



Sampling and Monitoring Program:
How Environmental Data Guides
Los Alamos National Laboratory Legacy Cleanup and
Verifies Corrective Actions

Northern New Mexico Citizens' Advisory Board

September 23, 2026

Stefanie Fountain
Director, N3B Water Program

Cleaning Up Today for a Safer Tomorrow

Fundamental to the Legacy Cleanup Mission

Environmental data provides the evidence to detect legacy contamination, guide cleanup decisions and verify protective actions are working.

~7,000

Environmental samples
collected annually

The sampling and monitoring program monitors water and environmental pathways – on and off Los Alamos National Laboratory (LANL) property

1

GROUNDWATER

Wells & aquifers

2

SURFACE WATER

Streams & canyons

3

STORMWATER

Runoff events

4

SEDIMENT

Deposited material

5

SOIL

Land areas

6

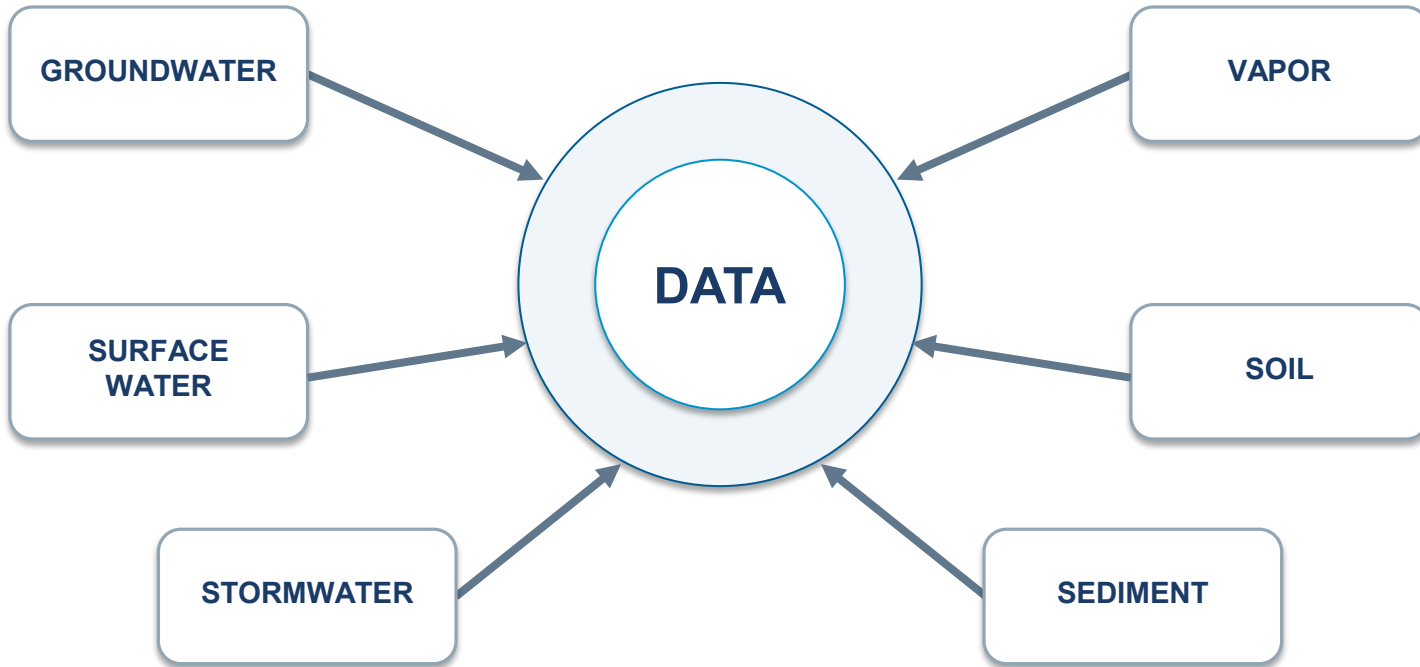
VAPOR

Subsurface gases

Extensive sampling and monitoring informs cleanup activities and confirms corrective actions are effective.

What We Monitor

One integrated program tracks multiple environmental media, and the pathways contaminants may follow.



**Monitoring occurs in impacted and non-impacted areas,
both on and off LANL property.**

Five Questions Sampling Answers

1 **WHAT** Which contaminants are present — and at what concentrations?

2 **WHERE** What is the location and extent of contamination?

3 **HOW** How fast is it moving, and along which pathways?

4 **EFFECTIVENESS** Are barriers, controls and cleanup actions working?

5 **PROTECTION** What measures protect people and the environment?

