

US Ecology Remedial Investigation

STAKEHOLDER WORKSHOP

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21 April 2009

US Ecology Remedial Investigation

TASK 1: RI PLANNING

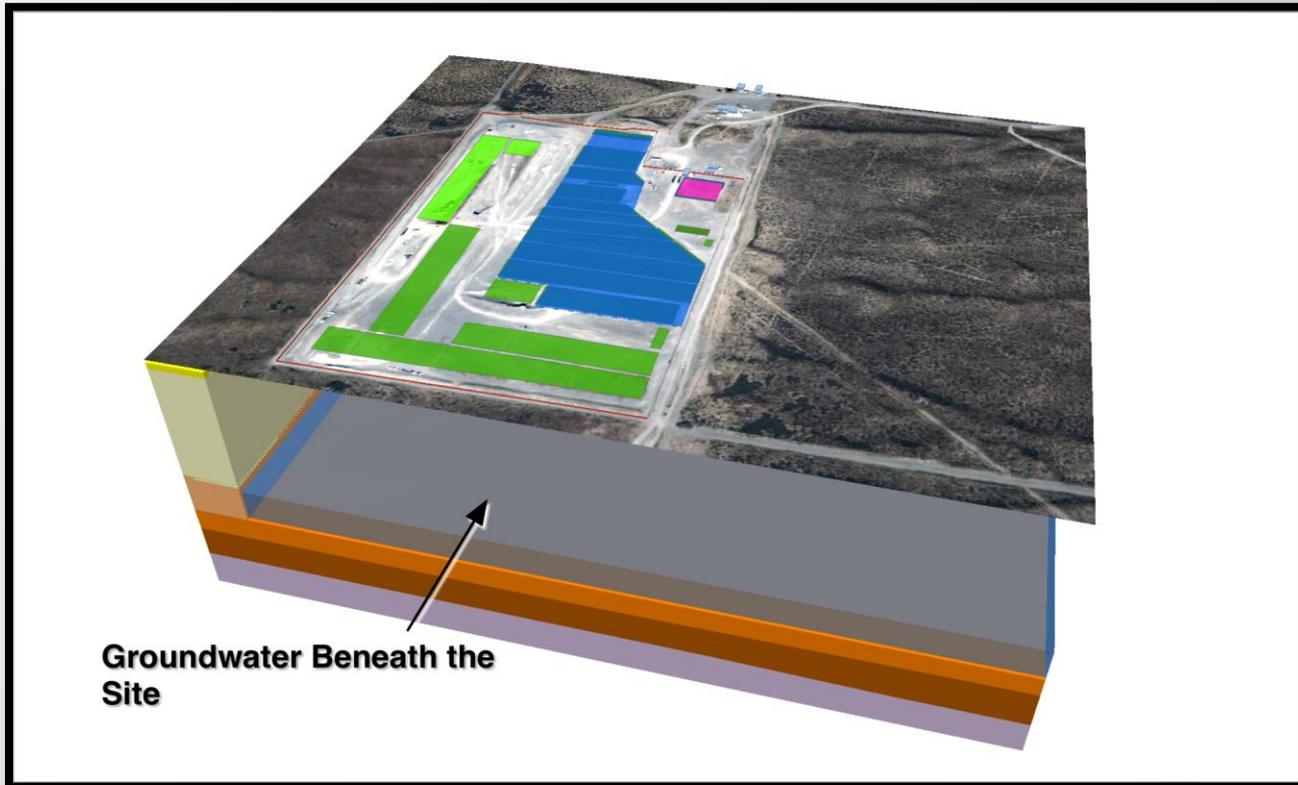
GOALS AND OUTCOMES

- ① Review the purpose of the Remedial Investigation and what it is intended to accomplish
- ① Describe the activities conducted as part of the remedial investigation
- ① Communicate the results of the investigation

WHY IS AN RI BEING CONDUCTED?

