

Soil Movement Guidance for Eligible Properties within the Midland Resolution Area

Midland, Michigan

This bulletin is being provided to you because your property is located within the Midland Resolution Area and has not been sampled for dioxins and furans.

In June 2012, the Michigan Department of Environmental Quality (MDEQ) approved The Dow Chemical Company (Dow)'s work plan to conduct soil sampling and cleanup for the Midland Resolution Area (MRA) of the City of Midland. This plan was designed to address the historic issue of dioxin contamination in Midland area soils. As part of this work, Dow requested access to collect soil samples from the owners of over 1,600 residential and residential-like properties in the MRA and conducted soil removal/replacement as required by the work plan. The majority of this work has been completed, with the exception of a small number of residential properties where the owner has not yet granted Dow access. The MDEQ has determined that sampling or clean-up are not required for non-residential property and they may continue to be used for commercial or non-residential purposes.

Soil within the MRA that has not been sampled, or soil that has been determined to be greater than the approved residential use criteria, requires certain precautions before it can be removed from the property. This document provides best practices for managing soil disturbance and movement on eligible properties to avoid inadvertent mishandling of soils that may be contaminated. See the attached map that indicates the boundary of the MRA, or visit www.midlandresolution.com for a list of eligible properties within the MRA that have not been sampled.

MISS DIG is Michigan's official utility safety notification system. In the event of any construction excavation activity identified for properties within the MRA, Dow has partnered with the MISS DIG system to provide notification services. Upon notification and confirmation of eligibility, Dow will provide advice and assistance for proper management of excavated soil consistent with the requirements of the approved work plan. Properties will remain in this notification program until soil sampling as specified in the work plan has been completed and the property is demonstrated to meet the approved residential criteria.

This guidance does not apply to the movement or removal of limited amounts of soil that is coincidental with common household gardening, landscape maintenance, or lawn care. For these common maintenance activities, it is good practice to minimize soil exposure by washing hands after contact with soil, washing foods from your garden, and by avoiding other activities that may increase the likelihood of incidental ingestion of soil. Furthermore, this guidance does not apply to soil below one foot depth and non earthen materials such as wood, concrete, asphalt and other building materials as these soils and materials are not contaminated by dioxin. These soils and materials may be managed as otherwise allowed by law.

This guidance does apply to **surface soil**. Surface soil is soil, dirt, gravel, and sand from the ground surface to one foot in depth. Dow is committed to assisting property owners within the MRA with proper management of the soil on their property. If you are planning an excavation or other soil disturbance and have any questions, are interested in soil sampling or other assistance, please contact the Midland Resolution team as indicated in this bulletin. The section below provides types of activities and best practices for surface soil movement.

