

From: [Linton, Ron](#)
To: [Tsosie, Bernadette](#)
Cc: [Kuhlman, Alison \(CONTR\)](#); [Traub, David \(CONTR\)](#); [Johnson, Dick \(CONTR\)](#); [Tigar, Aaron \(CONTR\)](#)
Subject: RE: Bluewater NM Disposal Site - Aeolian Deposition - Radon Barrier
Date: Thursday, June 06, 2019 10:35:00 AM
Attachments: [image004.png](#)

Bernadette:

Thank you for the notification of the study. NRC requests that we receive a copy of the work plan for reference, if you have one. We do not have any additional comments and look forward to receiving the final results of the study.

Thank you.

Ron C. Linton, Project Manager
U.S. NRC
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From: Tsosie, Bernadette <Bernadette.Tsosie@lm.doe.gov>
Sent: Wednesday, June 05, 2019 6:47 PM
To: Linton, Ron <Ron.Linton@nrc.gov>
Cc: Kuhlman, Alison (CONTR) <Alison.Kuhlman@lm.doe.gov>; Traub, David (CONTR) <David.Traub@lm.doe.gov>; Johnson, Dick (CONTR) <Dick.Johnson@lm.doe.gov>; Tigar, Aaron (CONTR) <Aaron.Tigar@lm.doe.gov>
Subject: [External_Sender] Bluewater NM Disposal Site - Aeolian Deposition - Radon Barrier

Ron,

Thank you for speaking with us on the phone. As discussed DOE-LM is planning to conduct an Aeolian deposition study at the Bluewater, New Mexico, Disposal site beginning the week of June 24th, 2019. 10 CFR 40.28(c)(5) requires that DOE "Notify the Commission prior to undertaking any significant construction, actions, or repairs related to the disposal site, even if the action is required by a State or another Federal agency." While DOE-LM does not consider this to be a significant action, DOE-LM wanted to ensure that NRC was aware of the planned study and had the opportunity for voice any concerns.

DOE-LM is proposing to perform a study of aeolian deposits at the Bluewater disposal site. Aeolian dust is filling the interstitial spaces in rock riprap layers that were designed to control wind and water erosion on the disposal cells. The study will evaluate how natural processes are changing the engineering properties of disposal cell covers. Information from this Applied Studies and Technology (AS&T) study will help inform long-term surveillance and maintenance decisions.

The study will adhere to the AS&T Investigation of Aeolian Deposition In the Rock Riprap Cover Work Plan. Study area testing will occur at select on-site locations, both on the main and carbonate tailings disposal cell covers, and at previously undisturbed analog locations. A map showing the proposed study areas is included with this email. Minimal off-cell ground disturbing activities will occur. All work will be performed using hand-powered tools (shovels, rakes, etc.) only. The work will entail:

- Conducting field observations, data gathering, and photographing;
- Selecting specific study locations;
 - Evaluating the content of the existing dust traps on the main tailings disposal cell cover;
 - Constructing approximately 10 small test pits (approximate size 3 feet (ft) by 3 (ft) and approximately 9 large test pits (approximate size 3 ft by 15 ft). The depth of the test pits on the cell covers will be limited to the thickness of the riprap (approximately 4.5 inches). The depth of the test pits in the analog locations will be limited to approximately 12 inches below ground surface. Only small test pits (approximately 2) will be constructed in the analog area. Although disposal cell radon barrier material will be sampled as part of the study, the radon barriers will not be fully penetrated nor will radiological material be encountered. The rock/soil layer morphology and ecology will be characterized while the test pits are being constructed. Once work in a test pit location is complete, temporarily moved riprap or soil matrix will be redistributed across the test pit location to restore each test pit to its original condition.
 - Collecting a pair of puck samples, 2 inch diameter × 2 inch deep, from each test pit directly underneath the rock armor from the radon barrier or analog soil for bulk density characterization. A 500-milliliter (mL) sample of dust and a 500 mL near-surface radon barrier sample will be collected from each test pit for laboratory analysis. The radon barrier material removed will be replaced with suitable material from onsite stockpiles that meets the original design specifications and will be compacted to the original design specifications. Analog soil will be redistributed to near the original condition.
 - Chemical, physical and biological characteristics of the collected aeolian soils and near surface barrier materials will be analyzed.

Vehicle travel, including all-terrain vehicles, will occur on established roads and tracks to the extent possible. Only UTVs will be used on the disposal cells. On-site refueling of vehicles or equipment is not permitted for these activities.

Results of the study will be documented in a report and provided to NRC for reference.

This work is currently planned to begin the week of June 24, 2019 and extend through the week of July 1, 2019. As such any comments, questions, or concerns regarding this work would be appreciated in a timely manner. If no response is received, work will continue as planned.