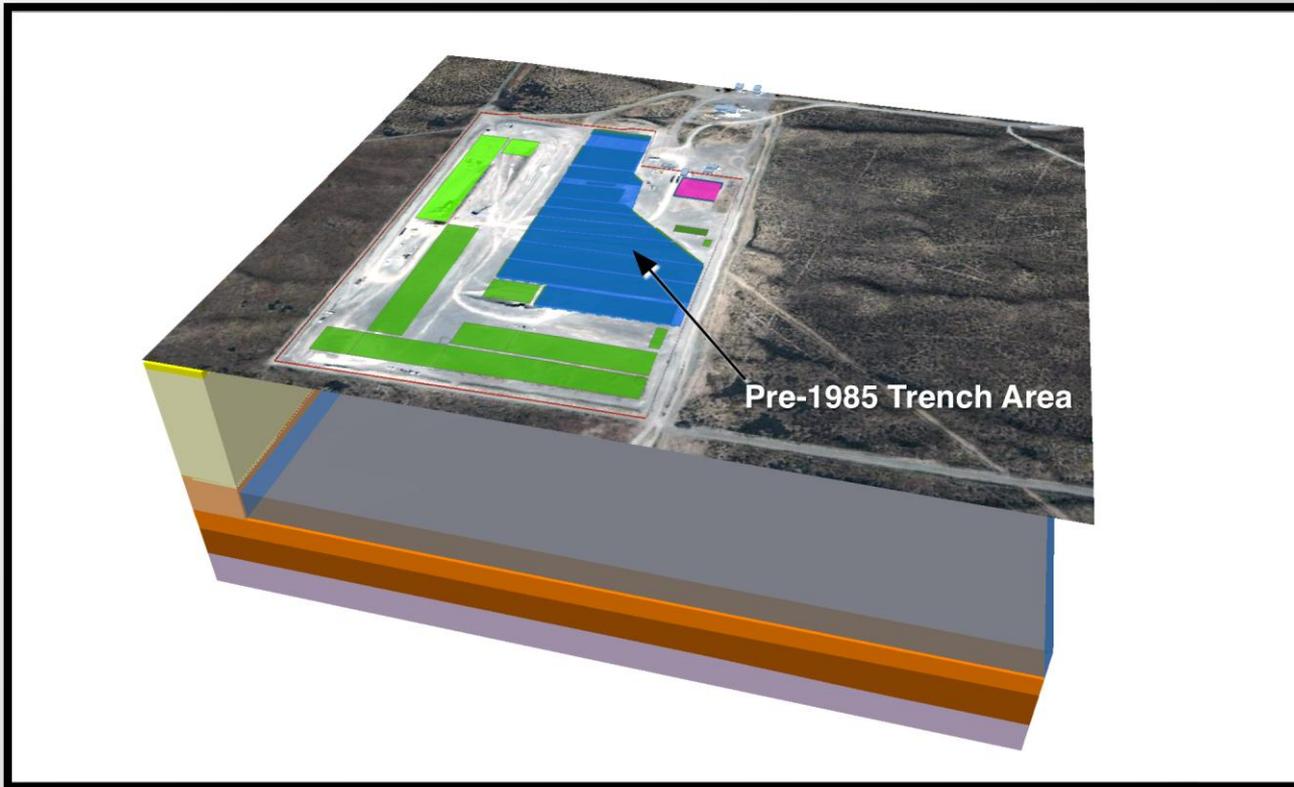
- ◎ To describe and characterize the contamination at the three US Ecology Site Decision Units
 - The Resin Tank Area
 - The Pre-1985 Trenches
 - Groundwater underneath the site

