

TECHNICAL GUIDANCE DOCUMENT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



E-85 Fuel Contaminants of Concern (COCs)

Office of Land Quality

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E-85 is an alcohol fuel mixture that typically contains a mixture of up to 85% denatured fuel ethanol and approximately 15% unleaded gasoline or other hydrocarbon by volume. E-85 has been shown to reduce harmful emissions of hydrocarbons into the environment. However, E-85 plumes will migrate further and faster due to the solvent effect of ethanol.

The following table summarizes the most common COCs for the E-85 Fuel and the analytical methods that should be utilized at each sampling location (for both soil and groundwater).

Table 1: Contaminants of Concern for E-85

Contaminants of Concern	SW-846 Analytical Methods
Ethanol	8260, 8015
VOCs (including naphthalenes ¹)	8260

1. Naphthalenes include 1-methylnaphthalene, 2-methylnaphthalene and naphthalene.

Notes:

- Follow the IDEM's Remediation Closure Guide (RCG) to develop a site specific list of COCs.
- The IDEM reserves the right to modify these requirements dependent upon historical site conditions and the type and nature of the release.
- The IDEM also recommends using the most updated analytical method.
- The IDEM reserves the right to request additional contaminants of concern based on analytical data provided.

References:

The IDEM's Remediation Closure Guide (RCG)

http://www.in.gov/idem/cleanups/files/remediation_closure_guide.pdf

The IDEM's Remediation Program Guide (RPG)

http://www.in.gov/idem/cleanups/files/remediation_program_guide.pdf

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846)

<https://www.epa.gov/hw-sw846>