

# Air Force Civil Engineer Center

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## Wurtsmith Restoration Advisory Board Meeting

5 December 2018  
Matt Marrs  
AFCEC/CIB



# Wurtsmith RAB

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# Welcome





# Wurtsmith RAB Agenda



## Welcome



- Introductions
- Ground rules

## Updates



- Stakeholder updates

## Presentations



- Central GAC PTS
- Vapor Intrusion
- MDEQ sampling

## Break



## RAB Business



- Co-chair R&Rs
- Co-chair vote

## Public Comment



- Three-minute limit
- Written comments



# Wurtsmith RAB Ground Rules



- 01** | Respect one another and maintain an atmosphere of open dialogue and exchange of ideas.
- 02** | Use our time together efficiently, wisely and respectfully.
- 03** | Speak clearly and succinctly one person at a time; avoid interrupting others.
- 04** | Listen and remain open to differing points of view.
- 05** | Maintain a propensity for progress: prepare, discuss, document and move forward.
- 06** | Share information early, openly and honestly
- 07** | Accurately and objectively relay to others the discussions that occur at board meetings.



# Wurtsmith RAB



**Updates**



# Wurtsmith RAB Stakeholder Updates



Since the last RAB meeting...



Installed **7**  
monitoring  
wells



Sampled **81**  
GW  
monitoring  
wells



