Northern New Mexico Citizens' Advisory Board Meeting

March 20, 2024
1:00 p.m. to 5:00 p.m.
Hybrid Meeting
Santa Fe, New Mexico

The video for the March Board Meeting can be viewed on the NNMCAB YouTube Channel:
NNMCAB March 2024 Meeting (youtube.com)

Meeting Minutes

Meeting Attendees

Department of Energy

1. Ellie Gilbertson, Acting Manager, Environmental Management, Los Alamos Field Office
2. John Evans, Environmental Management Los Alamos
3. Robert Reine, Environmental Management Los Alamos
4. Allison Majure, Environmental Management Los Alamos
5. Tyler Ingalls, Environmental Management Los Alamos
6. Cheryl Rodriguez, Environmental Management Los Alamos
7. Donovan Robinson, Office of Management and Budget

NNMCAB Members

1. Elena Fernandez, Chair
2. Melissa Casias
3. Sterling Grogan
4. Mark Hayden
5. Martinez Hewlett
6. Anne Laurent
7. Manuel L'Esperance
8. Roger Life
9. Beverly Martin
10. Stephen McLaughlin
11. Patricio Pacheco
12. Lt. Governor Jamie Viarrial
13. Joseph Villegas

NNMCAB Staff/Support

1. Bridget Maestas, Executive Director
2. Menice Santistevan, Senior Advisor
3. Yolanda Valdez, Executive Assistant

Guests

1. Dallas Croft, TetraTech
2. Angela Martinez, Los Alamos National Laboratory
3. Kristin Henderson, N3B
4. Elicia Williams, Environmental Management Los Alamos
5. Brad Smith, N3B
6. Rita Carbal, Industrial Economics, Incorporated
7. John Gonsky, Tech2 Solutions
8. Michael Peterson, New Mexico Environment Department
9. Erich Evered, N3B
10. Karen Jackson, Los Alamos National Laboratory
11. Matt Miller, United States Representative Teresa Leger Fernandez's Office
12. David Abelson, N3B
13. Caitlin Martinez, New Mexico Environment Department
14. Renee Martinez, Environmental Management Los Alamos
15. Stephanie Gallagher, Environmental Management Los Alamos
16. Deborah Kerrigan, N3B
17. Dallas Mahoe, Environmental Management Los Alamos
18. David Fellenz, N3B
19. Jeff Holland, N3B
20. Nadia Martin, Industrial Economics, Incorporated
21. Luciana Vigil Holterman, Los Alamos National Laboratory
22. Scott Kovac, Nuclear Watch New Mexico
23. Kaitlin Victorino, Jemez Pueblo
24. Melanie Hand, Los Alamos County Counselor
25. Amanda Caudillo, Environmental Management Los Alamos
26. Kylian Robinson, New Mexico Environment Department
27. Kelsey Shank, theEDGE
28. Troy Thompson, N3B
29. Lauren Hargraves, Environmental Management Los Alamos
30. Bret Griebenow, N3B

***The written minutes are intended as a synopsis of the meeting.**

Minutes

I. Call to Order

The meeting of the Northern New Mexico Citizens' Advisory Board (NNMCAB) was held on March 20, 2024, in a hybrid and in person format. Ms. Ellie Gilbertson, Acting Manager, Environmental Management, Los Alamos Field Office, stated that on behalf of the Department of Energy (DOE) the meeting of the NNMCAB was called to order at 1:02 p.m.

Ms. Gilbertson recognized Ms. Elena Fernandez, the NNMCAB Chair. Ms. Fernandez presided at 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)

Ms. Fernandez conducted roll call of board members in person and on WebEx. At the call to order, eleven NNMCAB members were present or online, and a quorum was established. Ms. Fernandez stated that the meeting was being recorded to produce the minutes of the meeting.

III. Welcome and Introductions

Ms. Gilbertson introduced herself and stated that Mr. Keith Grindstaff, Deputy Designated Federal Officer (DDFO), would not be present at today's meeting, and that she would be serving as DDFO.

Ms. Fernandez welcomed everyone to the March Board Meeting. She then introduced the NNMCAB staff and herself. Ms. Fernandez then stated that she served six years on the board and today her term comes to an end. She then introduced Vice-Chair Mr. Pacheco and stated that he would be serving as Chair until October 1st. Ms. Fernandez then requested that the Board members introduce themselves.

Ms. Fernandez asked if members of the public would like to introduce themselves. Ms. Fernandez introduced Mr. Miller from the United States Representative Teresa Leger Fernandez's Office. Mr. Kovac and Ms. Henderson introduced themselves.

IV. Approval of Agenda

Ms. Fernadez stated that updates to the agenda will be required. A request has been made to amend the agenda for a fifteen-minute early adjournment at 4:45 p.m. She then stated that Ms. Martinez will be providing the update on behalf of the Hazardous Waste Bureau and Mr. Griebenow and Mr. Smith will both provide an update from N3B. The board reviewed the agenda for the March 20, 2024, Board meeting. Ms. Fernandez opened the floor for a motion to approve the agenda as amended.

Mr. Marty Hewlett made a motion to approve the agenda as amended; Mr. Joseph Villegas seconded the motion. The motion to approve the agenda, as amended, passed.

V. Old Business

a. Update from Chair/Vice-Chair

Ms. Fernandez, NNMCAB Chair

Ms. Fernandez stated that Ms. Maestas sent out an invitation to attend the Department of Energy (DOE) Order 435.1 Radioactive Waste Overview webinar that will take place on April 3rd at noon. The webinar will provide fundamental awareness of federal radioactive waste requirements including enabling legislation and regulations for the generation, packaging, storage, treatment, and disposal of high-level waste, transuranic waste, and low-level waste and mixed waste to a non-technical audience.

Ms. Fernandez then stated that the Waste Isolation Pilot Plant (WIPP) resubmittal meeting will be taking place on March 20 from 2:00 p.m. to 4:00 p.m. The meeting will be hosted by the Carlsbad Field Office and the Salado Isolation Mining Contractors. The meeting will be regarding the WIPP Hazardous Waste Facility Permit.

Ms. Fernandez extended an invitation to the members to join the Los Alamos National Laboratory (LANL) Technical Working Group (TWG). The group will provide a deeper technical understanding of the work being done by Environmental Management Los Alamos and N3B.

Ms. Fernandez provided a reminder of the Site-Specific Advisory Board Chairs' Meeting hosted by the Portsmouth Citizens' Advisory Board. She stated that the NNMCAB is looking for one more member to attend and if anyone is interested, please contact the NNMCAB staff.

b. Update from Subcommittee Chairs

Consent Order Subcommittee

Mr. Mark Hayden stated that they had the budget review from DOE, and it will be the driver for their recommendations. He will provide more information later this year.

Public Outreach Subcommittee/Risk Evaluation & Management Subcommittee

Ms. Fernandez stated that due to her term coming to an end an election of officers will need to take place for both the Public Outreach and the Risk Evaluation and Management Subcommittees.

VI. New Business

a. Special Election of Vice-Chair

Ms. Fernandez stated that a special election will be held for Vice-Chair and a notification requesting nominations was sent out. Mr. L'Esperance and Mr. Villegas were nominated, and both accepted. Ms. Fernandez questioned if there were any other nominees. Each candidate was provided the opportunity to give a statement.

Mr. L'Esperance stated that he began his career as an oil driller in the oil fields of Texas. He then became employed with LANL, where he remained for thirty-seven years. During this time Mr. L'Esperance was a Supervisor, Superintendent,

Emergency Management Manager, Deputy Group Leader, and Program Manager. He worked with the Storm Water Pipe Program, Hazmat Response Team, and was certified through the Occupational Safety and Health Administration (OSHA) as a Hazardous Incident Commander and Safety Officer. After his retirement, he was employed by LANL to establish the Wildland Fire Program. Mr. L'Esperance was forced into early retirement and is disabled due to long-term exposure to hazardous materials. His priority is to ensure that operations at LANL are done safely and properly so others remain safe.

