

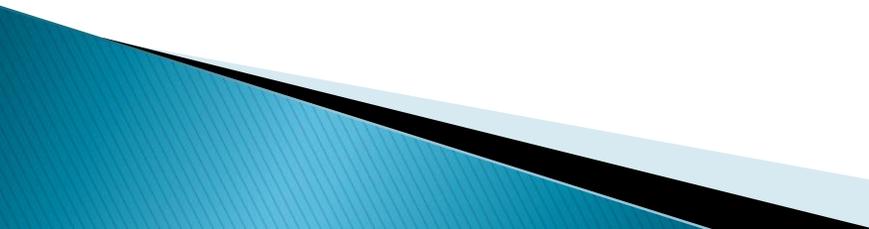
**Community Advisory Group  
Informational Meeting  
US Magnesium Superfund Site  
June 19, 2014  
6-8 p.m.  
Grantsville Library**



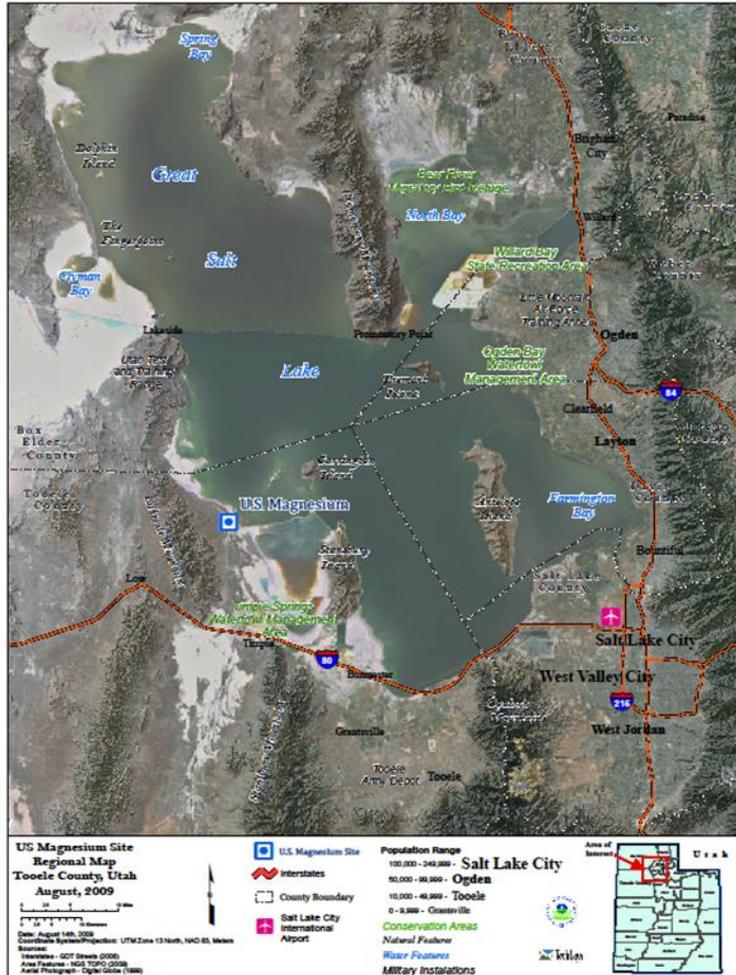
# US Magnesium Superfund Site Overview



# US Magnesium Superfund Site Overview

- ▶ US Magnesium is the largest producer of primary magnesium in North America.
  - ▶ Magnesium is vital to the production of aluminum and titanium, and is used for automobile, pharmaceuticals and weapons production.
  - ▶ The US Magnesium plant employs nearly 700 people, including contractors. It supplies raw materials to nearby ATI titanium manufacturing and Hill Brothers Chemical plants.
- 

# US Magnesium Superfund Site Overview



- ▶ The US Magnesium Superfund Site is located in Tooele County within three miles of the Great Salt Lake shoreline. The closest communities are:
  - Grantsville (25 miles);
  - The Goshute Skull Valley Reservation (30 miles);
  - Tooele (35 miles);
  - Salt Lake City Airport (40 miles);
  - Salt Lake City Wasatch Front (50 miles);
  - Various ranches and recreational areas scattered around the area.



US Magnesium Superfund Site Overview

# US Magnesium Superfund Site Overview

- ▶ The US Magnesium Plant electro-chemically processes magnesium chloride derived from brine produced by solar evaporation of Great Salt Lake water to produce:
  - Primary magnesium metal (~60,000 metric tons per year).
  - Chlorine (~30 million gallons pure liquid).
- ▶ US Magnesium production byproducts include:
  - Liquid and slurry streams containing hydrochloric-acid and chlorinated-organic compounds including: hexachlorobenzene, polychlorinated biphenyl (PCBs) and dioxins/furans.
  - Gaseous streams containing chlorine and hydrogen-chloride particulates/aerosols containing chlorinated-organic compounds.

