

Exposure Controls

CAG Meeting

April 19, 2010

Outline

- Interim Response Actions (IRAs)
- Removal Actions at Exposure Units (EUs)
 - EU001 – Riverside Blvd
 - EU002 – West Michigan Park
- Update on Task 1 – Exposure control at high use properties

Potential Environmental Risk

- In general terms, potential risk depends on the following factors:
 - How much of a chemical is present in an environmental medium (e.g., soil, sediment),
 - How much contact (exposure) a person or ecological receptor has with the contaminated environmental medium, and
 - The inherent toxicity of the chemical.

Why is Exposure Control Important?

- EPA considers risk to be the chance of harmful effects resulting from exposure to an environmental stressor
- Controlling exposure → controls potential risk
- “Worst-first” exposure control
 - Higher surface soil contamination, and
 - More frequent use

INTERIM RESPONSE ACTIONS

REMOVAL ACTIONS AT EUS

**UPDATE ON TASK 1 – EXPOSURE
CONTROL AT HIGH USE PROPERTIES**

Key Objectives for Task 1

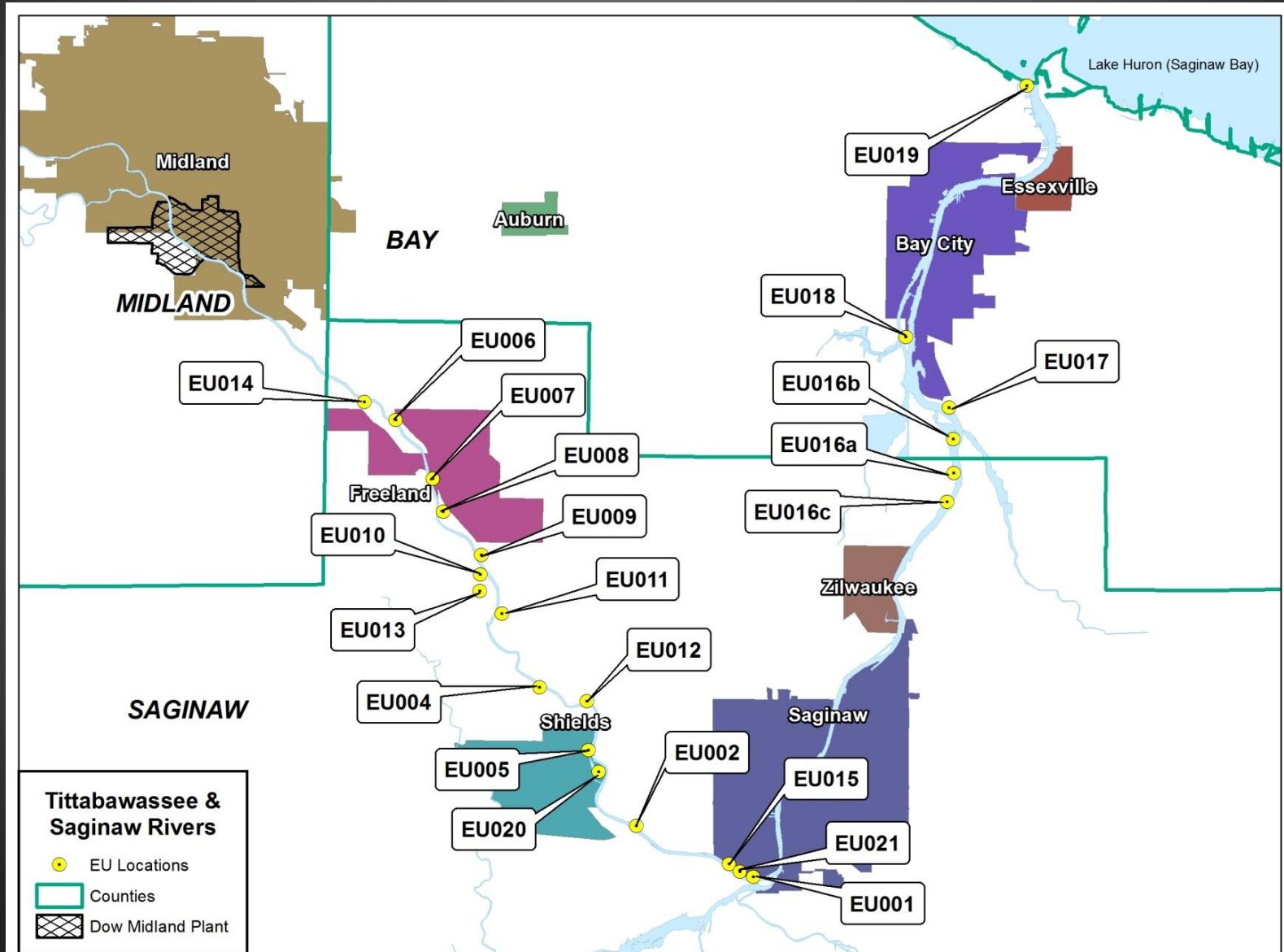
Exposure Control at High-use Properties

- Develop options to address potential acute or near-term exposure risks
 - Focus on areas of high human use
 - Focus on exposure control
 - Not intended to be comprehensive cleanup
- Balance – benefits of early action vs. comprehensive segment cleanup

Exposure Units (EUs)

- EPA and MDEQ identified EUs in early to mid-2008, using:
 - Data available at the time (Dow's and MDEQ's)
 - Information about previous flooding (and assumptions about potential contamination)
 - Topography
 - Property use designations
- EUs → 4 - 15, 20, and 21 (Tittabawassee); and 16 - 19 (Saginaw)

General Location of Exposure Units



Task 1 Sequencing

Do we know enough about:

Then:

Contaminant distribution, actual property use and conditions, and effectiveness of any existing exposure controls?

YES

Develop response options (Task 1.4)

NO

Contaminant distribution?

YES

Assess property use and conditions, and existing controls (Task 1.3)

NO

Fill data gaps (Task 1.2)

Update on Task 1

- Draft sequencing memo under review
 - Includes 18 remaining EUs
- Evaluates about 262 property parcels
- More areas may be addressed under Task 1 based on:
 - Review of distribution of contaminated soil in floodplain
 - Land use assessments
 - Any time during the life of the Agreement

Update on Task 1 (cont.)

- Preliminary identification of some properties for development of response options (Task 1.4) by:
 - Some areas on the properties with high surface dioxin TEQ concentrations; and
 - Land use identified by aerial photographs
- Most properties need a more rigorous land use assessment (Task 1.3)
 - May result in early action or waiting for Segment-specific action
- Evaluating whether more data is needed for some areas (Task 1.2)

- Questions?