Mr. Villegas stated that leadership is very important and that the NNMCAB has outstanding leadership. The Board may not always agree with the work being done at LANL or Sandia National Laboratory, but with continued collaboration, there can be a positive outcome. Mr. Villegas stated that his background is in Emergency Management for the Tribal Nations and if all the parties continue to collaborate there will be a positive outcome.

Ms. Fernandez stated that ballots would be provided to those that are present and Ms. Valdez sent out an electronic ballot to those online.

The votes were tallied and read. Ms. Gilbertson stated that Mr. L'Esperance received six votes and Mr. Villegas received four votes.

Mr. L'Esperance has been elected as Vice-Chair.

b. Consideration and Action on Draft Recommendation 2024-01, "Fiscal Year 2026 Budget Priorities"

Ms. Fernandez stated that a copy of the draft recommendation for the Fiscal Year 2026 Budget Priorities was provided in the meeting packet for review. The original recommendation was circulated to members and their edits were considered.

Mr. McLaughlin stated that he found three typographical errors. Page one, line twenty-two remove NNMCAB. It should read "fulfillment of that opportunity and responsibility." Line twenty-five, "the" is duplicated. On page two, line fifty-one "possible" should be removed.

Mr. Villegas stated that the term "possible" should be left in.

With no other comments from members, Ms. Fernandez recommended that edits be made to lines twenty-two and twenty-five and retain the word "possible" in line fifty-one. Ms. Fernandez then asked if there was a motion to move forward with voting.

Mr. McLaughlin made a motion to approve the recommendation, as amended; Mr. Villegas seconded the motion. The motion to approve the recommendation, as amended passed.

VII. Update from NMED

Ms. Caitlyn Martinez gave the update for NMED. Ms. Martinez stated that she is the Acting Program Manager for LANL's Corrective Action Program with the Hazardous Waste Bureau.

Consent Order - Fiscal Year 2024 Appendix B was submitted on July 28th. NMED and DOE have met regularly to negotiate a proposal and an agreement has finally been reached. Upon submission of the final Appendix B, NMED will coordinate a Public Meeting.

Groundwater – Well R-73 was plugged and abandoned in September 2023. DOE submitted a causal analysis for that failure in December 2023.

Chromium Interim Measure - NMED sent a Notice of Disapproval (NOD) for the Chromium Interim Measure (IM) and Characterization Work Plan on May 31st. In the NOD, NMED required that DOE propose an alternative injection location as part of the revised document. Meetings took place in July and December 2023, to discuss the comments. DOE submitted responses to the comments on January 3rd, and NMED anticipates a revision to be submitted by July 2024.

The Drilling Work Plan for Well R-76 was approved on June 8th and drilling and construction of the well started on September 21st. DOE requested a variance from the New Mexico Office of the State Engineer (NMOSE) for the approved Well R-76 work permit on November 24th. NMOSE denied the request on November 28th and suspended the permit until DOE submits the required information on the variance request. NMED, NMOSE, and DOE met on March 18th to discuss NMOSE's requirements for future permit submissions and the current variance. The well remains on pause.

DOE submitted a revised drilling work plan for Well R-79 on October 27th, to accommodate NMOSE's requirement for a single screen well. NMED reviewed the submission and issued comments on January 22nd. NMED is awaiting revisions.

DOE submitted a permit application for Well R-80. NMOSE returned the permit on January 3rd due to it being a proposed dual-screen design. NMED will review the revised drilling work plan to accommodate a single-screen design.

The injection and extraction portion of the Chromium IM Project has been shut down since April 1st. DOE and NMED have not agreed on a path forward. NMED has requested that DOE propose an alternative injection location for the contaminated water to resume operations NMED sent a letter to DOE on September 6th to propose a path forward for continued remediation of the Chromium Plume. The letter provided acceptable corrective actions that would allow for a temporary re-commencement of injections while an alternative injection location is proposed and developed. NMED also discussed the need to retain an independent mediator. That was based on the recommendation from the Government Accountability Office (GAO) and the Radioactive and Hazardous Materials Committee. DOE responded on December 5th in disagreement with the proposed corrective actions and conditions and requested approval to resume injection operations. DOE also stated that they retained the Savannah River National Laboratory to conduct an Independent Technical Review of Interim Measures Operations. NMED and DOE selected panelists and are in the process of beginning that review. NMED also responded to the December 5th letter with another letter on February 6th, stating a second compromise for partial injection operation. DOE does agree to long-term protective measures, NMED has extended the time for temporary authorization.

NMED is currently reviewing a drilling work plan for the SIMR-3 well on the Pueblo de San Ildefonso property. It is proposed as a dual-screen design, and it will monitor potential contamination south of the injection locations. NMED is also continuing discussions with DOE and the Pueblo de San Ildefonso's Department of Environmental and Cultural

Preservation, to determine if SIMR-3's construction will be completed as dual-screen or single-screen design. A three-party meeting took place on February 8th to present NMED's and DOE's perspectives. NMED will submit a response after it receives a response from the Tribal Council as to what plan they support.

Corrective Action – NMED issued their Statement of Basis for Material Disposal Area C (MDA C) on September 7th. In the statement, NMED proposed a remedy that would include the excavation of waste for appropriate final disposal and an active soil vapor Extraction System to remediate the Volatile Organic Compound (VOC) Plume. A final remedy will be selected after input from the public. The public comment period originally ended on November 6th and NMED received three requests for a public hearing on the Statement of Basis. The request came from TRIAD National Security, EM-LA/N3B, and Nuclear Watch New Mexico. NMED is currently in the process of scheduling a public hearing and the comment period for that Statement of Basis has been extended automatically to the close of the public hearing. NMED is also working with the County of Los Alamos and DOE to schedule a public town hall on June 10th. The town hall's purpose is to gather input on the remedy selection from residents.

NMED issued a review letter for the bi-annual asphalt monitoring and removal report for AOC C-00-041 on March 18th. NMED also attended the Natural Resource Damage Assessment Trustee Council meeting on March 6th.

Middle DP Road – NMED approved the Solid Waste Management Unit Assessment Report for Middle DP Road on February 14th. The LANL permit renewal application was submitted in 2020 and NMED has sent two administratively incomplete determinations. NMED is awaiting the submission of a new application. The application will include an additional storage unit that was not included in the original submission.

WIPP Update – The final permit renewal became effective on November 3rd and permittees are implementing new permit conditions that focus on a Legacy Tru Waste Disposal Plan. More information on this can be found on the Hazardous Waste Bureau WIPP page. WIPP has upcoming Procurement Management Reviews (PMR). A class 1, two-item package was submitted on March 19th. WIPP permittees agreed to submit the two class ones in the renewal negotiations. Item one is to revise the text and permit part one, section 1.5.1, regarding Tribal Community notice and involvement. Item two is to revise the text and permit attachment A1, concerning the flood zone designation for the WIPP facility. Class 2 is also a two-item package, and it is anticipated to be submitted on April 1st. Public notice is anticipated on April 2nd. Item one is concerning the addition of new shield container assemblies and item two is a graded approach to audit.

Shipment update – Total shipments are 52. They have received 39 from Idaho National Laboratory, 5 from Los Alamos National Laboratory, 5 from Savannah River Site, and 3 from Oakridge National Laboratory

VIII. Update from EM Los Alamos Field Office

Field Manager Transition – Ms. Gilbertson stated that effective March 24th, Mr. Mikolanis will transition to a new position for the National Nuclear Security Administration at the Savannah River Site. Ms. Gilbertson will be the Acting Manager for EM-LA.

Fiscal Year 2024 Budget – Congress has approved the Fiscal Year 2024 budget and funding details by site are in progress.

Hexavalent Chromium Plume - Correspondence has been exchanged with NMED regarding DOE's desire to resume the Chromium IM Campaign. DOE proposed a compromise, to resume injections in locations that were not designated as a concern by the State and to perform a partial resumption. On February 6th DOE received a response from NMED and it is currently under evaluation. A response to NMED's will be sent out within the week. As a result of the Chromium Measure being shut down, a rebound of Chromium concentration in key wells has been noted. DOE is continuing to monitor the wells and keep an open dialogue with NMED concerning this issue.

