



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
**ENVIRONMENTAL
MANAGEMENT**



Individual Permit Corrective Actions Update

February 28, 2024

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N3B/T2S



ENVIRONMENTAL MANAGEMENT
SAFETY ♦ PERFORMANCE ♦ CLEANUP ♦ CLOSURE





Acronyms

- 2M – Twomile Canyon
- 3M – Threemile Canyon
- A – Ancho Canyon
- Acid – Acid Canyon
- AOC – Area of Concern
- B – Bayo Canyon
- BTV – Background Threshold Value
- CDB – Cañada bel Buey
- CDV – Cañon de Valle
- CHQ – Chaquehui Canyon
- DP – DP Canyon
- IP – Individual Permit
- LA – Los Alamos Canyon
- M – Mortandad Canyon
- NPDES – National Pollutant Discharge Elimination System
- P – Pueblo Canyon
- PCB – Polychlorinated biphenyl
- POC – Pollutant of Concern
- PJ – Pajarito Canyon
- PT – Potrillo Canyon
- R – Rendija Canyon
- S – Sandia Canyon
- SMA – Site Monitoring Area
- STRM - Starmers Gulch
- SWMU – Solid Waste Management Unit
- T – Ten Site Canyon
- TA – Technical Area
- TAL – Target Action Level
- W – Water Canyon





Effective date: August 1, 2022

Corrective action is required once a permit Target Action Level (TAL) and Background Threshold Value (BTV) have been exceeded for a Site-related Pollutant of Concern (POC). Options for implementing corrective action are:

Installation of Enhanced Controls – Enhanced controls are designed to reduce storm water run-on or runoff from the Site, mitigate erosion within the Site, or capture sediment/POCs on the Site.

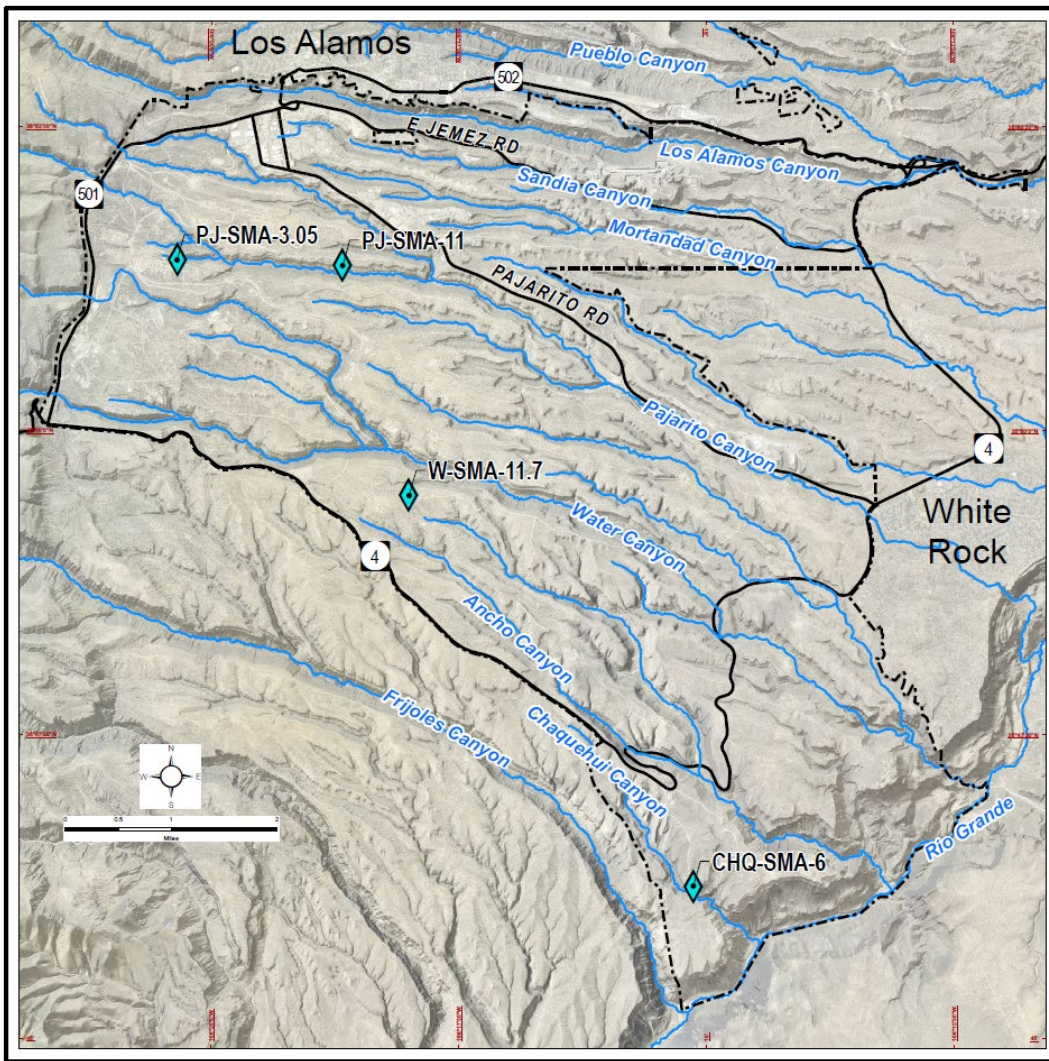
Eliminate Exposure of POCs to Storm Water – No exposure can be (a) a cap or engineered cover, or (b) soil removal