GROUNDWATER BENEATH THE US ECOLOGY SITE

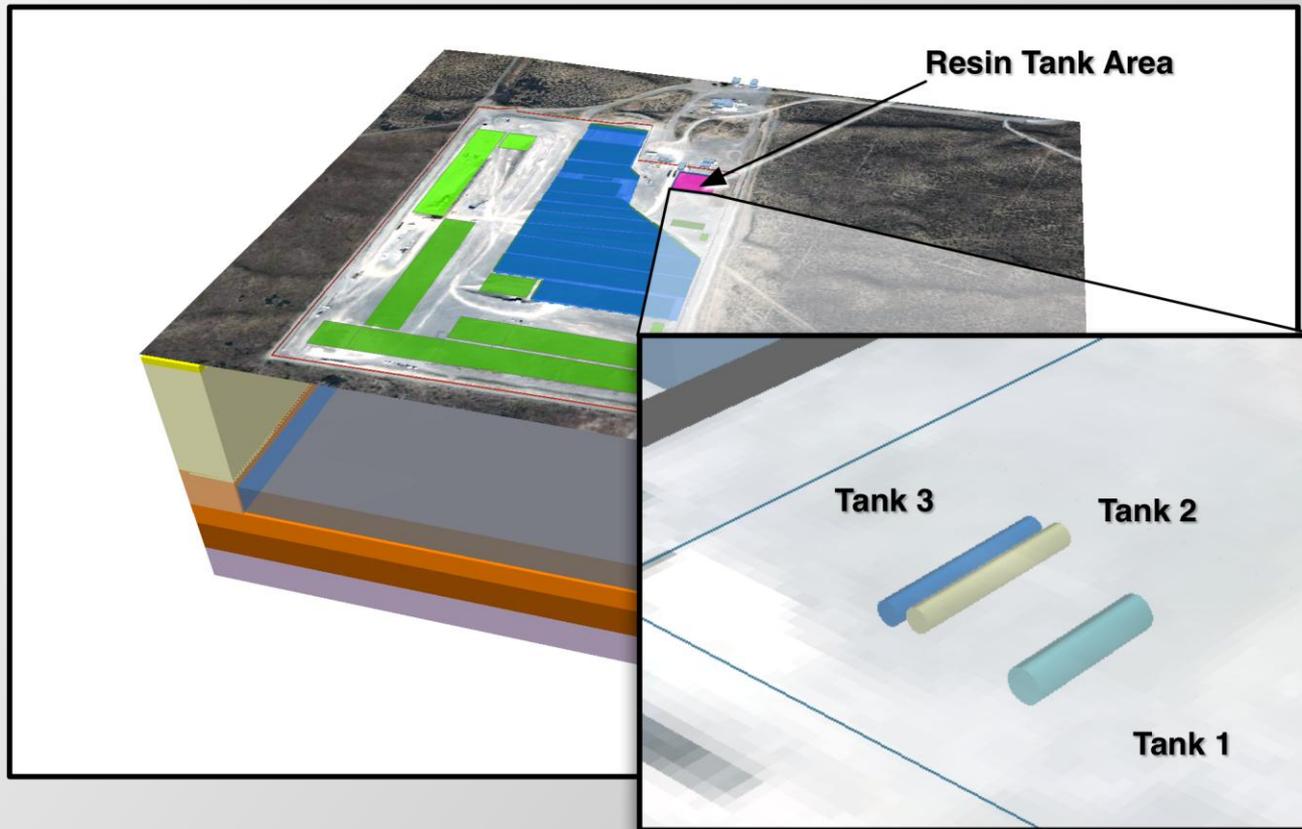


Groundwater Beneath the
Site

PRE-1985 TRENCH AREA DECISION UNIT



RESIN TANK AREA



BASIS OF INVESTIGATION PLANNING



- ◎ WAC 173-340-350
- ◎ Agreed Order Scope of Work
- ◎ Data Quality Objectives Report
- ◎ Vista Engineering Technical Proposal

INVESTIGATION PLANNING

- ◎ Develop plans to control the field investigation and long-term monitoring
 - Remedial Investigation Work Plan
 - Quality Assurance Project Plan
 - Sampling and Analysis Plan
 - Health and Safety Plan
- ◎ Investigation Procedures comply with applicable regulations, guidance, and ASTM standards

PROJECT BREAKDOWN

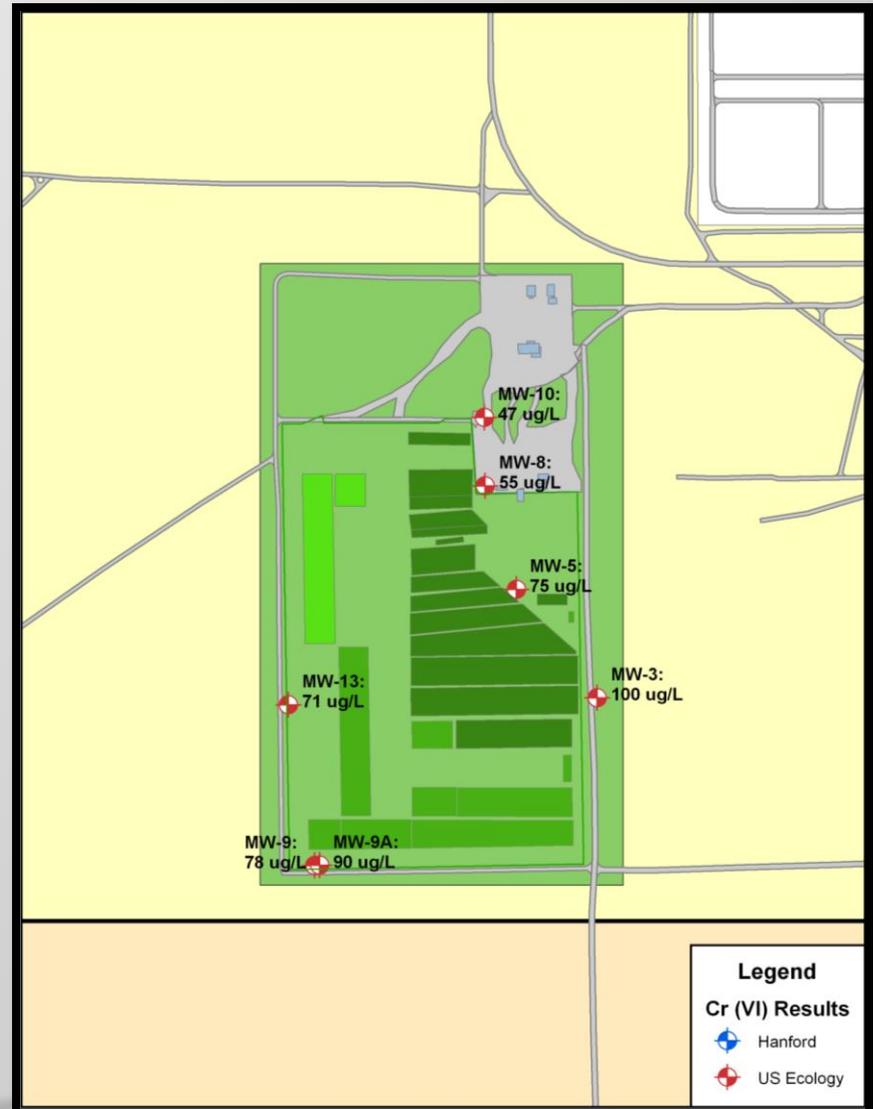
	<u>Complete</u>
⦿ Task 1: Investigation Planning	✓
⦿ Task 2: Field Investigation	✓
⦿ Task 3: Long-Term Monitoring	60%
⦿ Task 4a: Remedial Investigation	90%
⦿ Task 4b: Feasibility Study	