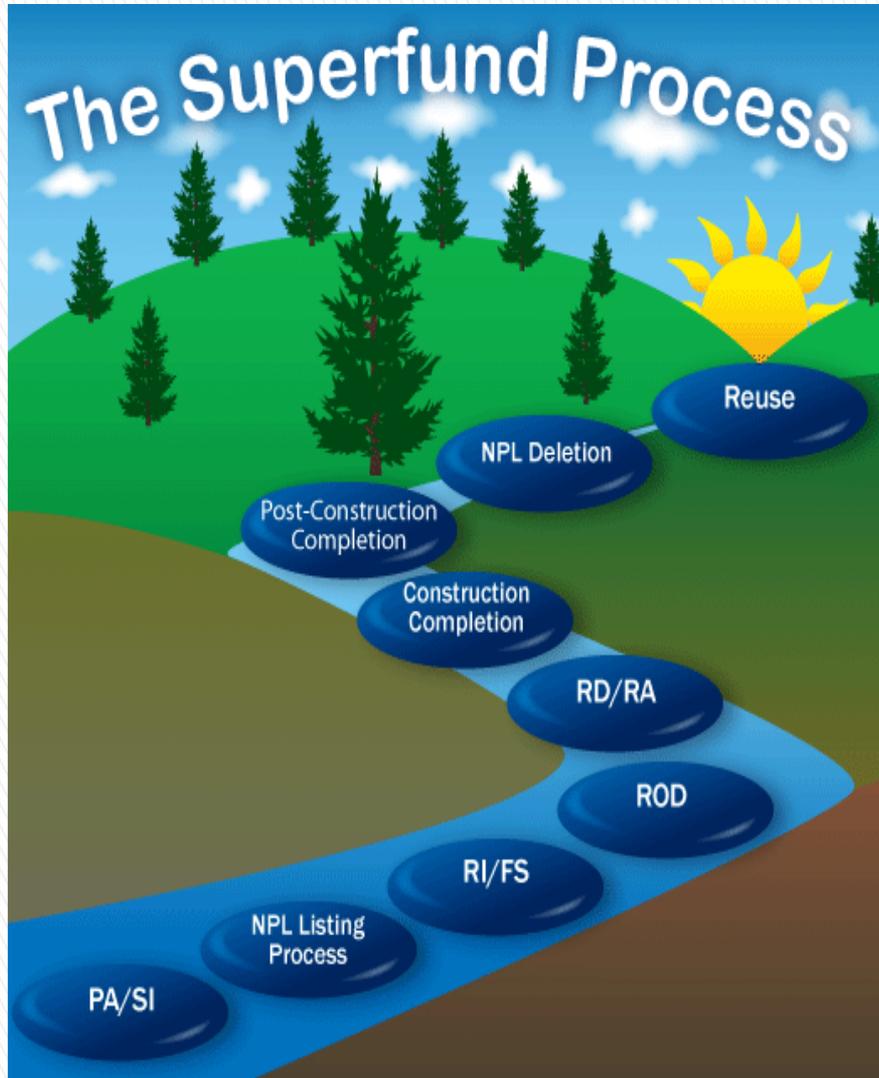
# US Magnesium Superfund Site Overview

EPA is implementing an environmental investigation and cleanup at the US Magnesium Superfund Site in accordance with CERCLA and the NCP, referred to as the Superfund cleanup process.

**CERCLA:** The Comprehensive Environmental Response, Compensation, and Liability Act. CERCLA was passed by Congress in 1980 to address the dangers of abandoned or uncontrolled sites contaminated with hazardous substances.

**NCP:** (40 CFR, Subchapter J, Part 300): The National Contingency Plan. CERCLA- implementing regulations. The federal government's blueprint for responding to both oil spills and hazardous substances, pollutants, or contaminants.

# US Magnesium Superfund Site



## Superfund Process Acronyms

- ▶ **PA/SI:** Preliminary Assessment/Site Inspection
- ▶ **NPL:** National Priorities List
- ▶ **RI/FS:** Remedial Investigation/ Feasibility Study
- ▶ **ROD:** Record of Decision
- ▶ **RD/RA:** Remedial Design/Remedial Action

# US Magnesium Superfund Site CERCLA Timeline

- ▶ **September 3, 2008: EPA proposes the US Magnesium site to the National Priorities List.**
  - Announced in the Federal Register, EPA press release, local newspapers and EPA website
  - 60-day comment period followed by 20-day extension, by request
  - Received 115 letters and petitions of support and 3 in opposition

# US Magnesium Superfund Site CERCLA Timeline

- ▶ **November 2, 2009: EPA adds the US Magnesium site to the National Priorities List.**
  - Announced in the Federal Register, EPA press release, email to stakeholders, EPA website and in local newspapers.