DOE and NMOSE have met regularly to work through the permit approvals for the new proposed wells. DOE is acquiring the necessary data to prepare for the remedy that is being created by NMED. DOE has also been working with the Pueblo de San Ildefonso on a second monitoring well on Pueblo land. EM-LA and NMED engaged experts from the Network of National Laboratories for Environmental Management and Stewardship to perform a technical review and to assist in facilitating discussions between DOE and NMED's differing of professional opinions. The review team consists of fourteen members with participation from industry, Academia, and the Environmental Protection Agency (EPA) Region 6. The team is being led by Dr. Triay, the Interim Dean of the College of Engineering and Computing for Florida National University. The review began on March 18th and both DOE and NMED have provided presentations and technical information to the team for review. All three parties will continue to engage regularly and public engagement opportunities for this review are currently being coordinated.

a. Questions

Mr. Hayden asked if NMED agrees that the pressure wall approach is a temporary acceptable alternative for injection.

Ms. Martinez stated that NMED has evaluated this process for the past five years. There has been no significant indication from the data that the injection wall is having a noticeable impact on the water table, nor would it cause hydraulic control. They have noted a water table decrease from the pressure pool from the extraction wells and there are concerning trends that NMED believes are a result of injection operations in the Eastern Region. NMED would like to see DOE find another location to place the clean water that is not connected with the plume.

Mr. Hewlett asked what they believed caused the Chromium rebound after they thought that a barrier had been created by injection at the time the interim measure had been stopped.

Ms. Martinez stated that the state did not feel their concerns were being addressed adequately so they opted for the shutdown of injection. DOE did provide an assessment of modeling results of what could be anticipated but NMED thought there would be more time before a rebound.

Ms. Gilbertson stated that DOE believes that the hydraulic pressure is working, and without a barrier there is nothing to hold it back. DOE has modeling that supports this data but ultimately, the technical review team will assist in helping the two parties reach a professional agreement.

Mr. Life asked if there is an estimate of how long it will take to remediate the areas where the plume is located.

Ms. Martinez stated that they cannot provide a time frame for complete remediation.

Mr. Villegas asked where the community fits in in terms of mitigation and what aquafer will be affected.

Ms. Martinez stated the Española basin is where the contamination is located. She then stated that NMED provides a quarterly update to the public and they encourage public facilitation.

IX. Update and Look Ahead from N3B

Mr. Brad Smith provided the update for N3B. Mr. Smith introduced himself and thanked Ms. Fernandez for her service and congratulated Mr. Pacheco on his position as Chair. Mr. Smith then introduced Mr. Evered, Ms. Henderson, Ms. Kerrigan, and Mr. Griebenow.

Mr. Smith stated that nine members of his team and himself attended the Waste Management Conference in Phoenix, Arizona. N3B highlighted the Los Alamos cleanup progress and participated in the panels on WIPP and waste shipments and the Contractors President Panel. During the panels N3B discussed mission delivery, leadership development, career development/ next-generation workforce, regulatory issues, mission excellence and safety culture.

N3B gave out the Danny Nichols and Mike Huddleston scholarships to local students. Jade Madrid, Amber Ferree, and Felicia Rodriguez each received a $9000.00 scholarship to pursue a field of their choice. N3B is also contacting local high schools to discuss internships.

Mr. Smith stated that in the next quarter, N3B will be mobilizing crews to go out to Chaquehui and Lower Pajarito Canyon. N3B continues its investigation remediation of Starmer/Upper Pajarito and Twomile Canyon. There is continuing progress with corrugated metal pipes and drill and drain operations have resumed after a shutdown due to lack of staffing. The staff has been requalified and sent back out in the field. N3B is also piloting a Universal Drum Assay and segregation system. The system is a refined counting mechanism to understand if the waste is either TRU Waste or Low-Level Waste. This system will assist in shipping the waste to the proper sites and not overload WIPP with waste that may be stored at other locations. Counting began on March 19th and more data will be provided at subsequent NNMCAB meetings. An Environmental Management Cleanup Forum is scheduled for April 18th at the Sala Event Center at Fuller Lodge. The focus will be on Waste Disposition and Ms. Gilbertson will also be providing updates.

Mr. Smith turned the update over to Mr. Griebenow.

Mr. Griebenow introduced himself and provided information on his background. Mr. Griebenow stated that he was employed by DOE and the Department of Defense (DOD) for thirty-seven years and has currently been employed by N3B since 2023. His previous employment included being Deputy Program Manager at the Pueblo Chemical Agent Pilot Plant in Pueblo Colorado. Their mission was to disassemble and dispose of mustard gas munitions from the United States Arsenal.

Mr. Griebenow stated that N3B is standing up a new Mission Excellence Program that is another facet of Mr. Smith's operational excellence initiative. Mr. Griebenow believes that mission excellence consists of two parts. The two are execution and people. On the execution side, they intend to elevate maintenance and work controls to an N3B Level and to unify the CH-TRU and Environmental Remediation maintenance organizations and place them under N3B level programs and procedures. The organizations will be cross trained, and this will lead to the optimization of the team's ability to support the mission. There will also be a focus on disciplined operations dedicated to implementing Conduct of Operation from across the DOE complex and reinforcing the disciplined operations in the field through coaching and mentoring. On the people side, N3B intends to increase their focus on their staff and create a better work environment for staff. A program titled Individual Developing Effective Alternative Solutions is being created to assist employees in identifying their ideas on how to improve N3B's safety and work environment.

a. Question

Mr. Pacheco asked what the $9000 scholarship money is allowed to be applied to.

Mr. Smith stated that it can be applied to the field of the recipient's choosing.

X. Presentation on Ground Water Monitoring

Mr. David Fellenz, N3B Presented on "Groundwater Monitoring." 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. Fellenz began his presentation by providing a history of LANL's Groundwater Program. He stated that LANL was established in 1943 to develop and test nuclear weapons. The first groundwater samples took place in 1945 and throughout the 1990s. Hundreds of supply, observation, test, and monitoring wells were installed across the Pajarito Plateau. From 1997-2005, the Hydrogeologic Characterization program was implemented and presently 203 monitoring locations exist across a forty-mile campus. The groundwater program fulfills the requirement in Section XII of the 2016 Compliance Order on Consent and Appendix B Milestone 1, and it's titled the *Interim Facility Wide Groundwater Monitoring Plan* (IFGMP). The plan is updated annually, and it runs from October 1st to September 30th. The plan consists of Monitoring Locations, Sampling Frequency, Analytical Suites, Sampling Schedules, and Reporting Requirements. The purpose of the plan is to determine the fate and transport of legacy-waste contaminants, detect the arrival of potential legacy contaminants in groundwater, evaluate efficacies of corrective action remedies and support proposed correction measures. The plan consists of eight monitoring groups. Each group monitors for different analytes and evaluates the condition and life span of the well. Off-site monitoring also takes place however, these samples do not fall under the IFGMP. Samples are taken from Los Alamos County, the City of Santa Fe, Pueblo de San Ildefonso, and domestic wells and springs. Mr. Fellenz then provided information on per- and polyfluoroalkyl substances (PFAS). He stated that it was developed in the 1930s and was originally utilized to coat pipes to prevent corrosion during the Uranium process. PFAS was added to the list of toxic pollutants in 2018 and was added to groundwater monitoring in 2019. Since that time only small amounts have been detected in regional aquifers.

a. Questions

Mr. Hayden asked if the PFAS found at LANL is considered Legacy Waste.

Mr. Fellenz stated that LANL does not have a legacy history of PFAS use. It was mainly utilized at Hanford and Oak Ridge while they were enhancing Uranium and Plutonium during the Manhattan Project era. Of the three locations that PFAS has been detected, none has been found to have exceeding levels of PFAS. N3B will continue to monitor.

Mr. Villegas asked if the Cochiti Dam was part of their off-site sampling.

Mr. Fellenz stated that samples are not taken as far as Cochiti Lake and Dam.