PROJECT CONCLUSIONS

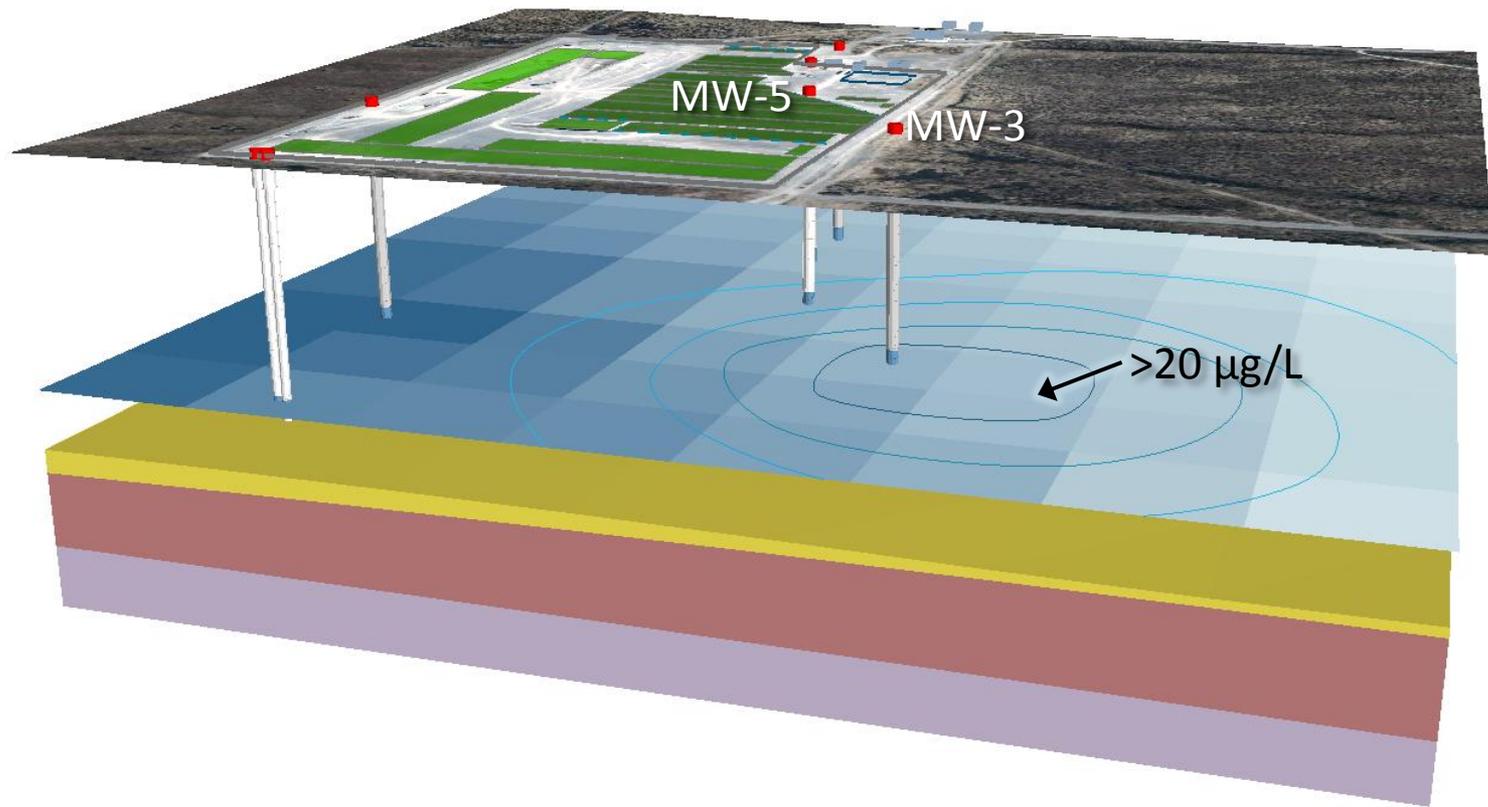
- ⦿ Groundwater contamination resulted from Resin Tank Area discharges and migration of chemical constituents from the Pre-1985 Trench Area
 - Trichloroethene, chloroform, and hexavalent chromium
- ⦿ Chemical constituents in soil are related to discharges from the resin tanks
 - Nitrate and hexavalent chromium
- ⦿ Vapor-phase contaminants in vadose zone related to emplaced trench wastes in the Pre-1985 Trench Area
 - Chlorinated and fluorinated hydrocarbons