# US Magnesium Superfund Site CERCLA Timeline

- ▶ **November 4, 2009: US Magnesium filed an appeal of the listing with the U.S. District Court of Appeals.**
  - ▶ **January 2010: EPA and state representatives hold a series of introductory meetings with stakeholders.**
  - ▶ **August 2010: The U.S. District Court of Appeals issues rulings rejecting US Magnesium's appeal.**
- 

# US Magnesium Superfund Site CERCLA Timeline

- ▶ **August 4, 2011: EPA and US Magnesium LLC entered into an Administrative Order on Consent/Statement of Work (AOC/SOW).**
  - Provides that US Magnesium will conduct the remedial investigation and feasibility study for the site per the Superfund process.
    - Remedial investigation determines the nature and extent of releases.
    - Feasibility study evaluates potential cleanup alternatives based on information gathered during the remedial investigation.
  - Work will be conducted in accordance with EPA direction and oversight.

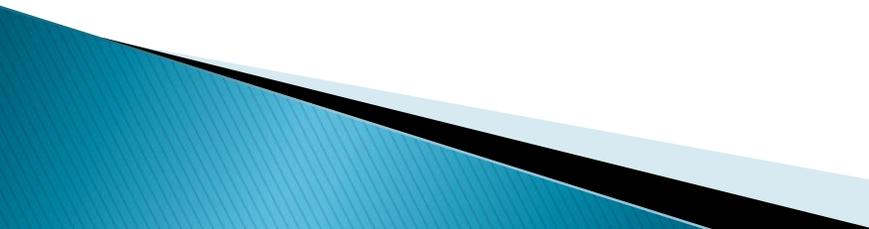
# US Magnesium Superfund Site CERCLA Timeline

- ▶ September and November 2011 and April 2012: EPA and state representatives conduct community interviews as a basis for the site community involvement plan.
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# US Magnesium Superfund Site CERCLA Timeline

- ▶ September 2013: EPA finalizes the Phase 1A Remedial Investigation Sampling and Analysis Plan to Identify Chemicals of Potential Concern in Soils, Sediment, Solid Waste, Water and Air, and Receptor Surveys.

**(Phase 1A SAP)**



# Phase 1A SAP

## ▶ The Basics:

- The Phase 1A SAP is the first phase in a phased approach to the remedial investigation.
  - Lays out the technical specifications for implementing Phase 1A of the remedial investigation.
  - The primary objective of the Phase 1A remedial investigation is to identify chemicals of potential concern.
- 

# Phase 1A SAP

The Phase 1A Objectives:

- ▶ include but are not limited to:
  - ✓ Develop preliminary site conceptual models and remedial investigation/risk scoping.
  - ✓ Plan specs for the work necessary to identify chemicals of potential concern.
  - ✓ Conduct surveys to identify ecological habitat and the potential for human exposures.
  - ✓ Develop a screening level Ecological Risk Assessment (SLERA) and refine the conceptual site models.

