South Dakota’s Abandoned Underground Storage Tank Removal Project

Terry Florentz, P.E.
Department of Environment and Natural Resources
The Problem?
In 1999, a pilot study was completed on 10 tank sites across South Dakota.
Abandoned Tank Project

What is it?

- A voluntary program passed in the 2000 legislature that authorizes the DENR to remove eligible abandoned UST’s and pay for the removals and any necessary cleanup by utilizing South Dakota’s Petroleum Release Compensation Fund (PRCF).

- All tanks containing petroleum fuels were already eligible for reimbursement funding from the PRCF.
What tanks are eligible?

- Abandoned petroleum tanks located at commercial operations taken out of service before April 1, 1988.

- Abandoned petroleum tanks located at non-commercial operations.

- Heating fuel and used oil/waste oil tanks at any location.
What tanks are ineligible?

- Abandoned petroleum tanks used for retail fuel storage after April 1, 1988.
- Inaccessible tanks.
- Properly abandoned tanks filled with an inert substance.
- Non-petroleum tanks.
- Aboveground tanks.
Finding Tanks

- Mass mailings to local communities including county Spruce Up South Dakota coordinators.
- Newspaper ads.
- Press releases.
- Contractors and environmental consultants.
- State employees tank search.
Petroleum Release Compensation Fund (PRCF) investigators visit each site to verify the presence of tanks, accessibility, and fluid levels.
Trials and Tribulations

- Bitten by a horse.
- Chased (and almost rammed) by a goat.
- Dog in the van.
- Cats in the truck (had to use tape measure to coax them out).
- Chased out of a pasture by a bull.
- Swarmed and stung by bees.
Tank Removals

- Excavation contractors originally bid on several sites within a city or county. In recent years, some bids have been for a few sites in a multi-county area.

- Paid according to agreed upon unit prices:
  - tank removal.
  - Backfilling.
  - contaminated soil.
  - tank decommissioning and disposal.
Environmental Consultants

- Environmental consultants under contract with our Department submit work plans using agreed upon hourly rates to perform:
  - Project direction, removal of tank fluids, soil segregation, environmental sampling, compaction testing, technical assistance, and reporting.
Problems

- Tank disposal,
- Contractors not paying their subcontractors or state excise tax,
- Need for speed prohibited us from getting site specific information,
- It was difficult to get all tanks signed up in the city while the contractor was there, and
- Contractors hit everything.
July 1, 2019 Statistics

- 4,750 tanks removed at 3,223 sites
- Withdrawn sites - 280
- Clean sites - 1,717
- Contaminated sites with releases from tank systems - 1,506
Release Sites

- Contaminated sites closed based on no current risk - 1,480
- Contaminated sites with pending risk evaluation, assessment, or cleanup - 26
- Fluids Removed = Approximately 1,700,000 gallons (includes water)
- Soil Removed = Approximately 20,000 cubic yards
Petroleum-Hydrocarbon Contaminated Sites

- Reported releases at 1,506 of the 3223 sites where tanks were removed.
- South Dakota adopted the Risk-Based Corrective Action approach in 1995.
- Early days of the program were affected by political pressure to “get the tanks out” with limited resources allocated to assess contaminated sites. Quick decisions were made to determine which sites would be thoroughly assessed.
Project Costs to Date

- Total Invoiced Cost through Dec, 2001 = $3,635,000
- Total Invoiced Cost through Dec, 2013 = $9,496,306
- Total Invoiced Cost through July, 2019 = $11,313,556
- Estimated pending assessment and cleanup costs for “Open” release sites = $400,000
Project Costs
July, 2014 through June, 2019

- Total Invoiced Cost past five State Fiscal Years = $1,669,641
- Sites with invoiced costs past five State Fiscal Years = 292
- Average Invoiced Costs past five State Fiscal Years = $5,718 per site
- Most of the highly-contaminated large release sites were signed up in the first few years of the program.
Why We Do It

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Why We Do It

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- Every time we remove a tank with product remaining in the tank we have averted a potential future emergency when the tank inevitably fails and release the product to the environment.
- We still have places like this with potential for damage from the underground storage tanks.
Translation to Other Locales

- Package several sites to get quantity pricing. Reduces uncertainty and travel/mobilization costs.
- Clearly define site eligibility and the potential cost to the owner.
- View future economic development as an offset to project costs.
For more information

1-800-GET-DENR (1-800-438-3367)

Email Questions to DENR at: DENRINTERNET@state.sd.us

email me at Terry.Florentz@state.sd.us