GROUNDWATER COPCS

- Hexavalent Chromium
 - Max Detect – 100 $\mu\text{g/L}$
 - No exceedences in non-USE wells

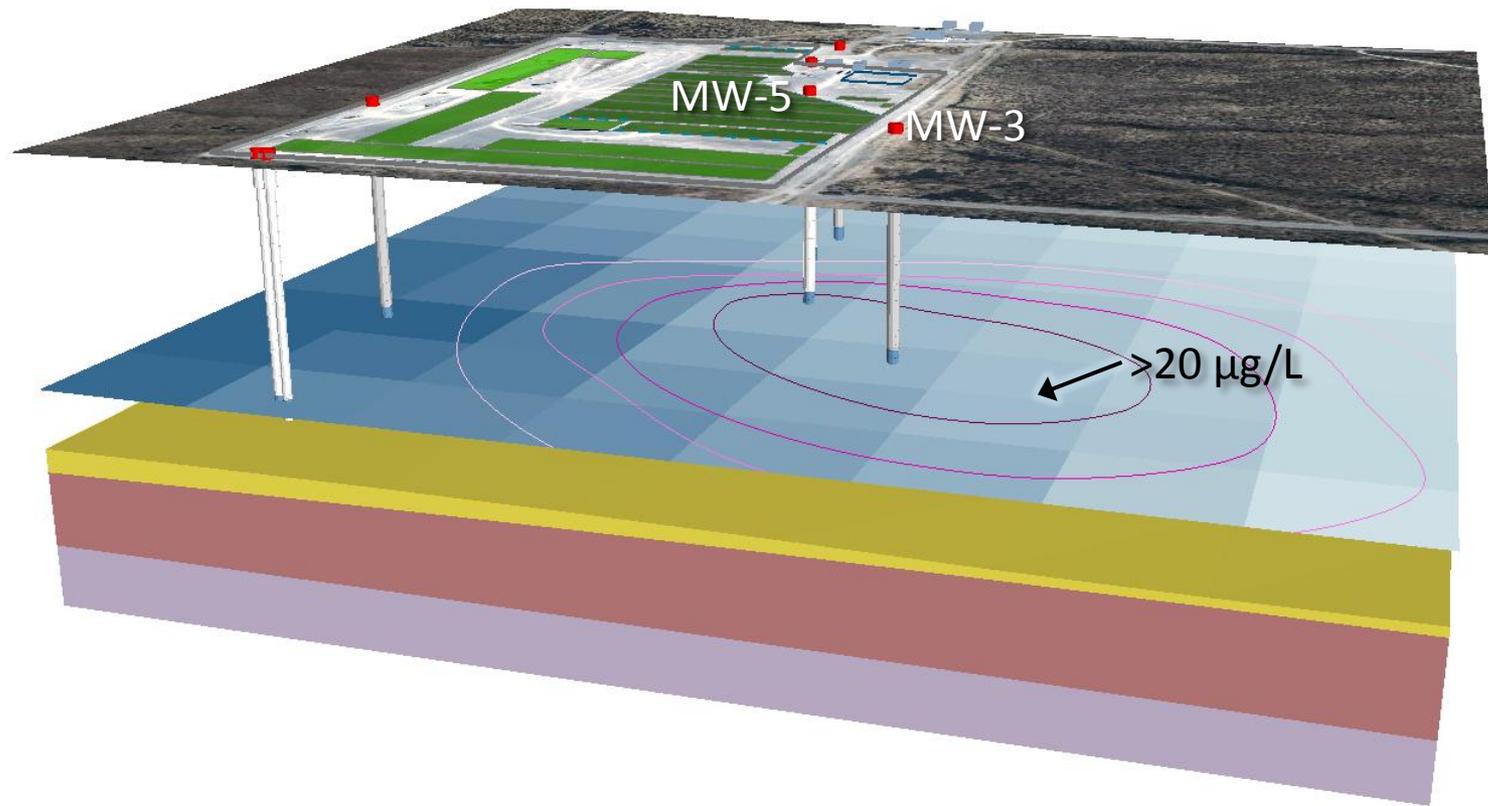