Installed **18**  
transducers  
to measure  
water levels



Sampled **25**  
drinking  
water  
supplies



Awarded  
LF30/31  
project



# Wurtsmith RAB Stakeholder Updates





## Presentations





# Wurtsmith RAB Central GAC PTS Update

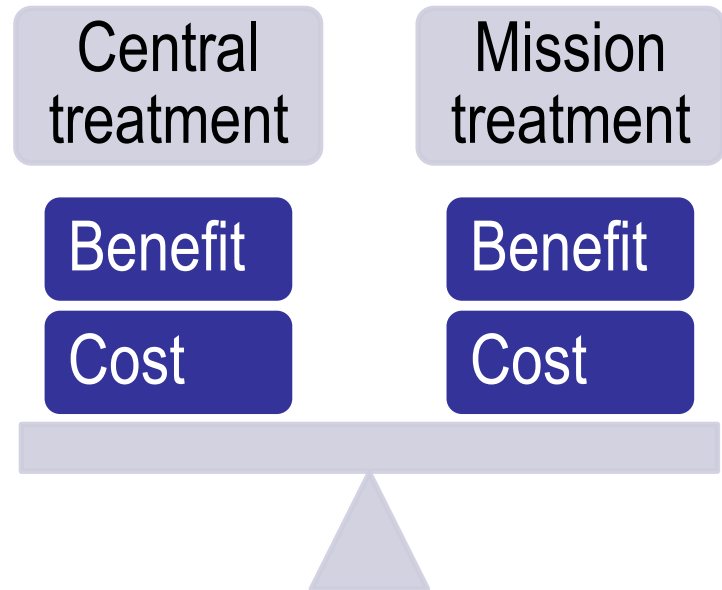


## Central GAC PTS

- ✓ Arrow Street
- ✓ Benzene Plant
- Mission Street



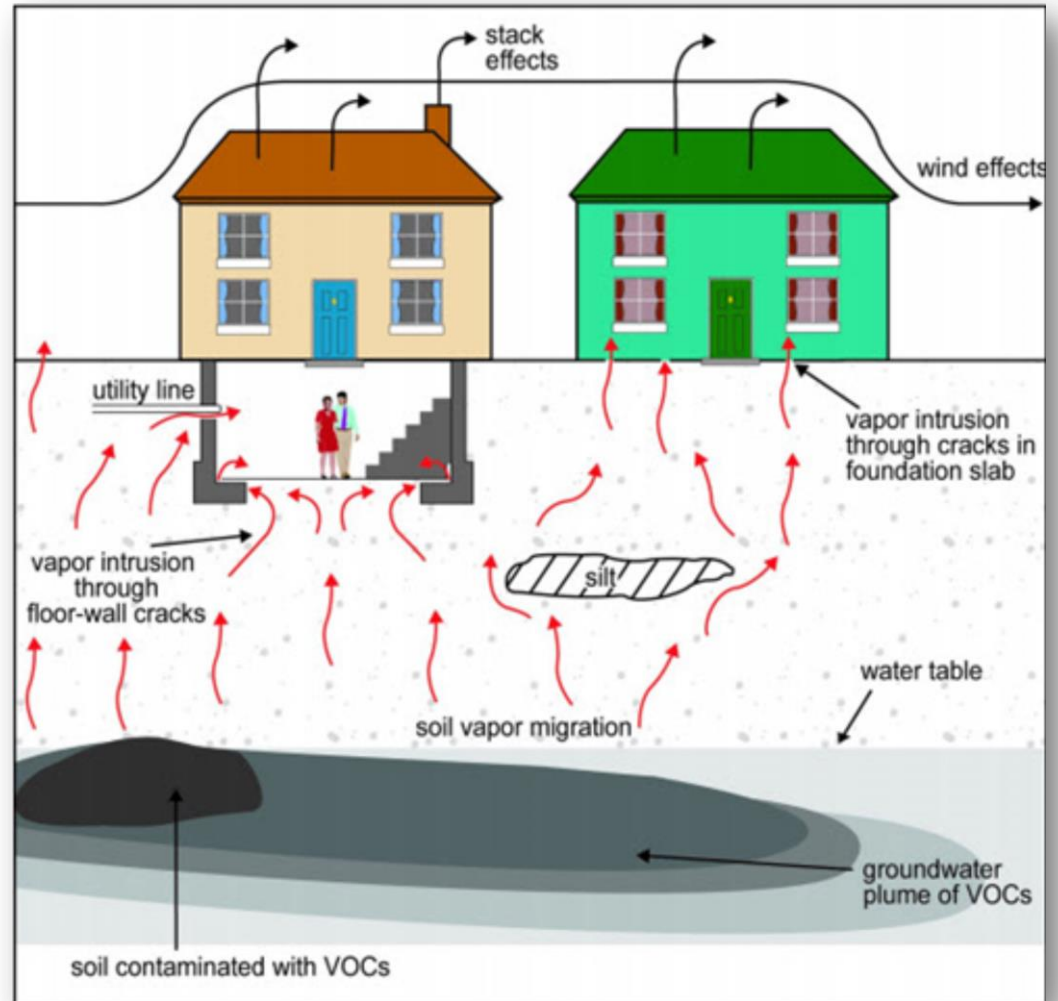
*SSI data feeds cost-benefit analysis for maximizing capture and treatment*



## What is VI?

Migration of vapor-forming chemicals from any subsurface source into an overlying building.

- volatile organic compounds such as PCE, TCE and benzene
- select semi-volatile organic compounds, such as naphthalene
- elemental mercury





# Vapor Intrusion Investigation

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## Why Do We Care?

- VI can impact a broad range of land use settings and buildings of any foundation type
- Vapor accumulations may pose:
  - Near-term safety hazards
  - Acute and chronic health effects
  - Aesthetic problems
- What we know about vapor intrusion has been increasing over the years. The potential risks from these chemicals that are linked to vapor intrusion are better understood today



# Wurtsmith RAB

# Vapor Intrusion Investigation

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## Why Do We Care? (cont.)