Retention of 3-Year, 24-Hour Storm Runoff Volume – 3-year, 24-hour retention can be achieved by retaining the volume of storm water runoff from a Site or Site Monitoring Area (SMA) that is equivalent to a 3-year, 24-hour storm event.





Corrective Actions Completed in 2022





PJ-SMA-3.05

- This site monitors SWMU 09-004(o), a high explosives sump and associated inlet and outlet drainlines.
- It had 1.1 x copper and 2.2 x gross alpha TAL exceedances from September 2019 and July 2021 samples.
- The corrective action consisted of installing coir logs and compost logs.

PJ-SMA-11

- This site monitors SWMU 40-003(a), a former detonation area.
- It had 8.2 & 10 x copper and 3.6 x gross alpha TAL exceedances from June 2021 and August 2021 samples.
- The corrective action consisted of installing compost logs and lining a swale with riprap.



New stormwater controls at PJ-SMA-11





W-SMA-11.7

- This site monitors AOC 49-008(c), potentially contaminated soil from radiochemistry operations and containment experiments.
- It had 6.3 x aluminum and 3.0 x gross alpha TAL exceedances from September 2013 and August 2021 samples.
- The corrective action consisted of installing wood chip wattles.



New stormwater controls at W-SMA-11.7

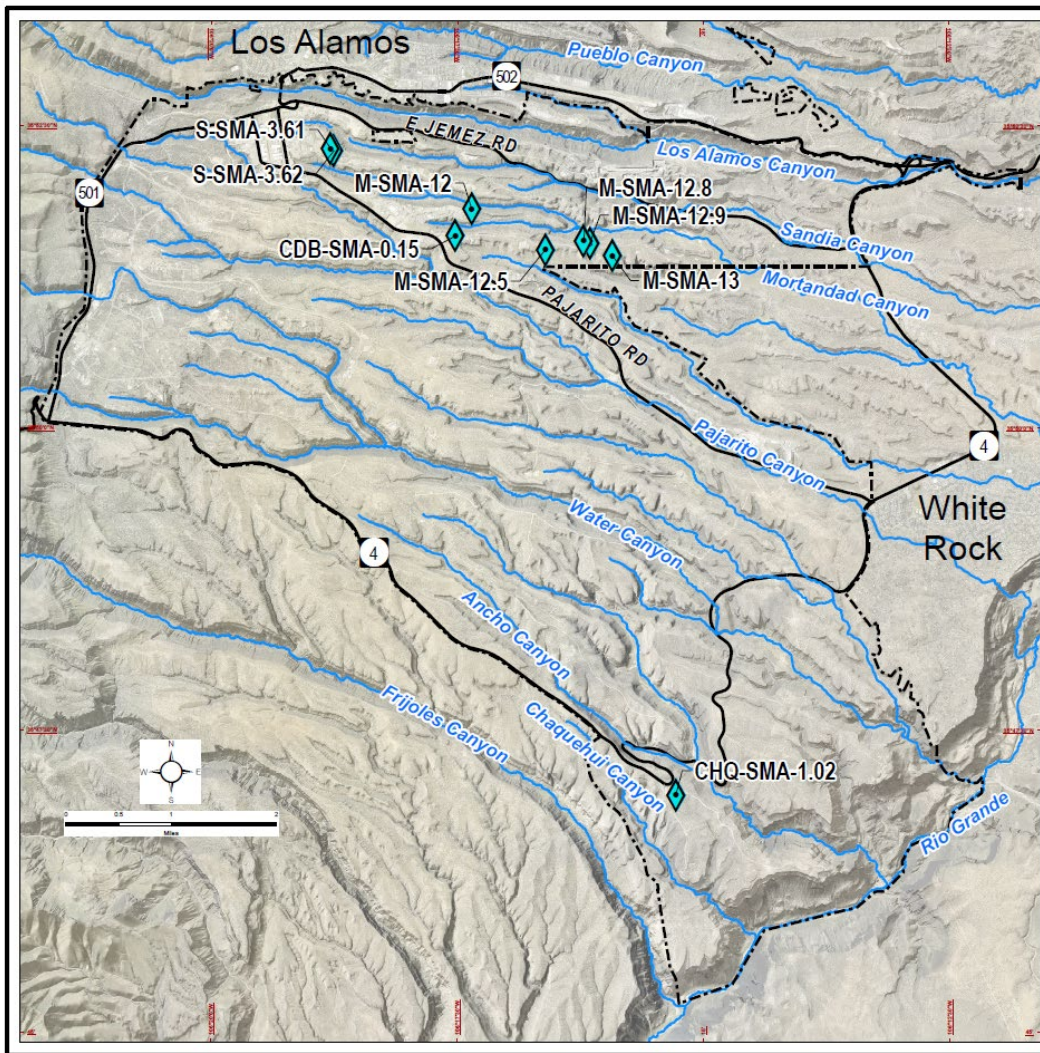
CHQ-SMA-6

- This site monitors SWMU 33-004(j), a drainline; SWMU 33-006(a), an inactive shot pad; SWMU 33-007(b), two former gun-firing sites; SMU 33-010(c), a former surface disposal site; and SWMU 33-010(h), a former surface disposal site.
- It had 9.2 & 9.0 x copper and 1.5 x gross alpha TAL exceedances from May and July 2021 samples.
- The corrective action consisted of installing coir logs and rock check dams.
- An additional action consisted of a debris pickup; shrapnel and cable were removed from the monitoring area.





Corrective Actions Completed in 2023