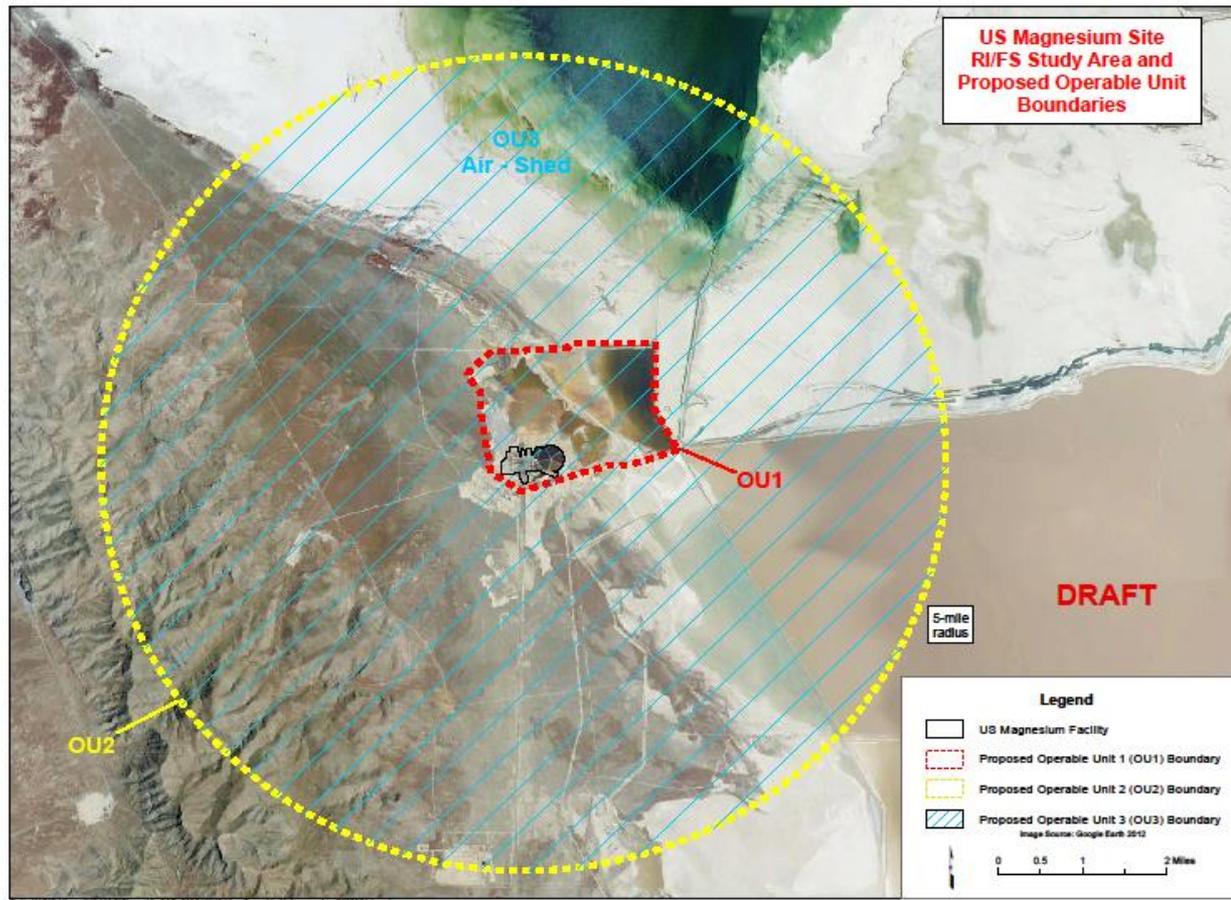
# Phase 1 A SAP

- The study area is defined as the five-mile radius around the plant stack.
  - The entire site is included on the NPL and required by CERCLA to undergo a remedial investigation and feasibility study and potential remedial action.
  - The plant facilities remain in continuous production and operate under requirements of the Clean Air Act as well as CERCLA.
- 

# Phase 1A SAP

The site is divided into 18 preliminary investigation areas (PRIs) that are grouped into two operable units:

- OU1 Soil/Sediment/Water, primarily USM waste management areas.
- OU2 Air, within the study area.