- Before, our biggest concern with underground chemicals was the safety of drinking water.
- But we know that some of these chemicals can get into buildings through the air
- Because of our increased knowledge of the risks, vapor intrusion has become a more urgent issue. Vapor intrusion is a national problem, and state and federal agencies across the country are continuing to learn more about it



# Vapor Intrusion Investigation

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## Factors Affecting Vapor Intrusion

### Source Factors

- Volatility
- Toxicity
- Phase
- Amount
- Location
  - Depth
  - Proximity to building

### Building Factors

- Foundation
- Openings
- Pressure differentials
- Entry rates
- Air exchange
- Mixing



# Wurtsmith RAB Vapor Intrusion



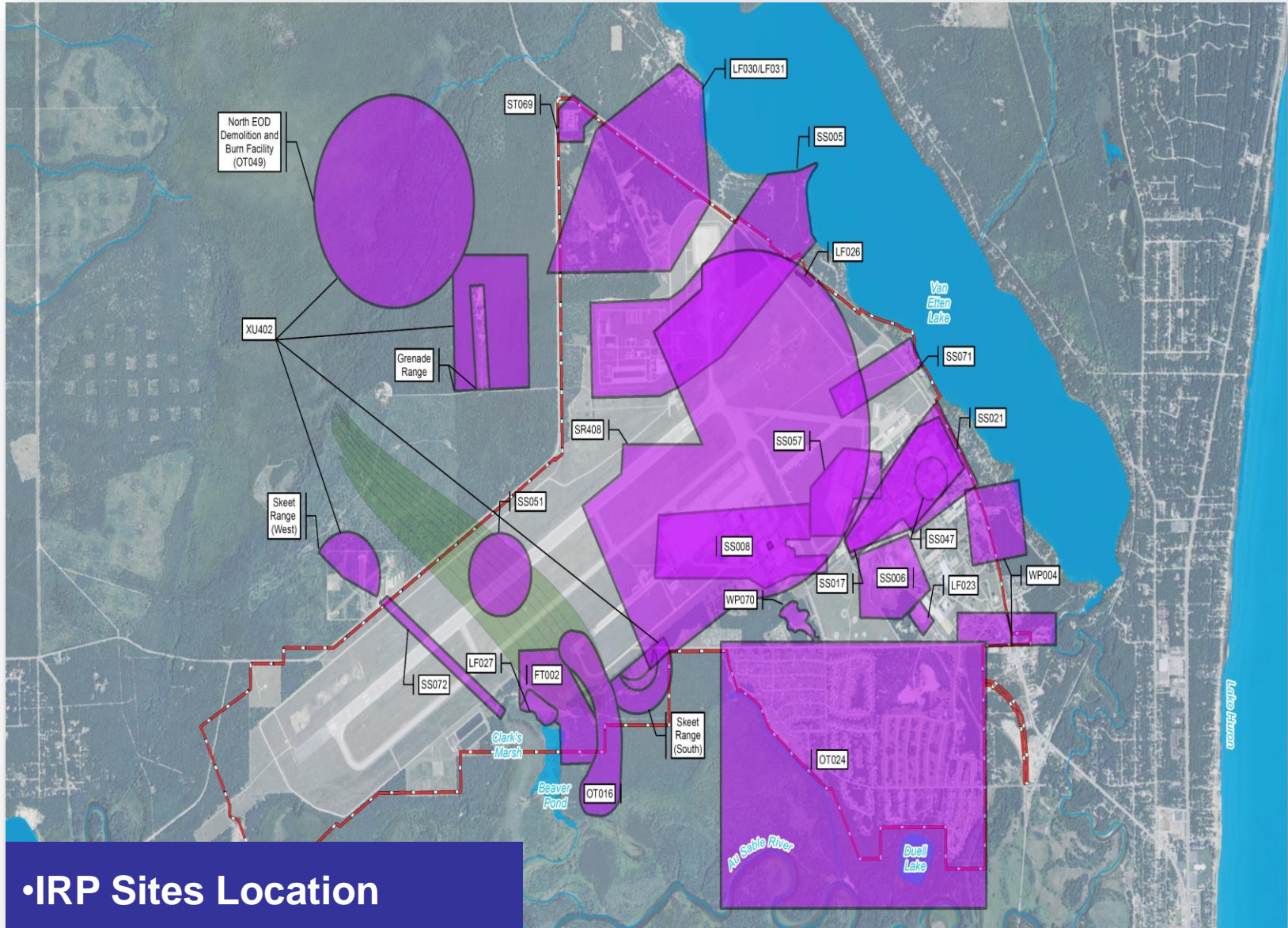
## Vapor Intrusion Investigation Objectives

