

#### LETTER TO THE COMMUNITY

Progress is the best word to describe the combined proposed resolution. On June 1, DEQ approved Dow's work plan, and soon after, work began.

years of discussion and negotiation. Throughout our talks, the point we agreed upon most was the desire to reach resolution once and for all. This newsletter provides an update on our efforts. You'll see in these pages evidence of further collaboration between Midland city leaders, residents and the community as we have prioritized cleanup activities and systematically begun the remediation process.

We encourage you to read the newsletter and learn about our progress. As always, Dow and DEQ remain open to your questions and available for discussion. Thank you for your support and patience during this process, and watch your mailbox for further updates as the project progresses.

**Rich Wells** SITE DIRECTOR MICHIGAN OPERATIONS THE DOW CHEMICAL COMPANY

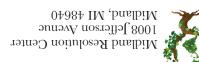
**DeLores Montgomery** CHIEF, HAZARDOUS WASTE SECTION, OFFICE OF WASTE MANAGEMENT AND **RADIOLOGICAL PROTECTION** 

Department of **Environmental Quality** PURE //ICHIGAN

activities of The Dow Chemical Company and the Michigan Department of Environmental Quality (DEQ) in recent months, as we have worked collaboratively to address the cleanup of dioxins in soils in the city of Midland. In February 2012, we announced agreement on a

This progress was the culmination of many

Legend



## What Are Dioxins?

Dioxins are unintended byproducts of certain industrial processes and also occur due to activities such as backyard burning of household trash. Dioxin contamination in the city of Midland is the result of airborne emissions from historic waste management practices at Dow. Emissions released into the air from incinerators used earlier in Dow's manufacturing operations contained dioxins, which ended up in the soil downwind of the plant.

Dioxin emissions from Michigan Operations decreased dramatically over the years as processes were modernized.



#### PATH FORWARD

Dow will resume cleanup activities in Spring 2013, as soon as weather conditions make it feasible to begin work.

DEQ and Dow are offering information sessions to provide updates on the remediation process.

Availability sessions will be at the Midland Center for the Arts, Saints and Sinners Lounge, 1801 West St. Andrews Rd., Midland, on these dates:

> Date: March 12, 2013 Time: 6-8 pm

Date: March 14, 2013 Time: 1-3 pm

Date: March 19, 2013 Time: 6-8 pm

FOR MORE INFORMATION Dow has established numerous ways for homeowners to obtain more information. Please contact us with your questions and comments.

#### In Person:

Midland Resolution Center 1008 Jefferson Avenue Midland, MI 48640 (989) 631-2270 • (888) 778-2306 www.midlandresolution.com

DEQ Contact: Al Taylor (517) 335-4799 taylora@michigan.gov www.michigan.gov/deqdioxin

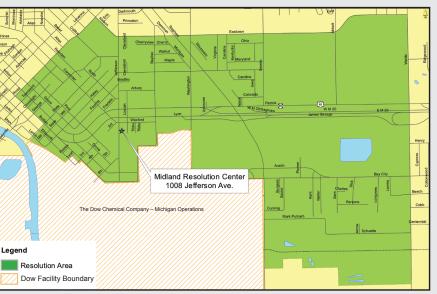


# Midland Resolution Project Newsletter

**MARCH** 2013

### PROJECT OVERVIEW

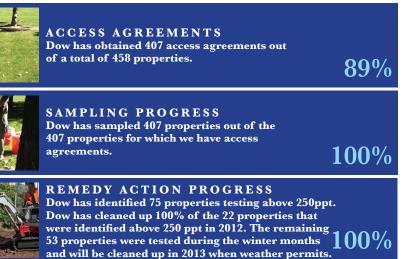
In February 2012, the DEQ and Dow announced agreement on a proposed plan to resolve the historic issue of dioxin contamination in city of Midland residential soils. The resolution required Dow to analyze soil samples from residential properties in the Resolution Area (below) to determine dioxin levels. Properties containing more than 250 parts per trillion (ppt) of dioxin are eligible for remediation activities. Properties with 250 ppt or less do not require cleanup.



# **Progress Report**

Implementation of Dow's Midland Area Soils work plan continues to progress well ahead of schedule. We have sampled all properties originally slated for 2012, as well as the properties that were added in July and September, where we were able to obtain access agreements. A total of 407 properties were sampled in 2012. Of those, 332 tested below the 250 ppt action level.

#### BY THE NUMBERS



#### **REMEDIATION PROCESS**

Dow is using a systematic process to conduct cleanup activities. Remediation activities are being conducted in a phased manner, beginning with properties closest to Dow's Michigan Operations manufacturing site. The following process will continue through 2017 until remediation is completed:



Dow contacts residential property owners in the current sampling 1 area to request permission to sample soil on their properties. The process is entirely voluntary.

If Dow receives approval from the property owners, the company 2 analyzes soil samples to determine the level of dioxins.

- Properties that test above 250 ppt are offered cleanup. Those at 250 3 ppt or below require no action.
- Upon receiving sampling results, Dow develops a specific cleanup 4 plan for each property, which is reviewed with the owner.

Upon consent of the property owner, Dow removes the top 12 inches 5 of soil from the property, replaces it with new soil and returns the property to its previous state.

It is difficult to estimate the length of time that will be needed to complete this project, but Dow's commitment is to conduct work as safely and as quickly as possible.

The pictures below capture the remediation process from start to finish.

# From Start to Finish





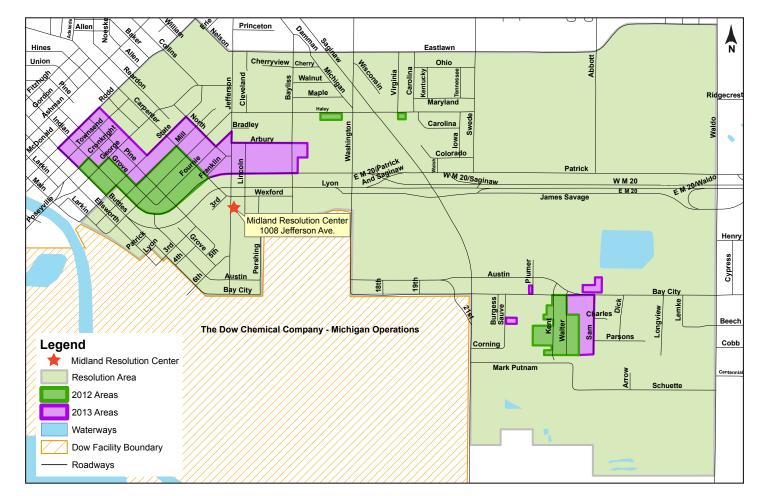








# Sampling Areas



#### **QUESTIONS YOU MAY HAVE**

#### Q: How did you determine the 250 ppt action level?

A: The site specific action level was developed by DEQ, in accordance with EPA approved risk assessment procedures and with input from EPA. Soil, dust, bioavailability and climate data from the Resolution Area were used to refine standard exposure values in order to develop a site specific action level that is protective of human health.

#### Q: What about parks and schools located in the **Resolution Area?**

A: They will be treated in the same manner as residential properties and all the same requirements will apply.

#### Q: Who will be responsible for the maintenance of my new lawn?

A: Dow will work with property owners to maintain new lawns and plants until they are re-established. This may include installing water delivery systems, restoring existing irrigation systems, and paying for watering the lawn and new plants until vegetation is re-established.

Many more commonly asked questions and answers and other information can be found on the DEQ website at http://www.michigan.gov/deqdioxin