

CHAPTER 120

LANDFARMING OF PETROLEUM CONTAMINATED SOIL

567—120.6(455B) PCS analysis and characterization.

120.6(2) Other cleanups. PCS not originating from a department-supervised emergency cleanup pursuant to subrule 120.6(1) shall be characterized and tested as follows before being land farmed. PCS originating from a cleanup pursuant to 567—Chapter 135 may utilize those test results as applicable.

a. Source identification. The name and address of the contaminated site from which the PCS

originated, the UST registration number, and the leaking underground storage tank (LUST) number shall be recorded, if applicable.

b. Type classification. The PCS shall be classified by type according to the petroleum product's trade name (e.g., gasoline, diesel fuel) or according to the trade names if there is a mixture of petroleum products.

c. Chemical testing. The following analyses shall be performed. Samples shall be acquired,

stored, handled, tested, and reported in accordance with the required methodology and accepted scientific procedures.

- (1) **BTEX testing.** The PCS shall be tested for benzene, toluene, ethylbenzene, and xylene (BTEX). A laboratory certified for UST petroleum analyses pursuant to 567—Chapter 83 shall test the samples. The analysis shall utilize the most recent version of Method OA-1 (GCMS), "Method for Determination of Volatile Petroleum Hydrocarbons (Gasoline)," University of Iowa Hygienic Laboratory.
- (2) **TEH-diesel testing.** The PCS shall be tested for total extractable hydrocarbons (TEH-diesel). A laboratory certified for UST petroleum analyses pursuant to 567—Chapter 83 shall test the samples. The analysis shall utilize the most recent version of Method OA-2, "Extractable Petroleum Products (and Relatively Low Volatility Organic Compounds)," University of Iowa Hygienic Laboratory.
- (3) **MTBE testing.** The PCS shall be tested for methyl tertiary-butyl ether (MTBE) unless prior analysis at a site, pursuant to rule 567—135.15(455B), has shown that MTBE is not present in soil or groundwater. A laboratory certified for UST petroleum analyses pursuant to 567—Chapter 83 shall test the samples. The analysis shall utilize one of the following methods:
 1. The most recent version of Method OA-1 (GCMS), "Method for Determination of Volatile Petroleum Hydrocarbons (Gasoline)," University of Iowa Hygienic Laboratory.
 2. U.S. Environmental Protection Agency (EPA) Method 8260B, SW-846, "Test Methods for Evaluating Solid Waste," Third Edition.
- (4) **Total metals testing.** If the history of the petroleum contaminated site is known to have included solvents, batteries, leaded fuel, waste oil, or a gas station in operation prior to 1985, then the PCS shall be tested for total Resource Conservation and Recovery Act (RCRA) metals.