Assess VI human health exposure pathway for all sites with volatile contaminant of concern in a phased approach:

- Phase 1:** VI screening evaluation (presence/absence) for the 25 currently open sites
- Phase 2:** Further evaluation, remediation or mitigation
- Phase 3:** VI screening evaluation (presence/absence) for appropriate closed sites
- Phase 4:** Further evaluation, remediation or mitigation (Follow up work as needed)



# Wurtsmith RAB VI Investigation: Sites





# Wurtsmith RAB VI Investigation: Sites



	Site ID	Site Name
1	FT002	Active Fire Training Area
2	WP004	Inactive Waste Treatment Plant Sludge Drying Beds
3	SS005	TCE Spill, Southwest of SAC Alert Apron
4	SS006	Fuel Spill, POL Bulk Storage Area
5	SS008	TCE and Fuel Spill, SAC Nose Doc and Operational Apron
6	OT016	Jet Engine Test Cell Building 5098
7	SS017	Fuel Oil Spill Near Building 25
8	SS021	TCE Spill Northeast of Building 43
9	LF023	Landfill, SE of POL Bulk Storage





# Wurtsmith RAB VI Investigation: Sites



	Site ID	Site Name
10	OT024	Three Pipes Drainage Ditch
11	LF026	Landfill, East of Alert Apron
12	LF027	LF South of the Center of SAC Instrument Runway
13	LF030/LF031	Landfill, Northern (Perimeter Road) Area
14	SS047	Base Gas Station
15	SS051	KC-135 Crash Site
16	SS057	Old Apron Hydrant Fuel System
17	ST068	Oil/Water Separator, Facility 5067
18	ST069	TCE Plume DRMO



# Wurtsmith RAB VI Investigation: Sites



	Site ID	Site Name
19	WP070	Sand-Fill Storage and Borrow Area
20	SS071	Building 5045 Drain Field
21	SS072	PCE Plume discharging to Clark's Marsh
22	SR408	Bombing and Strafing Area
23	XE404	Weapons Storage Area
24	XU402	Former Grenade Range
25	OT049	EOD Range



## Vapor Intrusion Investigation

### VI Phase 1 Procedure:

Screen active sites (25) for potential VI

Sites with potential VI

Evaluate nature and extent

Identify potential receptors

100 ft radius

Or 30 ft radius (petroleum contaminants)

