



# LAUN-DRY UPDATE AND GROUND AND SURFACE WATER RULES REVIEW PROGRESS

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New Mexico Environment Department

# Today's Presentation

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- Laun-Dry status and cleanup progress
- Ground Water Rules Review specifics
  - Need for updating regulations
  - Changes needed and proposed
  - Process for our review, public participation, WQCC review and adoption



# Laun-Dry Background

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- Laun-Dry, a dry cleaning chemical supply company located on 12<sup>th</sup> Street NW in Albuquerque, stored and distributed Tetrachloroethene or “Perc” or PCE to dry cleaners in New Mexico.
- The facility had an aboveground leaking storage tank which was spotted by NMED. It had probably leaked for decades.
- PCE was likely spilled during transfer from the railcar to the tank.
  - Depth to plume/groundwater ~30 feet
  - Depth for regional drinking water aquifer ~400 feet
  - Nearest municipal well  $\frac{3}{4}$  mile to the northwest



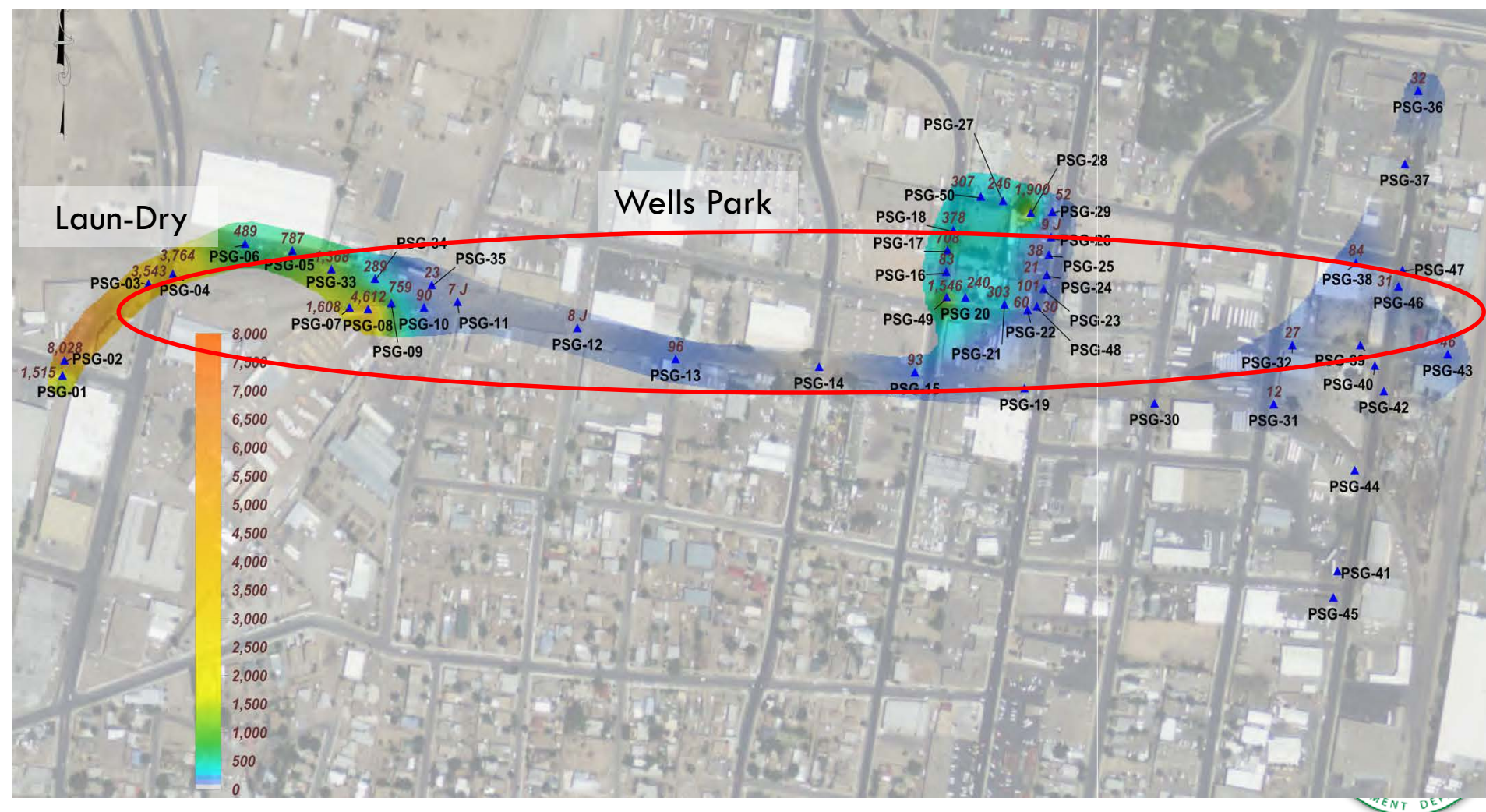
# The Former Laun-Dry PCE Tank

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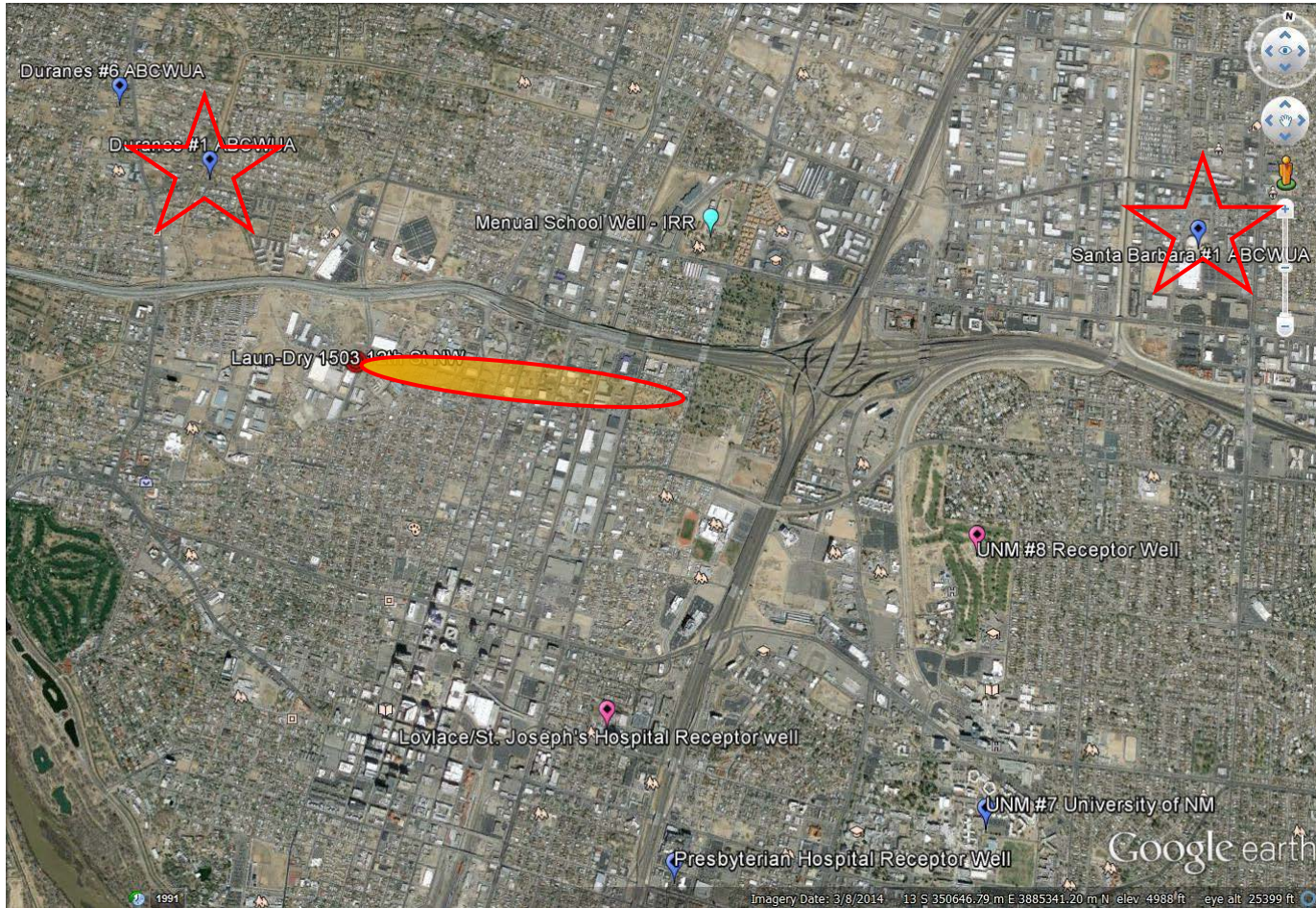
The site is complex including: more than one area of concern, potentially more than one source, and an eastward flow

