

FMC – MIDDLEPORT FACILITY

RCRA FACILITY ENVIRONMENTAL INVESTIGATION

AIR DEPOSITION AREA 1 & CULVERT 105 SOILS



AGENCIES' JUNE 2009

PRESENTATION

PRESENTATION TOPICS

- RFI Purpose: Determine Nature & Extent of Contamination
- Off-Site Area 1 & Culvert 105 Soil Contamination
 - Nature of FMC-Related Soil Contamination
 - Determining Extent of FMC-Related Soil Contamination
 - Property Categories- Affected, Un-Affected, No Data, Etc.
- Public Input Opportunities
- Next Steps

AREA 1 & CULVERT 105

Nature of FMC-Related Soil Contamination

- Past FMC Chemical Releases & Migration
- Chemical Constituents of Concern
 - Arsenic
 - Lead
 - Chlorinated Pesticides (DDT, etc.)
- Primary Constituent of Concern:
 - Arsenic –
 - Highest Concentrations in Soil & Most Widespread
 - Potential Toxic & Carcinogenic Risks

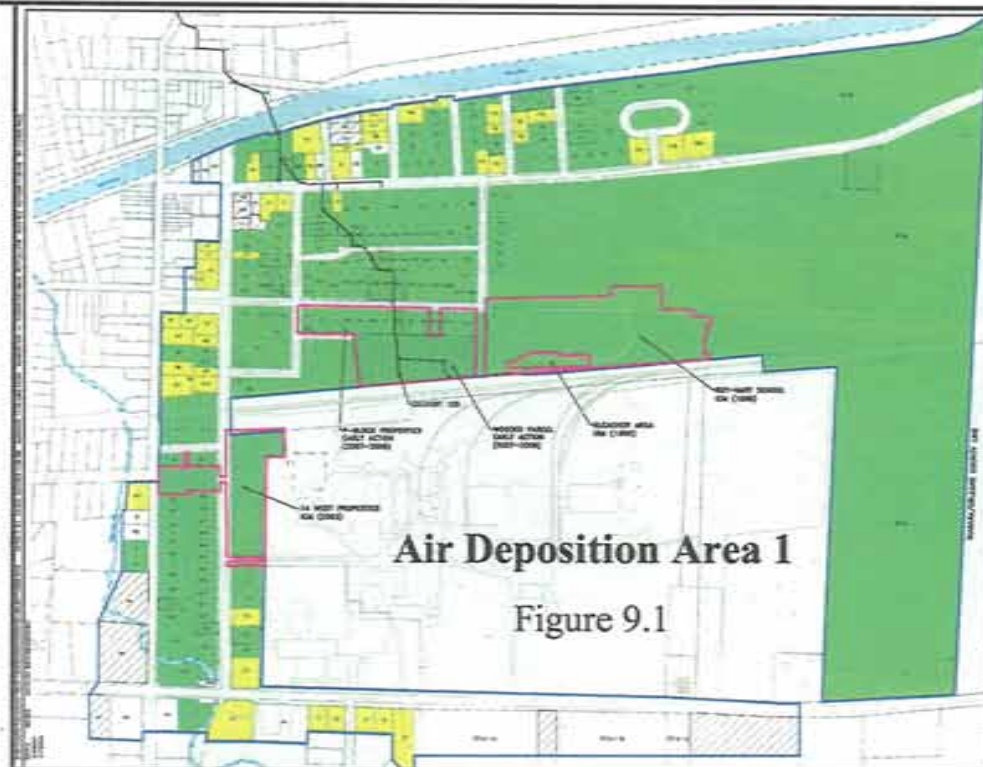
AREA 1 & CULVERT 105

Extent of FMC-Related Soil Contamination

- Factors Used To Determine Extent

- Arsenic Background Concentration: **20 ppm**
 - 100 Gasport Soil Samples
 - Different Land Uses (Farm, Residential, Commercial, Orchards)
 - 95th Percentile of Residential Data = 20 ppm
 - Weighted 95th Percentile of All Data = 20 ppm

- Other Factors:
 - Area 1 – Historic Wind Patterns, Ground Features
 - Culvert 105 – Pipe/Ditch Location, Flood Zone Limits