Together, these answers turn individual samples into cleanup decisions.

From Detection to Corrective Action

Sampling is not a one-time check — it drives an iterative response cycle.



**Results feed the next decision:
continue, adjust controls or take additional corrective action.**

Corrective Action Example: Chaquehui Canyon



WHAT WAS FOUND

1.26x

Total copper TAL
July 2022

1.1x

Total polychlorinated
biphenyls (PCBs) TAL
August 2023

TAL = threshold triggering review
and potential corrective action

ACTION + RESULT

- 1 Installed biodegradable coir logs
- 2 Enhanced controls certified
July 2025
- 3 Copper + PCBs below TAL

Corrective controls confirmed effective.

Corrective Action Example: Ancho Canyon

WHAT WAS FOUND

1.11x

Total copper TAL
August 2013

110x

Total PCBs TAL
August 2023

TAL = threshold triggering review
and potential corrective action

ACTION + RESULT

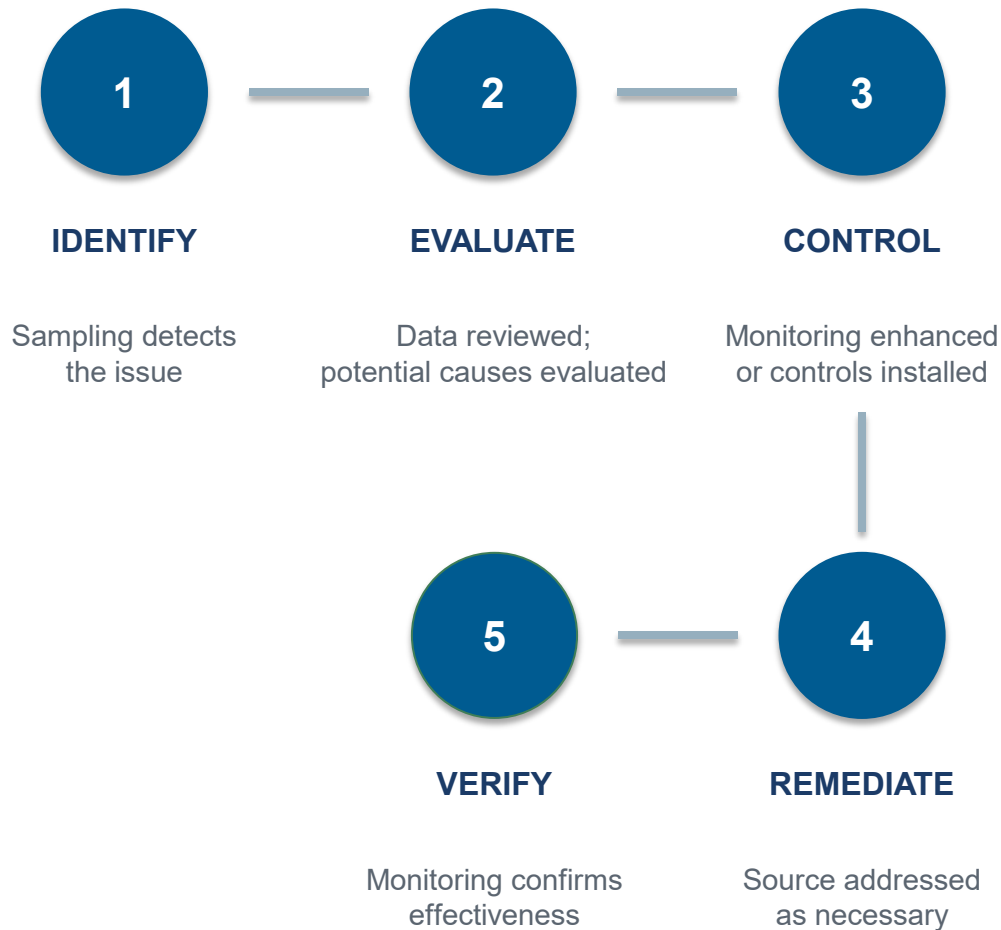
- 1 Coir logs for erosion and sediment control
- 2 Earthen berm + three rock spillways
- 3 Enhanced controls certified
October 2025
- 4 Additional actions based on results

Adjustments continue until compliance is confirmed.



Key Takeaway

Sampling Closes the Loop



Access to Sampling Data

All sampling data is available through IntellusNM:

<https://www.intellusnm.com/>

Documents and reports can be viewed in the LANL Legacy Cleanup Electronic Public Reading Room: <https://ext.em-la.doe.gov/epr/>