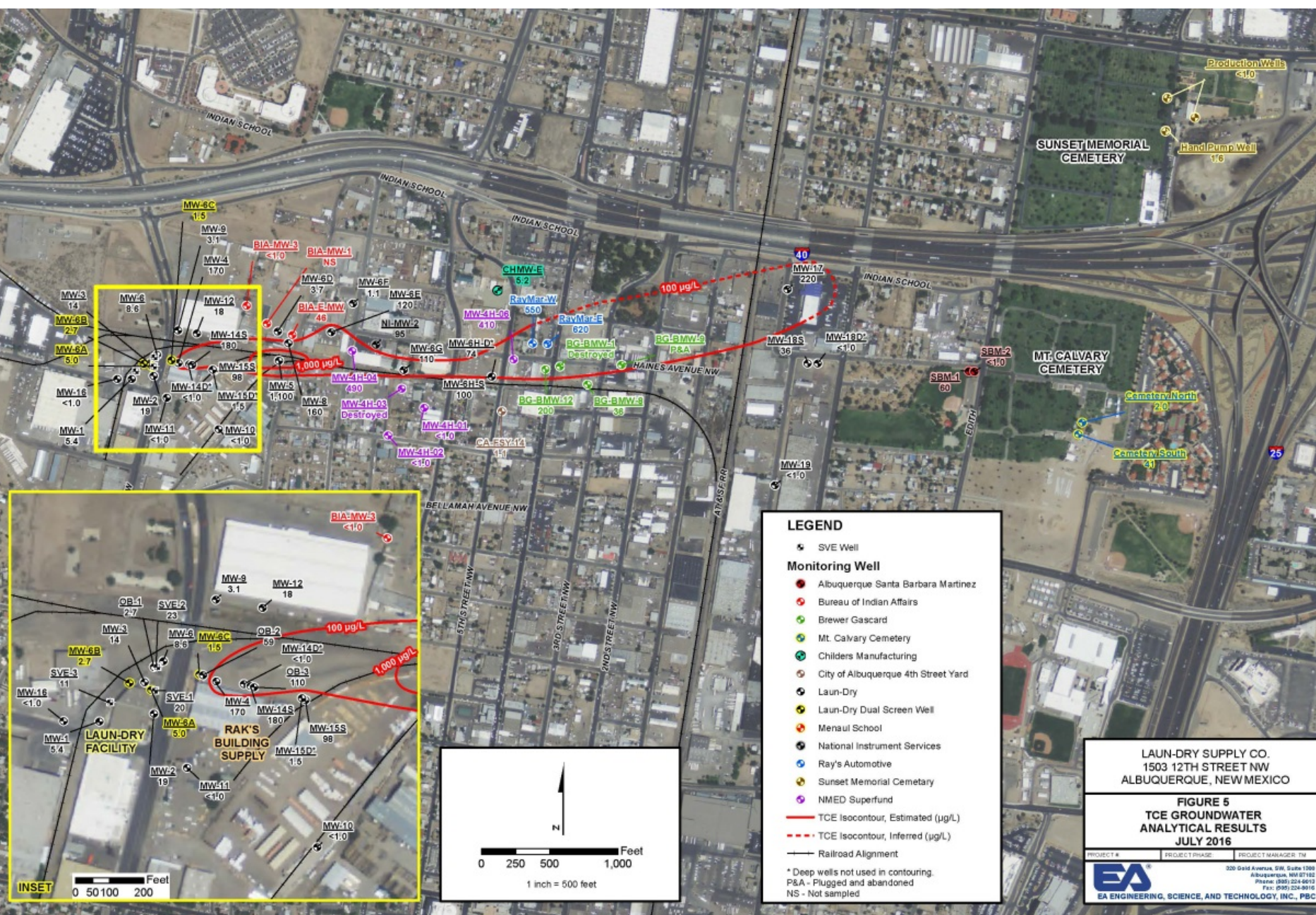
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# Closest wells: Up and Down Gradient

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**LEGEND**

- SVE Well
- Albuquerque Santa Barbara Martinez
- Bureau of Indian Affairs
- Brewer Gascard
- Mt. Calvary Cemetery
- Childers Manufacturing
- City of Albuquerque 4th Street Yard
- Laun-Dry
- Laun-Dry Dual Screen Well
- Menaul School
- National Instrument Services
- Ray's Automotive
- Sunset Memorial Cemetery
- NMED Superfund
- TCE Isocontour, Estimated (µg/L)
- TCE Isocontour, Inferred (µg/L)
- Railroad Alignment

