

Benchmarking, Priority and Status Indicators

The following areas have been targeted to provide an overview of the asset condition and to identify potential problems that may occur if maintenance is not carried out:

- Security
- Contamination
- Safety
- Confined spaces
- Carbonation (deterioration of concrete structures)
- External Structural condition and Protective Coatings
- Internal Structural condition and Protective Coatings

Each area is given a priority number (based on years) that can be used to compare conditions between similar assets - some sections will also influence others due to parallel areas of interest.






- **Contamination** mainly refers to vermin entry, dust, debris or storm water entering the storage from unsealed areas.
- **Security** relates to the possibility of unauthorised tank access - this can directly relate to Contamination and Structural issues if vandals are accessing the structure.
- **Safety** includes all features that may cause injury, and is influenced by **Confined Spaces** in some cases.
- **Structural** condition can be directly affected by deterioration of roof framing, support posts etc or by defects in the protective **Coating** or a high **Carbonation** percentage. **Carbonation** is expressed as a percentage between remaining sound concrete and steel cover depth, with 100% carbonation meaning the steel is fully exposed to the surrounding environment.

By using these benchmarks, an average life span and working environment can be predicted, allowing preventative measures to be taken before serious damage or personal injury occurs.

Priority numbers are also placed on each External and Internal item inspected, to create a target and time schedule for planned maintenance

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PRIORITY INDICATORS

	0	<p>No time to fix – urgent attention required</p> <p>The highest action priority. This is only to be used in cases of personal safety being compromised when carrying out routine operations on the asset; water quality being affected to a level that places the consumers at risk; structural defects that have the potential for costly reinstatement if left unattended</p>
	1	<p>1 year from inspection date</p> <p>Also urgent, but will not place at risk the day-to-day operation of the asset. Dealing with safety, water quality and structural defects likely to cause further damage if not rectified within twelve months.</p>
	2	<p>2 years from inspection date</p> <p>To be used for priority maintenance. Coating defects both external and internal, entry hatches, safety rails, roofing defects, deteriorating internal ladders, pipework and supports.</p>
	3	<p>3 years from inspection date</p> <p>General rating for structural and coating maintenance that is required to preserve the effective asset life. Additions that can be carried out to improve access and safety as finances permit. Steel tanks and their internal fittings should be inspected at three-yearly intervals to establish a maintenance pattern.</p>
	4	<p>Items rated under this priority are those that are likely to remain structurally sound during normal wear and tear for at least 3–4 years, based on past experience of the asset.</p> <p>This includes roofing, external fixtures not requiring coating, ventilation systems, animal proofing and concrete structures with a proven history. New coatings that have passed the warranty period.</p>

STATUS INDICATORS

A	Attention is required
F	Re-assessment or monitoring is required
D	Deferred until the next inspection

All tanks should be inspected regularly by the asset owners and more frequently if known vandal activity occurs on site, after any extreme weather conditions, or if the local environment could increase the risk of potential tree impact damage to fences or asset.

ASAM Data Management – Online and Accessible

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