

# CONTROL DUST AND LITTER

## WHAT IS THIS?

Research has shown that 2.5 tonnes of dust per hectare per month can occur on sites with no dust controls. Dust and litter controls minimise the amount of dust and litter generated by wind erosion on your development site. Protect the soil from becoming airborne by setting up wind barriers or scheduling regular watering of exposed areas. Make sure all machinery have dust suppressors fitted.

*Note: A sediment fence CANNOT be used as a wind barrier - they are made from different materials and are for different purposes.*

## WHAT DO I NEED TO DO?

### Before starting site works:

Good site planning can virtually eliminate dust being a problem.

- Assess the dust potential of your site. Dust generating activities include major soil disturbances or heavy construction activity such as vegetation clearing, excavation, demolition, cutting concrete, or excessive vehicle traffic.
- Document all potential dust generating activities and the associated controls on your approved ESCP, considering the specific site, type of development, and potential weather conditions during the development period (see page 17).
- Include an explanation of dust control function and maintenance schedule in all site inductions.

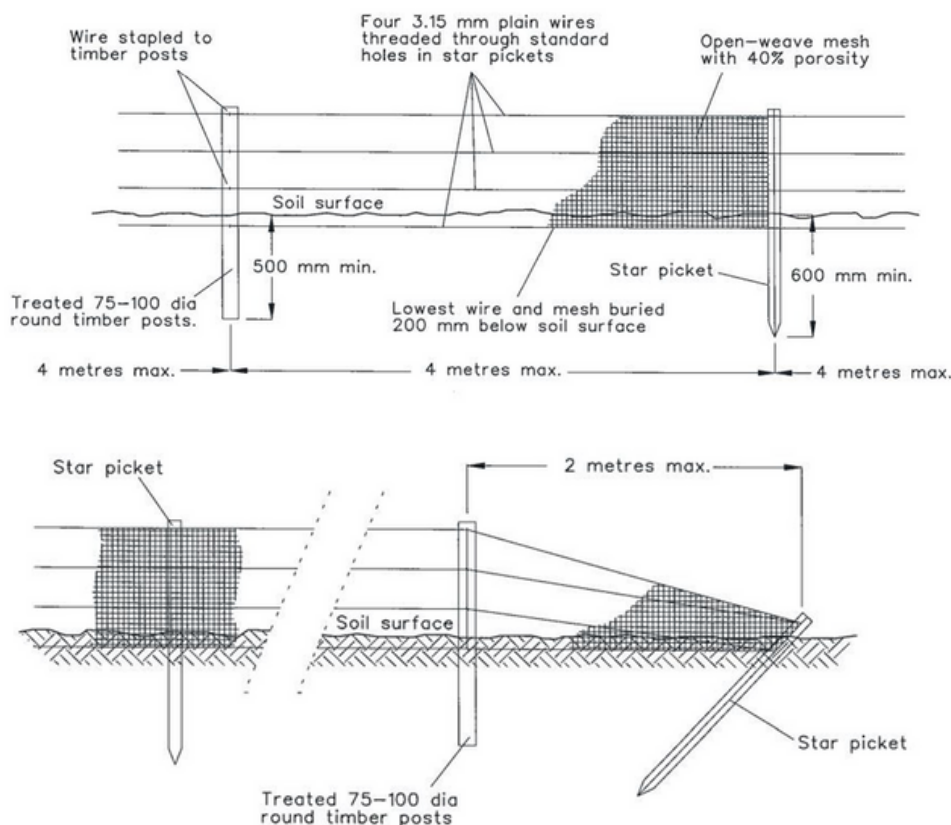
### Installing the controls:

- Stage works and limit soil disturbance to the minimum required for each stage (see page 34).
- Maintain as much vegetation as possible (see page 38). Existing trees and shrubs provide coverage to surface soils and act as wind breaks, slowing wind velocities.
- Install wind barriers if there is high risk of dust generation. Wind fences divert the wind up and over the site. Ensure the material used is semi-permeable open weave mesh (Figure 14), otherwise down-wind turbulence can make erosion worse.
- Dampen the site slightly with a light application of water during excavation or when dust is being raised. Be careful to only moisten the ground surface, DO NOT wet it to the point of creating mud and runoff.

- Apply mulch to recently disturbed areas (see page 39). Mulch is a cheap solution and can reduce wind erosion by 80%.
- Where plants and mulching cannot be used (i.e. on-site roads and entrances and some slopes) apply gravel and rocks.
- For large open areas for some soil types, deep ploughing (tillage) brings soil clods to the surface where they rest on top of the dust, preventing it from becoming airborne. Consult a suitably qualified soil specialist to decide whether this is appropriate for your site.
- Spray-on soil stabilisers are a versatile option and can be used on small to large sites and on flat ground or slopes (see page 41).
- Stabilised site access (see page 56) will help to reduce dust generated by vehicle movement on and off the site.
- Cover sand and soil stockpiles with anchored fabric, plastic, or vegetation (see page 47).
- Ensure that relevant equipment and machinery have dust suppressors fitted.

### Maintaining the controls:

Dust controls involving the application of water require more monitoring than structural or vegetation controls, to ensure water being applied is not creating mud or runoff. If structural controls are used, they should be inspected for deterioration regularly to ensure that they are still achieving their intended purpose.



**Figure 14:** Construction details for the correct installation of a wind erosion barrier, including the depth and spacing of supports. *Figure from Landcom 2004 'Soils & Construction Volume 1 Managing Urban Stormwater (4th edition)'.*