

Environment and Heritage Expertise

Technical Guideline

TG 0875.52 – Odour

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Confidentiality: OFFICIAL



**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

Approver Name	Approver Role	Signature
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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 odour which may be created or emitted 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
- **TG 0875.52: Odour (this guideline)**
- 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 Odour

2.1 Overview

MANAGEMENT	
Commitment	Repeated exposure to odour emissions can be detrimental to people's health and wellbeing. State-based legislation regulates odour management.
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: No odour complaints received as a result of project activities.
Legislation	<ul style="list-style-type: none"> For all works: <ul style="list-style-type: none"> National Environment Protection (Ambient Air Quality) Measure (Cth) For all works at EPA licensed facilities: <ul style="list-style-type: none"> Environment Protection Act 1993 (SA) Environment Protection (Air Quality) Policy 2016 (SA) For all other works: <ul style="list-style-type: none"> Local Nuisance and Litter Control Act 2016 (SA)
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.
Reference material	<ul style="list-style-type: none"> AS/NZS 4323.3: Stationary source emissions – Part 3: Determination of odour concentration by dynamic olfactometry EPA (SA): Ambient air quality assessment EPA (SA): Evaluation distances for effective air quality and noise management EPA (SA): Emission Testing Methodology for Air Pollution Version 2
Related guidelines	<ul style="list-style-type: none"> TG 0530: Sewer Network Hydraulic Design Considerations to Minimise Network Odour Impact TG 0531: Gravity Network Ventilation Design

2.2 Planning and design

MITIGATION MEASURES	STAKEHOLDERS
Assessing the presence of sensitive receptors (i.e. residences, schools, hospitals) must be undertaken to determine any potential odour risks and constraints (adopting the definition of sensitive receptor as described in SA Water Technical Standard 0854.	Environmental Officer Asset Planner Design Manager
Potential options to minimise operational or temporary construction odour impacts must be identified, to influence options selection and decision making.	Design Manager Process Engineers Environmental Officer Asset Planner
Where there is risk of odour emissions related to wastewater network designs, follow the risk-based approach described in a SA Water Technical Standard 0854 to determine whether further investigations are required.	Design Manager Process Engineers Environmental Officer Project Manager
Where there is risk of operational or construction odour emissions impacting sensitive receptors (unrelated to wastewater network designs) that requires further investigation, a detailed odour assessment may be required and must be undertaken by a suitably qualified air quality consultant.	Design Manager Process Engineers Environmental Officer Project Manager
Recommendations of any detailed assessments must be considered in the design, which may include modifications to the design or implementation of fit for purpose odour control.	Design Manager Process Engineer Environmental Officer Project Manager

2.3 Construction

MITIGATION MEASURES	STAKEHOLDERS
Ensure engagement and communication protocols recognise Sensitive Receptors and provide information regarding the nature of works, complaints handling and contact details.	Contractor
Ensure management plans have taken reasonable steps to minimise potential odour impacts on sensitive receivers, including measures to monitor odour (such as hydrogen sulfide), depending on the likelihood of construction increasing odour levels.	Contractor
Ensure management plans include incident notification protocols, including an odour complaint handling procedure.	Contractor
Site planning and management: Where possible, design site layouts and works areas to achieve separation distances between odorous point sources and sensitive receivers.	Contractor
Minimise the potential for odours by closing release points where possible e.g. minimise the number of open access chambers, close maintenance holes overnight.	Contractor
Ensure odour control measures are available and ready to use during the works, where required.	Contractor

MITIGATION MEASURES	STAKEHOLDERS
Monitor weather conditions (i.e. prevailing wind direction) and implement additional odour control measures if required.	Contractor
Maintain equipment in good working order, have appropriate exhaust pollution controls, and meet Australian Standards for exhaust emissions.	Contractor
Ensure management plans include appropriate detail on the type and location of all control measures to be implemented to manage odour risk.	Contractor

2.4 Monitoring requirements

DESCRIPTION	METRIC	FREQUENCY	ACCOUNTABILITY
Performance monitoring to validate effectiveness of odour control measures	As per agreed requirements	Ongoing	Contractor