CHQ-SMA-1.02

- This site monitors SWMU 33-004(h), a warehouse outfall; SWMU 33-011(d), a former storage area; SWMU 33-015, a former incinerator; and AOC 33-008(c), a former surface disposal area.
- It had 2.0 x copper and 2.4 x gross alpha TAL exceedances from May and August 2021 samples.
- The corrective action consisted of installing an earthen berm.



Earthen berm construction at CHQ-SMA-1.02





S-SMA-3.61

- This site monitors SWMU 60-004(f), a former storage area.
- This is a new site.
- The baseline controls consisted of installing gravel bags and certifying an asphalt berm and cap.

S-SMA-3.62

- This site monitors SWMU 60-002, three former storage areas.
- This is a new site.
- The baseline controls consisted of installing coir logs and rock check dams.

CDB-SMA-0.15

- This site monitors SWMU-04-003(a), a former building outfall, and AOC 04-004, soil contamination associated with the photo processing laboratory.
- It had BTV and 1.57 x copper TAL exceedances from a July 2015 sample.
- The corrective action consisted of installing coir logs and certifying a new curb.

M-SMA-12

- This site monitors SWMU 35-016 (p), an active roof storm drain.
- It had BTV and 2.01 x aluminum TAL exceedances from a July 2015 sample.
- The corrective action consisted of installing gravel bags and compost logs.





M-SMA-12.5

- This site monitors SWMU 05-005(b), a former outfall and associated outlet drainline.
- It had BTV and 2.4 x selenium TAL exceedances from a July 2019 sample.
- The corrective action consisted of installing coir logs and rock check dams.

M-SMA-12.8

- This site monitors SWMU 05-001(a), a former steel barricade firing pit; and 05-002, a canyon side disposal site.
- It had BTV and 1.01 x copper TAL exceedances from a July 2019 sample.
- The corrective action consisted of installing coir logs.