GROUNDWATER DECISION UNIT



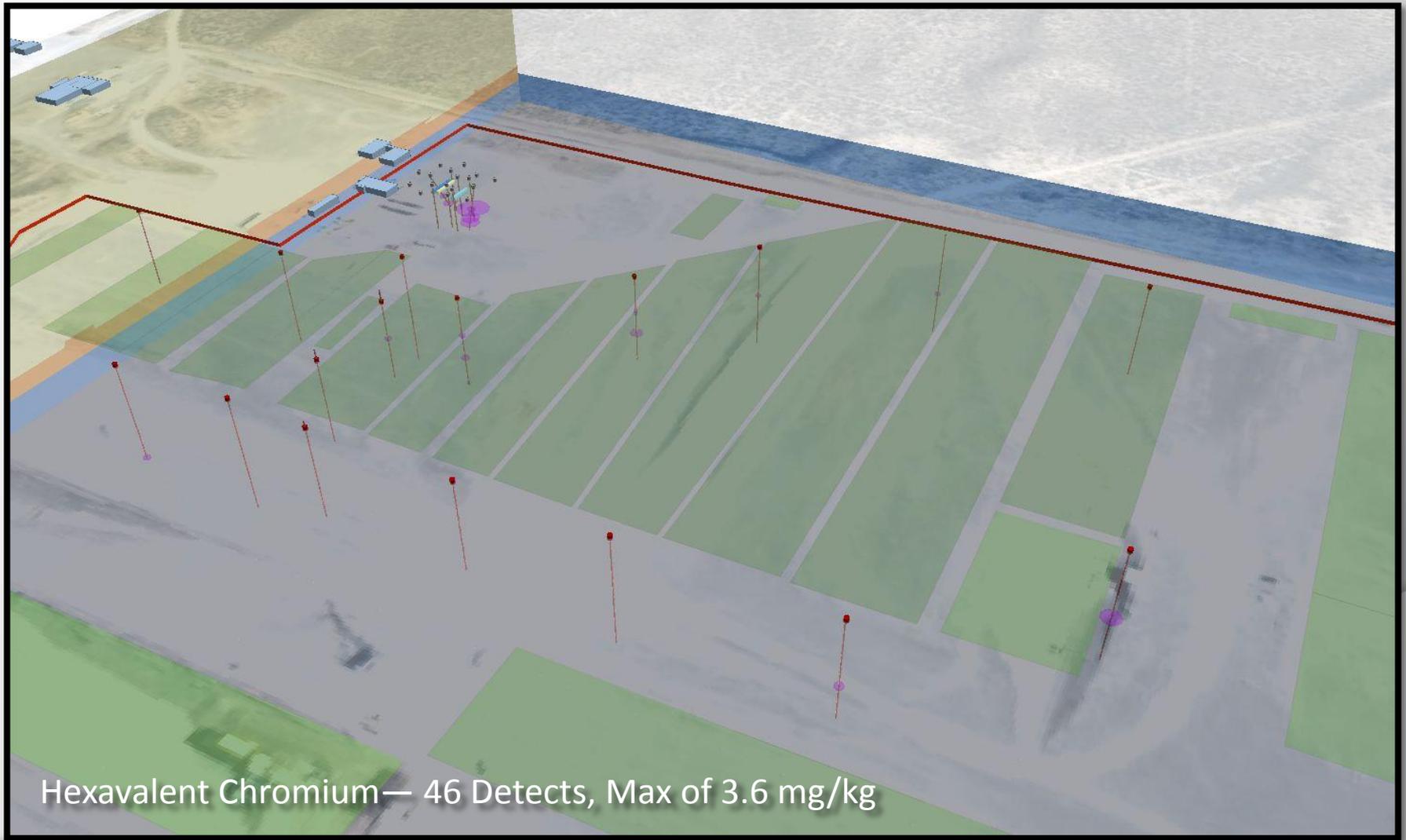
Trichloroethene — 9 Detects, Max of $27 \mu\text{g/L}$

GROUNDWATER DECISION UNIT (CONT.)



