TerranearPMC Team

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  - 610-659-0663

- **Katie Roberts, Public Outreach Liaison**
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- **Peter Gram, Program Manager, Senior Geologist**
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- **Eric Klingel, Drilling Site Testing Manager, Ph.D, PG**
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- **Bruce Gryniewski, Public Communications & Media**
  - BruceG@gallatinpa.com
  - 206-696-7971
Advisory Board Members

- The purpose of the Advisory Board is to enhance trust with local stakeholders, ensure effective education and communication and provide their extensive experience related to DOE projects.

- **Peter Lyons, Chair**
  - peterlyons4@gmail.com

- **Margaret Chu, Member**
  - msychu@gmail.com

- **Keith Klein, Member**
  - kklein@longenecker-associates.com
Subject Matter Experts - NM Research Institutions

➢ University of New Mexico
  • Karl Karlstrom
  • kek1@unm.edu

➢ NM Tech
  • Shari Kelly
  • shari.kelley@nmt.edu

➢ NM State
  • Jeff Amato
  • amato@nmsu.edu
R&D Considering Multiple Disposal Alternatives

- Mined Repositories in Crystalline Rocks
- Mined Repositories in Bedded Salt (WIPP)
- Mined Repositories in Bedded Clays
- Deep Boreholes in Crystalline Rocks (least developed)
  - Deep Boreholes considered for disposition since 1950s
  - Crystalline basement rocks are common
  - DOE waste only - NOT Commercial Used Fuel
  - Only suitable for small waste forms
Evaluating the Feasibility of Deep Borehole Isolation

Characterization Program

- Design, drill, and construct Characterization Borehole
- 5km deep, straight and vertical, with 8.5-inch completion diameter
- Develop and Test engineering solutions to drilling challenges
- Evaluate presence of fluids, fractures, and fluid movement in deep subsurface (if any)
- Develop testing methods and instrumentation for deep subsurface testing
- Fresh water not expected at depth due to effective aquitards
- Turner State #1 Well: no water or aquifers noted below 1055 ft. depth
Location of the Proposed Research Site

- Allows evaluation of drilling and testing technologies under anticipated/required conditions
- In proximity to drilling resources of Permian Basin oil field
- Sufficient permitted and existing water supply to support the project and enduring research
- Flat, accessible terrain
- Limited impact to residents
Potential Benefits to Otero County and NM

- Enduring research opportunities provided for institutions of higher education, such as New Mexico Tech, University of New Mexico, and New Mexico State—all of which are on the TerranearPMC team; opportunity for local high schools (STEM)

- Approximately $3 to $4 million in subcontracting work available for local vendors and construction contractors, including Otero County small and disadvantaged businesses
  - Site construction: roads, power, water transport from existing permitted wells, septic, trailers, fencing
  - Site services: food service, supplies, maintenance, fuel, security, non-hazardous waste disposal

- Local jobs (~20-25): employment for site support staff

- Internship and scholarship opportunities provided for local high school and college students
Our Commitment to Safety, Quality and Environmental Protection

➢ **Priority #1:** Establish safe research site and preserve local environment and quality of life in Otero County
  • Create environmental protection plan for the site
  • NEPA Environmental Assessment
  • Selected site without sensitive land uses, preserves or wetlands
  • Selected site that offers no chance for impact on groundwater supply

➢ **Proven Track Record**
  • **Zero** accidents, no recordable injuries, no lost time in last 5 years
  • 24/7 deep well program at LANL with no injuries or lost time—ever
  • Proven ability to seal off shallower groundwater and perched water to protect well integrity and groundwater supply
  • No environmental releases on any of our projects
  • 100% compliance with NMED requirements
Our Commitment to Factual Public Education

- Discussions with Otero County Commissioners dating to September 2015
- Initial meetings with Mayor and County Commission Jan 12: days after contract award
- Neighboring ranchers January 24, follow-up February 9
- City Commission January 31
- County Commission February 9, April 13
- Public meetings March 14-16: Alamogordo, Timberon and Weed
- White Sands Rotary Club March 16
- Alamogordo Rotary Club April 12
- Business Impact / Government Relations Meeting April 11
- Mayor of Carlsbad / Carlsbad Nuclear Task Force April 13
- Commitment to open communications for full length of project
- Offering to pay for independent oversight reporting to Otero County Commissioners
DOE Phased Award and Schedule (Dates are approximate)

- **Phase 1 Public Outreach: Jan-May 2017**
  - DOE “downselect” may eliminate a site

- **Phase 2 Permitting and Draft Work Plan: May-Aug 2017**
  - DOE “downselect” to 2 or 3 sites: Aug 2017

- **Phase 3 Final Work Plan: Aug-Nov 2017**
  - DOE “downselect” to one site (other site(s) kept available as backup for 6 months)

- **Phase 4 Drilling and Testing: Jan 2018-Apr 2019**

- **Phase 5 Site Closure and Restoration or Continuation**
  - May continue with 17” Test Borehole
  - May close and restore
  - May transition to University for further research
We need your support to bring this work to NM

- **DOE sees public support as a key criteria to continue with their chosen site**
  - Letters of support from government officials, local business leaders, general public
  - Comments to website or letters of support from the general public
  - Supporters need to be heard—not only opposition
  - Signatures on Petition

- **Already offering support**
  - Representative Steve Pearce
  - State Senators Ron Griggs and Bill Burt
  - State Representatives Yvette Herrell, Jim Townsend, Rick Little and Zack Cook
  - New Mexico Research Institutions: UNM, NM State, and NM Tech
  - Otero County Economic Development Council
  - Building Contractors Association of Otero County
  - Carlsbad Mayor, Dale Janway and Carlsbad Nuclear Task Force