Southeast Calgary Odours – Community Update (Spring 2026)

This update provides an overview of what has been learned to date from the Southeast Calgary odour monitoring system, along with key actions underway at City facilities this year.

Odour Monitoring System – What We're Seeing

The Southeast Calgary odour monitoring system has now been operating continuously for a full year, providing detailed, real-time data on air conditions around the Shepard area and surrounding communities. This system combines air sampling, weather data, and 311 community odour reports to better understand where odours may be coming from and under what conditions they occur.

Analysis of 2025 data shows that:

- Multiple odour sources were identified, including City-operated facilities and offsite sources west of the Shepard Complex. These offsite sources were identified in about 39% of complaints, although confidence is lower in these findings due to limited monitoring coverage.
- The Shepard landfill was found to be a main source of odour, particularly in New Brighton and McKenzie Towne. Field investigations suggested the landfill's leachate system was a likely source of the "rotten grass" odour described in 311 complaints. These emissions tended to increase during weather changes such as barometric pressure.
- Odour events were most common during low or variable wind conditions, when it is harder to trace a single source.
- Odours associated with the Biosolids Lagoons and the Calgary Composting Facility were detected at times but were less often found to be the primary contributor to complaints.

This information is helping The City shift from broad odour management to more targeted, evidence-informed responses.

Actions Underway at City Facilities

Based on monitoring data, field investigations, and ongoing operational reviews, The City continues to take action to reduce odour impacts where possible.

Shepard Landfill

- Leachate is a toxic liquid that forms from rain/snow encountering the garbage in the landfill and must be properly captured to protect the environment. Work will be underway throughout 2026 to seal off the landfill leachate system access points to reduce the potential release of odour-causing compounds.
- Continued monitoring to track how these improvements perform over time and under different weather conditions.

Calgary Composting Facility

The facility expansion will see the anaerobic digestion system completed in May 2026. Performance testing and optimization will continue through May 2027 to ensure the system is operating as intended and delivering odour-reduction benefits.

Operational Improvements

- Keeping facility doors closed as much as possible during operations.
- Biofilter media replacement and ongoing performance monitoring.
- Improved acid scrubber maintenance and performance monitoring.
- Reduction in outdoor storage of finished compost.
- Performance improvements within the curing building.
- Reducing outdoor compost handling activities during windy conditions.

These measures are intended to reduce the likelihood of odour releases and improve overall containment and treatment of air emissions.

Biosolids Lagoons

The biosolids lagoons provide thickening and temporary storage of biosolids from wastewater treatment before it is beneficially reused in land application as a soil amendment.

- Lagoon maintenance work to support continued system performance and reliability is planned for 2026.
- Willow tree planting around the lagoons to help with odour buffering.
- Monitoring and adjusting the storage of dewatered biosolids on the storage pad to manage odour potential under varying weather and operating conditions.

What's Next

- Continue to address potential odour sources at City facilities and monitor the effectiveness of operational and infrastructure interventions (ongoing).
- Further refine the understanding of City facility emissions and how they may affect nearby communities by installing additional technology that can look at some of the harder-to identify odour compounds through gas chromatography-mass spectrometry (GC/MS) instrumentation in 2026.

Your 311 Odour Reports Make a Difference

Community reports remain a critical part of the odour monitoring program. Odour reports help confirm when impacts are being experienced and allow monitoring data to be better interpreted.

When reporting odours to 311, the most helpful information includes:

- Exact time and date the odour was noticed
- Location where odour was noticed
- How long the odour lasted

Reports can be made anytime at **calgary.ca/odours** or through 311, even after the odour has passed.