



Hydrogen sulphide, commonly associated with a “rotten egg” odour, continues to generate enforcement activity.

On 26 February 2026, the Land and Environment Court imposed total fines of \$270,000 on a non-putrescible landfill operator following prosecution by the Environment Protection Authority (EPA) arising from hydrogen sulphide emissions in mid-2023.

The landfill operator pleaded guilty to:

- An offence under s 129(3) of the *Protection of the Environment Operations Act 1997* (POEO Act) for causing the emission of offensive odour beyond the boundary of the premises, which is a strict liability offence; and
- An offence under s 64(1) of the POEO Act for contravening an Environment Protection Licence (EPL) condition, by failing to appropriately manage leachate generated within a landfill cell.

The Court imposed fines of \$240,000 for the odour offence and \$30,000 for the licence breach.

ClarkeKann acted for the operator in the proceedings.

This outcome follows *Environment Protection Authority v Dial-A-Dump (EC) Pty Ltd* [2024] NSWLEC 21, where the Court imposed a fine of \$280,000 for comparable hydrogen sulphide odour emissions.

Together, these decisions confirm that odorous landfill emissions remain a clear regulatory focus.

Hydrogen Sulphide Risk in Non-Putrescible Landfills

Operators of non-putrescible landfills often assume that excluding biodegradable organic waste materially reduces odour risk when compared with putrescible landfills. The position is more nuanced.

While non-putrescible waste excludes biodegradable organic waste capable of anaerobic decomposition, these facilities frequently accept sulphate-bearing materials such as plasterboard (gypsum). When waste becomes saturated, anaerobic conditions can develop. Those conditions are conducive to the generation of hydrogen sulphide.

In both recent decisions, the Court treated hydrogen sulphide generation from a saturated waste mass as a foreseeable event, despite past activities not generating an odour or external professional advice indicating that odour was not likely to be an issue.

Key Compliance Lessons from the Decisions

Broad EPL Obligations Will Be Enforced

Most EPLs require licensed activities to be carried out in a competent manner. This condition extends beyond prescriptive requirements and captures the overall adequacy of operational systems.

The Court’s approach confirms that the EPA may rely on these broadly framed conditions where site systems, monitoring or controls are considered insufficient, even in the absence of a specific mandated licence condition.

Leachate Control Is Critical

Unless expressly varied by licence conditions, operators are required to comply with the Environmental Guidelines: solid waste landfills, 2016 (**Guidelines**).

The Guidelines provide that a leachate extraction and level-control system should be able to keep leachate no greater than 300mm above the upper surface of the base liner (measured from the bottom of the sump), or below some other level that is justified by the design, site conditions and leachate management measures. Quarterly monitoring represents a minimum standard.

The recent decisions make clear that:

- In the absence of a specific licence condition dealing with leachate management, operators must undertake sufficient monitoring to identify when leachate levels exceed 300mm above the base liner of the sump and transfer leachate to a storage pond;
- During periods of heavy rainfall, more frequent monitoring and transfer of leachate may be necessary;
- Saturation of waste mass increases the risk of anaerobic conditions; and
- Resulting hydrogen sulphide generation may be treated as foreseeable.

The Court did not regard extreme rainfall as an unexpected anomaly. Wet weather contingencies must form part of ordinary operational planning, including adequate pumping capacity and storage infrastructure.

Odour and Gas Monitoring Should Be Proactive

Even where an EPL does not expressly mandate landfill gas monitoring, the Guidelines require monthly methane monitoring.

Monitoring provides early warning of anaerobic activity. Methane concentrations exceeding 500 parts per million warrant investigation and corrective measures, such as:

- Placement of additional cover material;
- Adjustment of operational practices; or
- Installation of gas extraction infrastructure.

The enforcement trend indicates that reactive management following complaints is insufficient. Proactive monitoring and intervention are expected.

Record-Keeping Strengthens Compliance Position

Contemporaneous records remain central to demonstrating compliance and addressing issues of foreseeability.

Operators should maintain detailed records of:

- Leachate levels;
- Volumes transferred to storage ponds;
- Gas monitoring results;
- Odour surveys; and
- Corrective actions implemented.

Robust documentation materially strengthens an operator's position in any subsequent investigation or prosecution.

Regulatory Exposure Under the POEO Act

The prosecutions commenced by the EPA in the decisions were summary criminal enforcement proceedings. EPA prosecutions may result in:

- Significant financial penalties;
- Ongoing regulatory scrutiny;
- Reputational consequences; and
- In certain circumstances, personal exposure for directors or managers.

The recent decisions demonstrate that offensive odour emissions will attract substantial penalties, particularly where the risk was foreseeable and systems, such as leachate and odour management, were inadequate.

Further Information

If your operations raise similar compliance issues or you are responding to regulatory inquiries, early legal advice is critical.

For more information or advice about your circumstances, please contact Jimmy Gill, Royce Tout or your usual ClarkeKann contact.