Mr. Life asked what the effects of Aqueous Film Forming Foam (AFFF) on the outer human body are.

Mr. Fellenz stated it is similar to exposure to radioactive elements. Acute versus chronic exposure and science is still uncovering data on the effects.

Mr. Pacheco asked if the canyon south of the airport had been tested due to the local firefighters shooting foam into the canyon.

Mr. Fellenz stated that the canyon is monitored because they have a well in that area. That area is also the site that contains the highest concentrations of PFAS.

Ms. Fernandez asked if soil samples are also being taken.

Mr. Fellenz stated that TRIAD is spearheading all soil and air monitoring, but N3B will work in conjunction with them.

Ms. Fernandez stated that New Mexico Toxic Pollutant Group is working to add more PFAS constituents to the toxic pollutant list and are currently looking for other resolutions to the matter.

XI. Public Comment Period

Ms. Fernandez opened the floor for public comment at 4:18 p.m.

Mr. Scott Kovac, Nuclear Watch New Mexico, signed up for public comment. Mr. Kovac stated that the DOE budget request for FY2025 was released. LANL cleanup is currently scheduled to end in 2044. That does not include excavating any Material Disposal Areas. To date, LANL has spent 4.6 billion dollars on cleanup and have from 4.1 billion to 6.1 billion dollars left to go.

With no further public comment, Ms. Fernandez closed public comment at 4:21 p.m.

XII. Adjournment

Ms. Maestas stated that there will be a Combined Subcommittee meeting on April 24th with a presentation from Lauren Foster. Ms. Foster will discuss Ground Water Monitoring as a tool for remediation. The Spring Chairs Meeting will take place in Chillicothe, Ohio from April 29th-May 2nd. The event is being hosted by the Portsmouth Citizens Advisory Board. A LANL tour is being planned for June 12th and the NNMCAB will be attending a WIPP tour on October 17th. Travel day to Carlsbad is October 16th. Two groups of ten will be going on a tour underground.

With no additional business to discuss, Mr. Grindstaff adjourned the meeting at 4:32 p.m.

Certified By:

5/29/2024

Mr. Patricio Pacheco, Chair

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

Attachments

1. **Final NNMCAB Meeting Agenda for 03/20/2024**
2. **NNMCAB Recommendation 2024-01, "Fiscal Year 2026 Budget Priorities"**
3. **Biography, David Fellenz**
4. **Presentation by David Fellenz N3B, "Overview of Groundwater Monitoring at Los Alamos National Laboratory"**
5. **Handout, Cleanup Snapshot August 2023**
6. **Handout, Cleanup Snapshot September 2023**
7. **Handout, Cleanup Snapshot October 2023**
8. **Handout, NNMCAB Meeting Schedule for 2024**

Public Notice:

***All NNMCAB meetings are recorded. Audio files will be placed on file for review at the NNMCAB office, 94 Cities of Gold Road, Santa Fe, New Mexico, 87506. The written minutes are intended as a synopsis of the meeting.**

Attachments

Northern New Mexico Citizens' Advisory Board
March 20, 2024
Cities of Gold Hotel, Tribal Room
10 Cities of Gold Road
Santa Fe, NM 87506
1:00 p.m. to 5:00 p.m. (MT)

(Please see WebEx Call-In Information Below)

AGENDA

Time	Action	Presenter
1:00 p.m.	Call to Order	Keith Grindstaff, Deputy Designated Federal Officer
	Welcome and Introductions	Elena Fernandez, Chair
	Overview and Approval of Agenda	
1:10 p.m.	Old Business	
	a. Update from Chair and Vice-Chair	Elena and Patricio
	b. Update from Subcommittee Chairs	Elena and Mark
	c. Other Items	
1:30 p.m.	New Business	
	a. Special Election for Vice-Chair	Elena
	b. Consideration and Action on Draft Recommendation 2024-01, "Fiscal Year 2026 Budget Priorities"	Elena
	c. Other Items	
2:00 p.m.	Update from NMED	Rick Shean
2:30 p.m.	Update from EM Los Alamos Field Office	Ellie Gilbertson, EM-LA Deputy Field Manager
3:00 p.m.	Update and Look Ahead from N3B	Brad Smith President and General Manager
3:30 p.m.	**Break**	
3:45 p.m.	"Groundwater Monitoring at LANL"	David R. Fellenz Groundwater Monitoring Technical Lead
4:30 p.m.	**Public Comment Period**	
4:45 p.m.	Update from Executive Director Recognition of Outgoing Members	Bridget Maestas
5:00 p.m.	Adjourn	Keith Grindstaff, DDFO

Meeting number (access code): 2821 455 0347
Meeting password: ZKqYkKqc435
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NORTHERN NEW MEXICO CITIZENS' ADVISORY BOARD
Recommendation to the Department of Energy
No. 2024-01
Fiscal Year 2026 Budget Priorities
Drafted by: Elena Fernandez and Ad Hoc Committee

Background

On March 30, 2016, the Northern New Mexico Citizens Advisory Board (NNMCAB) approved a recommendation on budget priorities for Fiscal Year 2018. At the time of this writing, the majority of recommendations for priority remediation and completion of those priorities have yet to be completed. The reasoning for incomplete or non-yet completed clean-up has been due to several factors such as the scope and scale of the work involved, newly discovered areas of contamination such as on DP Road, and the unknown depth and width of the Hexavalent Chromium Plume.

Comments and Observations

Since the inception of the NNMCAB, the Department of Energy (DOE) has requested input from the NNMCAB on development of top clean-up priorities for Environmental Management of Legacy Waste at Los Alamos National Laboratory, the clean-up program of which is under the purview of DOE/EM-LA and performed by its remediation subcontractor Newport News Nuclear BWXT-Los Alamos, LLC (N3B). This recommendation is consistent with and in fulfillment of that the NNMCAB's opportunity and responsibility.

Based the on the data and information available, and in the interest of the safety, wellbeing of the regional environment (and in consideration of migration across all other downwind communities) and environmental justice of land-based communities and New Mexico Tribal Sovereign Nations, the NNMCAB is providing the following as our input for the Fiscal Year 2026 top clean-up priorities, and for concurrent implementations and activities. Public health and safety and environmental justice are some of our highest priorities; therefore, we respectfully urge continuation of existing EM-LA legacy cleanup funding, that future funding be made available, and that Congress appropriate full base-line funding necessary for this comprehensive clean-up effort.

The current NNMCAB's list of prioritized projects is nearly identical to that of the 2016 recommendations and consists of projects that ought to receive priority in the form of increased funding and resources sufficient to complete them. However, such activities should not be undertaken at the expense of nor detriment to other on-going clean-up efforts, nor at the expense or detriment of that work and those facilities and operations that make clean-up possible. Furthermore, the NNMCAB has prioritized facilities and projects for increased funding and resources based upon areas of concern and risks to human, ecological, and environmental health and safety. The NNMCAB also recommends that the identified projects should be reasonably implemented and completed concurrently.

Recommendation

Facilities	Projects
1. Above-ground storage dome: Continued reskinning for continued safe storage. **2. Work Areas:** In addition to standard protocols for hazardous work, ensure workers have access to adequate heating, cooling, facilities, and safety features that ensure worker safety and security, and support mitigation or reduction of exposures to environmental health hazards.	**1. Hexavalent Chromium Plume (Cr VI):** DOE/EM-LA should concentrate efforts on resuming and completing the chromium Remediation of the Cr (VI) plume that is also a priority under the *2016 Order on Consent* and as agreed to by the NMED and DOE/EM-LA (NMED and DOE, 2017). **2. CH-TRU Waste Removal to WIPP** **3. Watershed remediation** **4. Technical Area 21** Continuance of efforts to remediate and transfer land to Los Alamos County. **5. Material Disposal Areas:** MDA A & B MDA H MDA L

Intent

It is the intent of this recommendation that the NNMCAB provide and have input into developing the budget priorities for FY 2026. It is also the intent of this recommendation to support compliance with federal and local regulations to the greatest extent possible. This will ensure effective and safe remediation based on the best available science and data possible that are technically and regulatorily defensible. It is also the intent of this recommendation that funding is adequately and appropriately provided to ensure continuing clean-up efforts, that also helps to ensure and enable DOE/EM-LA to make significant progress if not completion of campaigns (these and all) within a reasonable timeframe.