M-SMA-12.9

- This site monitors SWMU 05-001(b), a former steel barricade firing pit; and 05-002, a canyon side disposal site.
- It had BTV and 5.91 x copper TAL exceedances from a July 2015 sample.
- The corrective action consisted of installing coir logs, compost logs, and riprap erosion controls.





M-SMA-13

- This site monitors AOC 05-001(c), a former firing point.
- It had BTV and 2.17 x copper TAL exceedances from a August 2021 sample.
- The corrective action consisted of installing coir logs and compost logs.

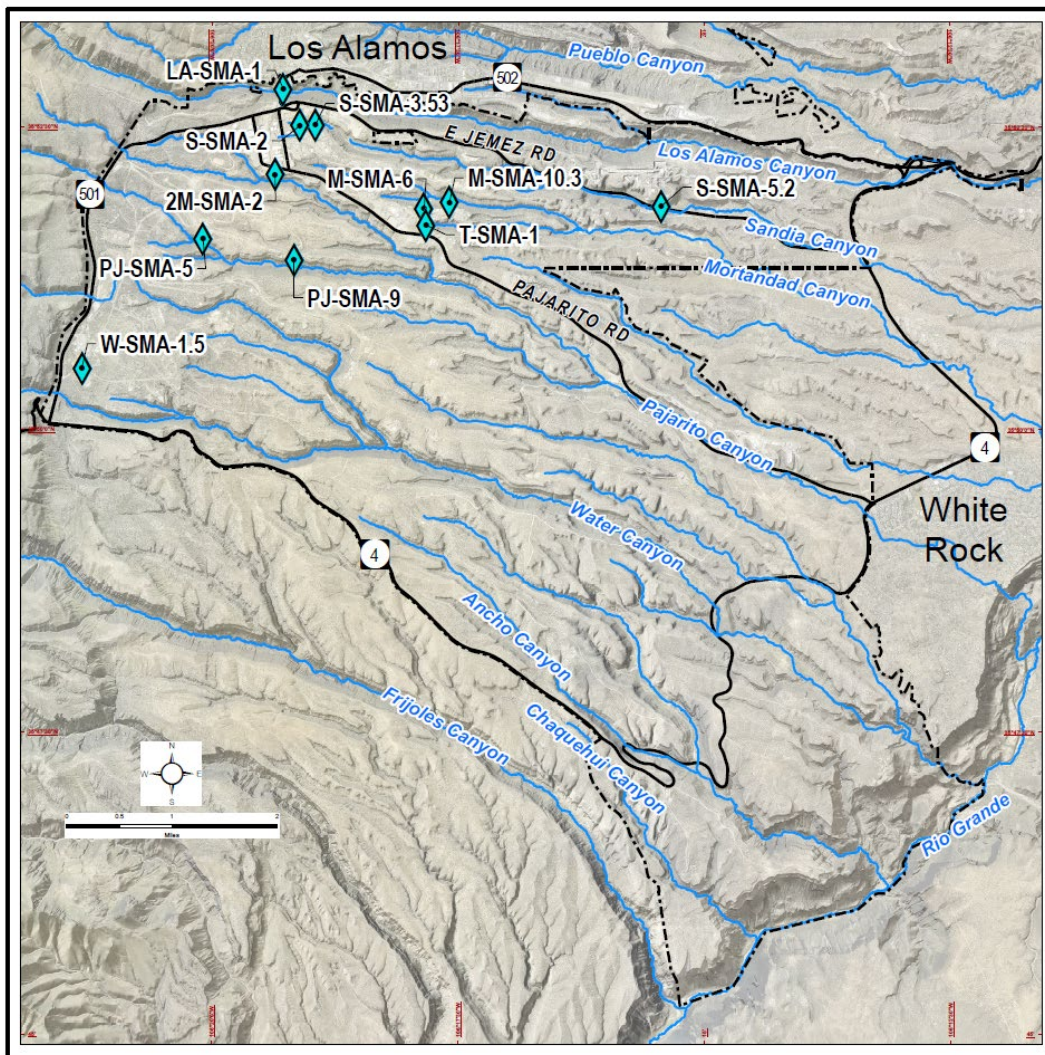


New stormwater controls at M-SMA-12.9





Corrective Actions Scheduled for Completion in 2024



LA-SMA-1

- This site monitors SWMU 00-017, inactive industrial waste lines; and AOC C-00-044, surface contamination from use of lead based paint on Omega bridge.
- It had BTV and 39.9 x aluminum TAL, 2.1 x gross alpha TAL, and 1.7 x PCB TAL exceedances from a July 2017 sample.
- The corrective action installation is complete and certification is in process. The corrective action consisted of installing rock check dams and log berms.

