



Subsurface Intrusion now a Factor for NPL Listings According to New EPA Final Rule

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On May 22, 2017, EPA finalized a new [rule](#) establishing subsurface intrusion as a new component of the Hazard Ranking System (HRS), the principal mechanism for placing contaminated sites on the National Priorities List (NPL).

The HRS is part of the National Contingency Plan, promulgated pursuant to CERCLA. EPA and state regulators use the HRS to quantify the relative environmental risks posed by contaminated sites. Sites meeting a threshold risk score may be placed on the NPL, which qualifies a site for long-term remedial action under CERCLA.

Subsurface intrusion consists of hazardous substances, pollutants, and contaminants migrating up from soil or groundwater into overlying structures, such as houses or factories. Vapor intrusion (migration into the air inside structures) is the most common form of subsurface intrusion, but water intrusion also poses risks (such as contaminants entering structures as a liquid and then vaporizing). Contaminants are often able to migrate through dirt floors, cracks in flooring and foundations, and utility line openings.

Prior to EPA's rule, the HRS recognized four routes via which contaminants pose threats to public health and welfare, known as exposure pathways: surface water, groundwater, air, and soil. The HRS did not consider threats posed by subsurface intrusion. Thus, EPA could only list sites with subsurface intrusion if these sites also posed risks via one or more of the four exposure pathways. The rule now adds subsurface intrusion as a component of the soil exposure pathway, meaning that EPA must consider risks posed by subsurface intrusion when evaluating sites under the HRS. EPA may even list sites where the only route of exposure is subsurface intrusion, provided that the threshold HRS score is met. Notably, the rule does not change the method of calculating a site's overall HRS score or the threshold score (28.5) to qualify for addition to the NPL.

In justifying the rule, EPA says that its removal authority under CERCLA often does not allow EPA to fully address subsurface intrusion issues. Presently, EPA's primary means of addressing subsurface intrusion under its removal authority is installing vapor mitigation systems to interrupt the migration of contaminant vapors. This is frequently an impermanent solution, as subsurface contaminants may continue to migrate upwards after vapor mitigation systems are uninstalled. Limits on the extent and cost of removal actions frequently prevent EPA from more permanently addressing the subsurface contamination.

The addition of subsurface intrusion to the HRS will not affect the status of sites already on or proposed to be added to the NPL. Furthermore, EPA states that it does not plan to systematically re-evaluate sites that had not previously met the HRS cutoff for inclusion on the NPL. Rather, EPA states that it will "continue to follow its policy regarding legacy sites of typically re-scoring only those sites for which new information becomes available or additional sampling has been performed due to evidence of changing site circumstances (e.g., a municipal well downstream of a groundwater plume becomes contaminated)." Finally, EPA does not expect the addition of subsurface intrusion to the HRS to increase the number of annual site assessments or the number of sites placed on the NPL each year, primarily due to budget constraints and the increased costs associated with assessing subsurface intrusion risks.

This post was drafted by [Paul Jacobson](#), an attorney in the Kansas City, MO office of Spencer Fane LLP. For more information, visit [spencerfane.com](#).

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