References

1. Flynn, R. (2016, March 30). New Mexico Environment Department (NMED) presentation to the Northern New Mexico Citizens Advisory Board on the Revised Consent Order [Power Point Presentation]. Retrieved from https://www.energy.gov/em/nnmcab/articles/nmed-revised-lanl-consent-order-draft-march-2016

2. NMED and DOE. (2017, February 17). *2016 Compliance Order on Consent*. Retrieved from https://www.energy.gov/sites/prod/files/2020/01/f70/2016%20Consent%20Order_February%2017.pdf

David Fellenz

Groundwater Monitoring Technical Lead

Since May 2018 David Fellenz has served with N3B's critical subcontractor Tech2 Solutions (T2S) as Technical Lead for the Groundwater Monitoring Project in N3B's Environmental Remediation program. In this role he provides technical insights regarding the groundwater system, oversight of field sampling events, and groundwater-level data validation. He also assists in interfacing with the New Mexico Environment Department (NMED) on groundwater technical matters. David is the Groundwater Project's subject matter expert on reporting of per- and polyfluoroalkyl substances (PFAS), and serves on the PFAS integrated project team.

David received a B.A. in geology from Lawrence University in Appleton, WI in 2003. In 2010 David took a position as a field geologist with TerranearPMC, Inc. where he worked until 2015. He then joined NMED within the DOE Oversight Bureau, where he conducted non-regulatory sampling at DOE sites for groundwater, surface water, air quality, and biota.

David loves playing his drums and it has become more than just a hobby. He has formed or taken part in multiple bands over the years. Currently he plays with DK & The Affordables, a rockabilly band, as well as Escape on a Horse, a band comprised of several N3B employees. He has played at numerous events across New Mexico and the Southwest. David is also involved with Cub Scouts and currently serves as Cubmaster of Los Alamos Pack 22.

N3B Los Alamos

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Overview of Groundwater Monitoring at Los Alamos National Laboratory

Presentation to

Northern New Mexico Citizens' Advisory Board

March 20, 2024

David Fellenz – Groundwater Monitoring Technical Lead, N3B/T2S

DEPARTMENT OF ENERGY EM-LA ENVIRONMENTAL MANAGEMENT LOS ALAMOS
ENVIRONMENTAL MANAGEMENT
SAFETY ❖ PERFORMANCE ❖ CLEANUP ❖ CLOSURE

N3B Los Alamos

Background: Groundwater Monitoring at LANL

- 1943 - WWII – LANL established for research, development, and testing of nuclear weapons
- 1943 - present – Diverse operations → various impacts to environment
- 1945 – Earliest groundwater monitoring studies
- Mid-1990s – Hundreds of supply wells, test holes, observation wells, and monitoring wells installed across Pajarito Plateau
- 1997 - 2005 – Implementation of Hydrogeologic Characterization Program
- Today – Network of 203 monitoring locations across the 40 square mile campus

Interim Facility-Wide Groundwater Monitoring Plan (IFGMP)

- Fulfills groundwater monitoring requirement in Section XII of the 2016 Compliance Order on Consent and Appendix B Milestone 1
- Updated annually with approval from NMED
- Monitoring year runs from October 1 through September 30
- Provides:
  - Monitoring Locations
  - Sampling Frequency
  - Analytical Suites
  - Sampling Schedule
  - Reporting Requirements

Loading rafts ahead of the annual White Rock Canyon sampling event

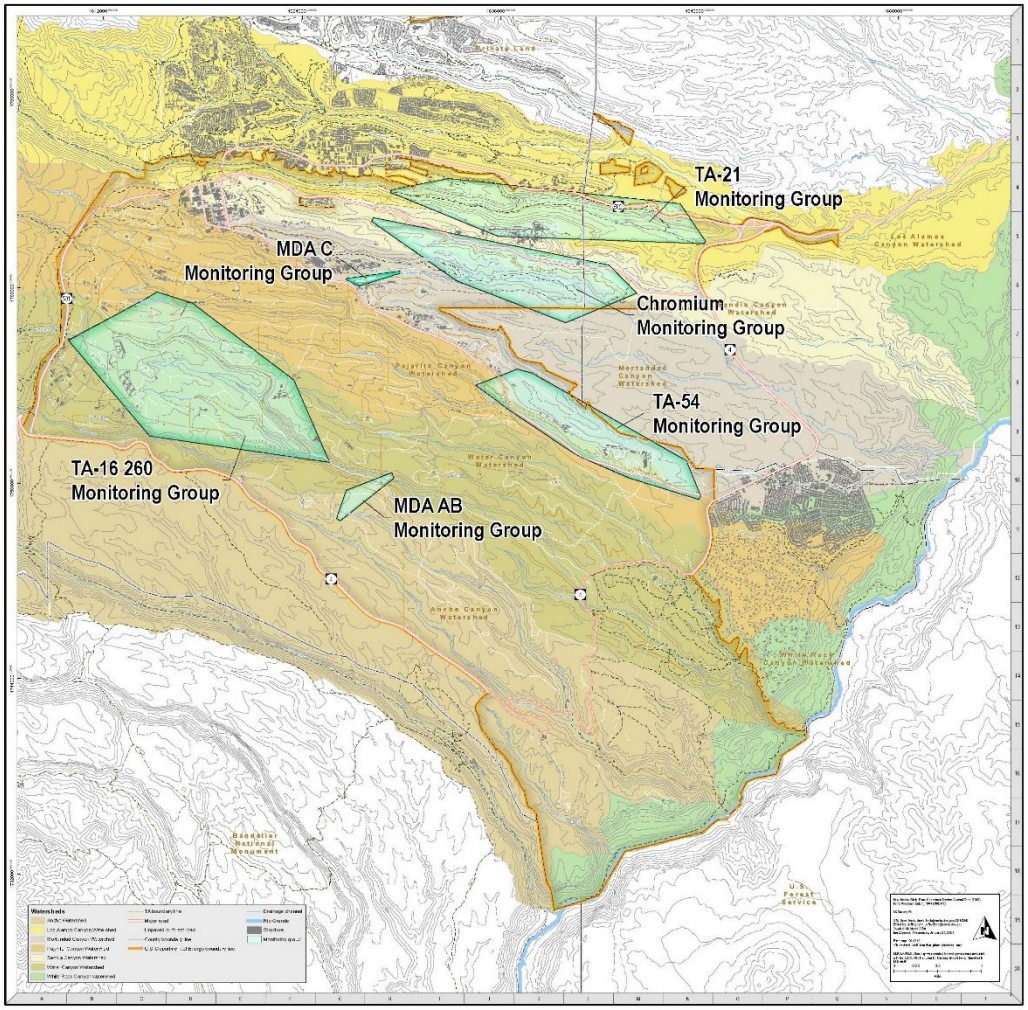
IFGMP Purpose

- Determine the fate and transport of known legacy-waste contaminants
- Detect the arrival of potential legacy contaminants in groundwater from previous releases
- Evaluate efficacies of corrective action remedies
- Support proposed corrective measures

The IFGMP is available for download at https://eprr.em-la.doe.gov

Samplers purging well prior to sample collection

Locations of Monitoring Groups Across the Pajarito Plateau



IFGMP Monitoring Groups

Monitoring Group	Site History	Analytes of Concern
TA-16 260 Outfall	Former high explosives (HE) machining outfall. Discharge 1951 – 1996	RDX, HMX, TNT, barium, TCE, and toluene
TA-21	Historical plutonium processing, weapons production, and tritium research	Tritium, nitrate, and perchlorate
TA-54	Radioactive waste storage & disposal area	TCE and tritium
Chromium Investigation	Hexavalent chromium discharged 1956 – 1972 as blowdown water from cooling towers	Hexavalent chromium, perchlorate, sulfate, nitrate, tritium
MDA AB	Underground hydronuclear testing in early 1960s. Experiments produced large inventories of radioactive and hazardous materials	Tritium, radionuclides, arsenic, chromium, copper, lead, perchlorate
MDA C	Inactive landfill, low-level and chemical wastes	TCE and tritium
General Surveillance	Not project-specific. Long-term monitoring of potential impacts from on-going operations	Watershed specific