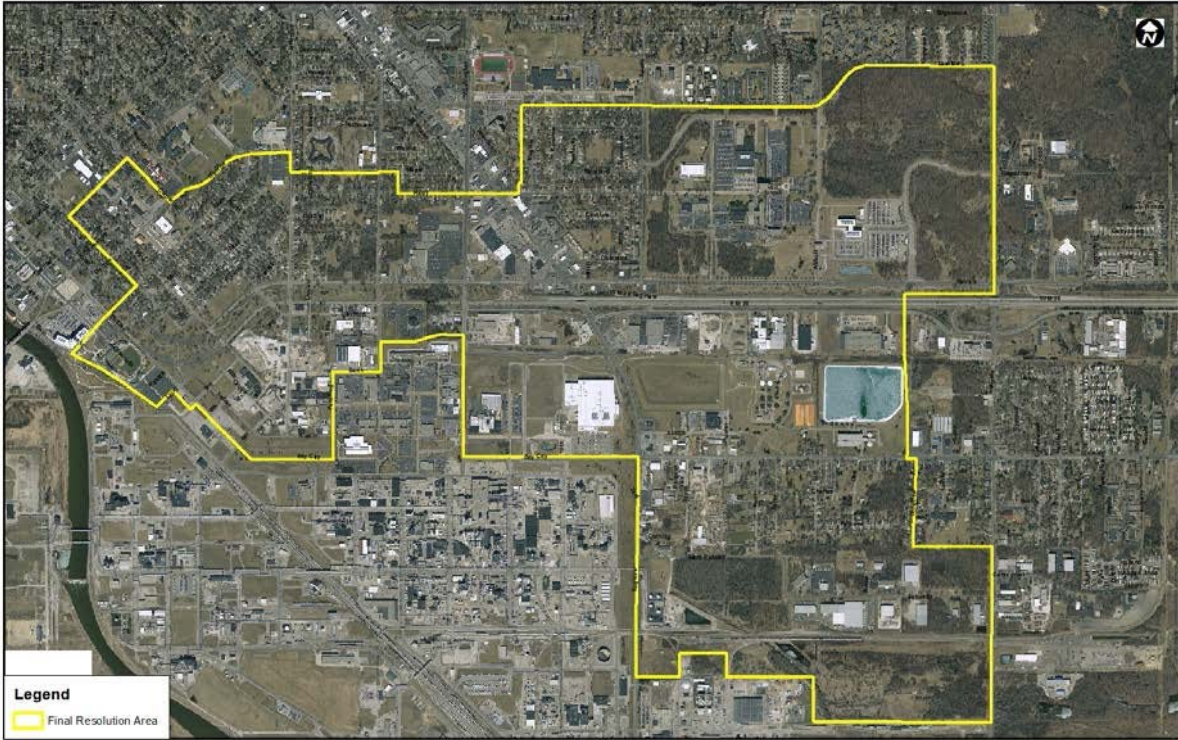
Major Household and Commercial Soil Movement Activities

1. **Types of activity:** Examples include construction of footing for homes or other buildings, road or parking lot construction or repair, sewer or water line construction or repair, utility (electric, hard line phone) construction or repair, underground storage tank repair or removal and large landscaping projects.
2. **Recommendation:**
 - a. Contact the Midland Resolution Team for specific soil management guidance and information about having the soil sampled. If analysis determines that the dioxin levels are 250 ppt or less, disposal of the soil will not be necessary. If the levels of dioxin are greater than 250 ppt, the Midland Resolution Team can assist you with making arrangements for managing the soil. Please note that sampling and analysis could take 1-2 months so advanced planning is required.
3. **Best Practices:**
 - a. Minimize contact with soil during construction activity. Gloves and typical construction attire are sufficient.
 - b. Take measures to control and minimize fugitive dust from excavated soils. This may be done through covering piles of disturbed or excavated soil with plastic sheeting, application of water, or other common means to control dust.
 - c. Put sufficient measures in place to prevent soil erosion off the property from wind and rain.
 - d. In lieu of sampling, either maintain/reuse the upper 12” of excavated soil on the property or properly dispose of the upper 12” of excavated soil to the City of Midland Landfill.

For sites that have obtained a Soil Erosion and Sedimentation Control Permit and/or have received a Notice of Coverage under Part 91 of the Natural Resources and Environmental Protection Act, the requirements identified to comply with those permits will generally be sufficient to prevent runoff from disturbed areas. Not all activities that could result in soil runoff from the property require a permit from DEQ; however a number of best management practices (BMPs) have been developed which can be followed to prevent soil runoff and inadvertent discharge of potentially contaminated soil. Examples and guidance are available at the following DEQ website:

http://www.michigan.gov/documents/deq/deq-whm-hwp-dow-Reducing-Exposure-Home_251917_7.pdf

This bulletin was prepared by The Dow Chemical Company and approved by the MDEQ. For additional information regarding the Midland Resolution Program or this advisory, please visit the MDEQ web site, http://www.michigan.gov/deq/0,4561,7-135-3307_29693_21234-268764--.00.html, the Midland Dioxin Resolution web site, www.midlandresolution.com, or call one of the contacts listed below.



Contact Information	
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