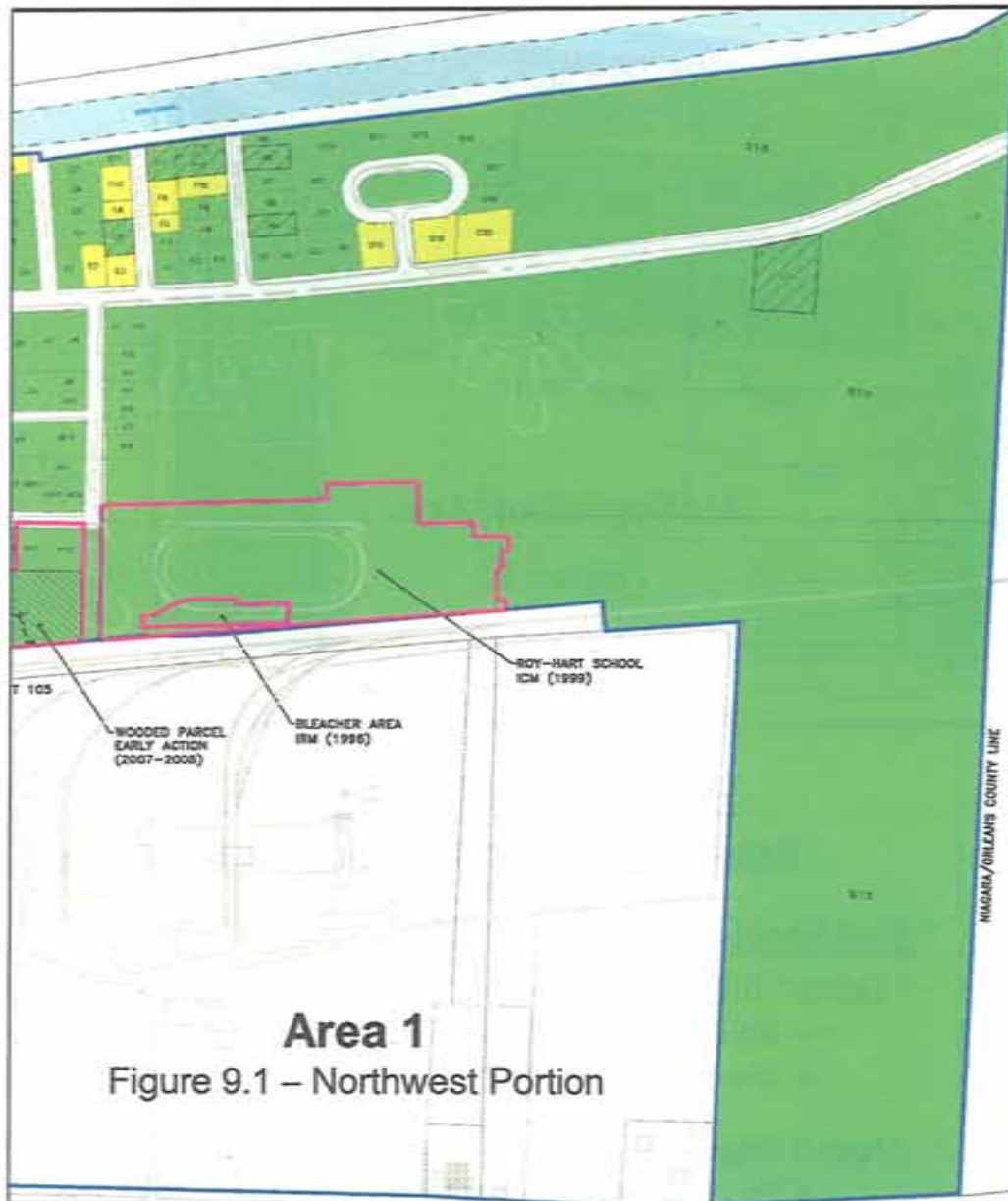
AREA 1 & CULVERT 105

Extent of FMC-Related Soil Contamination

Fact Sheet Figures

- Culvert 105 (Figure 8.1):
 - Blue/Violet Line: Culvert Pipe/Ditch
 - Green Area: Approximate Extent of Affected Properties/Areas

- Area 1 (Figure 9.1):
 - Blue Line: Approximate Extent of Area 1 Soil Sampling
 - Green Area: Approximate Extent of Affected Properties/Areas



AREA 1

Extent of FMC Soil Contamination

Areas North & East of Blue Line:
(North of Canal & East of County Line)