Pathway Analysis

Further investigation: phase 2

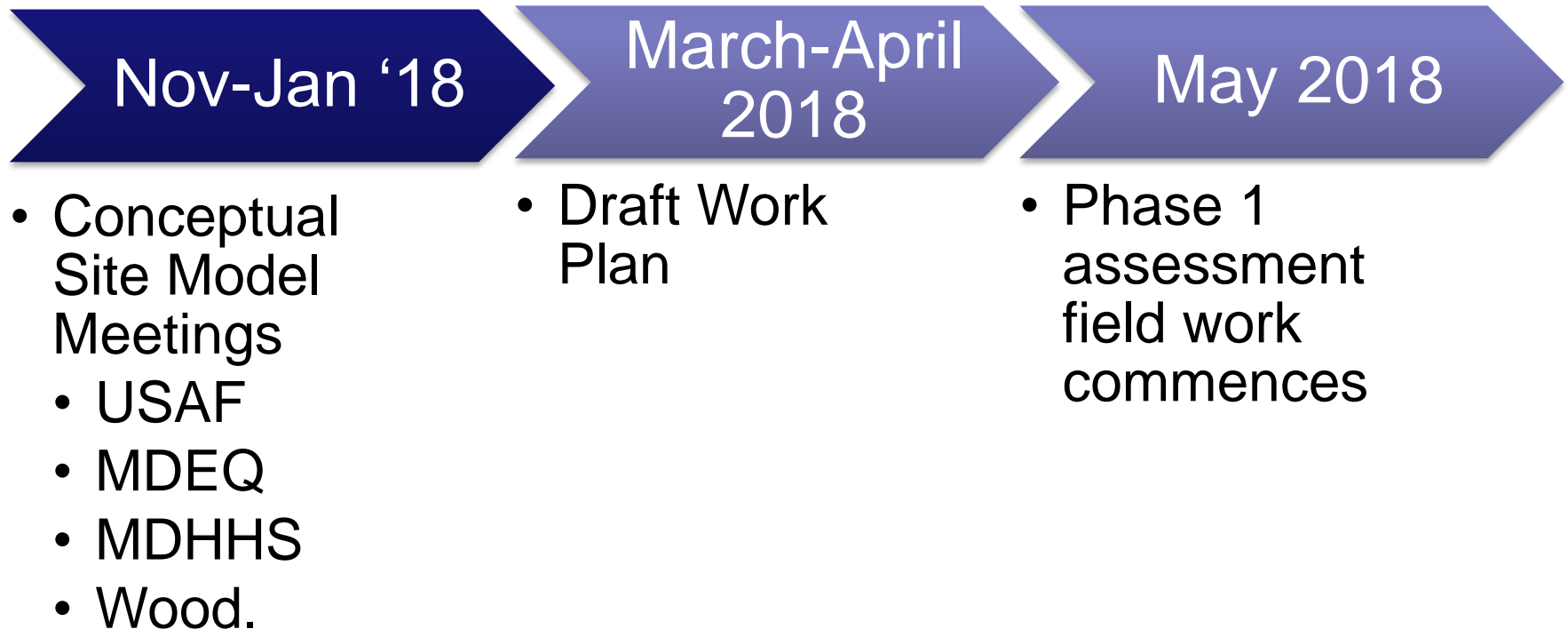
Or no further investigation



# Wurtsmith RAB VI Investigation



## VI Phase 1 Assessment Schedule





# Vapor Intrusion Investigation

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## VI Phase 1 Assessment (Preliminary)

### What we know so far:

- Collaborative approach: USAF, MDEQ and MDHHS
- 16/25 Sites are less likely to have VI Exposure Pathway because of at least one of the following:
  - Absence of volatile contaminants
  - Current and future land use (no buildings)
  - Contaminant is below a layer of clean GW
  - 9/25 Sites considered for VI Exposure Pathway
    - Under review by MDEQ and MDHHS

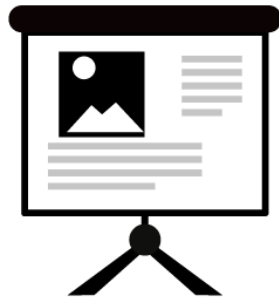


# Wurtsmith RAB

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 **Break**



## **Presentations (MDEQ)**



# Wurtsmith RAB

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## RAB Business





# Wurtsmith RAB Co-Chair R&Rs



## Wurtsmith RAB Community Co-Chair

### REPRESENT

- Represent Oscoda community
- Ensure relevant community concerns are raised

### COMMUNICATE

- Help provide info to the public
- Report back to the community

### COORDINATE

- Work with AF and community RAB to prepare agendas

### SUPPORT

- Help ensure meetings / participation remain open and constructive



## Public Comment



## Public Comment Period

**01** | Sign in and write your name on a card

**02** | Deliver your comments from the front of the room

**03** | Three minute time limit

**04** | RAB members will confer after your comment to see if a follow-up action is needed



## Conclusion & Adjournment

