Pasminco Containment Cell – Environment Protection Licence 5042

Summary of Annual Ambient Groundwater Monitoring Report 2025-26

This summary:

- Explains what was monitored, where, when and why
- Provides interpretation of results of the raw data provided in the full report
- Identifies and explains any exceedances and trends
- Is written in plain English
- Complements the detailed tables, graphs, maps and appendices published in the full report

Annual Ambient Groundwater Monitoring Report (April 2026)

Pasminco Containment Cell, Boolaroo (EPL 5042)
Reporting period: May 2025 – February 2026
Published by: Waste Assets Management Corporation (WAMC)

1. Why monitoring is undertaken

Groundwater monitoring is carried out to confirm that the Pasminco containment cell is effectively isolating contaminated material and that surrounding groundwater is not being adversely impacted. Monitoring is required under Condition E1 and M2 of Environment Protection Licence EPL 5042 and the approved Groundwater Monitoring and Management Plan (GMMP).

2. What was monitored and where

Groundwater levels and water quality were monitored at on-site sumps (A–E) and off-site groundwater wells (59–64) located up-gradient and down-gradient of the containment cell. Monitoring included:

- Standing water levels
- General water quality (pH, salinity, redox, dissolved oxygen, temperature)
- Heavy metals of concern: cadmium, lead, nickel and zinc

Monitoring was undertaken in May 2025, August 2025, November 2025 and February 2026, consistent with licence requirements. Locations of monitoring points are shown in Appendix 1.

3. Summary of results and trends

- **Shallow groundwater wells:** Heavy metal concentrations were stable and within historical ranges, with no increasing trends detected.
- **Deep groundwater well (BH65D):** Results were consistent with previous monitoring and indicate that the deeper aquifer is not impacted by the containment cell.
- **Standing water levels:** Observed variations are consistent with seasonal changes and do not indicate contaminant migration.

- **Sumps A–D:** Results were generally consistent with or below historical levels.
- **Sump E:** Zinc concentrations were above GMMP Objective 3 criteria, however they remain within historical ranges and well below previous maximum values for this location.

4. Interpretation and environmental significance

The monitoring results show that:

- The containment system is performing as intended.
- There is no evidence of off-site groundwater contamination attributable to the containment cell.
- Zinc exceedances in Sump E are localised, historically consistent, and do not translate to impacts on surrounding groundwater.

Overall, the data indicates that the containment cell continues to be an effective long-term control for legacy contamination at the site.

5. Conclusions and next steps

- Groundwater quality remains stable, with no detected impacts to shallow or deep groundwater beyond the site.
- Two monitoring wells were previously lost due to adjacent land redevelopment; investigation is ongoing into replacement and relocation of these monitoring wells to maintain monitoring coverage. Access and protection rights of remaining wells is also being pursued.
- Monitoring will continue in accordance with EPL 5042 and the GMMP, alongside an ongoing review of the Containment Cell Environmental Management Plan (CCEMP).