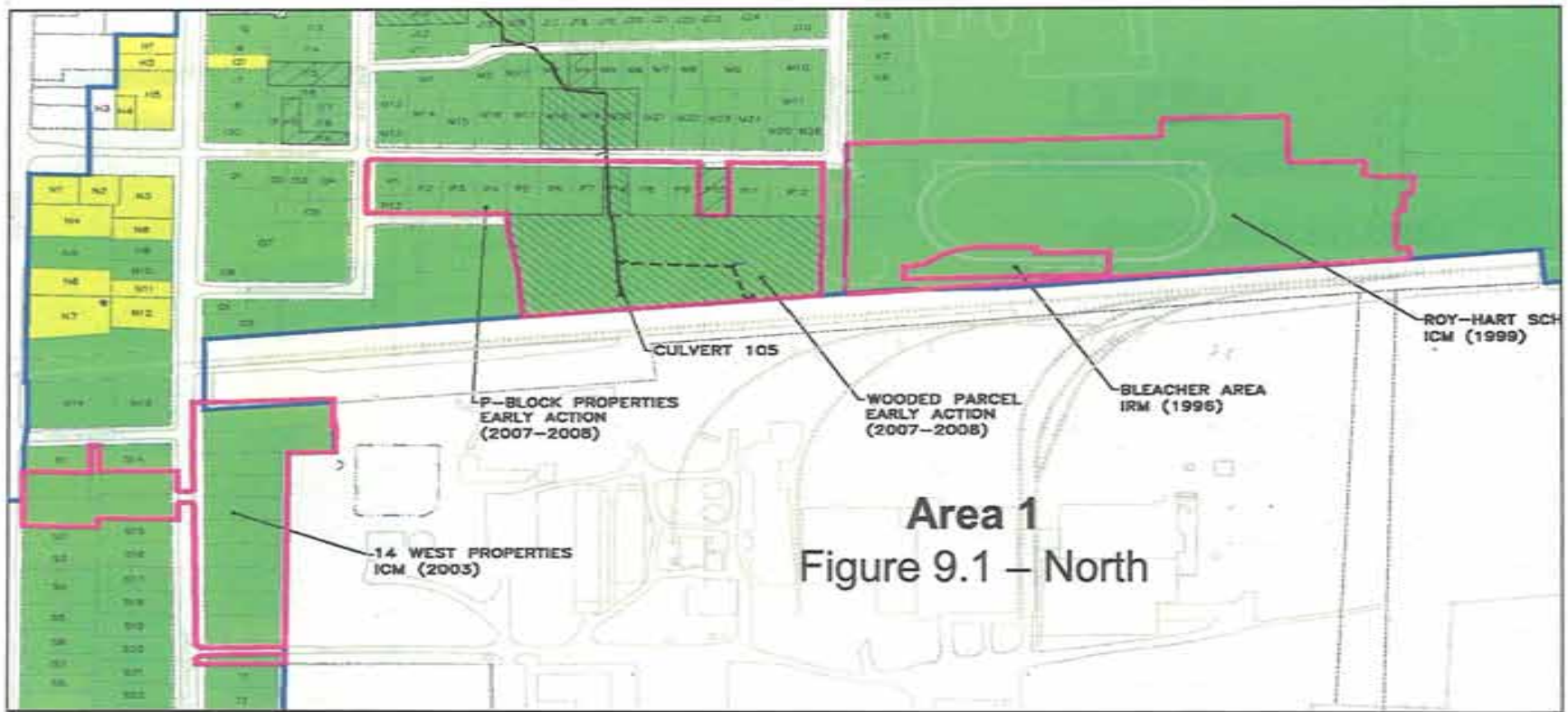
- Extent of FMC Arsenic Contamination Not Clearly Defined
- Additional Soil Sampling Underway
- Possible Area 2 to North and/or East
- Area 1 Given Priority over any Area 2

AREA 1

Property Categories

- Green Properties (Affected):
 - Elevated Arsenic in Soil (> 20 ppm)
 - Arsenic Consider FMC-Related
 - Properties Included in FMC CMS
- Yellow Properties (Un-Affected):
 - Generally Background Arsenic Concentrations (Mainly ≤ 20 ppm)
 - Agencies' Determined No Further Action
 - Properties Not Included in FMC CMS
- White Properties, Inside Blue (Un-Affected):
 - Soil Sampling Performed
 - Arsenic Present Either in Background Conc. or Elevated Due to Suspected non-FMC Source
 - Properties Not Included in FMC CMS
- White Properties, Outside Blue (Un-Affected):
 - No Soil Sampling
 - Arsenic Concentrations Unknown
 - Not Considered Affected by FMC
 - Properties Not Included in FMC CMS





AREA 1 - Property Categories

- Properties Inside Violet Borders (Affected):
 - Previously Remediated ICM Properties
 - Adequacy of Remediation to be Evaluated in CMS