# Phase 1A SAP

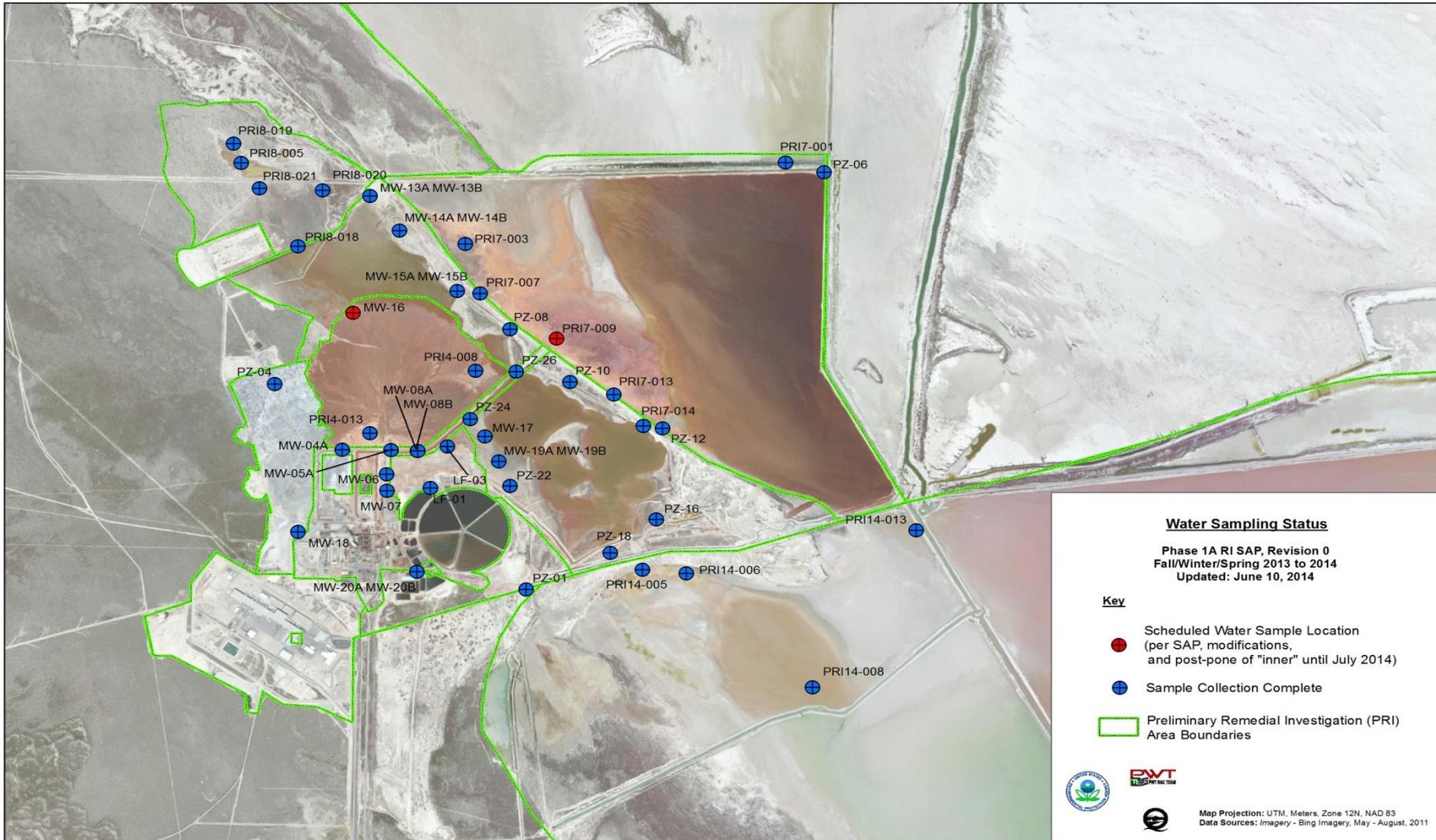


# Phase 1A SAP

## ▶ Progress to date:

- All Phase 1A sampling has been completed in PRIs 2 and 8–17.
  - Geophysics & drilling–sampling completed in PRI 2–Landfill
  - Surface water sampling completed.
  - Groundwater well/piezometer sampling completed.
  - Preliminary site conceptual models completed.
- 

# Phase 1A SAP



## Water Sampling Status

Phase 1A RI SAP, Revision 0  
 Fall/Winter/Spring 2013 to 2014  
 Updated: June 10, 2014

