

U.S. EPA Releases Report Evaluating Disa's High-Pressure Slurry Ablation System as a Viable Technology for Treatment of Abandoned Uranium Mine Waste

DISA TECHNOLOGIES, INC.

Casper, Wyoming – [Disa Technologies, Inc.](#) (Disa), an innovative materials liberation company, announced the public release of a U.S. Environmental Protection Agency (USEPA) and Navajo Nation Environmental Protection Agency (NNEPA) sponsored study titled “High-Pressure Slurry Ablation Treatability Study Report” (Report). The Report evaluated High-Pressure Slurry Ablation (HPSA) technology’s ability to remove metals and radionuclides from waste at Navajo Abandoned Uranium Mine (AUM) sites on Navajo Nation lands.

“We are excited to demonstrate that HPSA technology is a viable technology for treatment of the AUM waste,” says Greyson Buckingham, CEO and Co-Founder of Disa. “We have been working on AUM remediation efforts with the Navajo Nation for the past five years and are very grateful for the support we received from the U.S. EPA, Navajo Nation EPA, and other key stakeholders to conduct this study.”

“We look forward to continuing this important work, playing a vital role in cleaning up the public health threat these AUMs pose to surrounding communities, and finally making progress to address this longstanding issue,” says John Lee, COO and Co-Founder of Disa. “At present, we are engineering and constructing a full-scale commercial unit specifically for these sites that will be easily deployable and available this summer (2024).”

“The Navajo Nation EPA welcomes the promising results found in the High-Pressure Slurry Ablation Treatability Study Report. We look forward to partnering with companies, like Disa, in using innovative, remedy-optimizing technology to remove uranium waste effectively and economically from our Navajo lands,” says Stephen Etsitty, Executive Director of Navajo Nation Environmental Protection Agency.

Throughout the U.S., there are an estimated 15,000 AUM sites, many of which are on Tribal lands. On the Navajo Nation specifically, there are 523 AUM sites. For decades, the only option to remediate these sites has involved trucking 100% of the AUM waste to offsite disposal locations or capping the contaminated AUM waste, which poses challenges that many communities have thus far been unable to overcome. However, innovative technologies like HPSA are providing new opportunities to cleanup these sites that have burdened communities for decades. The Report reveals that HPSA, using a mechanical, chemical-free process, can economically and effectively separate uranium and other constituents of concern from mine waste material. Specifically, the Report demonstrated that:

- Waste rock material treated with HPSA had up to a 98 percent reduction in the concentration of uranium and up to a 93.5 percent reduction in the concentration of Ra-226;
- The treated material does not leach metals or radionuclides above water quality standards and can be disposed of onsite without the need to cover to protect surface water or groundwater;
- The concentrated waste material requiring offsite disposal was as low as 17 percent of the original waste volume, providing up to 83 percent reduction of the original waste volume; and
- HPSA treatment is an estimated 61 to 70 percent more economical than hauling and disposing of material offsite.

Disa is currently engaging and working with Chapter Houses across the Navajo Nation. Community leaders have asked questions and voiced support of this innovative technology to remediate AUMs.

The Report can be found on US EPA’s website: [Treatability Study: High Pressure Slurry Ablation at Three Navajo Abandoned Uranium Mines](#)