

**A METHOD FOR ASSESSING SOIL VAPOR INTRUSION FROM
PETROLEUM RELEASE SITES: MULTI-PHASE/FRACTION
PARTITIONING**

Hun Seak PARK

*Washington State Pollution Liability Insurance Agency, State of Washington, PO
BOX 40390, Olympia, WA 98504-0930 USA*

ABSTRACT

A model and spreadsheet-based numeric approximation for computing risk-based soil cleanup level to be protective of petroleum-contaminated soil to an indoor air exposure pathway is presented. The algorithm incorporates traditional equilibrium partitioning equations (3 or 4-phase) for the conservation of mass and volume, as well as Raoult's law convention, and subsequent diffusive and connective transport mechanisms.