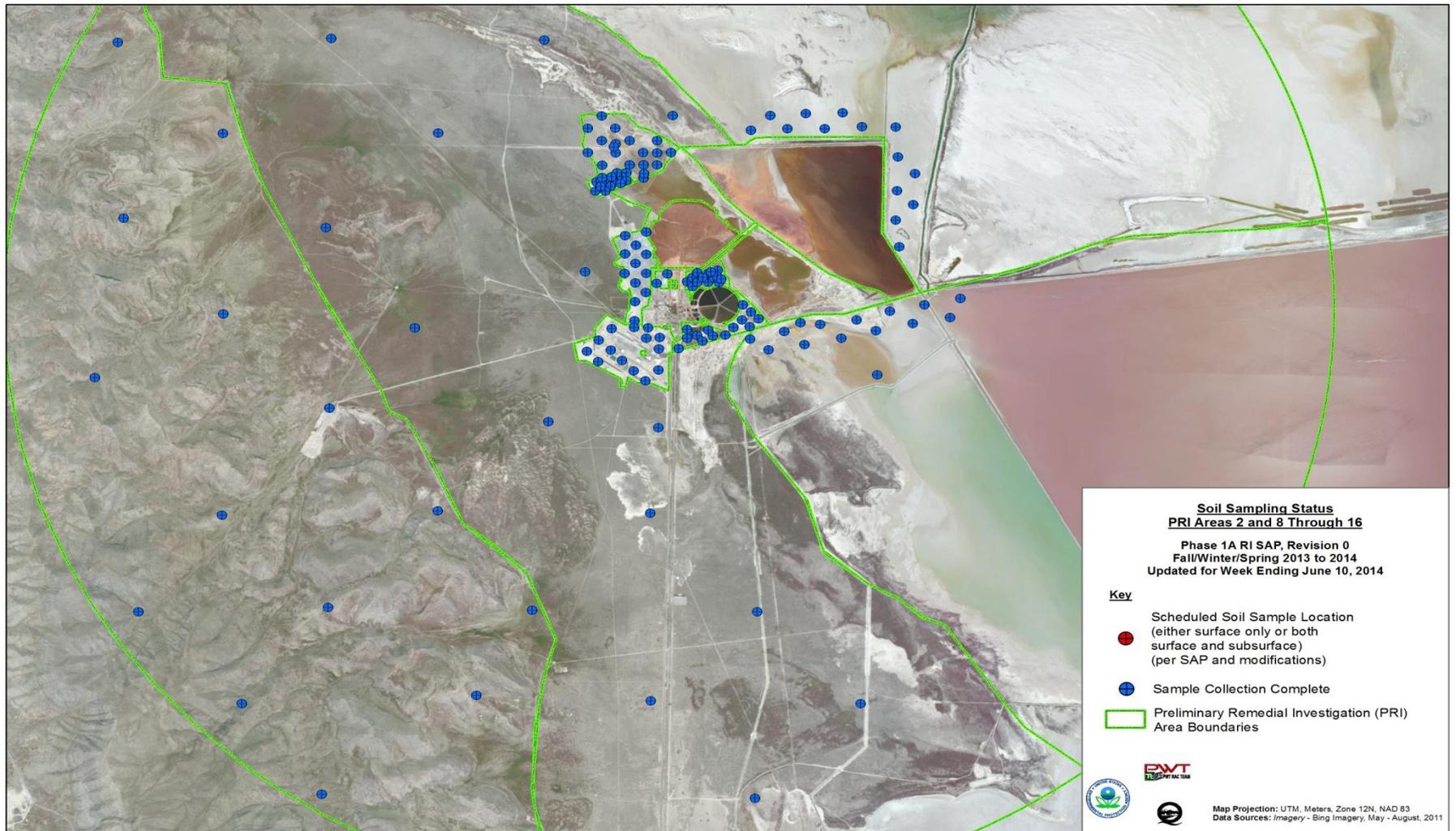
### Key

- ⊕ Scheduled Water Sample Location  
 (per SAP, modifications,  
 and post-pone of "inner" until July 2014)
- ⊕ Sample Collection Complete
- Preliminary Remedial Investigation (PRI)  
 Area Boundaries



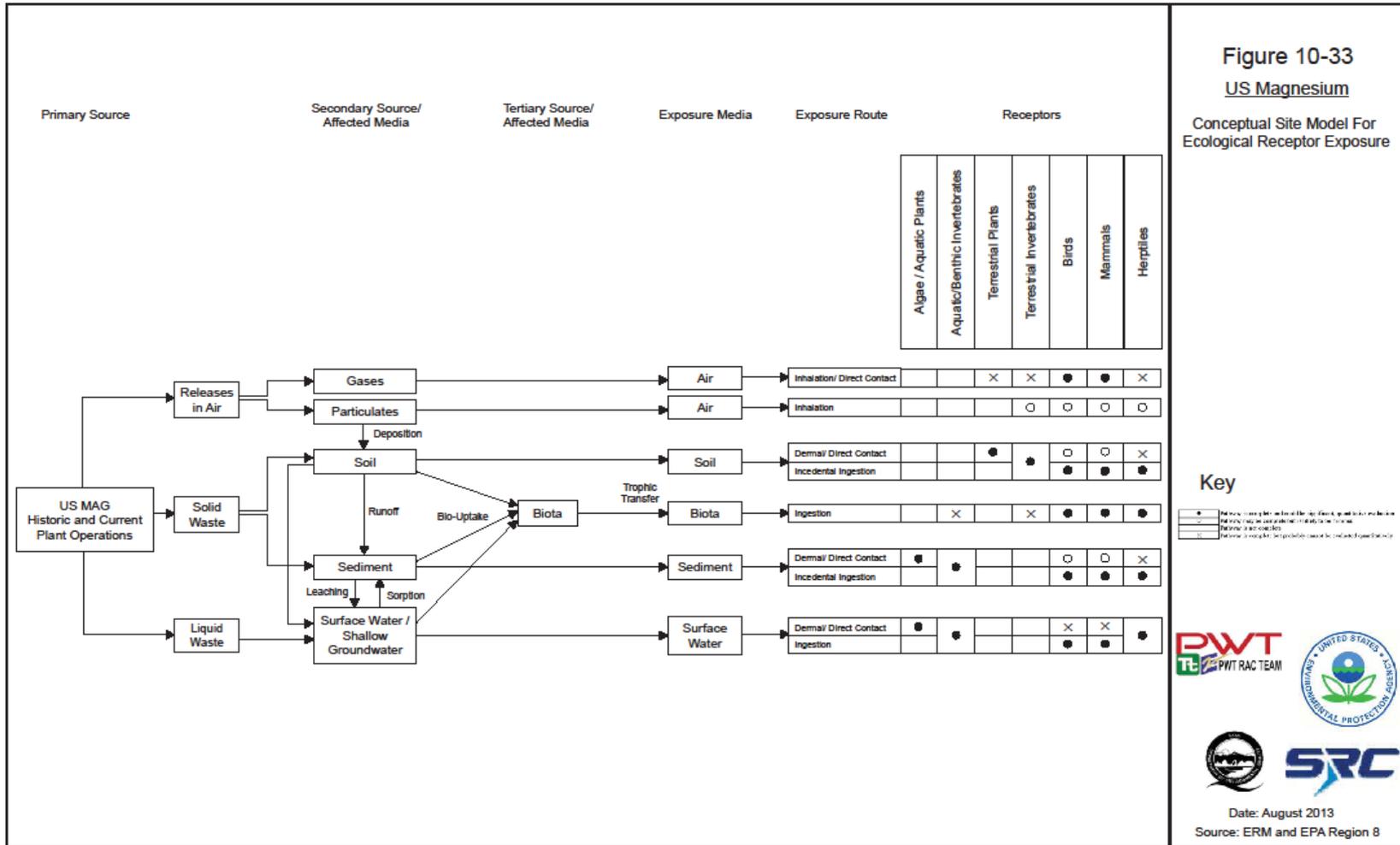
Map Projection: UTM, Meters, Zone 12N, NAD 83  
 Data Sources: Imagery - Bing Imagery, May - August, 2011