Water Occurrences at Monitoring Locations

- **Base flow** – persistent surface water maintained by precipitation, effluent, or other sources
- **Alluvial groundwater** – water within the alluvium present in canyon bottoms
- **Perched-intermediate groundwater** – localized saturated zones of limited lateral extent within the unsaturated zone
- **Regional groundwater** – deep, laterally continuous groundwater beneath the Pajarito Plateau

Note: Discharge at springs is the surface expression of groundwater and can be from alluvial, perched-intermediate or regional sources

Monitoring Locations

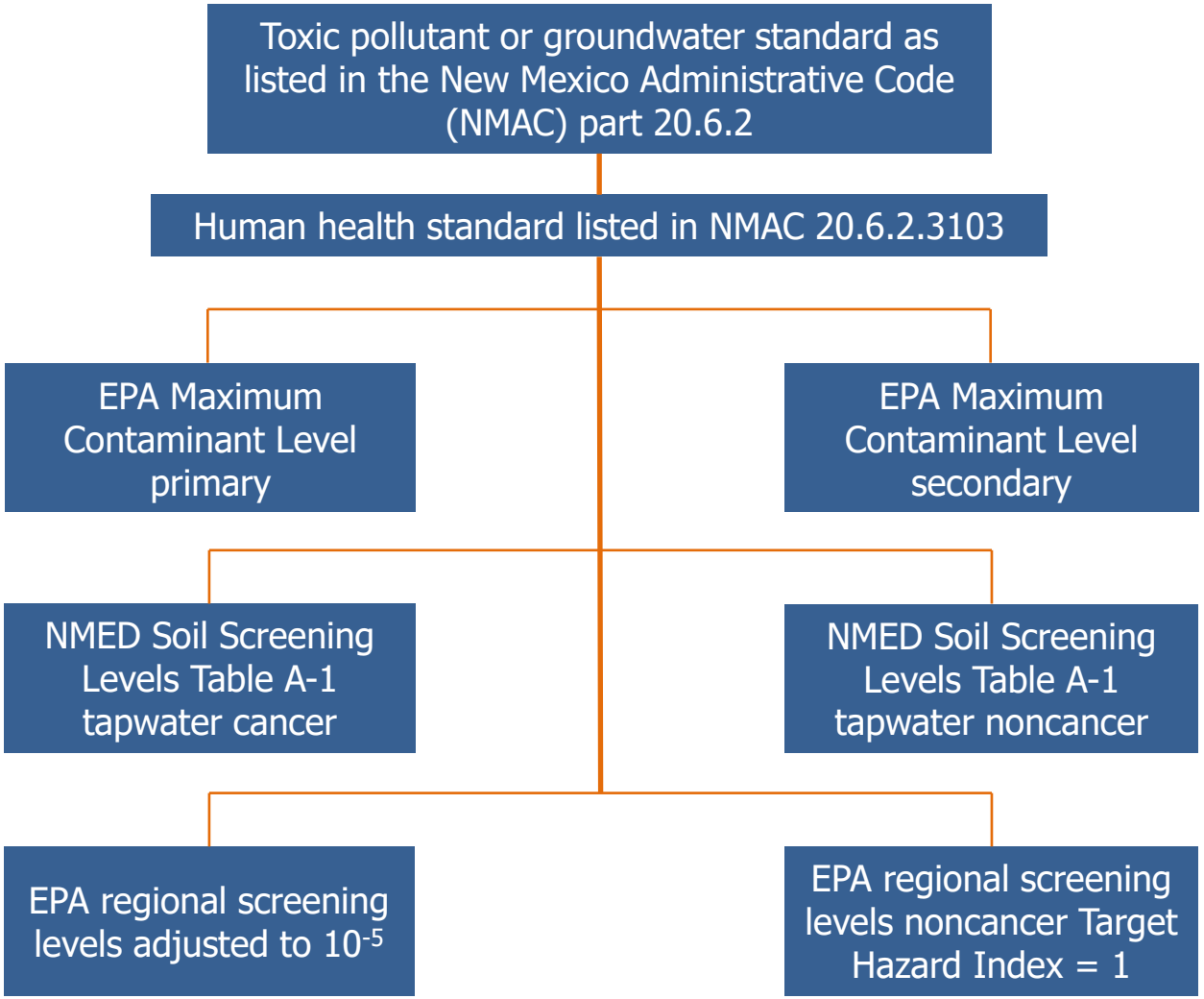
Number of Groundwater Monitoring Locations by Type	
Base Flow Sites	14
Springs	30
Alluvial Wells	20
Perched-Intermediate Wells	41
Regional Aquifer Wells	98

Off-Site Monitoring

- Not associated with IFGMP groundwater sampling
- Sampling of Los Alamos County and City of Santa Fe water supply wells
- Sampling of Pueblo de San Ildefonso water supply wells, domestic wells, and springs
- Select Los Alamos County wells sampled monthly to ensure continued absence of chromium
- Wells in Buckman well field sampled semiannually for general characterization and specific constituents of interest

View inside of pump house at production well Buckman 1

Groundwater Screening Criteria



Monitoring Objectives

- Identify concentration trends
- Determine long-term monitoring needs
- Evaluate representative conditions
- Understand potential contaminant sources
- Assess nature and extend of emerging contaminants

Typical setup for sample collection at a regional groundwater monitoring well

Emerging Contaminants: PFAS Background

- PFAS: **P**er- and **p**oly**f**luoro**a**lkyl **s**ubstances
- Over 15,000 anthropogenic chemicals
- First developed in the 1930s and used during the Manhattan Project
- 1950s through present – widely used in industrial and commercial applications
- Uses include:
  - non-stick coatings
  - grease-proof food-contact paper
  - waterproof fabrics
  - stain and water-resistant products
  - firefighting foam – Aqueous Film Forming Foam (AFFF)

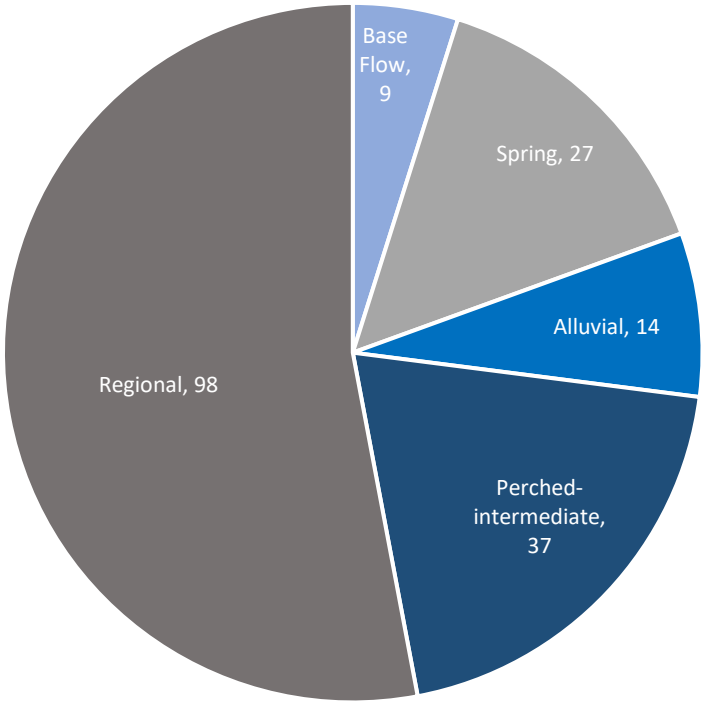
Example of AFFF in an industrial setting for illustration purposes only

