

Proposed Soil Gas Sampling Scope for Cost Estimation  
 Freeway Landfill and Dump  
 Burnsville, Minnesota

The objective of this proposed sampling is to evaluate soil gas conditions below occupied buildings to assess the potential for vapor intrusion risk. Soil gas samples will be collected at up to six building locations (Figure 1). Sampling will be conducted as described in the Minnesota Pollution Control Agency's document c-rem3-06e '*Best Management Practices for Vapor Investigation and Building Mitigation Decisions*'.

Please provide costs for the following tasks:

Installation of up to 13 sub-slab vapor sampling points - It is assumed that buildings are all constructed as slab-on-grade. If possible, a permanent vapor sampling point will be installed. Payment will constitute full payment for all materials, labor, and equipment required to install the permanent sub-slab vapor sampling point. Upon completion of the required sampling, the permanent soil gas sampling points will be removed, and the slab will be patched. The table below lists the occupied buildings, their approximate square footage, and the suggested number of samples that should be collected from each building.



<b>Property</b>	<b>Building</b>	<b>Approximate Area (square feet)</b>	<b>Suggested Number of Samples*</b>
U.S. Salt	Shop / Office	2,000	3
Freeway Landfill	Transfer Station Office	1,200	3
Freeway Landfill	Transfer Station Scale	450	1
Freeway Dump	Driving Range Office	1,000	2
Burnsville Storage	Residential Unit	800	2
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\*per Appendix C (MPCA, c-rem3-06h)

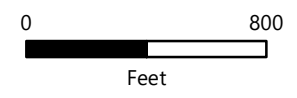
Installation of temporary soil vapor sampling point (contingency) - If a building does not have a slab, a temporary soil-gas sample point will be advanced to a depth of 4 feet below ground surface at a location adjacent to the building. Prior to the temporary point being advanced, utility locate (public and private) shall be conducted. Payment will constitute full payment for all materials, labor, and equipment required to construct the temporary soil gas sample point.

Sample collection and analysis – Two sampling events are proposed. One sample will be collected from each sample point during the heating season (November 1 to March 31) and then a second sample shall be collected from each sample point during the non-heating season (April 1 to October 31). Sampling procedures for sub-slab sample collection should align with those presented in Appendix B (Sampling Methodology) of the MPCA's BMPs. This includes but is not limited to leak testing, shut-in testing, purging, field screening, and differential pressure reading. Soil gas samples will be collected using Summa canisters and analyzed for VOCs by US EPA Method TO-15, as well as methane. Payment will constitute full payment for labor and equipment required for sampling and analysis of the samples.



-  Parcel Boundaries<sup>1</sup>
-  Proposed Vapor Sample Location

1 - Based on Dakota County Parcel and Ownership Data



**SAMPLE LOCATIONS**  
Freeway Landfill  
and Freeway Dump  
Burnsville, Minnesota

FIGURE 1