# Phase 1A SAP

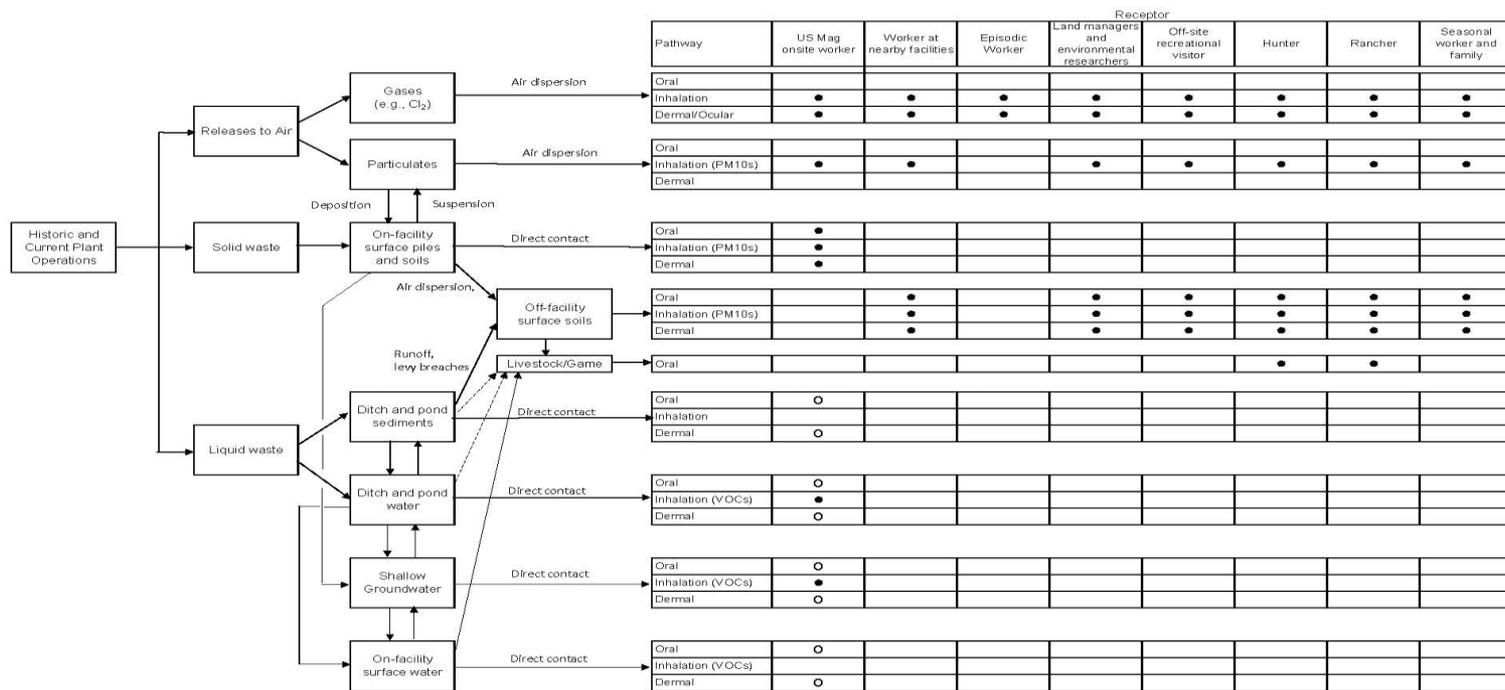


Path: K:\GIS Library\US MAG\Phase1A\_SAP\_082013\GIS data in EPA Guideline Format\Maps\Soil Collection Figure 20140610.mxd

# Phase 1A SAP



# Phase 1A SAP



**KEY**

- Pathway is complete and could be significant; quantitative evaluation
- Pathway is potentially complete, but data are needed on U.S. Magnesium worker activity patterns to determine if quantitative assessment is needed
- Pathway is not complete or is negligible; quantitative evaluation not needed

→ Primary transport or exposure pathway  
 - - - - -> Minor transport or exposure pathway

# Phase 1A SAP

## ▶ Next Steps of Ph1A:

- Air sampling for chronic-chemicals of potential concern.
- Initial sampling of soils, sediments and solid wastes of OU1 (Inner-PRIs).
- Identify chemicals of potential concern of OU2 (and OU1).
- Development of data quality objectives for subsequent phase of the remedial investigation

## Phase 1B: Preliminary Nature & Extent of Chemicals of Potential Concern

### ▶ Next Steps of Ph1B:

- Develop sampling and analysis plans for mapping of chemicals of potential concern.
- Sampling to determine nature and extent.

