

Independent testing results for the Dairy Flat community

Parents and neighbours want clear, science-based information about whether Redvale Landfill is affecting local health. To provide that assurance, WM commissioned independent testing of drinking water at Dairy Flat School, airborne dust at a neighbouring property, and soil at multiple points around the landfill boundary. All testing was carried out by accredited laboratories using recognised New Zealand and international standards.

The combined results show no evidence of health risks to the school, children, or nearby households.

1. Dairy Flat School drinking water

Three tap-water samples were taken from the Staff Room, Health Room and Hall Kitchen and analysed by Hill Laboratories, an accredited and independent facility.

Key findings

- E. coli was not detected in any sample.
- All metals (including arsenic, lead, copper and zinc) were well below New Zealand, WHO and US EPA drinking-water limits.
- Turbidity and dissolved solids were low, showing clean and clear water.
- No indicators of landfill leachate, saltwater influence or contamination were found.

These results confirm the school's water is safe to drink and meets all relevant standards.

2. Dust monitoring at Richards Road and the landfill boundary

Independent dust monitoring was carried out on 5 November 2025 under deliberately high-risk conditions including dry weather and north-easterly winds.

Two dust samplers were placed at a property on Richards Road, with monitoring heads facing the landfill. A third sampler was placed at the southern boundary of the landfill to understand site conditions.

Key findings

- At the residence, inhalable dust (the broader mix of airborne particles you can breathe in) was 0.018 mg/m³, while respirable dust (the fine fraction that can reach the lower lungs) measured 0.008 mg/m³.
- These levels are well below protective health guidelines used by the WHO and NZ air-quality standards.
- The results sit comfortably within typical semi-rural background levels for New Zealand.

- Even at the landfill boundary, dust levels remained well within health-protective limits and far below WorkSafe occupational thresholds.

There is no evidence of landfill dust reaching residential properties at levels that could affect health.

3. Soil testing around the landfill boundary

Soil samples were taken from four locations around the landfill (north, east, south and west). Samples were tested for heavy metals and BTEX compounds.

Key findings

- BTEX compounds (benzene, toluene, ethylbenzene and xylene) were not detected.
- Heavy metal concentrations (including arsenic, cadmium, copper and lead) were all well below the Ministry for the Environment's Soil Contaminant Standards for residential land.
- The results show no unusual or elevated levels at any location.

These results confirm that soil quality around the landfill sits within normal background ranges and does not pose a health risk to neighbours or the school community.

Conclusion

Across water, air and soil, the evidence is clear:

- The school's drinking water is safe, with no microbiological or chemical contamination.
- Dust levels near homes are low and typical of semi-rural areas, even when measured in challenging weather conditions.
- Soil samples around the landfill meet national health standards, with no detected contaminants of concern.

These findings support what ongoing environmental monitoring has shown over time. Redvale Landfill is not causing health risks for students, staff or neighbours.

WM will continue to fund additional air-quality monitoring at the school and around the site to provide another layer of transparency and reassurance for the community.