S-SMA-5.2

- This site monitors SWMU 20-003(c), a former gun mount.
- It had BTV and 190.0 x hexachlorobenzene TAL exceedances from a July 2019 sample.
- The corrective action installation is complete and certification is in process. The corrective action consisted of installing coir logs and a rock berm.

M-SMA-10.3

- This site monitors SWMU 35-016(i), a building storm drain outfall; and AOC 35-014(e2), a former oil spill.
- It had BTV and 3.3 x aluminum TAL exceedances from a July 2011 sample.
- The corrective action installation is complete and certification is in process. The corrective action consisted of installing coir logs and gravel bags.



Corrective Actions Scheduled for Completion in 2024

T-SMA-1

- This site monitors SWMU 50-006(a), a former outfall area; and SWMU 50-009, also known as Material Disposal Area C.
- It had BTV and 5.0 & 3.0 x copper, 2.0 x PCB, and 6.1 & 2.0 x zinc TAL exceedances from July and August 2011 samples.
- The corrective action installation is complete and certification is in process. The corrective action consisted of installing sediment basins.



New stormwater controls at T-SMA-1



Sediment basin at W-SMA-1.5

W-SMA-1.5

- This site monitors SWMU 16-026(b2), a former outfall and associated drainlines; and 16-028(d), a former NPDES outfall.
- BTV and 1.4 x copper TAL, and 2.7 x zinc exceedances from a July 2022 sample.
- The corrective action installation is complete and certification is in process. The corrective action consisted of installing rock berms.
- An additional action consisting of vegetation planting and fencing a sediment basin is planned for spring 2024.





2M-SMA-2

- This site monitors SWMU 03-050(d), an area of potential contamination from exhaust emissions; and 03-054(b) a cooling tower outfall.
- It had BTV and 4.3 & 4.6 x copper, 42.0 x PCB, and 1.9 & 2.3 zinc TAL exceedances from June and August 2013 samples.
- The corrective action installation is scheduled for April 2024. The corrective action will consist of expanding an existing sediment basin.

PJ-SMA-5

- This site monitors SWMU 22-015(c), a former NPDES outfall.
- It had BTV and 126.0 & 32.3 x copper TAL exceedances from May 2021 and July 2022 samples.
- The corrective action installation is scheduled for February 2024. The corrective action will consist of a diversion berm and large compost logs.



Soil staining at PJ-SMA-5



S-SMA-2

- This site monitors SWMU 03-012(b), 03-045(b), operational releases from cooling towers, 03-045(c), a cooling tower outfall, and 03-056(c), a former outdoor transformer storage area.
- It had BTV and 160 x PCB TAL exceedances from July and August 2013 samples.
- The corrective action installation is scheduled for May 2024. The corrective action will consist of a shotcrete cap.

S-SMA-3.53

- This site monitors AOC 03-014(b2), a former NPDES outfall.
- It had BTV and 1.2 x copper, and 160 x PCB TAL exceedances from a July 2014 sample.
- The corrective action installation is scheduled for May 2024. The corrective action will consist of a shotcrete cap.



Soil removal area at SWMU 03-056(c) with existing stormwater controls.



Corrective Actions Scheduled for Completion in 2024

M-SMA-6

- This site monitors SWMU 35-016(h), three storm drain outfalls.
- It had BTV and 3.1 x copper, 11 x gross alpha, and 55 x PCB TAL exceedances from an October 2012 sample.
- The corrective action installation is scheduled for Spring 2024. The corrective action will consist of coir logs and rock check dams.

PJ-SMA-9

- This site monitors SWMU 40-009, a former surface disposal area.
- It had BTV and 2.0 & 2.5 x copper TAL exceedances from July 2021 and 2022 samples.
- This site is in alternatives analysis.





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Questions?



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