# Community Advisory Group

# What is a Community Advisory Group (CAG)?

- ▶ A CAG is a group of individuals representing the diverse interests in a community.
  - ▶ A CAG provides an opportunity for EPA to share information directly with interested community members.
  - ▶ A CAG provides an opportunity for community members to discuss their needs and concerns directly with EPA.
- 

# What is a Community Advisory Group (CAG)?

- ▶ Opportunity to build trust between the stakeholders.
  - ▶ Facilitates working relationships and dissemination of information.
  - ▶ Central point of contact between community and EPA.
  - ▶ Better, more informed decisions about site cleanup and other environmental issues.
- 

# What is a Community Advisory Group (CAG)?

- ▶ EPA cannot, by law, abrogate its responsibility to make the final decisions at a site; however, by providing the perspective of the local community, the CAG can assist EPA in making better decisions. (EPA OSWER Directive 9230.0-28)

# What is a Community Advisory Group (CAG)?

- ▶ A CAG that is broadly representative of the affected community offers EPA a unique opportunity to hear—and seriously consider—community preferences for site cleanup and remediation. (EPA OSWER Directive 9230.0-28)

# What is a Community Advisory Group (CAG)?

- ▶ It is particularly important that in instances where an EPA decision and/or response differs from a stated CAG preference regarding site cleanup, EPA accepts the responsibility of explaining its decision and/or response to CAG members. (EPA OSWER Directive 9230.0-28)

# What the CAG Does

- ▶ Holds regular meetings to share information.
  - ▶ Reviews technical information about the site cleanup.
  - ▶ Connects with the community.
  - ▶ Works with EPA and state officials to determine information needs.
- 

# What is this Community Advisory Group ?

## ▶ Name?

- Suggestion: US Magnesium Superfund Site Community Advisory Group (US MAG CAG)
- Mission Statement: a short description of the overall goals and purposes of a group. It brings a clear focus to the group, allowing members to see how their actions support the goals and purposes of the group.

# What is this Community Advisory Group?

## Mission Statement Example 1: Carolawn Superfund Site CAG (Chester County, SC)

- ▶ To ensure that the community will be included in the proper and complete cleanup of the Carolawn Superfund Site, the CAG will be educated, aware and informed and will serve as an intermediary between EPA, SCDHEC, site response contractors and the community at large.

## Mission Statement Example 2: Jasper County EPA Superfund Citizen's Task Force (Jasper County MO):

- ▶ This Task Force is to: Develop a process to gather early, direct, and meaningful comments; serve as a public forum for community interests to present and discuss their needs and concerns related to the Superfund decision-making process with appropriate federal and state agencies; Provide a public service to the rest of the community by representing the community in discussions regarding the site and by relaying information from the discussions back to the rest of the community; Participate in the decision-making process.

# What is this Community Advisory Group?

## Expectations – CAG Members:

- Inform yourself about the issues discussed.
  - Attend meetings.
  - Be active in meetings (listen and speak).
  - Observe CAG rules and procedures.
- 

# What is this Community Advisory Group?

- ▶ Expectations – EPA and UDEQ
    - Work with CAG members to determine dates, times and places of CAG meetings.
    - Announce CAG meetings well in advance.
    - Provide all necessary information to CAG members well in advance of meetings.
    - Update CAG on site developments in a timely fashion.
    - Be available to CAG members for information and questions.
    - Carefully consider and respond to CAG input.
- 

# What is this Community Advisory Group?

- ▶ Membership – CAG members may be selected in many ways:
  - Self nominating
  - Existing group
  - Selection by local government
  - EPA/State and select a core group
  - None of the above/no formal process

*The key in any case is simply to ensure that the CAG will be fully representative of the community and will function effectively as a group.*

# Action Items for the Group

- ▶ Do we want to go forward and meet together as a Community Advisory Group?
  - ▶ What will the group's name be?
  - ▶ What will the group's mission statement be?
  - ▶ How will the group select members (formal vs. informal?)
  - ▶ Details: Ground rules? Meeting notes? Etc...
  - ▶ Next meeting?
- 