**Monitoring Well**

- Deep wells not used in contouring.
- P&A - Plugged and abandoned
- NS - Not sampled

LAUN-DRY SUPPLY CO.  
 1503 12TH STREET NW  
 ALBUQUERQUE, NEW MEXICO

**FIGURE 5  
 TCE GROUNDWATER  
 ANALYTICAL RESULTS  
 JULY 2016**

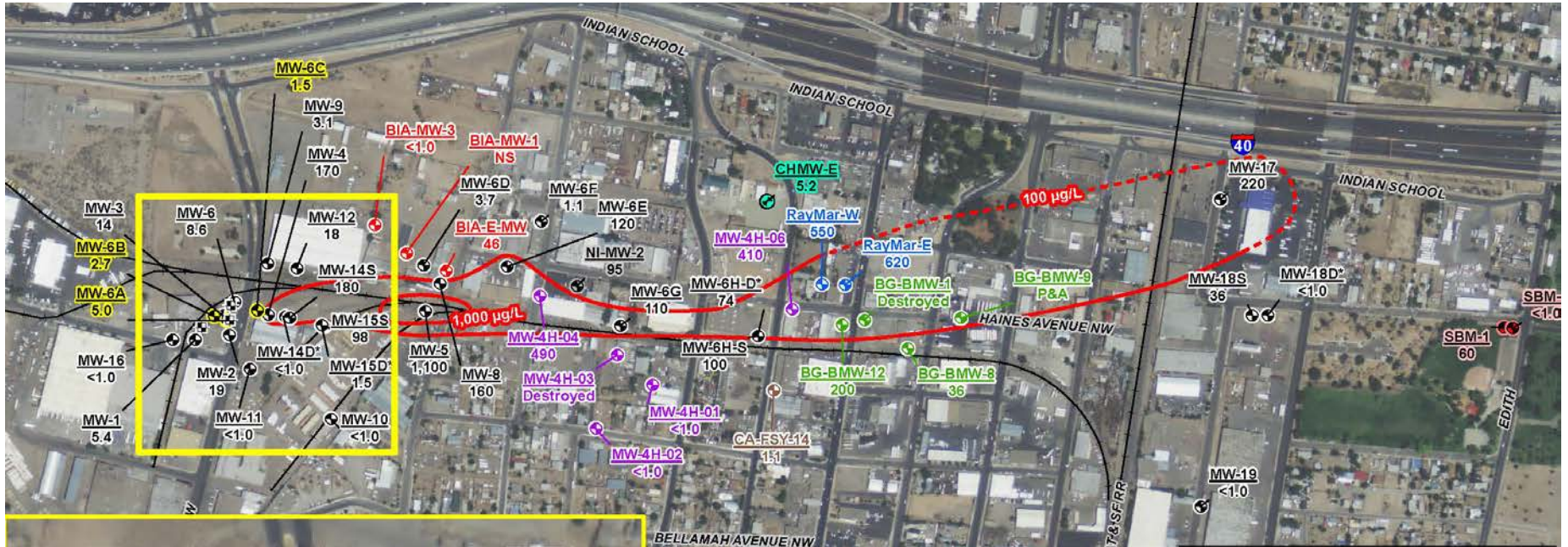
PROJECT # \_\_\_\_\_ PROJECT PHASE \_\_\_\_\_ PROJECT MANAGER, TM \_\_\_\_\_

**EA**  
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# TCE Plume

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# Cleanup at Laun-Dry Plume

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- 99% eradication of Laun-Dry source vadose zone vapors accomplished via SVE.
- With NMED's oversight the Responsible Party is expanding this successful approach to address a recently identified hot spot nearby and within the plume boundaries.



# Soil Vapor Extraction Unit

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# More Laun-Dry Cleanup

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- In early 2016 we personally contacted ~20 Wells Park homes for indoor air testing. Only 3 homeowners participated.
  - ▣ Folks are busy
  - ▣ Concerns not too strong
  - ▣ Results indicate no contamination of TCE.
- Soil & groundwater amendment study was conducted in 2015/16 to determine the best bioremediation method for bioremediation.
  - ▣ Findings not fully conclusive, and issues are still being resolved.
- Passive Soil Vapor survey in outdoor soils is underway.
- As investigation and characterization are finalized, cleanup continues accelerating.