Emerging Contaminants: PFAS Regulations in NM

- New Mexico Water Quality Control Commission added 3 PFAS to Toxic Pollutants List in December 2018
  - Perfluorohexane sulfonic acid (PFHxS); Perfluorooctane sulfonate (PFOS); Perfluorooctanoic acid (PFOA)
  - Initial screening level cumulative limit of 70 ng/L for 3 compounds
- As of June 2022 screening levels are for individual compounds
  - PFHxS – 400 ng/L
  - PFOA – 60 ng/L
  - PFOS – 60 ng/L
    - 1 ng/L is equivalent to 1 second in 31,688 years

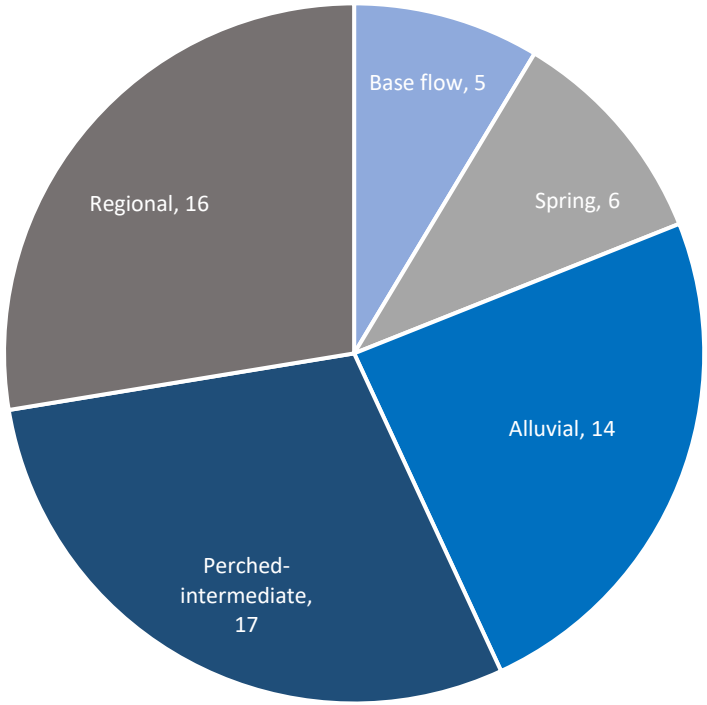
PFAS Proportional Distributions

Total Samples by Water Type



185 total locations sampled

PFAS Detects



58 total PFAS detects

3 locations (2 alluvial and 1 perched-intermediate) have exceeded a PFAS screening level

Summary

- Robust groundwater monitoring network:
  - Focus on specific monitoring groups ensures appropriate analytes are collected
  - Flexibility to tailor analytical suites based on historical and emerging contaminants of concern
  - Collection of suitable data sets to support potential remedial actions and source-term identification
  - Helps define extent of contamination
- Additional off-site monitoring ensures safety and quality of drinking water supplies
- Annual updates to sampling plan ensure that emerging contaminants are sampled

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Questions

ENVIRONMENTAL MANAGEMENT
SAFETY ❖ PERFORMANCE ❖ CLEANUP ❖ CLOSURE

Produced by Los Alamos Legacy Cleanup Contractor, N3B Los Alamos
on behalf of DOE's Environmental Management Los Alamos Field Office

N3B Los Alamos

Cleanup Snapshot

August 2023

Los Alamos Legacy Cleanup

Highlights of the Month

- **Consent Order:** Met two 2016 Consent Order fiscal year (FY) 2023 milestones agreed upon with New Mexico Environment Department (NMED)
  - Milestone #8: Submitted to NMED for review and approval Phase II Investigation Report for North Ancho Canyon Aggregate Area. The report signals the end of remediation activities.
  - Milestone #11: Submitted to NMED for review and approval Phase II Investigation Report for Threemile Canyon Aggregate Area. The report signals the end of remediation activities.
- Completed 20 shipments of waste off-site, totaling 273.99 cubic meters (m^3), enough waste to fill more than 1,315 55-gallon drums
- As part of N3B's commitment to operational excellence, including an emphasis on safety, initiated a Stop Work Action at Technical Area (TA)-21 and TA-54 to address workforce training requirements. Transuranic (TRU) waste shipments to the Waste Isolation Pilot Plant (WIPP) and Corrugated Metal Pipes (CMPs) retrieval and size reduction activities were paused as a result.

PROTECT WATER QUALITY

♦ ADDITIONAL ACCOMPLISHMENTS ♦

Hexavalent Chromium Plume: Remediating contaminated groundwater

- Conducted a walk-down of the planned location for a second regional monitoring well, SIMR-3, on Pueblo de San Ildefonso lands

Sample Collection: Monitoring surface water and groundwater to ensure water is protected

- Collected 458 water samples to the support water quality protection program

CLEAN UP THE LAND

♦ ADDITIONAL ACCOMPLISHMENTS ♦

Material Disposal Areas (MDAs): Securing needed data and preparing solutions to address old waste disposal sites

- MDA H – Continued developing the Corrective Measures Evaluation (CME), analyzing remedial alternatives. Report is due to NMED by September 30, 2023 (Consent Order milestone #13)

Cleanup Snapshot

August 2023

Consent Order Milestones	# of Milestones	Milestones Met	In Progress
FY23	14	9	5
FY22	18	18	N/A
FY18* - FY22	79	78	N/A

*3 FY18 milestones met before N3B contract start

Click to review FY23 Consent Order Milestones

Aggregate Areas: Remediating surface soils throughout LANL to protect water quality

- Potrillo and Fence Canyons Aggregate Area
  - Completed sampling for four of the nine waste units (called Solid Waste Management Units (SMWUs))
  - Began preparing progress report summarizing field work and status of site investigations. Report is due to NMED September 29, 2023 (Consent Order milestone #9)
- Twomile Canyon Aggregate Area
  - Completed 77% of initial sampling (collecting 1,821 samples since project start)
  - Prepared and sent for peer review progress report summarizing field work and status of site investigations. Report is due to NMED September 29, 2023 (Consent Order milestone #10).

Sample Collection: Collected 239 soil samples, including Twomile Canyon Aggregate Area, Threemile Canyon Aggregate Area, Potrillo-Fence Canyon Aggregate Area, and Starmer Upper Pajarito Aggregate Area. Sample collection is important to understanding the nature and extent of contamination and, in turn, determining where removal is needed to protect human and ecological health.

SHIP WASTE OFF-SITE

♦ ADDITIONAL ACCOMPLISHMENTS ♦

Off-Site Waste Shipments: Shipping hazardous and radioactive waste for off-site disposal (partial list)

- **MDPR:** Eight roll-off bins of low-level radioactive waste (LLW) to Waste Control Specialists, Andrews, Texas
- **Misc. Shipments**
  - Two roll-off bins from TA-06 to Energy Solutions, Clive, Utah
  - One tanker of water (~3,200 gallons) from hexavalent chromium well R-71 to Deer Trail, Colorado

A Look Ahead

- Secure the well R-76 permit from New Mexico Office of the State Engineer, and begin drilling well
- Finalize the MDA H Corrective Measures Evaluation report, including the recommended remedy, and submit it to NMED (Consent Order milestone #13)
- Restart retrieval and size reduction of CMPs
- Continue development of Pit 9 requirements for retrieval enclosure, venting overpack facility, and Dome 375 box processing upgrades at Area G
- Evaluate options for assay of fiberglass reinforced plywood (FRPs) in Pit 9 and finalize Pit 9 conceptual drawings.

