

NHDES Draft Technical Guidance: Determination of Background for Soil Contamination

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In January 2026, NHDES released a draft technical guidance document which describes the multiple lines of evidence approach required to determine whether contamination in soil is attributable solely to background in accordance with NHDES Env-Or 602.03 with specific additional information for PFAS, PAHs, and arsenic.

Env-Or 600 soil remediation standards (SRS) apply to contaminated soil but do not apply to soil contamination that has been attributed to background as defined by Env-Or 602.03 ([link to draft guidance](#)). NHDES' new guidance document is intended to be a technical reference for stakeholders preparing background assessments for contamination detected in site soils. Background contamination can be naturally occurring materials that are present at concentrations exceeding SRS, or background can be anthropogenic ambient conditions caused by the presence of human-made contaminants across a wide area that are not related to current or past site uses.

As per the guidance, the background determination requires multiple lines of evidence that on-site contamination is attributable to background, and the assessment includes a desktop study at a minimum and potentially may include a field study. The desktop study may include a review of available environmental data at the property in comparison with published background screening values, a historical use assessment of the site, and a review of geological and background information at the site and in the site vicinity. A field study would include collection of new soil contaminant data to assist with the background assessment. The results of the determination could be:

- Site contamination is solely attributable to background and does not require further investigation or remediation, or
- Soil contamination is partially or wholly due to site operations and should be investigated further and likely remediated.

Several items of interest from the draft document include:

- "Anthropogenic ambient background" definition includes soil with coal or wood ash, petroleum residues from vehicle operation or road construction, pesticides and fertilizers used in a manner consistent with labelling, and "some [PFAS] in soil at shallow depths associated with off property sources."
- Comparison to PFAS background threshold values (BTVs) developed for New Hampshire is a recommended initial step but is only considered a screening approach and is not recommended to be used alone to make a determination.
- A desktop study of available public and site information is considered the initial step with a field study at the site to follow if the results of the desktop study indicate the potential for natural or anthropogenic background condition. Therefore, it appears that both the desktop study and field study are recommended to make a background determination unless the desktop study indicates an on-site release.

As of April 2026, [this technical guidance](#) is considered draft, and the NHDES will be accepting feedback for consideration through June 1, 2026. If you would like to ask questions or provide comments on the draft guidance, you may provide them via email to State Site Supervisor Lea Anne Atwell at LeaAnne.S.Atwell@des.nh.gov.