

CHLORINATED SITES - EXPECTATIONS FOR CLEANUP, INVESTIGATION

The RR Program is seeing an increase in the identification and cleanup of sites contaminated with chlorinated compounds. These compounds are persistent in the environment, and typically have daughter, or breakdown, products that are more toxic than the original or parent compound.

These compounds are also known to sink in the aquifer, thereby providing a long-term source of contamination to groundwater and/or surface water. These behaviors are in contrast to petroleum compounds, which often stay near the water table and more readily break down to less toxic compounds through natural attenuation.

Incomplete Investigations and Proposals

Program staff are reporting receipt of some incomplete site investigations and remedial action proposals for sites contaminated by chlorinated compounds. Therefore, we are reminding consultants and responsible parties who investigate and clean up these sites that complete site investigations are critical to developing and selecting an effective and cost-efficient remedy.

Some of the shortcomings reported by staff include failure to delineate source areas and an unclear understanding of (groundwater and vapor) plume behavior before remedial action options are proposed. In addition, because of the behavior, toxicity and persistence of chlorinated compounds, national experience has shown that the use of natural attenuation as an effective remedy is the exception. However, in many cases, enhanced bioremediation can be effectively used in conjunction with other remedial options.

Natural Attenuation Reviews

Project managers will be reviewing natural attenuation of these sites as a remedial option on a case-by-case basis to determine whether the natural attenuation processes are both present and effective in cleaning chlorinated compounds above (please see "Can consultants make recommendations when reporting a discharge?" page 3) when deciding whether a discharge report requires further investigation. If no further action is required, these sites will be identified in BRRTS as sites with "no action required."

We hope these clarifications will help responsible parties and environmental consultants understand the different scenarios that may result after making a report of a discharge to the environment. If you have questions, you may address them to one of our regional RR Program Team Supervisors - telephone numbers and email addresses for RR staff are located on the RR web page at www.dnr.state.wi.us/org/aw/rr. In Madison, contact RR Bureau Director Mark Giesfeldt at 608-267-7562, or giesfm@dnr.state.wi.us, or RR Outreach Team Leader Laurie Egge at 608-267-7560, or egrel@dnr.state.wi.us, for more information.