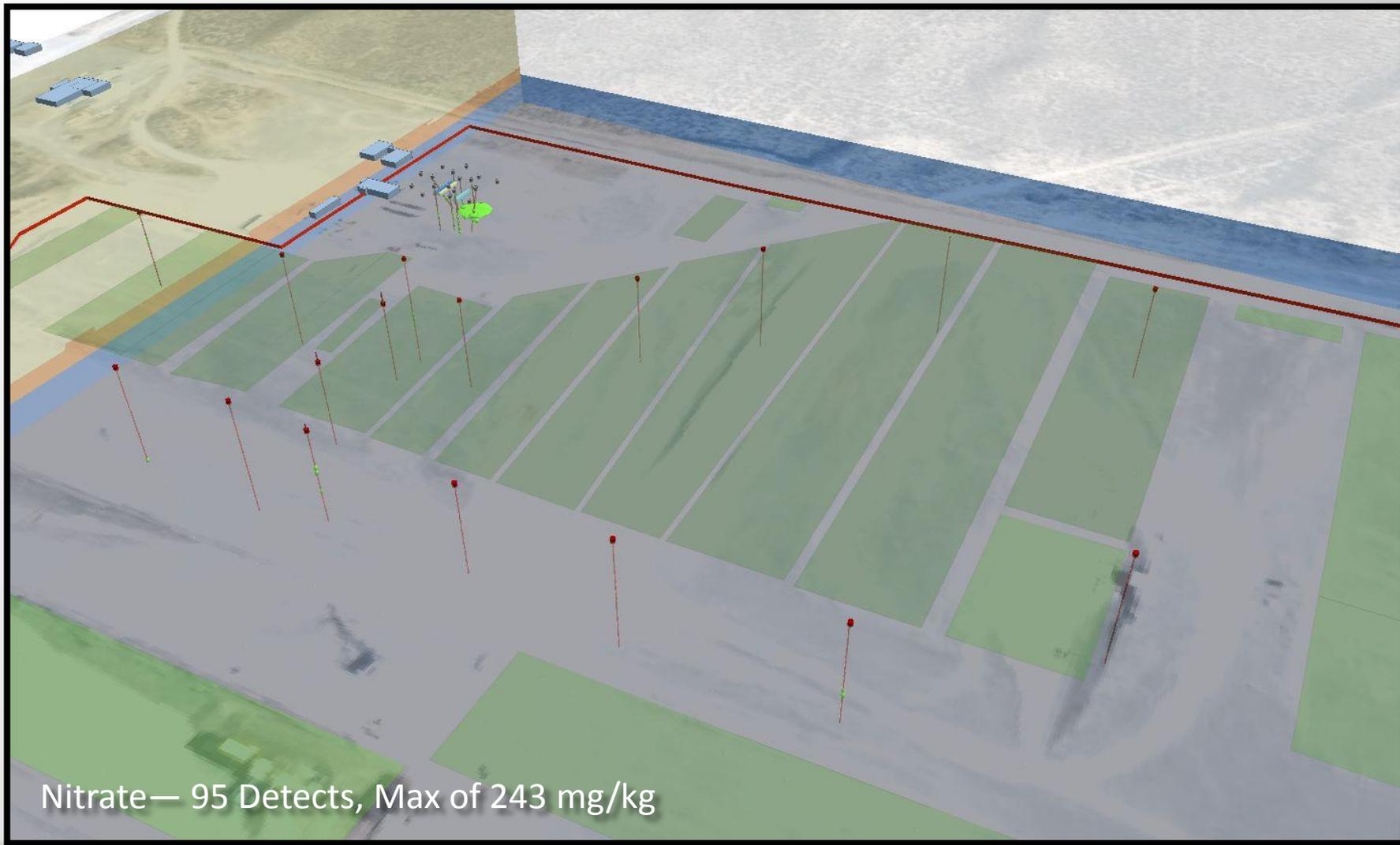
Chloroform— 12 Detects, Max of $22 \mu\text{g/L}$