# Laun-Dry Cleanup: Where we are now

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- Public Notice for the Stage 2 Abatement Plan (Cleanup Plan) ends on November 15<sup>th</sup>
- A combination of cleanup techniques are expected to continue :
  - in-situ bioremediation and
  - additional SVE
- Vapor Intrusion findings are promising as intrusion appears minimal to non existent.
- Our vigilance continues with more sampling and analysis in the future



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# Groundwater Regulations

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- New Mexico was the first state in the Nation to develop protective regulations for groundwater in 1977:
  - The regulations included reporting and cleanup of spills and the issuance of permits for discharges that could impact groundwater quality
  - 1977 numerical standards included metals, nutrients, and other inorganic standards
  - Additions in 1982 and 1986 included organic standards such as PCE, TCE, and BTEX
  - These organic standards for volatile organic compounds (VOCs) have not been updated since the 1980's
  - The Abatement process was added in 1995
  - Abatement language has not been updated in 20 years



# What type of changes are we proposing?

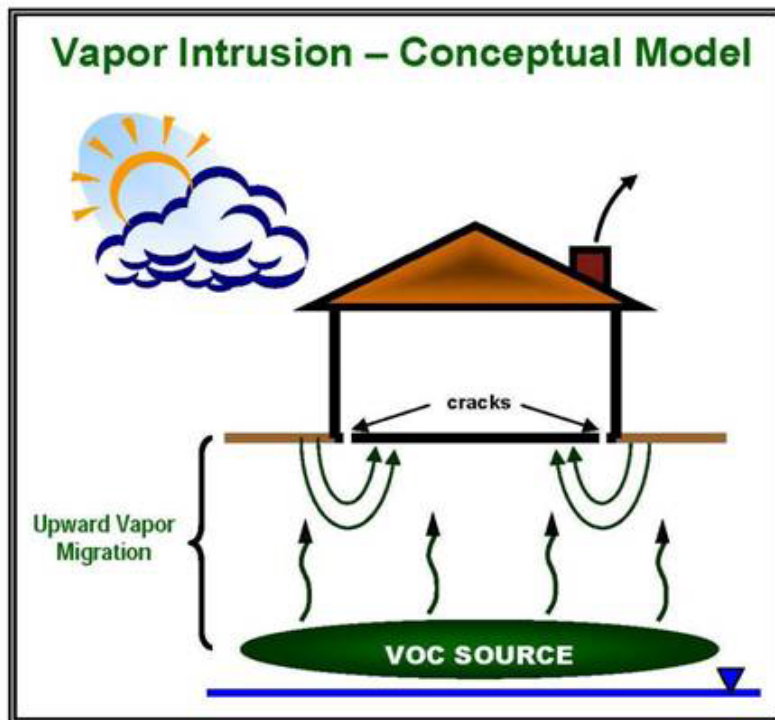
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- Adding vapor intrusion protections to the regulations
- Lowering (making more stringent) the VOC standard for TCE and adding its daughter products (DCE)
- Changing GW Standards to Drinking Water Standards
- Clarifying Abatement Language
- Raising Permitting Fees
  - (GWQB is largely General Fund-dependent and has suffered cuts of 40% in the last few years).
  - Approximately 10% of our permitting program costs are covered with fees
- Adding the regulatory oversight of Geothermal
- Adding technology based (electronic notifications) provisions to the public notice requirements



# What is Vapor Intrusion ?

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- VI is the migration of contaminants from the subsurface into buildings
- Almost always a chlorinated solvent like PCE or TCE
- Usually emanating from a former dry cleaner, auto repair, or semiconductor type of degreasing facility
- Petroleum products can create VI, but it's very rare



Department of Toxic Substances Control  
California Environmental Protection Agency





# Why do the standards need updating?

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- New Mexico groundwater standards for PCE and TCE were promulgated in 1982
- As scientific evidence grows, the regulatory climate and standards often change.

## Current NM Groundwater Standard

- ▶ PCE – 20 ug/L
- ▶ TCE – 100 ug/L

## Current EPA Drinking Water Standard

- ▶ PCE – 5 ug/L
- ▶ TCE – 5 ug/L



# How have we involved the public?

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- Ground Water Quality Bureau has conducted five public meetings.
  1. Initial meeting in Santa Fe
  2. Four “listening sessions” in Las Cruces, Farmington, Roswell, and Albuquerque
  3. One 30 day public comment period
  4. One 60 day public comment period





QUESTIONS?

