

# ISO/TR 24589-2:2025-05 (E)

## Examples of good practice for the management of assets of water supply and wastewater systems - Part 2: Wastewater systems

---

### Contents

	Page
Foreword.....	v
Introduction.....	vi
<b>1 Scope.....</b>	<b>1</b>
<b>2 Normative references.....</b>	<b>1</b>
<b>3 Terms and definitions.....</b>	<b>1</b>
<b>4 Principal aspects.....</b>	<b>1</b>
4.1 Objectives.....	1
4.1.1 Multiple wastewater utilities.....	1
4.1.2 Collection network.....	2
4.1.3 Treatment plants and other elements.....	2
4.2 Strategies.....	6
4.2.1 Maintenance strategy.....	6
4.2.2 Renewals decision.....	7
4.2.3 Inspection strategy of collection network.....	7
<b>5 Investigation.....</b>	<b>8</b>
5.1 Non-destructive sewer condition investigation techniques.....	8
5.2 CCTV good practices.....	10
5.2.1 General.....	10
5.2.2 Australian context.....	10
5.2.3 Objective.....	11
5.2.4 Methodology.....	11
5.3 Automated CCTV condition assessment.....	12
5.3.1 General.....	12
5.3.2 Context.....	12
5.3.3 Activities.....	12
5.3.4 Benefits.....	12
5.4 Hydraulic investigation.....	13
5.4.1 General.....	13
5.4.2 Flow monitoring.....	13
5.4.3 Hydraulic modelling.....	13
<b>6 Assessment.....</b>	<b>13</b>
6.1 Deterioration predictive models.....	13
6.2 Assess maturity of operations to define action plans.....	14
6.3 Treatment plant: implementation of simplified and monetized FMECA (Failure Mode, Effects and Criticality Analysis).....	15
<b>7 Implementation: sustainable field works.....</b>	<b>17</b>
<b>8 Operation and maintenance.....</b>	<b>17</b>
8.1 Odour management.....	17
8.1.1 General.....	17
8.1.2 Australian context.....	18
8.1.3 Objective.....	18
8.1.4 Methodology.....	18
8.2 Dynamic simulation for condition analysis and process optimization for a wastewater treatment plant (WWTP).....	19
8.2.1 General.....	19
8.2.2 Context and objectives.....	19

8.2.3	Outcomes.....	21
8.3	Monitoring and control.....	21
8.3.1	General.....	21
8.3.2	Hypervision.....	22
8.3.3	Integrated information systems.....	22
8.4	Monitoring.....	22
<b>9</b>	<b>Rehabilitation.....</b>	<b>23</b>
9.1	Network renewal plan.....	23
9.2	Rehabilitation strategies based on condition and material deterioration analysis and forecasting.....	23
9.3	Plant renewal plan.....	29
<b>Annex A (informative)</b>	<b>Summary of examples of good practices for asset management of wastewater systems.....</b>	<b>30</b>
<b>Bibliography.....</b>		<b>33</b>