RESIN TANK AREA DECISION UNIT

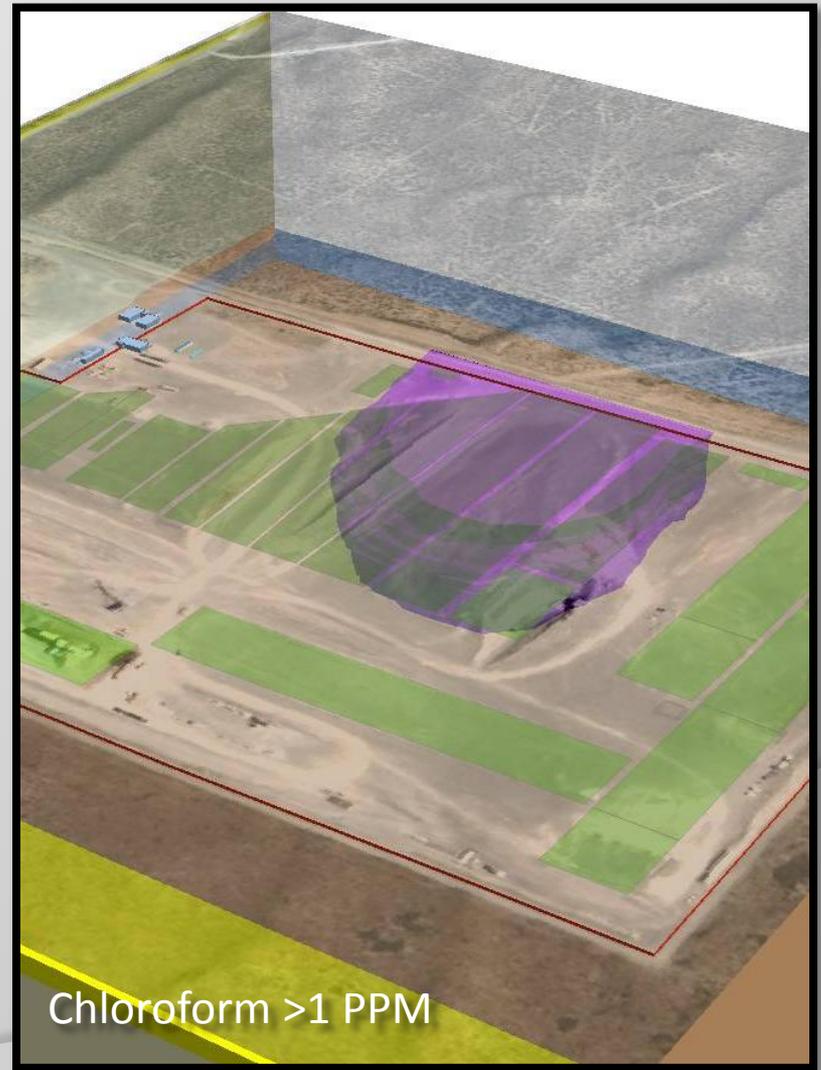
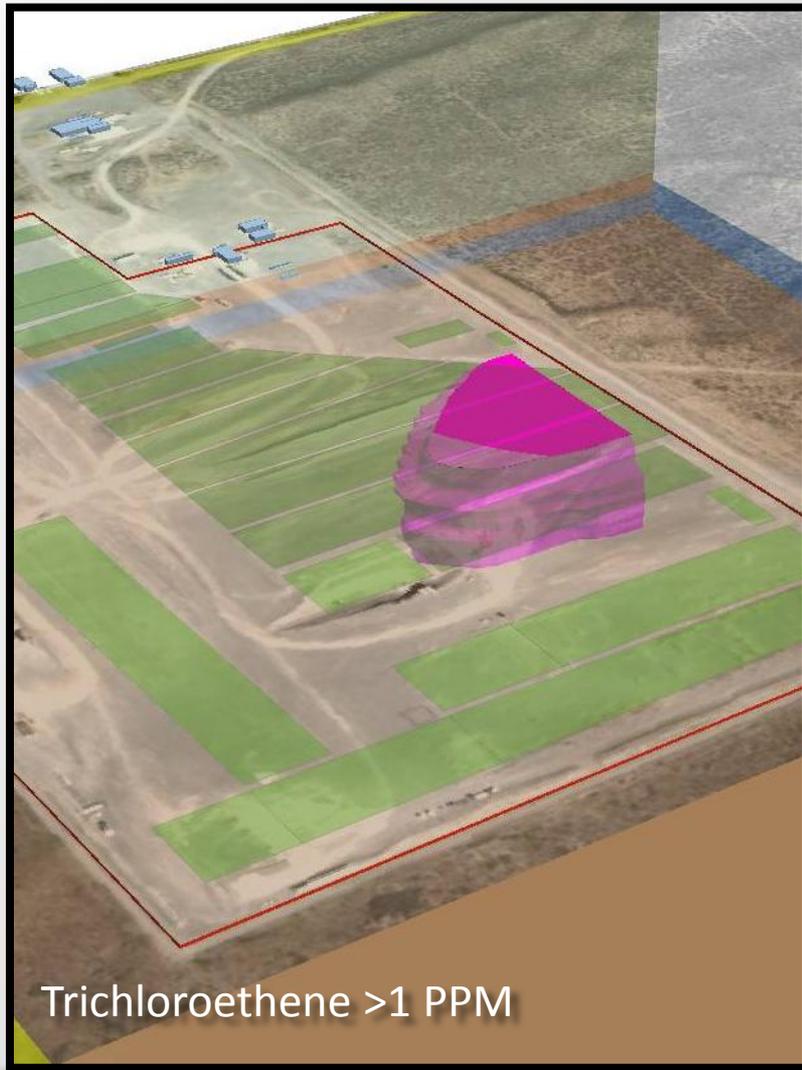


Hexavalent Chromium— 46 Detects, Max of 3.6 mg/kg

RESIN TANK AREA DECISION UNIT (CONT.)



PRE-1985 TRENCH DECISION UNIT



PATH FORWARD

- ① Data developed for this investigation is consistent and of sufficient quality
- ① The data is appropriate for evaluating cleanup alternatives for hazardous constituents
- ① Preparing the remedial investigation report
- ① Commencing work on Feasibility Study