Texas Natural Resource Conservation Commission

INTEROFFICE MEMORANDUM

To: Program Areas which Utilize the Risk Date: September 11, 1998

Reduction Rules and Site-Specific

Risk Analysis

From: Jeffrey A. Saitas, P.E., Executive Director

Subject: Arsenic Soil Cleanup Standards for Commercial/Industrial Areas

As a result of the TNRCC's experience in developing consistent risk analysis procedures, it has become apparent that there is considerable controversy regarding soil cleanup standards for arsenic at commercial/industrial properties. The TNRCC Risk Reduction Rule specifies the intention that the risk due to residual contamination after cleanup not exceed 1 X 10⁻⁶ for individual constituents. For arsenic, the application of this target risk level results in a soil cleanup level for commercial/industrial properties in the range of 2 parts per million (ppm). This cleanup level is below typical background levels of arsenic in Texas soils (average of 6 ppm).

While the Risk Reduction Rule allows background to be used as an alternate cleanup level in these cases, cleanup of commercial/industrial properties to these low background levels is unnecessarily stringent. This level of cleanup for commercial/industrial soils is inconsistent with arsenic cleanup levels utilized by the United States Environmental Protection Agency (USEPA), the Agency for Toxic Substances and Disease Registry (ATSDR), and other state environmental agencies. In evaluating soil cleanups at commercial/industrial sites across the country, it is apparent that 200 ppm is more in line with typical soil cleanup levels considered to be adequately protective of human health. The scientific weight of evidence which indicates that the carcinogenic potency of arsenic is currently overstated supports the application of these higher cleanup requirements.

Therefore, I am directing the various program areas that must make decisions in regard to arsenic contamination at commercial/industrial sites to utilize a cleanup level of 200 ppm in instances where the concern at a site is based on direct exposure to soil. If other considerations, (e.g., potential crossmedia contamination of groundwater, ecological concerns), indicate that a lower cleanup level is appropriate, those analyses should be followed rather than this directive.

This directive applies solely to contaminated sites subject to the existing Risk Reduction Rule. The agency is currently in the process of proposing a modified rule (The Texas Risk Reduction Program Rule) which will establish a consistent risk-based corrective action approach for all Office of Waste Management program areas. Until such time that these modified rules are adopted, this arsenic cleanup level will serve as an adequately protective concentration for commercial/industrial soils.

JAS/NEO/ls