



Wrap-Up Conclusions & Discussion

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* *Personal Perspective & Presentation – Does not represent Agency policy*
See: <http://epa.gov/oswer/vaporintrusion>

Feed back on Next Steps

- Does the evidence support the development of a peer-reviewed standard methodology
- for ITS measurements and use,
- such as (RCRA's) SW-846?

Method Development and Validation under the SW-846 methods and Work Group processes

- A monitoring program of known quality and integrity is an essential component at any assessment of possible exposures to hazardous constituents,
 - including vapors that have intruded into indoor air from a release of hazardous wastes.
- This sampling should be planned to provide assurance of appropriate sampling design
 - and
- provide samples representing the exposure levels of most concern for risk-based decision making.

Need for Proposed Methods

- The proposed methods use new understanding on how the measurement of supplemental metrics such as:
 - ‘Indicators’ (e.g., Differential Temperature and Pressures)
 - and
 - ‘Tracers’ (e.g., Radon), of the intrusion of soil gas into indoor air,
- can significantly increase the quantitative-confidence in the probability of indoor air samples representing the exposure levels of most concern for decision-making, e.g.,:
 - Reasonable Maximum Exposure (e.g., 90-98th%ile), and/or
 - 95th Upper Confidence Limit of the Mean

Support for new Methods

- New technologies make practical the nearly-continuous measurement of supplemental (non-target-chemical) metrics (ITS) that are less-disruptive to building occupants and lower-cost,
- i.e., allowing a sufficient-number/frequency of samples to provide improved understanding and confidence for when, and where, to sample indoor air for risk-driving CVOCs.

Benefits of new Methods validation

- Documentation of measurement devices, sampling protocols and procedures,
- as well as statistical-testing the associations between these ITS metrics and target-chemical concentrations,
- can quantify the confidence in representing exposure levels of concern from either:
 - 1) regularly-scheduled/occasional short-term indoor 'grab-sample' CVOOC sampling efforts (i.e. retrospective interpretation), or
 - 2) as 'trigger-points' for automated sampling by sensor technologies

Comments?