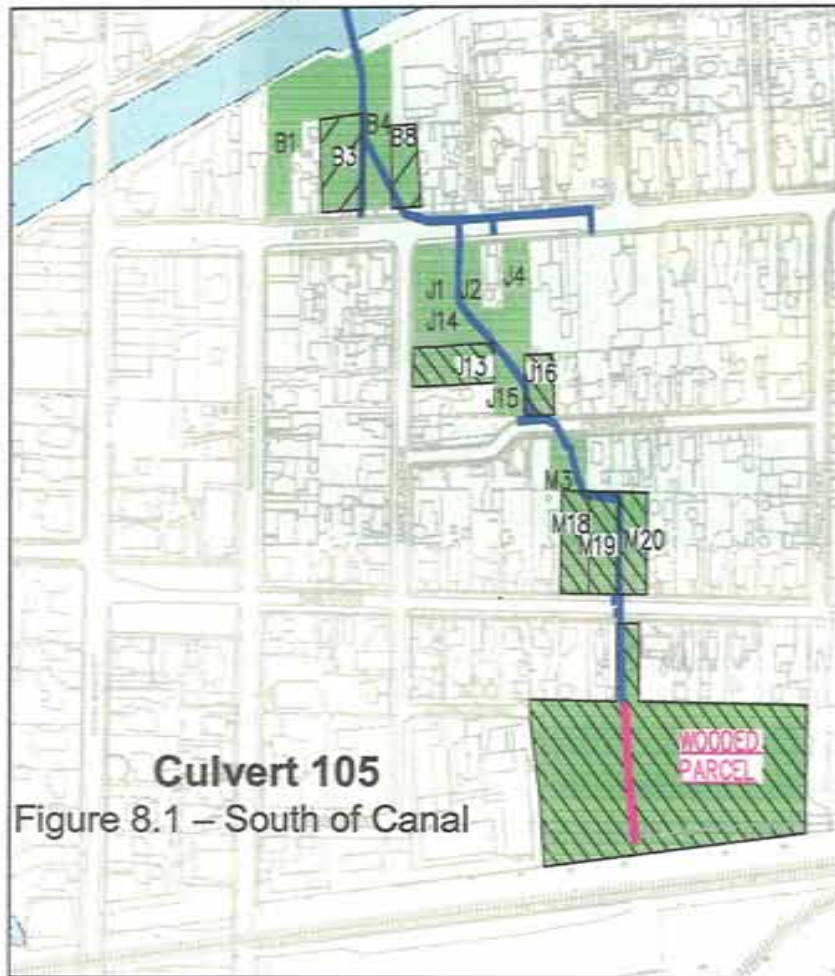
- Properties With Close Diagonal Lines (Affected):
 - Properties Affected by both FMC Air Deposition and/or FMC Culvert 105 Releases
 - Potential Surface Soil and/or Sub-Surface Soil (Pipe Depth) Contamination



AREA 1 - Property Categories

- Green Properties, Wide Diagonal Lines (Potentially Affected):
 - FMC Property Access Not Obtained – No Soil Sampling Data
 - Adjacent Arsenic Data Suggests Potential Elevated Arsenic Concentrations
 - Properties Included in FMC CMS