Cleanup Snapshot

Sept. 2023

Los Alamos Legacy Cleanup

Highlights of the Month

- **Consent Order Milestones:** Met all five 2016 Consent Order milestones agreed upon with New Mexico Environment Department (NMED) during September 2023
  - Milestone #3: Letter documenting the start of drilling well R-76, a well to characterize and monitor hexavalent chromium contamination in the regional aquifer
  - Milestone #9: Phase II Progress Report for Potrillo and Fence Canyons Aggregate Area. The report includes an update on field investigations, including sampling activities.
  - Milestone #10: Progress Report for Twomile Canyon Aggregate Area. The report includes an update on field investigations, including sampling activities.
  - Milestone #12: Progress report Starmer/Upper Pajarito Canyon Aggregate Area. The report includes an update on field investigations, including sampling activities.
  - Milestone #13: Corrective Measures Evaluation (CME) Report for Material Disposal Area H. CME presents a remedial alternatives analysis, including the recommendation to NEMD for addressing legacy contamination.
- Completed 12 shipments of waste off-site, totaling 97.1 cubic meters (m^3), enough waste to fill more than 466 55-gallon drums
- As part of N3B's commitment to operational excellence, including an emphasis on safety, resumed work at Technical Area (TA)-54 following a Stop Work Action to address workforce training requirements

PROTECT WATER QUALITY

♦ ADDITIONAL ACCOMPLISHMENTS ♦

Hexavalent Chromium Plume: Remediating contaminated groundwater

- Continued developing drilling work plan for well R-79, a well to characterize and monitor hexavalent chromium in the regional aquifer
- Continued developing drilling work plan for well SIMR-3, a characterization and monitoring well on Pueblo de San Ildefonso lands

Sample Collection: Monitoring surface water and groundwater to ensure water is protected

- Collected 406 water samples to the support water quality protection program

Cleanup Snapshot

Sept. 2023

Consent Order Milestones	# of Milestones	Milestones Met	In Progress
FY23	14	14	0
FY22	18	18	N/A
FY18* - FY22	79	78	N/A

*3 FY18 milestones met before N3B contract start

Click to review FY23 Consent Order Milestones

CLEAN UP THE LAND

♦ ADDITIONAL ACCOMPLISHMENTS ♦

Material Disposal Areas (MDAs): Securing needed data and preparing solutions to address old waste disposal sites

- MDA A – Received approval from NMED of the investigation work plan. The plan describes the activities to close identified data gaps.
- MDA C – Initiated the semiannual vapor monitoring program

Aggregate Areas: Remediating surface soils throughout LANL to protect water quality

- Briefed the Northern New Mexico Citizens' Advisory Board on the Aggregate Areas program, including successful completion of all FY23 milestones

SHIP WASTE OFF-SITE

♦ ADDITIONAL ACCOMPLISHMENTS ♦

Transuranic (TRU) Waste: Preparing and shipping radioactive waste for permanent disposal to the Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico

- Corrugated Metal Pipes (CMPs): Resumed size reduction activities following Stop Work Action; retrievals remained on hold through September
- Pit 9: This disposal site at Area G is the next below ground retrieval of drums and fiberglass reinforced plywood boxes; current activities focus on work planning and analysis
  - Submitted soil sampling and analysis plans for subject matter expert (SME) review
  - Completed statement of work for geotechnical engineering support
- Due to the Stop Work Action to address training, did not make any shipments to WIPP during September 2023

A Look Ahead

- Continue new hexavalent chromium well developments
- Conduct Rio Grande White Rock Canyon sampling
- Complete field work at Middle DP Road Site
- Restart WIPP shipments and CMPs retrievals following August stop work order
- Continue development of Pit 9 requirements for retrieval enclosure, venting overpack facility, and Dome 375 box processing upgrades
- Start contract for design and build of Pit 9 enclosure and drum venting enclosure

Cleanup Snapshot

Oct. 2023

Los Alamos Legacy Cleanup

Highlights of the Month

- Completed the White Rock Canyon sampling campaign, a four-day event that utilized rafts and hiking along the Rio Grande. Collected samples at 20 of 25 locations. Due to water levels and wildlife (i.e., rattlesnakes) not all sites were sampled.
- Completed final Middle DP Road Site walk-down with Los Alamos County, resolving issues identified in August 2023 walk-down, and setting stage to demobilize barriers and disposition remaining waste stored at Technical Area 21 (TA-21)
- Shipped 147.06 cubic meters (m^3) of waste off-site, enough to fill more than 700 55-gallon drums
- Resumed Corrugated Metal Pipe (CMPs) retrievals

PROTECT WATER QUALITY

♦ ADDITIONAL ACCOMPLISHMENTS ♦

Hexavalent Chromium Plume: Remediating contaminated groundwater

- Submitted to the New Mexico Environment Department (NMED) the drilling work plan for well R-79, a well to characterize and monitor hexavalent chromium in the regional aquifer
- Continued drilling well R-76, a well to characterize and monitor hexavalent chromium in the regional aquifer

Sample Collection: Monitoring surface water and groundwater to ensure water is protected

- Collected 356 water samples to the support water quality protection program
- Initiated seasonal shut down of sampling equipment

CLEAN UP THE LAND

♦ ADDITIONAL ACCOMPLISHMENTS ♦

Material Disposal Areas (MDAs): Securing needed data and preparing solutions to address old waste disposal sites

- MDA C – Completed the semiannual vapor monitoring program. VOC and tritium samples were successfully collected at 18 monitoring wells

Sample Collection: Collected 493 soil and sediment samples, including 209 from the Twomile Canyon Aggregate Area, and 235 from the Starmer/Upper Pajarito Aggregate Area. Sample collection is important to understanding the nature and extent of contamination, determining where removal is needed to protect human and ecological health, and confirmatory sampling to ensure regulatory standards are met.

Cleanup Snapshot

Oct. 2023

Consent Order Milestones	# of Milestones	Milestones Met	In Progress
FY24	TBD	TBD	N/A
FY23	14	14	N/A
FY18* - FY23	90	89	N/A

*3 FY18 milestones met before N3B contract start

Click to review FY23 Consent Order Milestones

SHIP WASTE OFF-SITE

♦ Additional Accomplishments ♦

Transuranic (TRU) Waste: Preparing and shipping radioactive waste for permanent disposal to the Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico

- Completed four shipments (16.61 m^3), bringing the total shipment count since April 2018 to 169 shipments (543.22 m^3)
- Corrugated Metal Pipes (CMPs): 158 metal pipes filled with radiologically contaminated cement
  - Retrieved one CMP, bringing the total number of CMPs retrieved to 21
  - Size reduced seven CMPs, bringing the total to 12 CMPs
- Pit 9: This disposal site at Area G is the next below ground retrieval of drums and fiberglass reinforced plywood boxes (FRPs); current activities focus on work planning and analysis
  - Issued purchase requests for heavy equipment procurements

A Look Ahead

- Continue new hexavalent chromium well developments
- Conduct walk-down of Pit 9 area and initiate work package for inspection of waste containers through inspection portal
- Repair domes at TA-54, including
  - Revising existing work plan for Domes 229 and 230 to repair 40 holes associated with the lightning protection rods
  - Performing repairs on Dome 153 and 282
  - Receiving asphalt membrane for installation in Dome 49

Final Shipment from Middle DP Road Site

NNMCAB MEETING SCHEDULE
2024

January 31 (Hybrid) **1:00 p.m. to 5:00 p.m. Board Meeting**	**Hilton Santa Fe Historic Plaza** 100 Sandoval Street Santa Fe, NM 87501
March 20 (Hybrid) **1:00 p.m. to 5:00 p.m. Board Meeting**	**Cities of Gold Hotel** 10-A Cities of Gold Road Santa Fe, NM 87506
May 15 (Hybrid) **1:00 p.m. to 5:00 p.m. Board Meeting**	**Fuller Lodge Art Center** 2132 Central Ave. Los Alamos, NM 87544
July 17 (Hybrid) **1:00 p.m. to 5:00 p.m. Board Meeting**	**Ohkay Conference Center** 68 New Mexico 291 San Juan, NM 87566
September 18 (Hybrid) **1:00 p.m. to 5:00 p.m. Board Meeting**	**Hotel Don Fernando de Taos** 1005 Paseo Del Pueblo Sur Taos, NM 87501
November 06 (Hybrid) **1:00 p.m. to 5:00 p.m. Board Meeting**	**Hilton Santa Fe Historic Plaza** 100 Sandoval Street Santa Fe, NM 87501