

Soil Vapour Mitigation



PRESENTED BY:

Pottinger Gaherty
Environmental Consultants

When is a Soil Vapour Mitigation Required?

- Based on soil vapour investigation, soil vapour remediation required
- Remediation and redevelopment of Site are to be conducted concurrently
- Post-remediation soil vapour investigation will be conducted after construction
- Pre-emptive Installation of Soil Vapour System as a Risk Management Step

Installation of Soil Vapour System

- Design soil vapour system (with mechanical engineer)
- Install soil-vapour piping beneath slab at time of construction, as a precaution
- Conduct post-remediation sub-slab soil vapour investigation (soil vapour system capped)
- Compare soil-vapour concentrations to applicable CSR Schedule 11 Standards for specific land use

Scenario 1: Soil Vapour System Capped

- Post-remediation soil vapour results meet the applicable CSR Schedule 11 Standards, with the soil vapour system beneath the sub-slab capped
- Apply for Numerical CoC

Scenario 2: Passive Soil Vapour System

- Conduct post-remediation sub-slab soil vapour investigation (soil vapour system uncapped)
- Compare soil-vapour concentrations to applicable CSR Schedule 11 Standards
- If standards meet, submit for a CoC with the following supporting information:
 - Letter from mechanical engineer, that the system was installed as designed, include as-builts

Scenario 3: Mechanical Soil Vapour System

- Conduct post-remediation sub-slab soil vapour investigation with mechanical soil vapour system operating
- Compare soil-vapour concentrations to applicable CSR Schedule 11 Standards

Scenario 3: continued

- For risk-based submission, prepare the following:
 - Letter from mechanical engineer, that the system was installed as designed, include as-builts
 - Prepare performance verification plan, including operational and maintenance, reporting requirements (e.g., letter from AP)

Questions?

Keith Gagne

Pottinger Gaherty Environmental Consultants

1200 - 1185 West Georgia Street, Vancouver, BC V6E 4E6

P: 604.682.3707 F: 604.682.3497

e: kgagne@pggroup.com w: www.pggroup.com