



Environment and Heritage Expertise

Technical Guideline

TG 0875.51 – Dust

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**Government of
South Australia**

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Significant/major changes incorporated in this edition

Not applicable - this is the first edition of the Technical Guideline.


Document controls

Version history

Version	Date	Author	Comments
1.0	28 August 2025	Various	Issued for Use

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Approvers

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Reviewers

Name	Role	Version	Review Date
Environment and Heritage Expertise Team	Team review of guidelines.	1.0	28-08-2025

1 Introduction

This guideline relates to the assessment and management of nuisance dust which may be encountered during a project's planning, construction, operations or maintenance activities.

It forms part of the TG 0875 Environment and Heritage Technical Guidelines and is designed to provide insight into regulatory obligations associated dewatering, dredging and earthworks drainage, as well as suggested approaches to manage risk.

Note the guideline is not exhaustive, and additional requirements may be necessary based on project- or site-specific activities, geographical location, or approval conditions.

1.1 Environment and Heritage Technical Guidelines Suite

The SAWG-ENV-0875 Environment and Heritage Technical Guidelines suite includes:

- TG 0875.00: General requirements
- TG 0875.11: Aboriginal heritage and Native Title
- TG 0875.12: Non-Aboriginal heritage
- TG 0875.21: Vegetation
- TG 0875.22: Fauna
- TG 0875.23: Weed hygiene
- TG 0875.24: Phytophthora
- TG 0875.31: Surface water
- TG 0875.32: Groundwater
- TG 0875.33: Recycled water
- TG 0875.34: Sediment, erosion and stormwater
- TG 0875.35: Dewatering, dredging and earthworks drainage
- TG 0875.41: Site contamination
- TG 0875.42: Acid sulfate soils
- TG 0875.43: Hazardous substances
- **TG 0875.51: Dust (this guideline)**
- TG 0875.52: Odour
- TG 0875.53: Noise and vibration
- TG 0875.61: Spoil management
- TG 0875.62: Recycling
- TG 0875.63: Waste management

This guideline must be read in conjunction with TG 0875.00: General requirements

1.2 General requirements

TG 0875.00: General requirements apply to all aspects of the work:

1. Purpose
2. Application
3. Scope
4. Statutory obligations
5. Strategic alignment
6. Terms and abbreviations

2 Dust

2.1 Overview

MANAGEMENT	
Commitment	Nuisance dust can impact sensitive land uses (i.e. schools, hospitals, residences), local communities and the environment. State-based legislation regulates nuisance dust. We will protect sensitive receivers from dust impacts and comply with regulatory requirements.
Strategic objective	<ul style="list-style-type: none"> Environment Corporate Strategy: <ul style="list-style-type: none"> Our culture creates empowerment, and increased accountability for environmental decisions, demonstrating proactive leadership. Asset Management Corporate Strategy: <ul style="list-style-type: none"> An integrated approach enables the sustainability outcomes our customers, community and owner expect.
Key Performance Indicator	<ul style="list-style-type: none"> KPI 1: Dust management requirements described in management plans and construction plans. KPI 2: No customer or community complaints associated with generation of nuisance dust. KPI 3: No significant impact to surrounding native vegetation or native fauna from generation of nuisance dust.
Legislation	<ul style="list-style-type: none"> Biodiversity Act 2025 (SA) Environment Protection Act 1993 (SA) Environment Protection (Air Quality) Policy 2016 (SA) Local Nuisance and Litter Control Act 2016 (SA) National Environment Protection (Ambient Air Quality) Measure
Regulatory approvals	<ul style="list-style-type: none"> EPA Authorisation
Statutory obligations	<ul style="list-style-type: none"> <i>Environment Protection Act 1993 (SA)</i>, Section 25: A person must not undertake an activity that pollutes, or might pollute, the environment unless the person takes all reasonable and practicable measures to prevent or minimise any resulting environmental harm. <i>Landscape South Australia Act 2019 (SA)</i>, Section 8: A person must act reasonably in relation to the management of natural resources within the State. <i>Biodiversity Act 2025 (SA)</i>, Section 11: An entity must not undertake an activity that harms or has the potential to harm biodiversity unless the entity takes all reasonable and practicable measures to prevent or minimise any resulting harm.
Reference material	<ul style="list-style-type: none"> EPA (NSW): Ambient air monitoring guidance note
Related guidelines	<ul style="list-style-type: none"> TG 0875.34: Sediment, erosion and stormwater TG 0875.61: Spoil management

2.2 Planning and design

MITIGATION MEASURES	STAKEHOLDERS
Assessing the presence of sensitive receivers (i.e. residences, schools, hospitals) must be undertaken to determine any potential nuisance dust risks and constraints from different emission sources, such as point, fugitive, area, etc. Assessing any air quality objectives/criteria specific to the project, i.e. associated EPA licences.	Environmental Officer Asset Planner Design Manager
Options to minimise dust must be identified through options selection and decision making i.e. consider differences in construction methodologies, site layout including adequate buffers.	Environmental Officer Project Manager Design Manager

2.3 Construction

MITIGATION MEASURES	STAKEHOLDERS
With respect to identified sensitive receivers, monitor for weather conditions, notably prevailing wind direction and speed.	Contractor
For high-risk works, install a dust monitoring system (PM2.5, PM10) at key locations and include appropriate mitigation arrangements described in approved management plans (including trigger levels and response actions). Ensure both pre-construction monitoring of baseline and post-construction monitoring are conducted when required.	Contractor
Plan and schedule soil disturbance activities and consider adverse weather conditions (for example hot, dry periods, high winds).	Contractor
Used fixed plant wherever possible to reduce vehicle movement on site.	Contractor
Introduce and enforce speed limits on sites (<10 kph on unsealed roadways).	Contractor
Design site layout to minimise dust risk where practicable e.g. place stockpiles away from sensitive receivers.	Contractor
Reduce the volume and/or height of stockpiles to reduce exposed surface areas. Ensure stockpiles are wet down where appropriate, and either covered or compacted if in place for more than 10 days.	Contractor
Consider installing dust screens, shade cloth or other wind barriers as appropriate.	Contractor
Suppress dust by using water carts to wet down areas where works are happening, including outside business hours if windy weather is forecast	Contractor
Cease dust-generating activities in high-risk areas where dust control measures are unable to be implemented or are ineffective, or there are extreme weather conditions.	Contractor

MITIGATION MEASURES	STAKEHOLDERS
If dust suppressants are to be used within spray carts, the dust suppressant product must be provided to SA Water for assessment of water quality risk and their use approved prior to application.	Contractor
Stabilise exposed soils after construction activities by methods such as revegetation (e.g., hydroseeding or hydromulching), applying spray suppressants or soil binders, or installing stabilisation matting. Whenever possible, incorporate a seed mix to promote the re-establishment of grasses or other vegetation. The selection of plant species for seeding must be approved by SA Water.	Contractor
Ensure management plans include appropriate detail on all control measures to be implemented for managing dust risk, including the location and type of each measure.	Contractor

2.4 Monitoring requirements

DESCRIPTION	METRIC	FREQUENCY	ACCOUNTABILITY
Dust monitoring for high-risk projects or sensitive receivers	Density of particles, mass per volume	Continuous	Contractor
Monitor local weather conditions via online data sources (BoM or similar)	Wind speed and direction	Continuous	Contractor
Effectiveness of controls to reduce or avoid dust risk (e.g., stockpile management, watering etc)	Visual Inspection	Weekly	Contractor