Thank you,

Bernadette Tsosie

Site Manager

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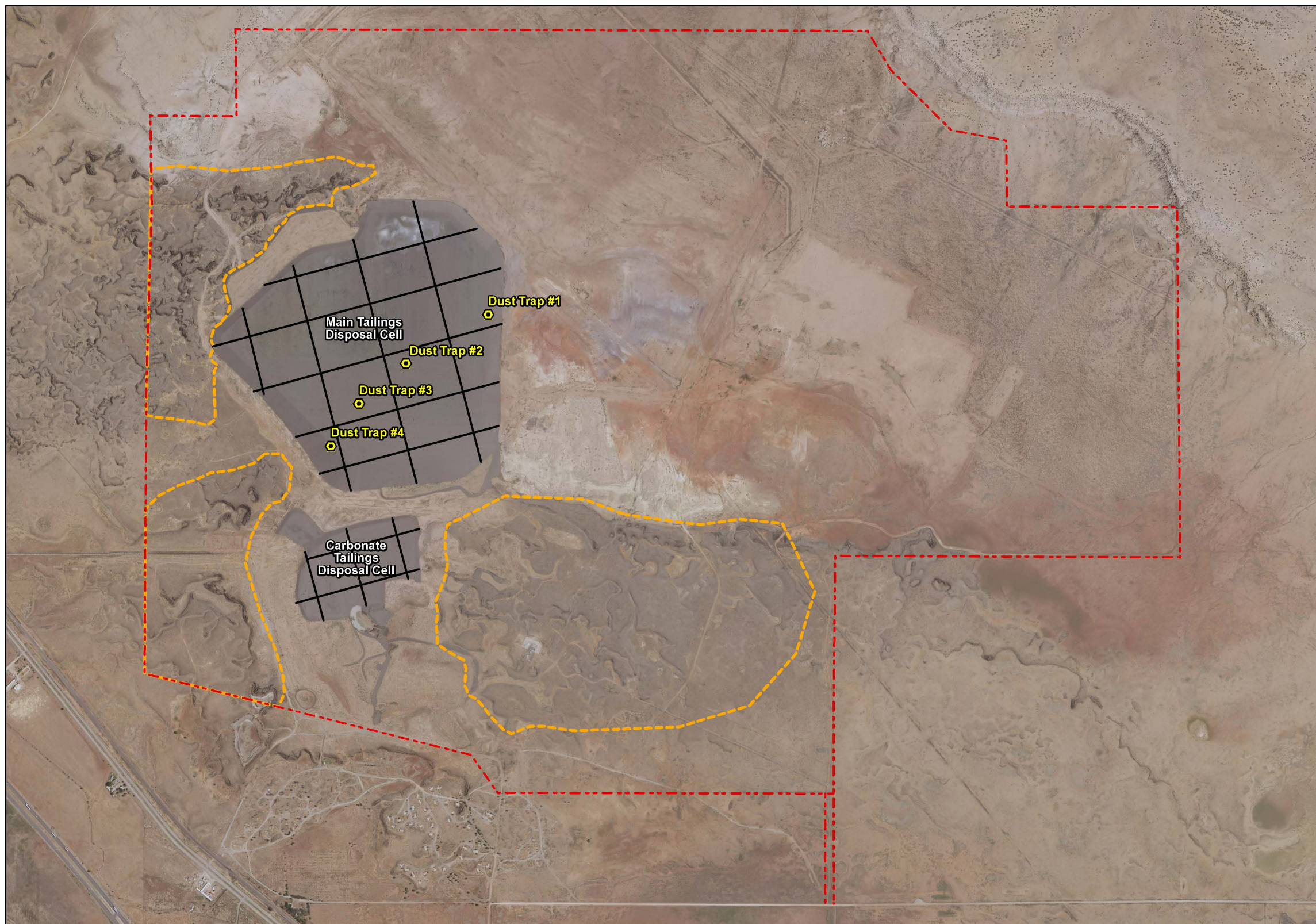
202.617.6055 –c





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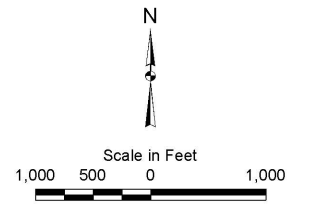
Legacy
Management





Legend

-  Dust Trap Location
-  Potential Transect
-  Potential Analogue Study Areas
-  Site Boundary



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Work Performed by
Navarro Research & Engineering, Inc.
Under DOE Contract Number DE-LM0000421

**Proposed Study Plan
Bluewater, NM, Disposal Site**

DATE PREPARED:
May 7, 2019

FILE NAME:
S2503400