infringement notices for offences related to nuisance dust from building sites are in place to act as a deterrent to potential offenders. The City of Cockburn imposes a fine of \$500 for non-compliance, however this is not a common occurrence. The City of Cockburn has not undertaken any prosecutions for dust nuisance.

When assessing compliance, the difficulty for many Local Governments is determining where the sand originates from. City of Cockburn LGOs are required to witness sand drift when it is occurring to enforce their local law. However, attempts are also made to contact the alleged offending parties when complaints are received but not witnessed.

Working towards environmental sustainability

The work undertaken by the City of Cockburn to mitigate and control dust and sand drift from building sites contributes to commitments made in strategies and plans that guide the City of Cockburn's actions for sustainability and environmental management.

This case study has been developed as part of the Sediment Task Force Project which is sponsored by:







