Northern New Mexico Citizens' Advisory Board Meeting

July 16, 2025
1:00 p.m. to 4:00 p.m.
Virtual Meeting
Minutes

Meeting Attendees

Department of Energy

1. Sarah "Ellie" Gilbertson, Deputy Manager, Environmental Management Los Alamos
2. Kelly Snyder, Designated Federal Officer, Office of Environmental Management
3. John Evans, Environmental Management Los Alamos
4. Allison Scott Majure, Environmental Management Los Alamos
5. Robert Reine, Environmental Management Los Alamos
6. Jeff Silvera, Environmental Management Los Alamos
7. Patrick Moss, Deputy Director, National Nuclear Security Administration, Los Alamos Field Office

NNMCAB Members

1. Eleanor Bravo
2. Danielle Duran
3. Mark Hayden
4. Abbey Hayward
5. Beverly Martin
6. Stephen McLaughlin
7. Arlina Sanford
8. Joseph Villegas

NNMCAB Staff/Support

1. Bridget Maestas, Executive Director
2. Yolanda Valdez, Executive Assistant

Guests

1. David Ableson, N3B
2. Wayne Barber, Exchange/Monitor Publications, Inc.
3. Adam Barras, N3B
4. Warren Baugh, Tetra Tech
5. Theresa Bonelli, Environmental Management Los Alamos
6. Amanda Caudillo, Environmental Management Los Alamos
7. Jordan Caylor, N3B
8. Peter Dillon, Tetra Tech
9. Erich Evered, N3B
10. Elena Fernandez, Public
11. Stephanie Gallagher, Environmental Management Los Alamos

12. John Gonsky, Tetra Tech
13. Jennifer Green, Los Alamos National Laboratory
14. David Gutowski, Defense Nuclear Facilities Safety Board
15. Jennifer Hart, Industrial Economics, Incorporated (IEc)
16. Joel Hebdon, N3B
17. Luciana Vigil-Holterman, Los Alamos National Laboratory
18. Kristin Henderson, N3B
19. Don Hickmott, N3B
20. Bob Hull, Public
21. Catherine Juarez, Los Alamos National Laboratory
22. Deborah Kerrigan, N3B
23. Amanda Kennedy, Environmental Management Los Alamos
24. Scott Kovac, Nuclear Watch New Mexico
25. Dallas Mahoe, Environmental Management Los Alamos
26. Angela Martinez, Los Alamos National Laboratory
27. Caitlin Martinez, New Mexico Environment Department
28. Renee Martinez, Environmental Management Los Alamos
29. Beau Masse, New Mexico Environment Department
30. Christian Maupin, N3B
31. Thomas McCrory, Environmental Management Los Alamos
32. JohnDavid Nance, New Mexico Environmental Department
33. Rebecca Ortiz, Environmental Management Los Alamos
34. Aubrey Pierce, Environmental Management Los Alamos
35. Joe Ritchey, Environmental Management Los Alamos
36. Vince Rodriguez, N3B
37. Lucia Ross, N3B
38. Brad Smith, N3B
39. Sarah Voorhees, Environmental Management Los Alamos
40. Elicia Williams, Environmental Management Los Alamos
41. Sasha, Public

Minutes

I. Call to Order

The meeting of the Northern New Mexico Citizens' Advisory Board (NNMCAB) was held on July 16, 2025, in a virtual format. The meeting of the NNMCAB was called to order at 1:00 p.m. Ms. Kelley Snyder presided over the meeting.

Mr. Patricio Pacheco, Chair and Mr. Manuel L'Esperance, Vice-Chair, were not in attendance. Ms. Beverly Martin, Chair of the Risk Evaluation and Management Subcommittee, presided over the meeting.

The meeting of the NNMCAB was posted in the *Federal Register* in accordance with the Federal Advisory Committee Act.

II. Establishment of a Quorum (Roll Call)

At the call to order, seven NNMCAB members were online, and a quorum was established.

III. Welcome and Introductions

Ms. Kelly Snyder introduced herself as the Designated Federal Officer (DFO) and an Environmental Management Headquarters Employee. Ms. Snyder stated that she was present to answer any questions the members may have, and she looked forward to an informative meeting.

Ms. Martin requested that board members online introduce themselves.

IV. Approval of Agenda

The board reviewed the agenda for the July 16, 2025, meeting.

Ms. Abbey Hayward made a motion to approve the agenda. Ms. Eleanor Bravo seconded the motion. The agenda was approved.

V. Old Business

a. Update from Chair/Vice-Chair

Chairman Pacheco and Vice-Chairman L'Esperance were out on travel and were not available to provide an update.

VI. New Business

a. Appointment of Nominating Committee

Ms. Martin stated that volunteers for the NNMCAB Chair and Vice-Chair nominating committee were needed. Volunteers will call each board member and inquire about their interest in running for Chair and Vice-Chair. Ms. Danielle Duran volunteered to be on the committee, and Mr. Joseph Villegas stated that he would offer support.

VII. Update from the New Mexico Environment Department

Mr. JohnDavid Nance introduced himself and stated that he is the Hazardous Waste Bureau Chief for the New Mexico Environmental Department (NMED).

Consent Order – Mr. Nance stated that the NMED and the Department of Energy (DOE) are working on executing requirements from the 2024 Modified Consent Order. Negotiations are currently taking place concerning the five-year expanded schedule and the campaign completion with the added completion dates. DOE submitted its first proposed Appendices A, B and C under the provisions of the Modified Consent Order. DOE and NMED will hold regular meetings to ensure that the appendices are finalized no later than September 30, 2025, per the settlement agreement. Upon completion DOE and NMED will jointly host a public meeting to present the changes. NMED continues to review and issue decisions for Certificate of Completion (COC) requests from DOE. A total of 159 sites have been reviewed since the settlement agreement was signed last September.

Groundwater (Chromium Plume) – SIMR-3 is the next proposed groundwater monitoring well for completion. The goal of the well is to evaluate potential contamination on the

Pueblo de San Ildefonso lands, south of the injection well locations. Drilling of that monitoring well will begin in the next month or two.

Chromium Interim Measures - NMED and DOE participated in an Independent Technical Review (ITR) for the Hexavalent Chromium Project. NMED and DOE are now in negotiations on implementing a path forward. NMED will require revisions to the Interim Measures (IM) and the Characterization Work Plan. This would include a proposal for a higher capacity injection location, monitoring wells to adequately characterize the plume under the IM and modifications to the groundwater model. NMED offered to provide comments for the draft language to facilitate that approval and are working with DOE through that process. A deadline for that Work Plan will be addressed as a part of the negotiations of the Consent Order appendices.

DOE has acted on the approval to resume partial IM operations and has been running the IM pump and treat system since September 30, 2024. NMED will continue to monitor the concentrations around the plume and will consider adjustments or any expansion of the authorization.

Corrective Action Document – NMED issued a Statement of Basis for Material Disposal Area (MDA) C and received three requests for a public hearing during the public comment period. The three requests came from Triad, Environmental Management Los Alamos (EM-LA)/ N3B, and Nuclear Watch New Mexico. The parties are now preparing for a public hearing that is tentatively scheduled for early 2026. DOE submitted a notification to NMED for the deferment of corrective action at MDA C on June 18, 2025. The intention was to change the status of MDA C to a deferred site due to active facility operations. NMED provided a response on July 2, 2025, clarifying that MDA C is not eligible for that change of status. NMED did assert that the public participation had been facilitated and the change of status at this point in the final remedy selection would unjustly diminish the public involvement received. It was also noted that a change of status was previously requested and denied in 2023. Therefore, submitting a change of status under the terms of the Modified Consent Order directly disregards the regulatory direction previously provided. NMED is proceeding with the public hearing on the final remedy selection in early 2026.

Permit Related Activities –Los Alamos National Laboratory (LANL) submitted their permit renewal application to NMED on July 10, 2025. LANL is expected to provide permittee responses to the Hazardous Waste Bureau comments that were developed during the administratively complete process. NMED has several concerns, and the Hazardous Waste Bureau is awaiting responses to the concerns. DOE is expected to provide supplemental information requested for permitting open burning and open detonation units. NMED and DOE have taken part in several meetings and have intentions to come to an agreement upon resubmission of the application. The application includes a Class 3 Permit Modification that changes the status of 19 sites to Corrective Action Complete.

NMED issued a response to the temporary authorization request for the treatment of Flanged Tritium Waste Containers. There was significant public interest that was related to this request by DOE. NMED responded with several criteria prior to consideration of the temporary authorization. The four components include obtaining an ITR of the process that DOE intends to follow, holding a public meeting for interested stakeholders prior to the activity, tribal consultation, and a hazardous waste compliance audit on hazardous waste management operations on the site. DOE has responded and initiated a dispute resolution per the permit requirements.

WIPP Update –Regarding WIPP community forums, the last Community Forum was held in Carlsbad on April 30, 2025. The next forums scheduled to take place are in Hobbs on July 30, 2025, and tentatively in Artesia in October. The forums are held virtually and in person.

Repository Sighting Annual Report (Permit Part 2 Section 2.14.3) - On June 16, 2025, NMED issued a letter to the WIPP permittees with suggestions to improve the 2025 Annual Repository Sighting Report. NMED did indicate that improvements can be made in the next Annual Repository Sighting Report due on December 31, 2025.

Legacy TRU Waste Disposal Plan – On May 21, 2025, NMED submitted a letter to WIPP permittees requesting certain improvements to the Legacy Transuranic (TRU) Waste Disposal Plan. The improvements are based in part on comments received during the comment period that ended on January 3, 2025, and extended 30-days thereafter. NMED also requested a response by November 30, 2025, on the requested improvements to that plan.

Shipment Update – From January 1, 2025, through July 9, 2025, there have been 185 total shipments to WIPP: 136 from Idaho National Laboratory; 24 from LANL; 22 from Savannah River Site; 3 from Oak Ridge National Laboratory. Argonne National Laboratory and Lawrence Livermore have not had shipments.

a. Questions

Mr. McLaughlin stated that he submitted a letter to NMED raising certain concerns about the approach to the remediation of the plume and asked if a response would be issued.

Mr. Nance stated that he would review the letter and provide an update at a later date.

Mr. Hayden asked how the fire risk in the above ground stored waste is being addressed with the drought and the budget cuts to the Bureau of Land Management.

Mr. Nance stated that a large amount of public outreach has been sent to the Governor's Office and NMED and DOE have been evaluating the area for mitigation. The domes that store the above ground waste contain an aluminum frame structure and the walls are coated with a polyvinyl chloride (PVC) coated and sprayed with retardant.

Ms. Ellie Gilbertson stated that fire protection does not fall under NMED's jurisdiction, and she will be covering fire mitigation in her portion of the meeting. Ms. Gilbertson also provided a reminder that the scope of the NNMCAB is focused on Northern New Mexico and not the southern portion of the state.

Ms. Duran asked for the dates of the revisions to the work plan for the Hexavalent Chromium Plume and if there is an estimated date on when information would be provided on the plume and its boundaries.

Mr. Nance stated that the work plan is currently under negotiation with DOE as part of the Consent Order five-year schedule and it should be finalized by September 30, 2025. SIMR-3 is strategically placed in a critical location and is a data point on the southern area of the chromium plume. Each well takes about nine months to drill and about a year to be completely drilled.

Ms. Caitlin Martinez stated that well SIMR-3, R-79 and R-80 are permitted and will be drilled as soon driller availability can migrate around the site. Upon completion of the SIMR-3, the drilling of R-80 will take place within the next year.

Mr. McLaughlin asked for the depth of the wells.

Mr. Nance stated that the wells are roughly 1000 feet.

Ms. Martin asked if the plume was still drifting.

Ms. Martinez stated that during the time the IM was nonoperational, natural migration took place. NMED monitored the boundary wells that were on the peripheral of the plume and around and no significant migration was noted.

Mr. Hayden asked for the status of a failed well that was drilled in the vicinity of the chromium plume.

Ms. Martinez stated that the R-73 well was plugged and abandoned due to the Office of the State Engineer's protocols. NMED and DOE have been in discussions on a replacement well.

VIII. Update and Look Ahead from N3B

Mr. Brad Smith stated that he would be discussing Consent Order milestones, Corrugated Metal Pipe (CMP) status and summer sampling.

Milestones- Mr. Smith stated that each year NMED and DOE agree to milestones under the Revised Consent Order. Eleven milestones were agreed upon for Fiscal Year (FY) 25 and N3B has completed six ahead of schedule. Milestone 11, which was a Phase 2 investigation work plan for the Lower Sandia Canyon Aggregate Area, was due in the fourth quarter but was completed in the third quarter. The Interim Facility Wide Ground Monitoring Plan (IFGIMP) Milestone 1 identifies the sampling frequency monitoring groups and analytes are on track. Milestone 3 is a report of the aquifer testing of the regional aquifer monitoring Well R-42. Its purpose is to document the completion of aquifer testing for the hexavalent chromium monitoring well. Milestone 8 is the periodic monitoring report for the 2024 vapor sampling at MDA C. The report summarizes the vapor phase volatile organic compound sampling data. Milestone eight is also on track. Milestone 10 is a periodic monitoring report for the 2024 vapor sampling and soil vapor extraction at MDA L Solid Waste Management Unit 54-00006 at Technical Area (TA) 54. The report summarizes the vapor phase, and its data is currently under analysis.

Corrugated Metal Pipes- Retrieval of the 158 CMPs was completed in September of 2024. Size reduction was completed in December of 2024. Each pipe was cut into five sections for loading into standard waste boxes for shipment and disposal to WIPP. A total of 792 will be shipped over the campaign period. The first shipment took place in May of 2025. As of July 4, 2025, 13 waste boxes have been shipped and a steady schedule of shipments is anticipated.

Sampling- Due to the wet monsoon season N3B has been reviewing their sampling protocols. Water samples are approximately 54% of the samples taken, soil samples are 37% and vapor samples are 9%. The sampling produces information on the presence and

absence of certain constituents, the potential impacts and what actions might need to be taken. N3B has taken 50,000 samples since the contract started.

a. Questions

Ms. Bravo asked if the 50,000 samples were taken at different depths and if those samples included surface water samples.

Mr. Smith stated that the samples are at different depths and parsed into groundwater and surface water. Surface water has protocols that consist of the amount of rainfall that will trigger crews to go out and sample.

Ms. Martin asked where the samples are taken to analyze.

Mr. Smith stated that samples are tested on site but N3B does have approved laboratories that samples may be sent to.

IX. Update from EM Los Alamos Field Office

Consent Order- Ms. Ellie Gilbertson stated that EM-LA is working directly with NMED on the FY26 planning process for the Consent Order. The planning includes five-year schedules for the Class A campaigns. EM-LA submitted appendices A, B and C to NMED on June 30, 2025, and are awaiting their response. As part of the annual planning process EM-LA revised appendices A, B. and C. Appendix A is the list of solid waste management units and areas of concern. Appendix B is the list of milestones and C is the list of cleanup campaigns. An agreement with NMED is anticipated by September 30, 2025. The final appendices and the five-year schedule will be made available on both the EM-LA and NMED websites following final approval.

MDA C- On June 18, 2025, EM-LA notified NMED that they will be deferring actions for solid waste management unit 50009 in MDA C. This is an 11.8 area location located in TA-50. It contains uncontaminated classified materials, metals, unhazardous waste constituents and some radioactive contaminated materials. MDA C is being deferred due to it being an active facility operation located on LANL property. In accordance with section 11C of the Consent Order EM-LA is deferring MDA C from further corrective actions until it is no longer associated with active facility operations. On June 18, 2025, EM-LA contacted the four accord pueblos and Los Alamos County to offer a conferral with DOE regarding the change of status on MDA C. DOE has certified that deferral of MDA C is not anticipated to result in an imminent or substantial endangerment of health or human environment. Vapor and groundwater monitoring will continue to take place.

Soil Investigation- Soil investigation and remediation span numerous locations on and around LANL property. Per the 2024 Settlement Agreement with NMED. NMED is to review a total of 221 outstanding certificates of completion requests for solid waste management units and areas of concern. NMED issues Certificates of Concern if they concur that the corrective actions are complete for a solid waste management unit or area of concern. Of the 221 request NMED has completed 159 of those reviews to date and has issued 147 certificates of completion. Twelve requests were disapproved and EM-LA and N3B are

determining a path forward on the 12 requests. NMED is required under the settlement agreement to review and additional 62 pending COC's by September 30, 2025.

RCRA Permit- EM-LA and NA-LA are co-permit holders of the Resource Conservation Recovery Act (RCRA) permit. Jointly they have submitted Part A and B to the RCRA renewal application for the LANL Hazardous Waste Facility to NMED. The permit holders include NA-LA, Triad, EM-LA and N3B. The application retains EM-LA's corrective action completion petition which is a Class 3 permit modification request. This request was originally submitted on September 30, 2021. Per the New Mexico Administrative Code, NMED's review time for Class 3 permits is 270 days. That elapsed about 1,100 days ago so EM-LA is looking forward to NMED's prompt review and response.

Hexavalent Chromium Plume- The IM is running successfully at 24/7 operations. N3B and EM-LA are closely monitoring the system. Since the partial restart of the IM in 2024 the chromium concentration at and near the operational wells has shown a decrease. EM-LA and NMED are collaborating to evaluate the recommendations from the Expert Technical Review which will incorporate changes into how they will proceed with the Hexavalent Chromium Campaign. The driller for the new groundwater monitoring well on the Pueblo de San Ildefonso is on-site and will be conducting training. They will mobilize their drill rig, and drilling is expected by the end of the month.

Wildland Fire Preparedness and Mitigation- The amount of rain has assisted in short-term fire mitigation. The rain also prompts more undergrowth, which then adds fuel to fires when it dries. N3B and EM-LA are working to address this issue and prioritize waste shipments. The above ground TRU inventories that are not characterized or certified for shipment are stored in monitored fire resistant storage domes. Most areas are also equipped with fire suppression systems and there is an interface with LANL and the National Nuclear Security Administration regarding wildland fire mitigation strategies that can be implemented real time. EM-LA also has several administrative controls that reduce the number of combustible materials that may contribute to a fire. Area G has monthly inspections for combustible materials and vegetation and annual engagements are conducted with Triad to simulate a potential wildland fire and determine the response time.

a. Questions

Mr. McLaughlin asked if the material that is being treated to protect the sites where waste is stored has been exposed to a fire test.

Ms. Gilbertson stated that the material has gone through general testing and follows industry parameters.

Mr. Hayden asked if the trip to WIPP would take place this year.

Ms. Gilbertson stated that she was unaware if the trip had been scheduled.

Ms. Maestas stated that the trip will be deferred to March or April of 2026.

Ms. Martin asked if there would be a path forward for parts to be dug up in MDA C.

Ms. Gilbertson stated that very prescriptive protocols would have to be put in place with the contractor and its staff.

Mr. Villegas asked if firefighting foam was being utilized for fire protection.

Ms. Gilbertson stated that upon the release of the Per-and polyfluoroalkyl substances (PFAS) directive EM-LA immediately began evaluation of the firefighting techniques and no PFAS bearing foam will be utilized.

X. Presentation on "Royal Demolition Explosives (RDX) Campaign at Los Alamos National Laboratory"

Mr. Adam Barras presented on, "Royal Demolition Explosives (RDX) Campaign at Los Alamos National Laboratory." An electronic copy of the presentation may be obtained from the NNMCAB staff. (Yolanda.valdez@em.doe.gov or bridget.maestas@em.doe.gov)

Mr. Barras stated that the campaign is a groundwater plume that contains high explosives that are titled RDX. The RDX project is located in TA-16 on LANL property. The RDX Plume is the second groundwater contamination plume located on laboratory property. The plume is further away from municipal wells and is considered a lower risk to receptors. RDX is a Class C carcinogen that is mobile in groundwater. Remediation has been divided into surface, shallow groundwater and deep groundwater components. Characterization and monitoring are divided into surface/alluvial long-term monitoring and groundwater monitoring. Surface/alluvial long-term monitoring consists of IFGIMP sampling, cap inspections, maintenance and trends. Groundwater monitoring consists of IFGIMP sampling and an annual progress report. The future for the RDX deep groundwater plume is to plan for future regional monitoring wells to further characterize nature and extent of contamination. The surface water monitoring future consists of continuing monitoring, maintenance and reporting as prescribed in the Long-term Monitoring and Maintenance Plan.

Questions

Ms. Bravo asked if the plume affects wildlife or vegetation.

Mr. Barras stated that the surface is monitored for contamination.

Mr. Don Hickmott stated that in the early 90's and 2000's characterization of the surface systems took place. An ecological risk assessment was completed that sampled the biota including small animals and health of invertebrates. There were no signs of body burden explosives at unhealthy levels in any of the biota and the macro invertebrates were healthy as in any other ecological niches in the Pajarito Plateau.

Mr. McLaughlin asked if similar modeling had been completed on the chromium plume.

Mr. Barras stated that a similar model had been developed for the chromium plume. It is standard to develop a conceptual site model for hydrogeology for groundwater contamination.

Mr. McLaughlin asked if a risk assessment was completed on the RDX plume.

Mr. Barras stated that the Consent Order envisions that process as a part of the corrective measure's evaluation.

Mr. Smith stated that the information will be provided at a later date.

Mr. Hayden asked if testing had been done on wildlife in the vicinity.

Mr. Hickmott stated that no negative effects were noted in the population of creatures. There may have been a slight body burden in terms of barium but not explosives in some rodents sampled.

Mr. Hayden asked if testing had been done on all animals located in the area.

Mr. Hickmott stated that the Mexican Spotted Owl was a concern due to it nesting in the area. No negative effects were found.

Mr. Villegas asked if PVC or galvanized piping is utilized in the monitoring wells and what is the depth of the wells.

Mr. Barras stated that the well-casing is stainless steel. The depth of the wells can vary between 1,200-1,400 feet below the ground surface.

Mr. Villegas asked if the piping would remain in the ground after the completion of the project.

Mr. Barras stated that the wells will remain for monitoring after the project's completion.

Ms. Martin asked if the 260 outfall was remediated.

Mr. Barras stated that the soil in that area had been remediated.

Mr. Hickmott stated that there was an initial cleanup and interim measure in 2021. A few RDX hot spots were located on the confirmatory sampling and those spots were remediated.

Ms. Martin asked if the regional aquifer is getting contamination from the perched aquifer.

Mr. Hickmott stated that similar to the chromium plume the conceptual model shows that quite a bit of the contamination is held up in the beta zone in the perched aquifers and potentially in the macropores and fractures. The contamination in the upper systems is dripping into the regional aquifer.

Ms. Martin asked if an IM is being considered to halt migration.

Mr. Barras stated that it would be a part of the corrective measure's evaluation process and for the time being the project is in the characterization and monitoring phase.

Mr. Hickmott stated there was a pilot study done in 2015 to look at the feasibility of pumping the perch zone, but it would be evaluated during the CME.

XI. Public Comment Period

Ms. Martin opened the floor for public comment at 2:05 p.m.

Mr. Scott Kovak was instructed to submit his comments in writing due to audio issues.

Ms. Martin closed public comment at 2:06 p.m.

XII. Update from the Executive Director

Ms. Bridget Maestas stated that the next Board Meeting will take place on September 17, 2025. Elections will take place for Chair and Vice-Chair. Those elected will serve a one-year term beginning October 1, 2025.

Questions

Mr. Hayden asked if there is a status of the current board members.

Ms. Maestas stated that the status would include the membership of Mr. Hayden and if there is an update on the Designated Federal Officer (DDFO)

Ms. Snyder stated that she will be covering the public meeting DDFO duties until a replacement is found. Ms. Gilbertson will be covering the day-to-day operations as an alternate DDFO. EM-LA is looking for a path forward for a permanent DDFO. Board member appointments are underway. Appointments were on hold for several months for all sites while updates were made to the process and the alignment of the new administration.

Ms. Martin asked if the in-person meetings would resume.

Ms. Snyder stated that without a DDFO that is not possible. In person meetings will resume when they are possible and travel restrictions have been lifted. Certain Environmental Management Site Specific Advisory Boards are meeting in person

XIII. Adjournment

Ms. Kelley Snyder thanked the attendees for their attendance and participation.

With no additional business to discuss, Ms. Snyder adjourned the meeting at 3:15 p.m.

Certified By:

09/04/2025

Mr. Patricio Pacheco, Chair

***Minutes prepared by Yolanda Valdez, Executive Assistant, NNMCAB**

Attachments

1. **Final NNMCAB Meeting Agenda for 7/16/2025**
2. **Biography, Adam Barras**
3. **Presentation by Adam Barras, N3B, "Royal Demolition Explosives (RDX) Campaign at Los Alamos National Laboratory"**
4. **Project Update Los Alamos Legacy Cleanup Q2 2025**

***All NNMCAB meetings are recorded. The written minutes are intended as a synopsis of the meeting.**

Attachments

Northern New Mexico Citizens' Advisory Board
Wednesday, July 16, 2025
Virtual Meeting via WebEx
1:00 p.m. to 4:00 p.m. (MDT)

(Please see WebEx Call-In Information Below)

AGENDA

Time	Action	Presenter
1:00 p.m.	Call to Order	Kelly Snyder, Designated Federal Officer
	Welcome and Introductions Overview and Approval of Agenda	Patricio Pacheco, Chair
1:10 p.m.	Old Business	
	a. Update from Chair and Vice-Chair	Patricio
	b. Other Items	
1:25 p.m.	New Business	Patricio
	a. Appointment of Nominating Committee	
	b. Other Items	
1:35 p.m.	Update from NMED	JohnDavid Nance, Hazardous Waste Bureau Chief
2:00 p.m.	Update and Look Ahead from N3B	Brad Smith President and General Manager
2:25 p.m.	Update from EM Los Alamos Field Office	Sarah "Ellie" Gilbertson EM-LA Deputy Manager
2:50 p.m.	"Royal Demolition Explosives (RDX) Campaign at Los Alamos National Laboratory" Adam Barras, N3B Environmental Remediation Water Program Director	
3:35 p.m.	**Public Comment Period**	
3:50 p.m.	Update from Executive Director	Bridget Maestas
4:00 p.m.	Adjourn	Kelly Snyder

Meeting number (access code): 2818 548 5692
Meeting password: Xrb2fG5DYt9
https://doe.webex.com/doe/j.php?MTID=m214318b3077ada7f8ac90f93047e4216
Join by phone
+1-415-527-5035 US Toll
+1-929-251-9612 USA Toll 2

Adam Barras

Environmental Remediation Water Program Director

Adam Barras has served as the Environmental Remediation Water Program director with Newport News Nuclear BWXT Los Alamos (N3B) since September 2024. He's been with N3B since April 2018. During his time with Environmental Remediation, Adam helped implement the nuclear safety basis at Technical Area 21, complete the Middle Delta Prime Road Project (MDPR), and execute the Material Disposal Area program. Adam has served N3B in a variety of project management roles in the Project Management Office, Business Services, and Planning & Integration.

N3B is a limited liability company owned by HII Nuclear and BWX Technologies. N3B manages the Los Alamos Legacy Cleanup Contract for the U.S. Department of Energy's Environmental Management Los Alamos (EM-LA) Field Office.

Royal Demolition Explosives (RDX) Campaign at Los Alamos National Laboratory

Presentation to Northern New Mexico Citizens' Advisory Board

Adam Barras, N3B Director of Water Programs

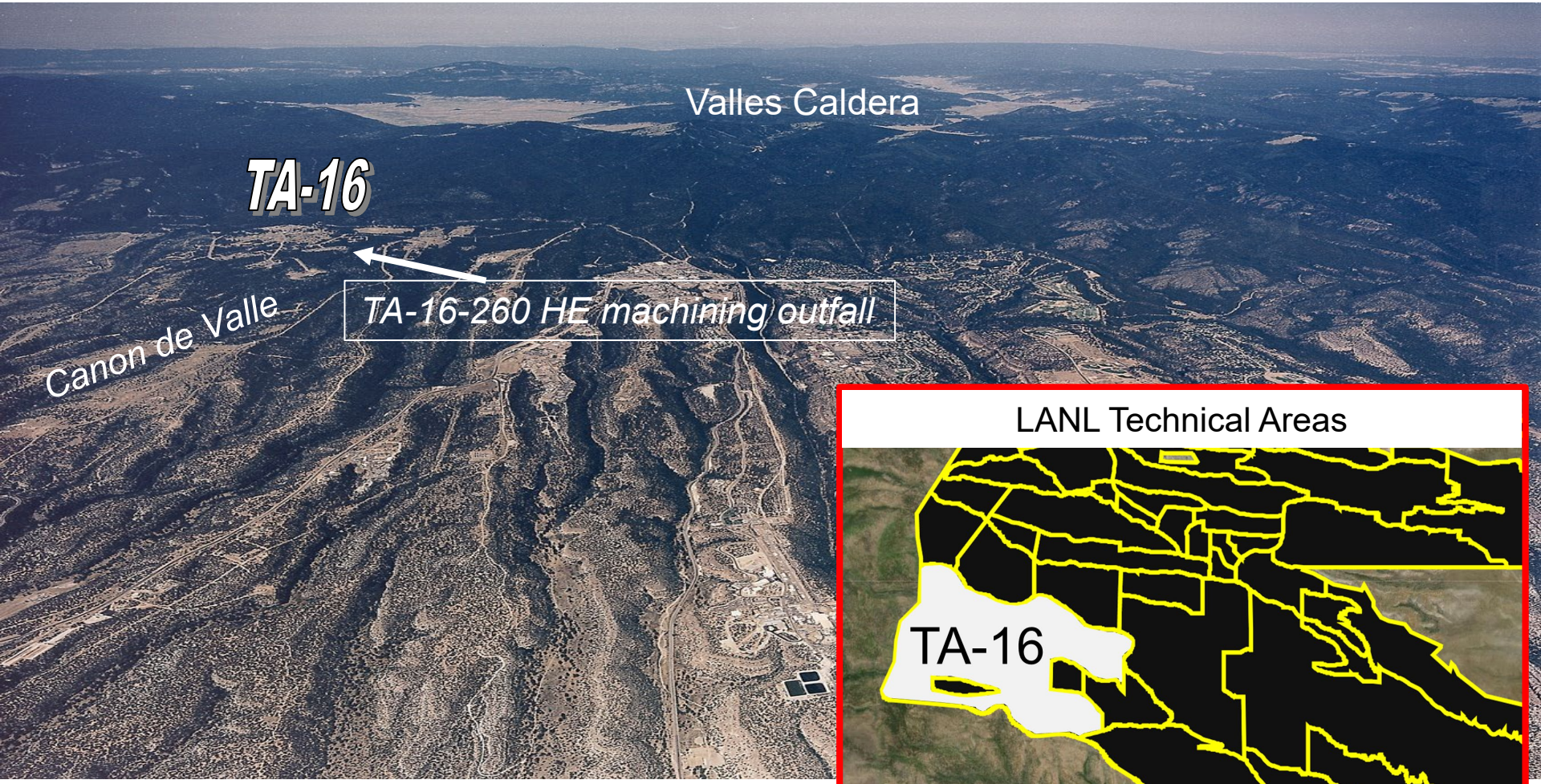
16 July 2025

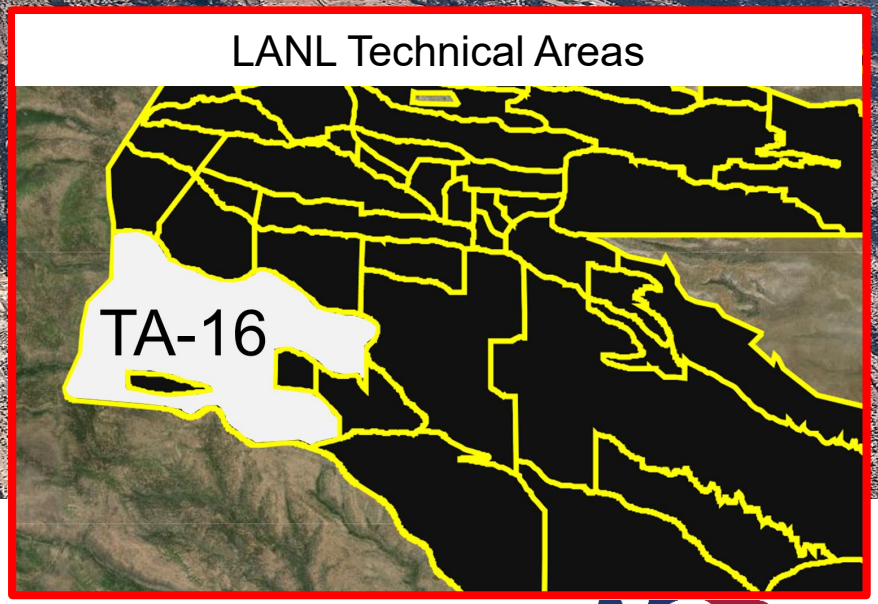
Driving Cleanup ▪ Honoring the Past ▪ Strengthening Communities

RDX Campaign – Presentation Topics

- RDX Plume Status and Comparison to Chromium Plume
- Background and History of High Explosives (HE) Outfall
- Surface and Shallow Groundwater (GW) Remediation
- RDX in Deep GW – Beneath LANL
- Ongoing Work - Characterization and Monitoring
- Conclusions and Future Activities

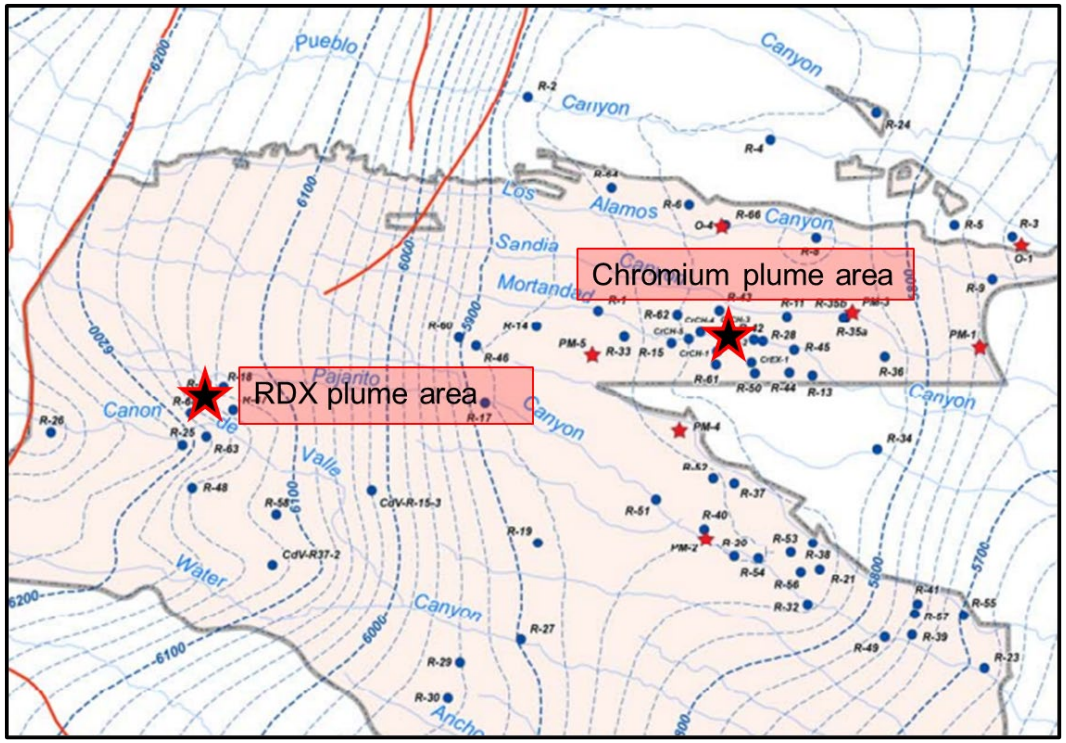
Location of TA-16 – LANL HE Production Site





RDX Bottom Line Up Front

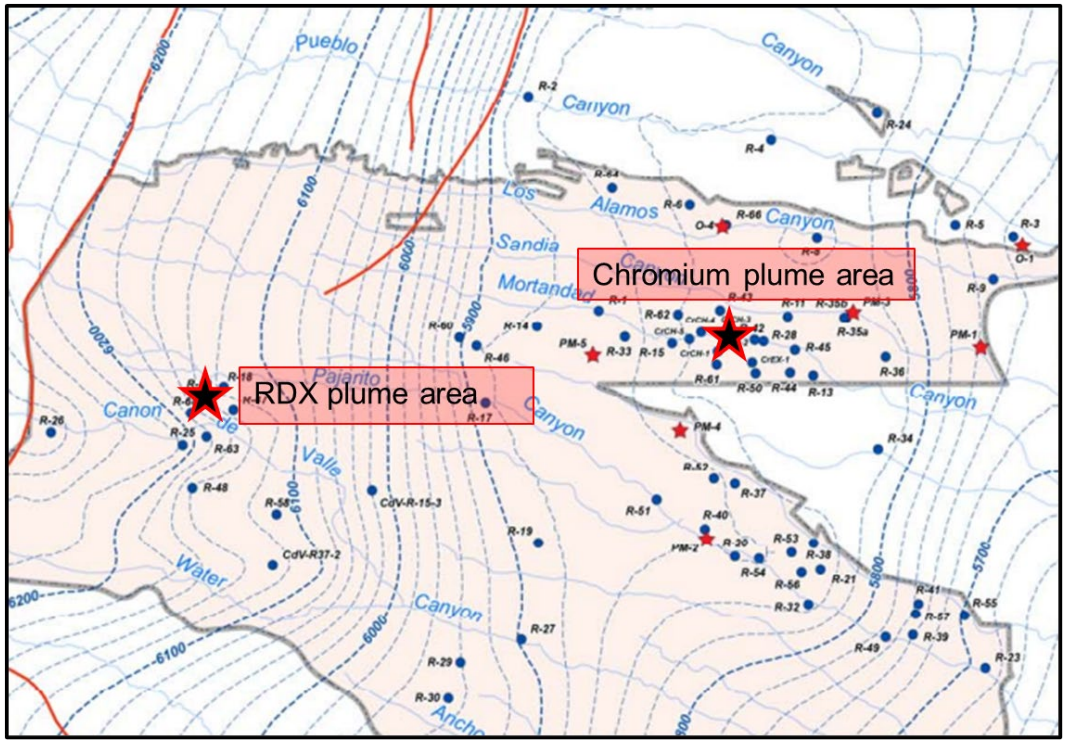
Relative to the chromium plume, the RDX plume is farther away from the nearest municipal supply well and is a lower risk to receptors. Modeling of RDX through 2200 AD indicates the plume is a low risk to supply wells.



Modified Figure 2.3-2 from N3B 2022, 702351

RDX Plume Status and Comparison to Chromium Plume

	Approximate Distance to Nearest Municipal Well	Flow Modeling Shows Institutional Controls Sufficient?	GW Interim Measure Necessary for Control?	Removal of Surface Contamination Inventory?
Chromium Plume	**~1/4 mile**	**No**	**Yes**	**No**
RDX Plume	**~2.8 miles**	**Yes**	**No**	**Yes**



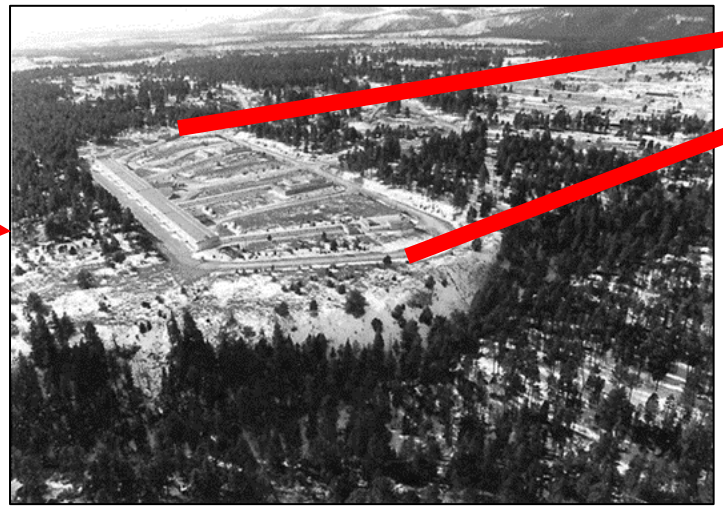
Modified Figure 2.3-2 from N3B 2022, 702351

The New Mexico Environment Department (NMED) and Newport News-Nuclear BWXT (N3B)/Department of Energy Environmental Management - Los Alamos Field Office (EM-LA) agree that they should prioritize the chromium plume over the RDX plume.

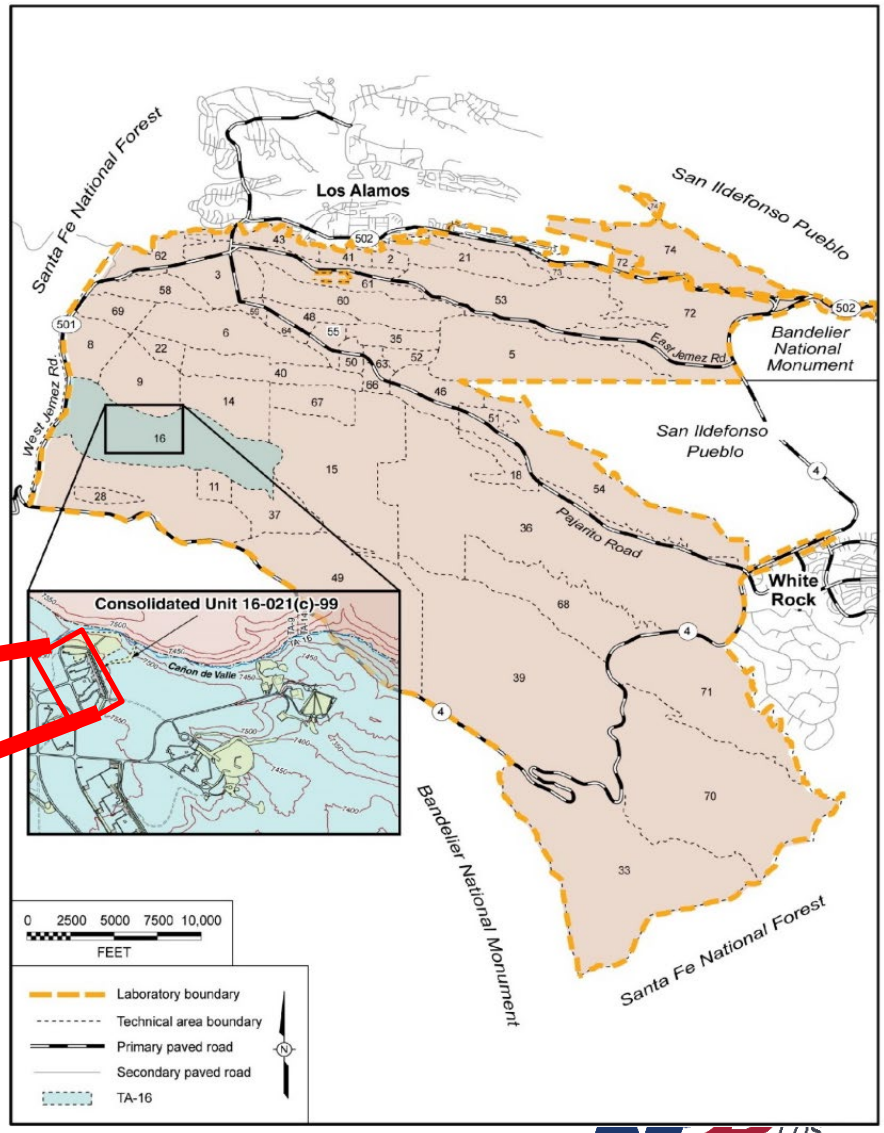
Background and History of High Explosives (HE) Outfall

- High Explosives (RDX, Her Majesty's Explosive [HMX], 2,4,6-trinitrotoluene [TNT]) production discharged several million gal/yr of contaminated water to Cañon de Valle (CdV) between 1951 and 1996 *(LANL 1998, 059891).*
- Soil and groundwater investigations began in the mid 1990s *(LANL 1998, 059891)*
- Surface and alluvial GW remedy completed in 2017 *(LANL 2017, 602597).*
- Deep GW monitored by observation wells through the Interim Facility-wide Groundwater Monitoring Plan (IFGMP)

Modified figure 1.0-1 from LANL 2017, 602597



260 Outfall



N3B Los Alamos

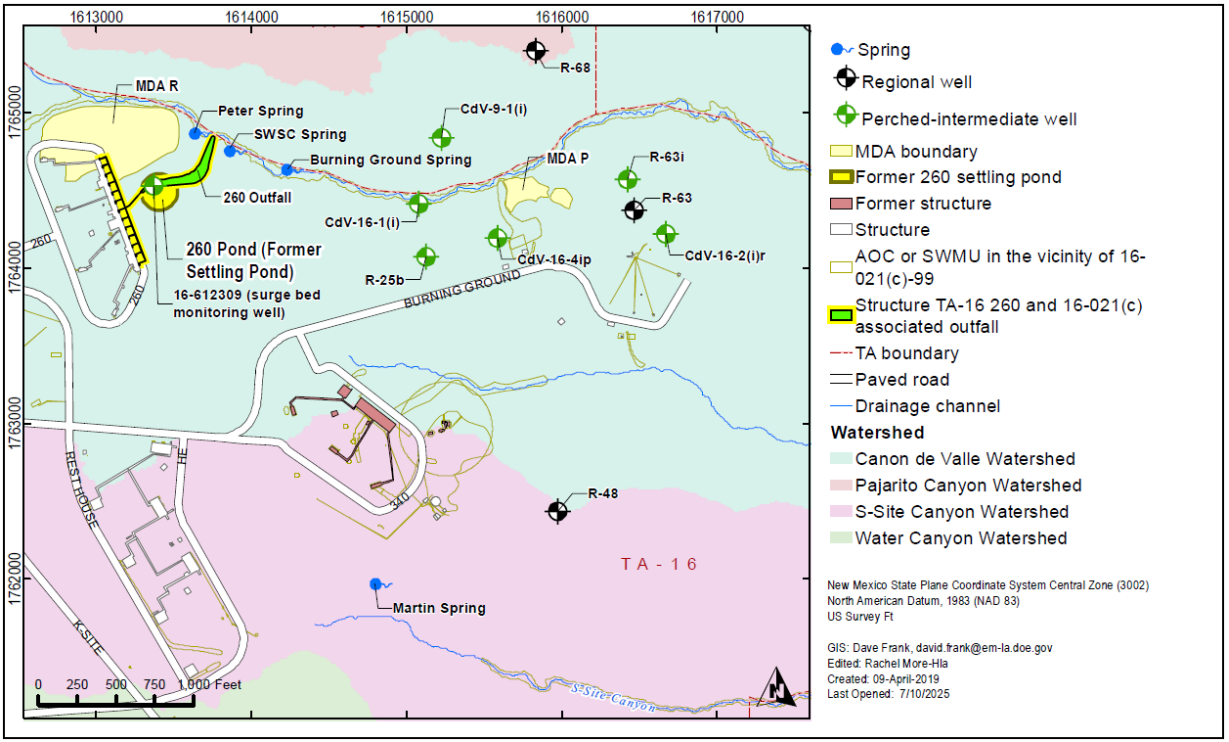
TA-16-260 Outfall Site Background

Back of HE machining building TA-16-260 showing HE sumps & blowout walls – sumps discharged to single outfall to northeast of building

- 260 outfall was highly contaminated with HE (RDX, HMX, TNT) and barium (used in the HE - Baratol) *(LANL 1998, 059891)*
- 260 outfall is the principal source of RDX at TA-16
- RDX is a class C carcinogen that is mobile in GW
- Remediation has been divided into surface and shallow GW, and deep GW components

TA-16-260 Outfall Site Background Continued

Subset of figure 2.1-2 from N3B 2022, 702351



Map of northern TA-16 showing 260 outfall in green, springs, Canon de Valle and a portion of the deep GW monitoring network

- Nearby springs, seeps, surface and alluvial GW contaminated with HE and barium
- Deep regional and perched-intermediate GW contaminated with RDX above the 9.66 ug/L NMED tap water screening level (TWSL)
- Contamination mostly came from the TA-16-260 outfall

Surface and Shallow GW Remediation

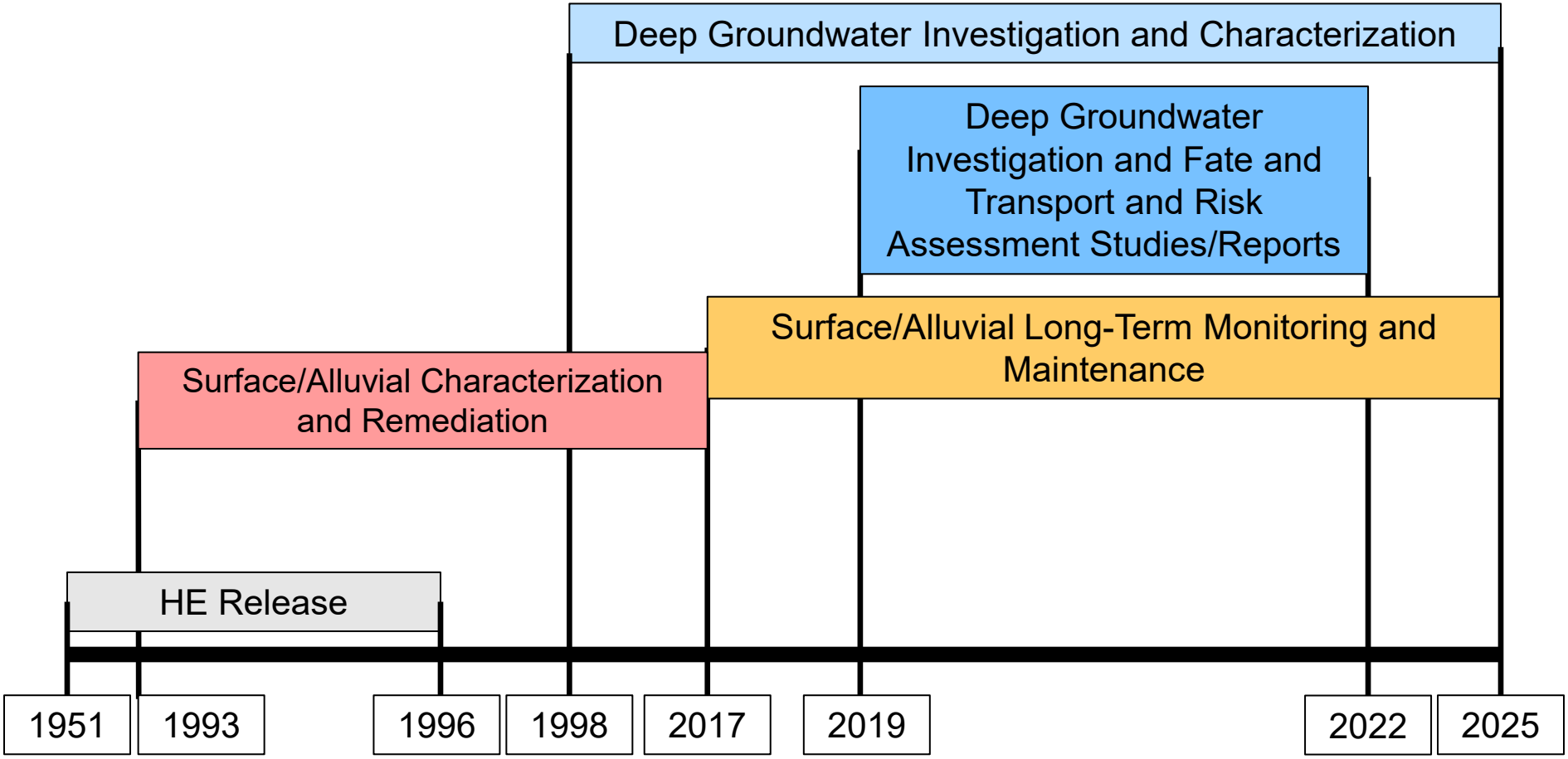
- Surface soil cleanup removed more than 1,300 yd^3 of HE contaminated soils, reducing the risk of further leaching to groundwater *(LANL 2002, 073706; LANL 2007, 098192; LANL 2017, 602597)*

- Reduction of risk to deep GW *(LANL 2007, 098192)*
  - Grout injections in infiltration pathways
  - Permeable reactive barriers
  - Low-permeability cap

- Remedy Completion Report *(LANL 2017, 602597)*
  - No further action required
  - Defined Long-Term Monitoring Plan
  - NMED approved

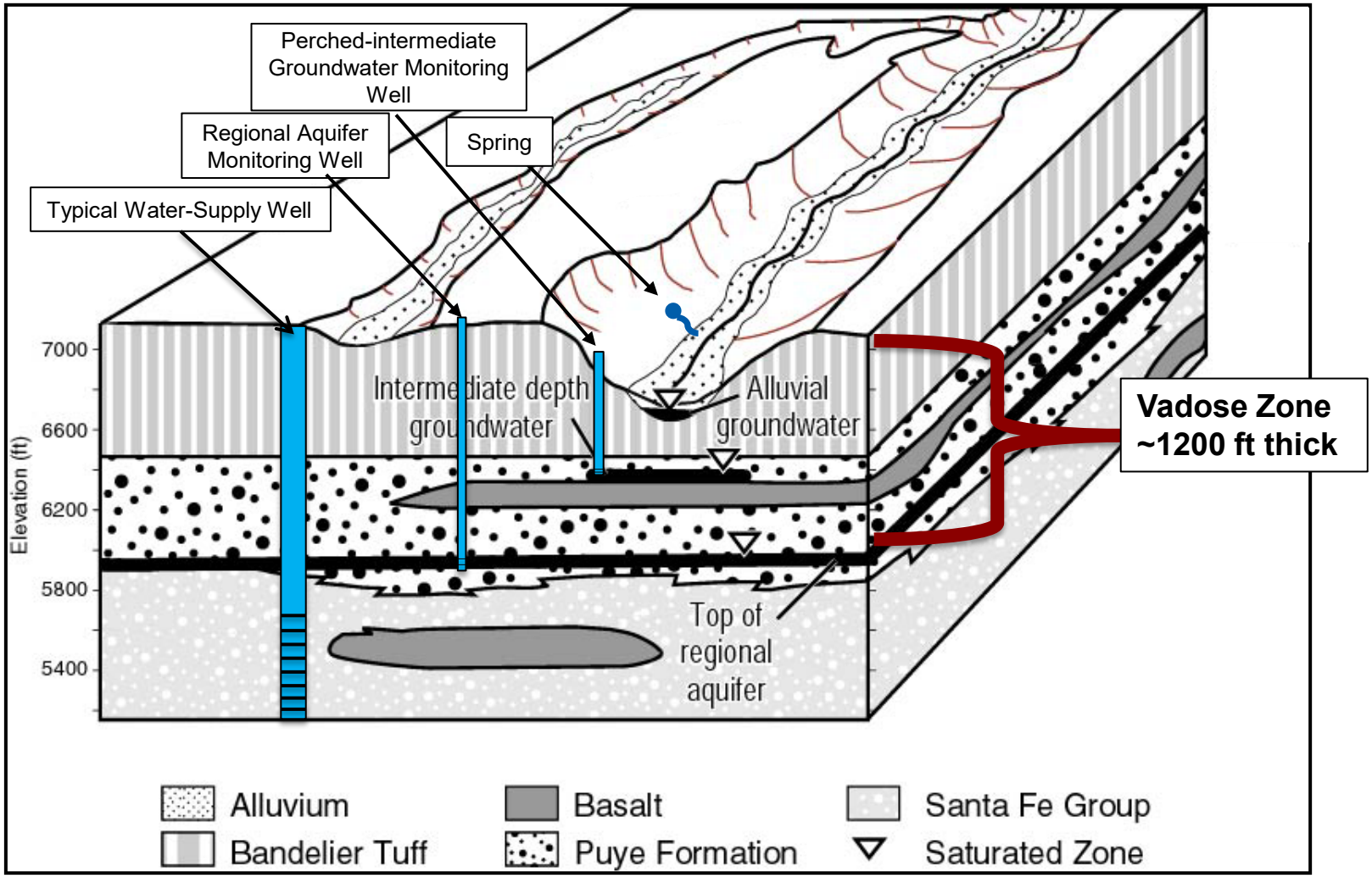
Interim Measure cleanup operations at 260 outfall

Timeline of Activities (Not to Scale)



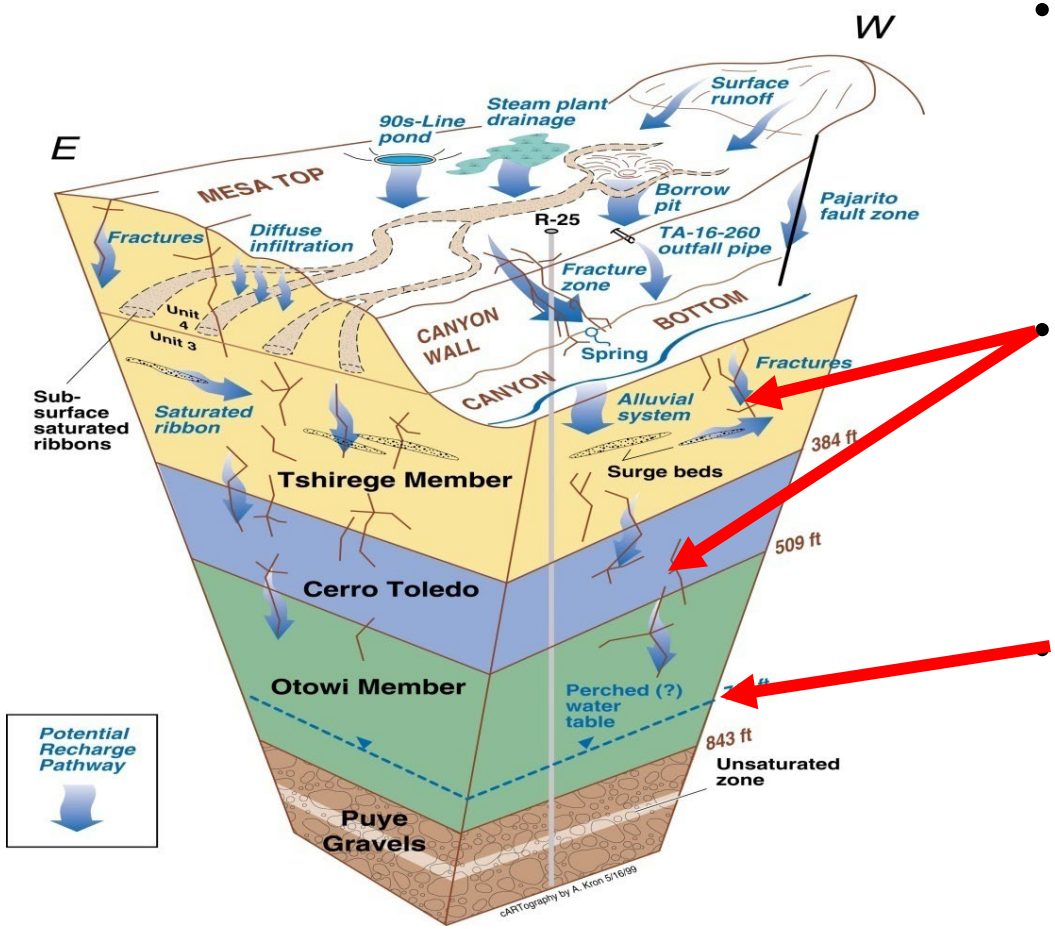
N3B Los Alamos

RDX in Deep GW – Beneath LANL



N3B Los Alamos

Hydrogeologic Conceptual Model (HCM) - Vadose Zone

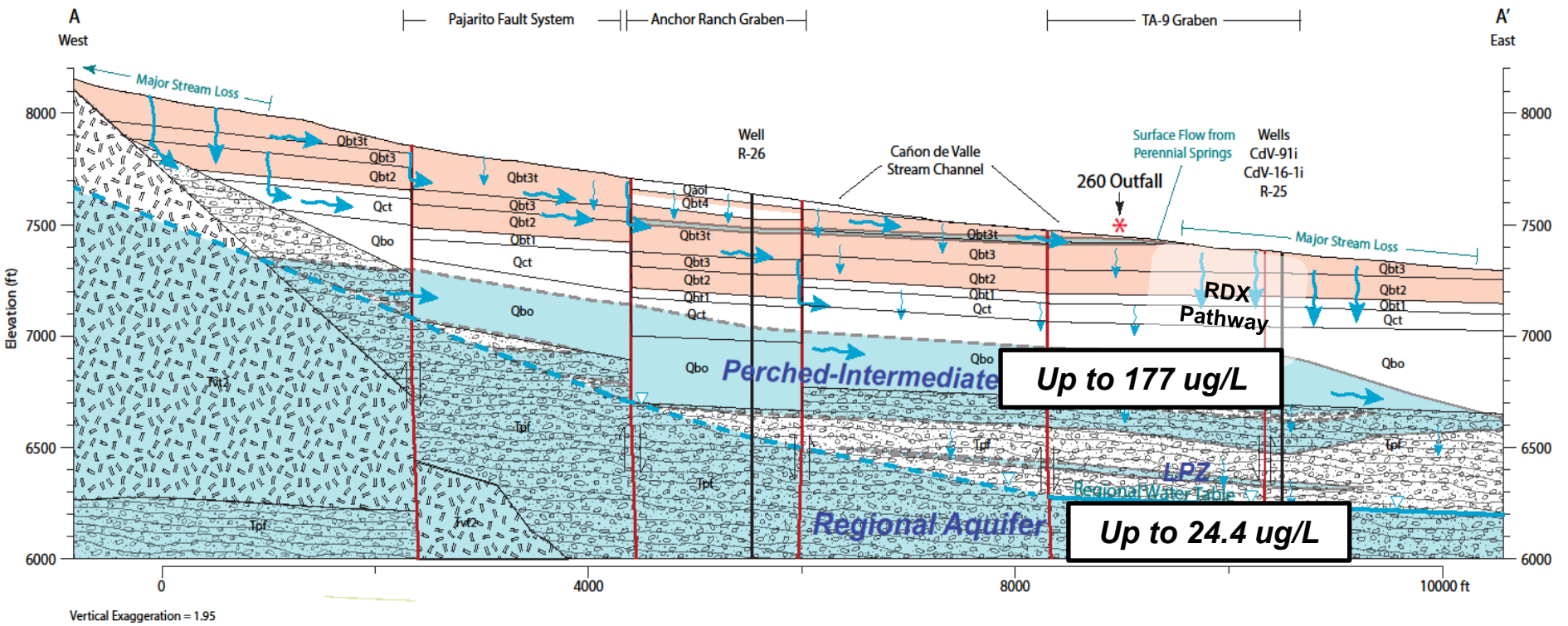


Hydrologic conceptual model for HE releases, alluvial system, & vadose zone

- Conceptual model used to define pathways for risk assessments and select monitoring locations
- Vadose zone transport characterized by ‘fast transport’ pathways, very heterogeneous contamination
- Deep perched-intermediate GW has the highest RDX concentrations

Hydrogeologic Conceptual Model – Regional Aquifer

Modified figure 3.2-1 from N3B 2019, 700561



Mountain block recharge mixes with contaminated mountain front recharge

- Shallow alluvial water infiltrates vadose zone via heterogeneous/fracture pathways
- Perched-intermediate groundwater in lower Bandelier tuff & upper Puye Formation (Fm); eastward flow
- Regional aquifer in Puye Fm; eastward flow

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Deep GW Characterization Activities

- Install monitoring wells to characterize “nature and extent” of contamination
  - Regional aquifer measured depths range from approximately 1,200 to 1,400 ft
  - Deep perched-intermediate GW depths range from ~130 to 1,200 ft bgs
  - Currently 22 monitoring locations (10 regional; 12 perched-intermediate) *(N3B 2024, 703382)*
  - GW flow ~20 – 40 ft/yr to east; RDX in GW slightly slower

- Conduct studies to understand the hydrology, “fate and transport” of contamination and refine conceptual model *(LANL 2018, 602963; N3B 2022, 702351)*

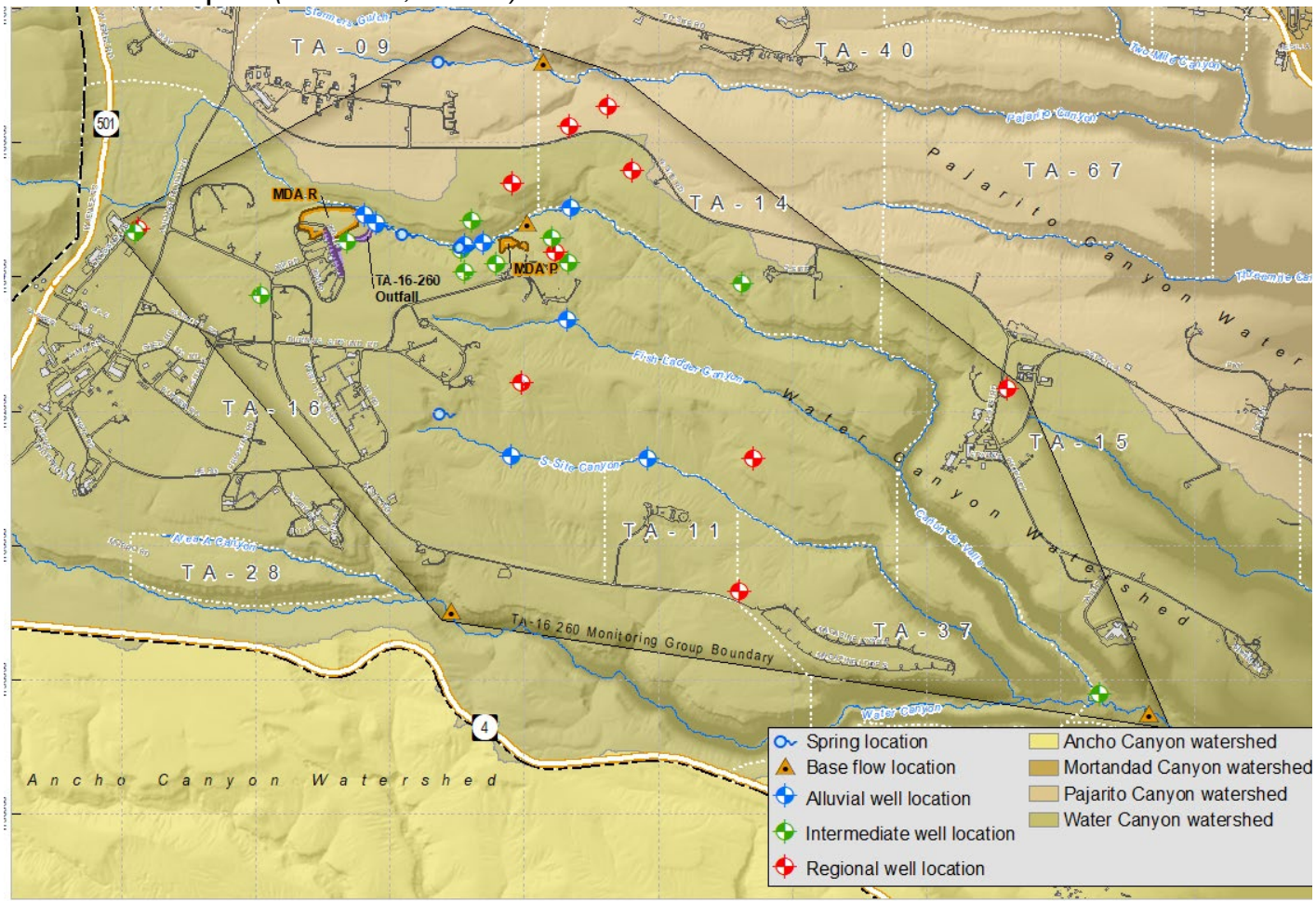
Ongoing Work - Characterization and Monitoring

SURFACE/ALLUVIAL LONG-TERM MONITORING

- Interim Facility-wide Groundwater Monitoring Plan (IFGMP) sampling *(N3B 2024, 703382)*
- Cap inspection, maintenance, and trends discussed in annual long-term monitoring and maintenance report *(N3B 2024, 703371)*

GROUNDWATER

- IFGMP sampling (including for tracer breakthrough)
- Annual progress report *(N3B 2024, 703443)*



IFGMP TA-16 Monitoring Group - Figure 6.1-1 from N3B 2024, 703382

N3B Los Alamos

RDX in Regional Aquifer

- Two onsite monitoring wells (R-68 and R-69) have measured RDX more than two times the 9.66 ug/L TWSL
- RDX is <u>not present</u> in municipal supply wells (approximately 2.8 miles away)

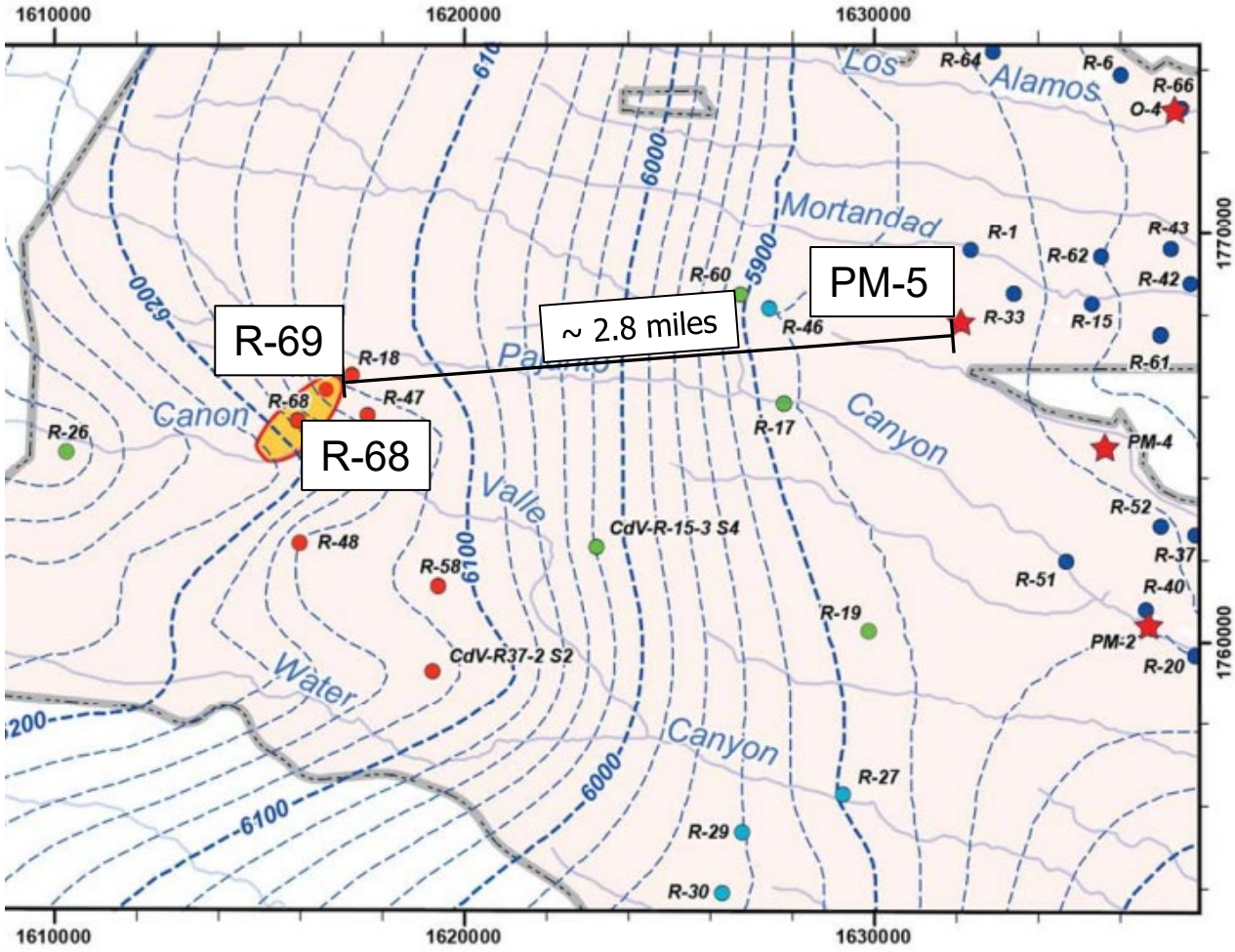
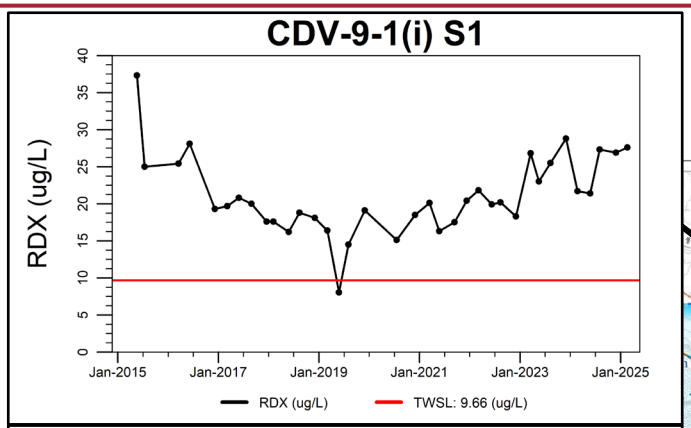
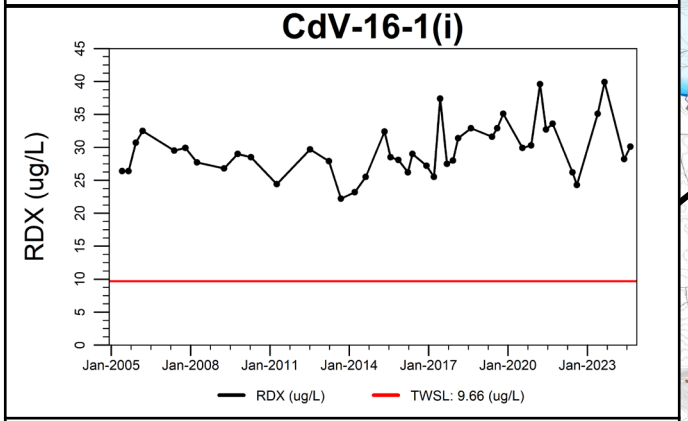


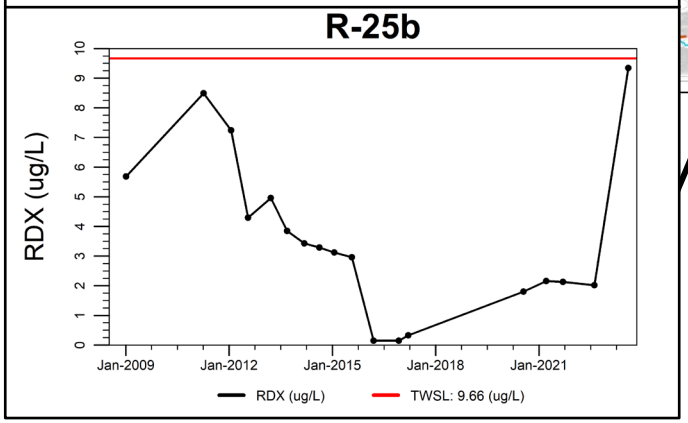
Figure 3.2-13 from N3B 2019, 700561

N3B Los Alamos

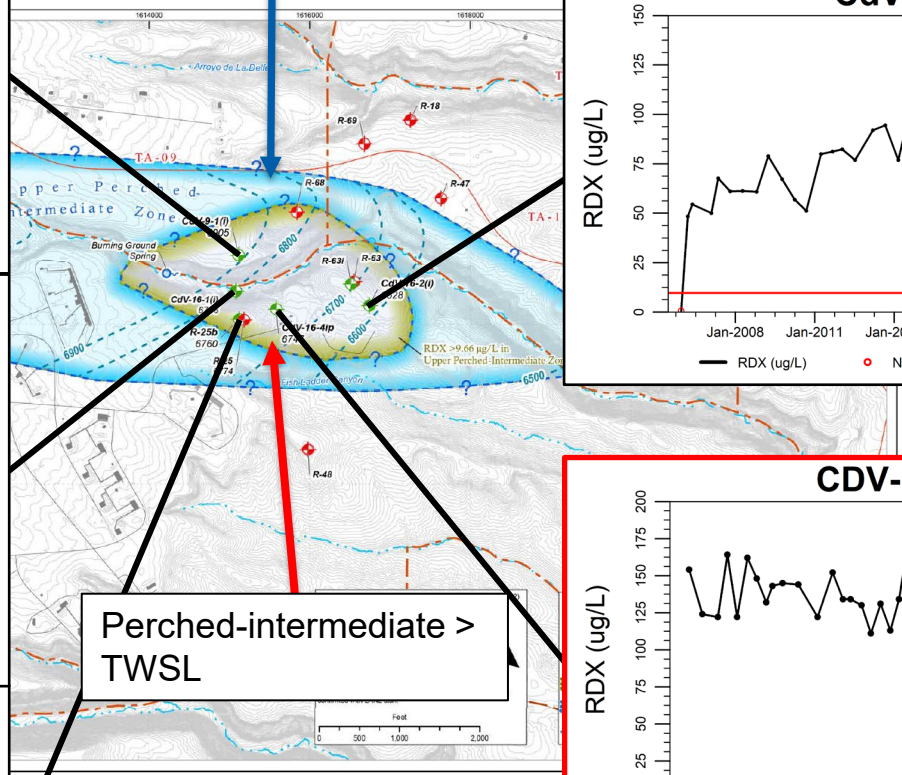
RDX in Select Upper Perched-Intermediate Monitoring Wells







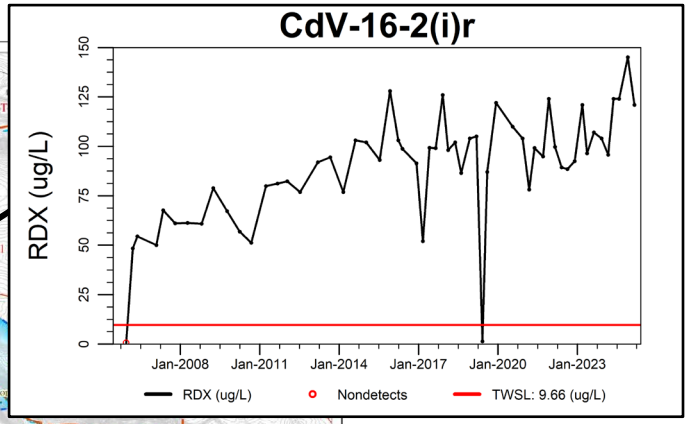
Extent of perched-intermediate zone

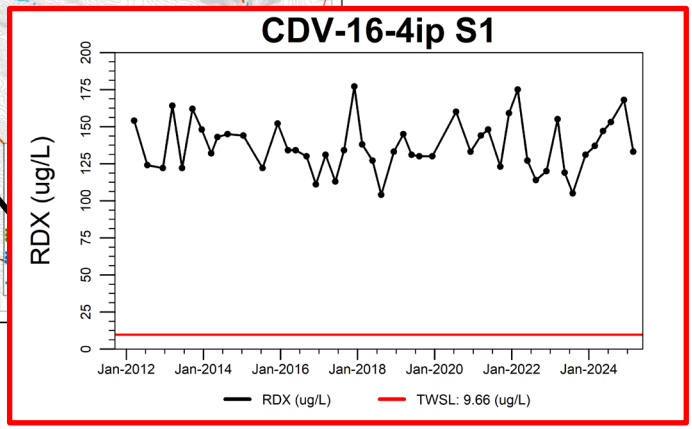


Perched-intermediate > TWSL

Modified figure 2.3-1 from N3B 2022, 702351

Red line in graphs depicts TWSL

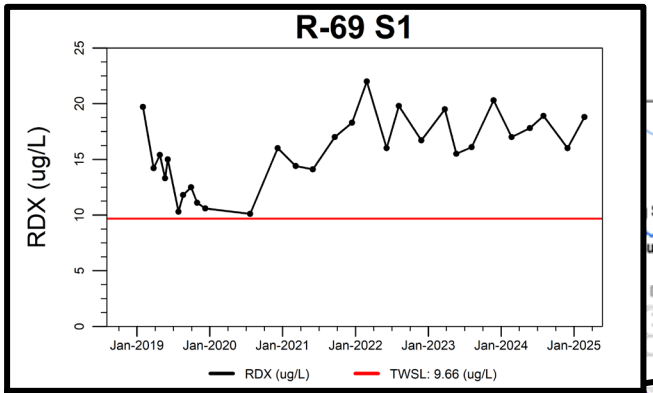


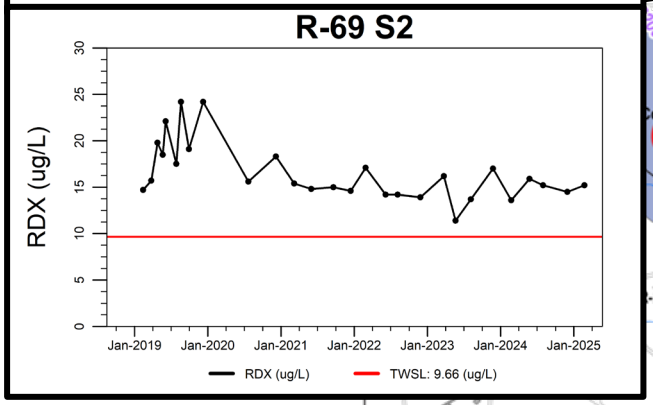


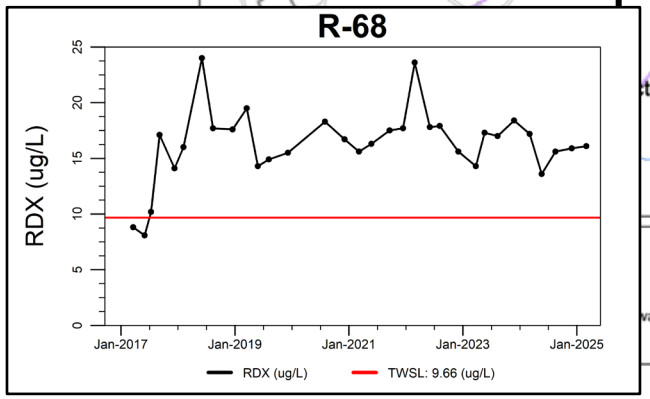
Highest contamination

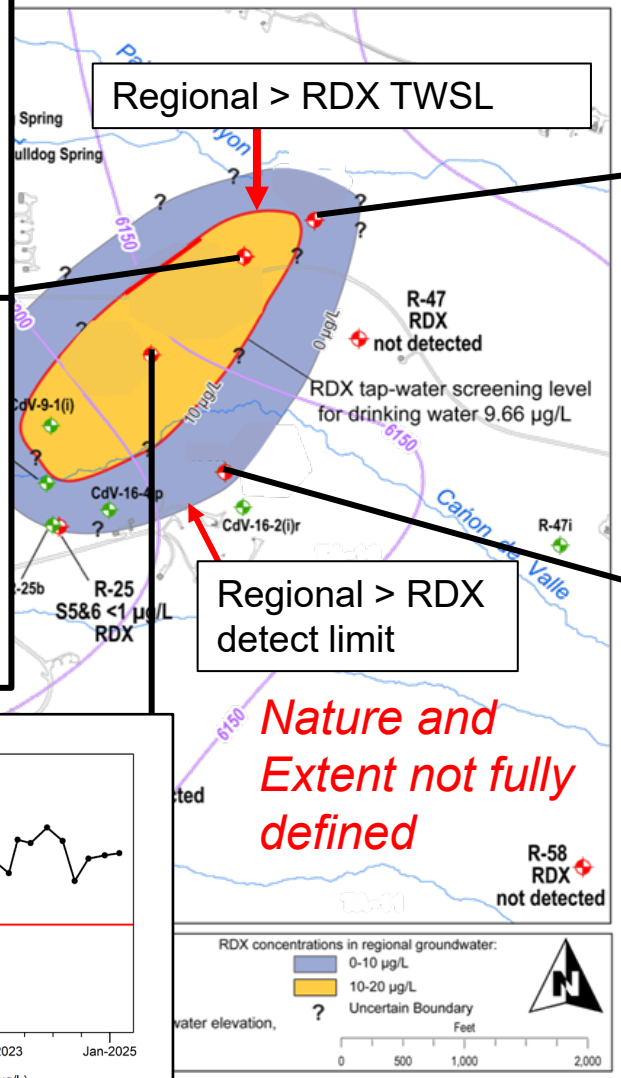
N3B Los Alamos

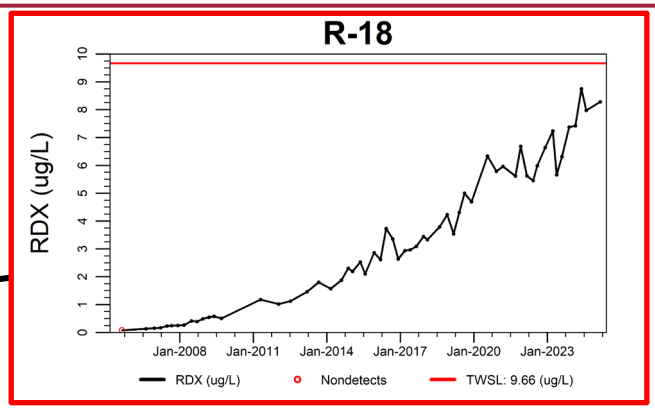
Regional RDX Plume – Nature and Extent & Times Series



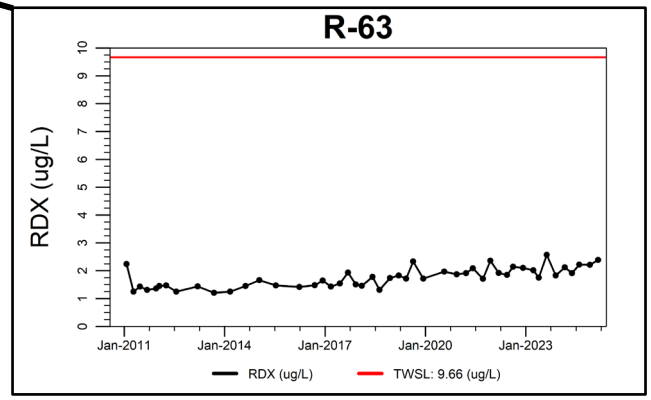








Trending towards TWSL

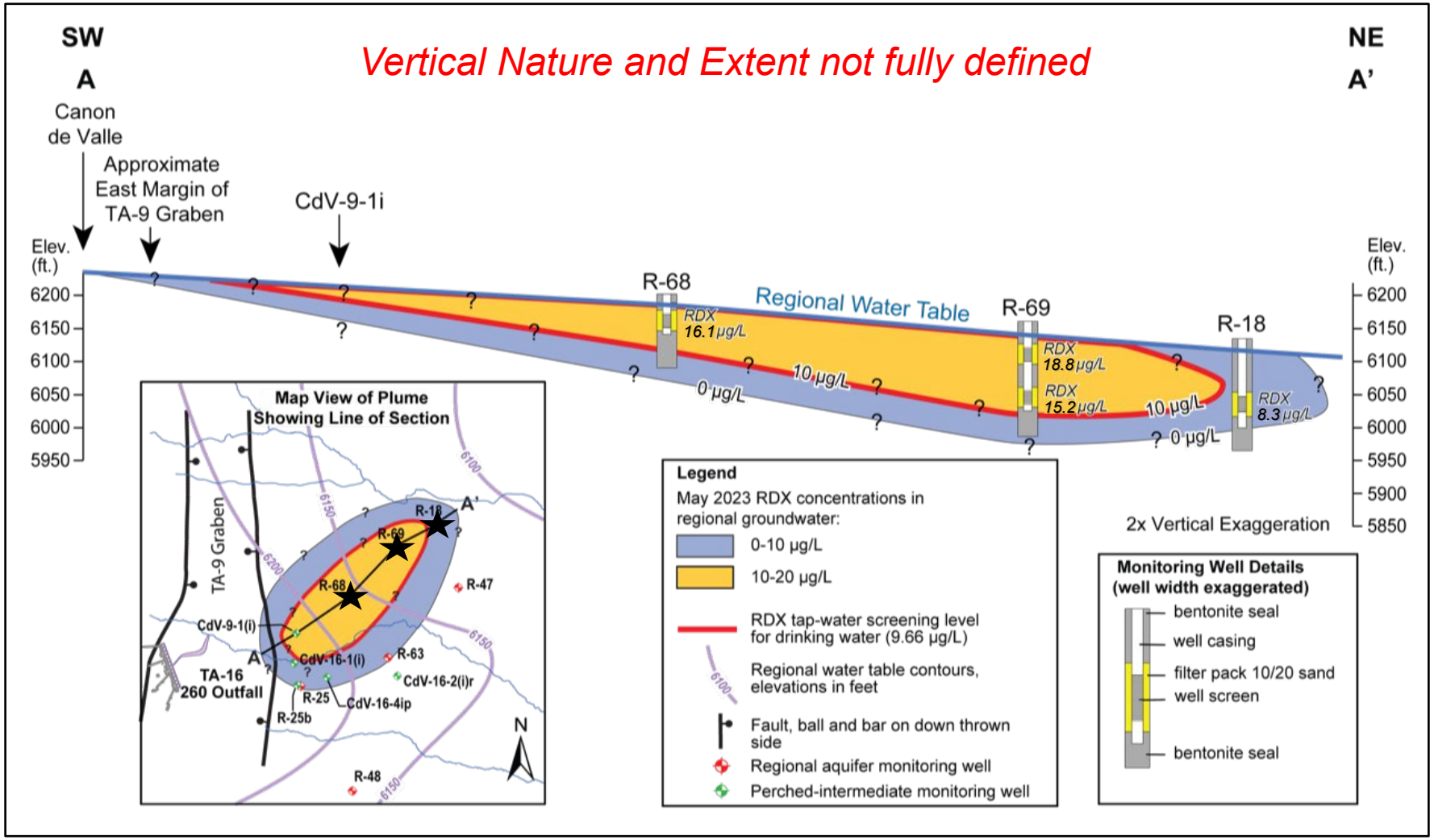


Red line in graphs depicts TWSL

Modified figure 2.3-3 from N3B 2022, 702351

N3B Los Alamos

Regional RDX Plume – Nature and Extent continued



Modified figure 3.1-4 from N3B 2019, 700561

Summary of 2022 Risk Assessment and Model Results

1. Risk assessment (RA) and the RDX model used to evaluate RDX transport over large spatial distances through 2200 AD *(N3B 2022, 702351)*
2. On-site risks acceptable with institutional controls
3. Modeling shows “effectively no probability of RDX exceeding 2 ppb at any [supply] well” through 2200 AD *(N3B 2022, 702351)*
4. Based on RA, relative to the chromium plume, the RDX plume is a lower-risk *(NMED 2023, 702800)*

Conclusions and Future Activities

Deep GW RDX Plume

- The RDX plume presents a low risk. Modeling shows negligible risk of exceeding RDX Tap Water Screening Level (TWSL) at supply wells through 2200 AD *(NMED 2023, 702800)*
- Planning for future regional monitoring wells to further characterize nature and extent of contamination and revised RA report

Remediated Surface/Alluvial RDX

- Continue monitoring, maintenance, and reporting as prescribed in the Long-term Monitoring and Maintenance Plan *(LANL 2017, 602597, N3B 2024, 703371)*

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N3B
Los
Alamos

Project Update
Los Alamos Legacy Cleanup

Q2
2025

Message from the President

I am proud of the role N3B has played in creating a lasting benefit for the Laboratory, its lands, and its watersheds. Even more importantly, our progress has had a positive impact beyond the boundaries of LANL, benefiting neighboring communities. Often at N3B we tout our accomplishments, but rarely do we explain the "why" behind our work and the many advantages it brings to those communities.

Protecting water quality, one of the three priorities of our work, is essential to the LANL legacy cleanup. That's why we spend so much time focusing on storm water management, groundwater treatment and management, and remediating contaminated lands that could put water supplies at risk. It's why we prioritize implementing remedial measures.

Similarly, our commitment to cleaning up the land is aimed at protecting people and the environment of Northern New Mexico from legacy contamination. Throughout the drainages and across the mesas, our remediation activities focus on ensuring the safety of neighboring communities, minimizing the movement of toxins and radioactive materials through runoff, and preventing any legacy contamination from impacting our air. In addition, we successfully completed the Middle DP Road cleanup effort, making land available to Los Alamos County for economic development. Those successes are vital for our families and our economy.

Every time we can remediate and safely dispose of and ship radioactive and hazardous waste off-site is a good day, as this effort reduces risks to neighboring communities. Since we began work in 2018, we have shipped more than 18,000 cubic meters of radioactive and hazardous waste—enough material to fill a football field 11 feet deep. Last year, we marked a significant accomplishment by retrieving buried transuranic waste in the form of corrugated metal pipes and preparing it for off-site disposal, which we will begin this year.

The risk reduction from these activities is a critical component of our commitment to the residents of Northern New Mexico.

Our impact goes beyond cleaning up the environment of legacy contamination. LANL is the economic engine of our region. Our dedication to the legacy cleanup mission and our ability to safely and effectively execute it supports the important ongoing national security, energy and scientific missions at LANL. LANL has rightly been called "the crown jewel" of the U.S. national laboratory system, and I am proud of the role N3B plays in ensuring LANL remains an asset for our nation's security and prosperity for decades to come. I'm also proud of the support we provide through our community commitment funds and employee volunteering to a variety of charitable organizations across Northern New Mexico.

Most importantly, I am deeply proud of the men and women of N3B. It is an honor to be part of this team and to see their dedication to executing our mission safely, efficiently, and with excellence. Here's to you and your great work!

– Brad Smith

Highlights of the Quarter

- ✓ Completed upgrades to the high-energy real-time radiography system, a critical process in analyzing the content of legacy waste drums.
- ✓ Completed 43 shipments of radioactive, hazardous and other wastes for safe off-site disposal.
- ✓ Completed waste (contaminated soil) disposition activities in the Starmer/Upper Pajarito Canyon Aggregate Area.
- ✓ Completed grading and revegetation activities in the Chaquehui Canyon Aggregate Area following excavation work at the former drum storage area (Solid Waste Management Unit (SWMU) 33-012(a)) and the Building 33-39 drainage and outfall (SWMU 33-004(i)).
- ✓ Activated Material Disposal Area (MDA) L Soil-Vapor Extraction (SVE) units to help remove volatile organic compounds (VOCs).
- ✓ Completed the fourth and final round of vapor sampling at MDA T, focusing on VOCs and tritium; sampling helps determine risks and corresponding remedial strategies.
- ✓ Completed the Los Alamos County Airport Landfill Cover inspection, a critical step in ensuring the old landfill remains protective.
- ✓ Collected nearly 1,000 gas, sediment, soil and water samples to support environmental remediation work.
- ✓ Began activating the Individual Permit storm water samplers, with all samplers scheduled to be activated by May 1, 2025; samplers are a critical step in protecting water supplies.
- ✓ Completed required safety hazard analysis for future below-ground waste retrieval at Pit 9 at TA-54, Area G.

Community Commitment – 2025 Giving Begins

N3B's 2025 Community Commitment contributions program supports organizations that promote (1) education, (2) health & human services, (3) arts & culture, and (4) civic & community initiatives. N3B allocates 5% of its fee over the life of the contract to support non-profit and community organizations in Northern New Mexico. Since the program's inception in 2018, N3B has provided $1.6M to support more than 80 organizations.

To learn more about this program and submit a funding request please visit:
https://n3b-la.com/community-contributions/

Community Spotlight – Youth Activity Centers

N3B is proud to help support free snacks and food assistance for youth who participate in Youth Activity Centers (YACs) in Los Alamos and White Rock. The YACs help provide students in 3rd through 8th grade in Los Alamos County schools with supervised after school and summer programming, including games, art and activities. Approximately half of those served reside in Los Alamos County and half reside in Santa Fe or Rio Arriba counties.

The YACs are one of the programs offered by the Los Alamos Family Council. Please visit: https://www.la-fc.org/

Spotlight on Safety: Promoting a Strong Safety Culture

The success of the LANL legacy cleanup mission depends on conducting cleanup safely. N3B is committed to maintaining and strengthening a strong safety culture, where safe performance and worker involvement are core values. Safety culture is an organization's values and behaviors, shaped by its leaders and internalized by its members, making safe work performance the top priority to protect the workers, the public and the environment.

N3B has put a concerted focus on strengthening its safety culture to enhance the safe performance of cleanup activities and to maintain an environment where workers can raise issues or concerns without fear of retaliation. N3B has completed more than 80 actions in response to an independent assessment performed by the Oak Ridge Associated Universities (ORAU). These actions include leadership development, implementation of management and employee safety observations, and making our progress visible to the workforce. These actions reinforce our commitment to safety, demonstrating that actions lead to results.

One critical element of the N3B safety culture is empowering our workforce to pause or stop work when they are uncertain about the process or identify any action that is unsafe. Taking the time to address any uncertainty—whether three minutes, three hours or three days—is the right thing to do.

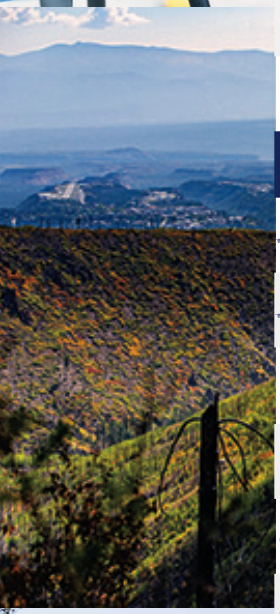
Finally, and perhaps most importantly, through workforce feedback and interactive dialogue, N3B can provide a better work environment. This two-way communication and feedback process highlights employee insights and identifies areas for improvement.

> "Safety culture and operational performance are inextricably linked. The leadership team is the lynchpin in building and sharing a strong safety culture. The experiences we provide our workforce drive their beliefs about what is truly important to leadership."
>
> – ***Robert Edwards***, Environment, Safety, Health and Quality Program Manager

>80	<1	<0.6	2x
Conducted more than 80 actions in response to an independent review	Achieved Total Recordable Cases (TRC), a work-related injury and illness metric requiring medical treatment, below our target goal of 1.1	Achieved Days Away, Restricted Duty or Transfer (DART), a standard safety metric, below the DOE goal of 0.6	Doubled management and employee safety observations, a cornerstone of the safety program

Safety checks before shipping

Safely size reducing Corrugated Metal Pipes



	FY25 to Date	Q2	Q1	FY24	Contract to Date
Protect Water Quality					
Storm water control inspections conducted	**1,677**	687	990	5,037	19,456
Water samples collected	**1,435**	761	674	5,300	26,252
Hexavalent chromium treated (million gallons)	**34.64**		13.31	0.03	459.17
Clean Up the Land					
Contaminated soil and debris dispositioned (m^3 = cubic meters)	**292.25 m^3**	172.66 m^3	119.59 m^3	654.79 m^3	7,909 m^3
Soil and sediment samples collected	**473**	197	276	5,557	17,632
Vapor samples collected	**273**	146	127	938	4,602
Ship Waste Off-site					
TRU waste shipments to WIPP WIPP was closed for maintenance during Q2	**2**	0	2	22	187
TRU waste volume shipped to WIPP	**6.4 m^3**	0	6.4 m^3	70.88 m^3	589.77 m^3
Area G mixed/low-level radioactive waste shipped off-site	**418.96 m^3**	418.96 m^3	0 m^3	661.85 m^3	3,536.39 m^3
Other mixed/low-level radioactive waste shipped off-site	**325.63 m^3**	206.25 m^3	119.38 m^3	696.92 m^3	10,733.20 m^3
Hazardous waste shipped off-site	**3.42 m^3**	3.06 m^3	0.36 m^3	3.76 m^3	280.62 m^3
Other waste streams shipped off-site	**169.99 m^3**	114.07 m^3	55.92 m^3	373.76 m^3	4,204.48 m^3
Total waste shipped off-site	**924.40 m^3**	742.34 m^3	182.06 m^3	1,807.17 m^3	19,344.46 m^3
Business Operations and Stakeholder Engagement					
Meetings with stakeholders	**30**	14	16	83	405
Amount committed to small business (millions) (N3B only)	**$72.75**	$57.23	$15.31	$168.51	$602.13
Percentage of subcontracts awarded to small business (N3B only)	**91.34%**	97.01%	74.76%	91.99%	80.32%
2016 Consent Order Milestones					

FY25 - 1 of 11 (10 in progress) **FY24 - 15 of 15** ✓ **Met 104 of 105 milestones (FY18* - FY24)**

*Three FY18 milestones met before N3B contract start.

BTN FY25 Q2 FINAL