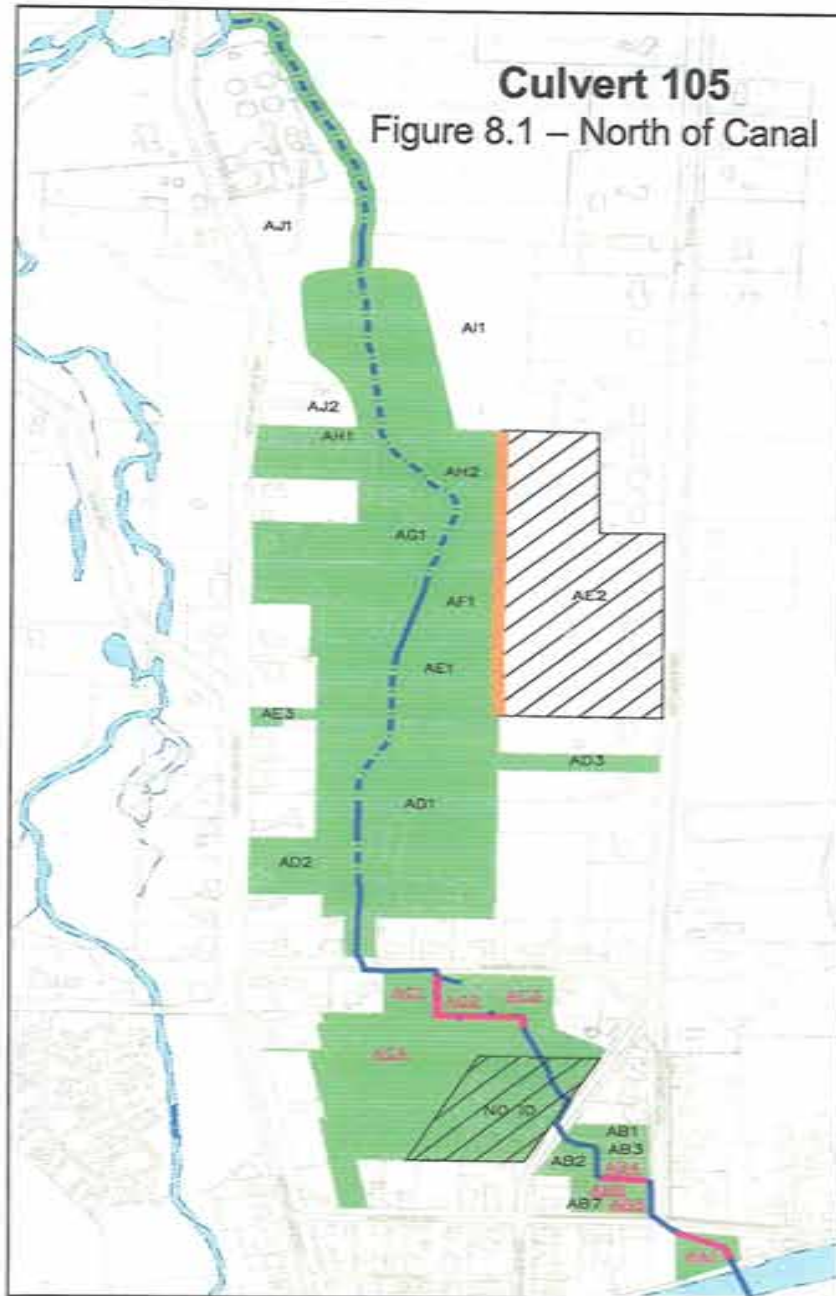
- White Properties, Wide Diagonal Lines (Un-Affected):
 - FMC Property Access Not Obtained – No Soil Sampling Data
 - Adjacent Arsenic Data Suggests Background Arsenic Concentrations
 - Properties Not Included in FMC CMS



CULVERT 105

Property Categories

- Plain Green Properties (Affected):
 - Arsenic Sub-Surface Soil Contamination
 - Mainly Near Pipe (Breaks/Leaks)
 - Properties Included in FMC CMS
- Green Properties, Close Diagonal Lines (Affected):
 - Properties Affected by both FMC Air Deposition and/or FMC Culvert 105 Releases
 - Potential Surface Soil and/or Sub-Surface Soil (Near Pipe) Contamination
- Green Properties, Wide Diagonal Lines (Potentially Affected):
 - FMC Property Access Not Obtained – No Soil Sampling Data
 - Potential Arsenic Sub-Surface Soil (Near Pipe) Contamination
 - Properties Included in FMC CMS



CULVERT 105

Property Categories

- Plain Green Properties (Affected):

- Surface & Sub-Surface Arsenic Soil Contamination
- Contamination Limited to Near Pipe in Some Areas (Breaks/Leaks)
- Contamination Laterally Expanded in Some Areas (Past Flooding along Ditch)
- Properties Included in FMC CMS

- Violet Culvert 105 Segments (Affected):

- Previously Remediated ICM Segments
- Adequacy of Remediation to be Evaluated in CMS

- Wide Brown Line:

- FMC Property Access Not Obtained East of Line – No Soil Sampling Data
- Eastern Extent of Elevated Arsenic Concentrations Not Clearly Defined

PUBLIC INPUT OPPORTUNITIES

Agencies Soliciting Public Comments on FMC Draft RFI Report (Volumes I, II & IV)

- Tonight:

- Oral Comments (Transcribed)
- Comment Form (Hand In or Mail)

- After Tonight (Until July 2, 2009):

- Mail To Me At:

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NEXT STEPS

1. Agencies Review Public Comments
2. Agencies Prepare & Present Responsiveness Summary
3. Agencies Make Final Determination on FMC RFI Report
4. FMC Conducts CMS for Area 1 & Culvert 105 Soils

FINALLY THE END

Acknowledgements:

- Middleport Public Involvement Group (MCIG)
- Other NYSDEC Staff
- NYSDOH Staff
- USEPA Staff

Send Your Comments To Me At:

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