

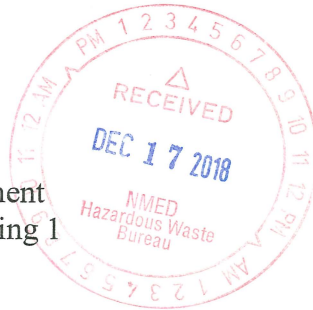


EMID-700155

DEPARTMENT OF ENERGY

Environmental Management Los Alamos Field Office (EM-LA)
Los Alamos, New Mexico 87544

Mr. John E. Kieling
Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303



DEC 17 2018

Dear Mr. Kieling:

Subject: Biennial Inspection and Maintenance Report on Erosion Controls Associated with Solid Waste Management Unit 16-003(o) within Fishladder Canyon

This letter documents the annual inspection and maintenance of erosion control measures associated with Solid Waste Management Unit (SWMU) 16-003(o) within Fishladder Canyon. This letter is required as part of the New Mexico Environment Department's (NMED's) approval with modifications for the Phase II Investigation Report for the Technical Area 16 (TA-16) 340 Complex, Revision 1, dated February 9, 2009.

Erosion controls for SWMU 16-003(o) in Fishladder Canyon were installed during Phase II investigation activities in July 2008. The controls included straw wattles, geotextile, and jute matting at the former fishladder location; a silt fence along the access road; and a gabion/rock check dam at the access road crossing.

After NMED's February 9, 2009, approval letter requiring the annual inspection and reporting for the erosion controls, the U.S. Environmental Protection Agency issued Los Alamos National Laboratory's National Pollutant Discharge Elimination System Storm Water Individual Permit (Permit No. NM0030759) (hereafter the Individual Permit). The Individual Permit became effective on November 1, 2010, and regulates storm water discharges from SWMUs and areas of concern; SWMU 16-003(o) is one of the SWMUs included in the Individual Permit. The erosion controls installed during the Phase II investigation were incorporated into the Individual Permit, and inspection and maintenance activities performed each year are reported in the Site Discharge Pollution Prevention Plan (SDPPP) under site monitoring area (SMA) CDV-SMA-2.3. The most recent SDPPP can be found by searching under Individual Permit at the website www.lanl.gov.

Since completion of the 2009 Phase II investigation, erosion controls have been modified to meet the needs of the site. The Phase II wattles and matting have been retired in place, and the silt fence was removed once the hillside and access road were stabilized; the gabion/rock check dam at the access road crossing continues to be inspected under the Individual Permit. Additional controls have been installed per requirements for SWMU 16-003(o) under the Individual Permit and are shown in Figure 1 (figures are enclosed). Figure 1 also shows the Individual Permit sampler location as well as erosion and sedimentation controls for other SWMUs associated with the SMA. Controls specifically associated with SWMU 16-003(o) consist of a rock berm

(-0026), an earthen berm (-0027), straw wattles (-0028 and -0030), rock check dams (-0024 and -0025), and the small gabion structure (-0002) installed during the Phase II investigation. Figures 2 through 10 show photographs taken in 2018 of these controls and general site conditions. Other controls in this SMA are associated with SWMU 16-003(n) and are not evaluated as part of this submittal.

On January 5, 2017, NMED approved the annual inspection report “Inspection and Maintenance of Erosion Controls Associated with Solid Waste Management Unit (SWMU) 16-003(o) within Fishladder Canyon” (dated December 13, 2016). Inspection reports are now submitted once every 2 yr and no later than December 31 of the second reporting year. This inspection report details activities for the 2017 and 2018 monitoring periods.

Under the Individual Permit, controls are inspected at least once per year, after a rainfall event equal to or greater than 0.25 in. of rain within 30 min, and in the event that storm water sampling results at the SMA exceed Individual Permit target action levels. Seven rainfall events occurred in 2017 and two occurred in 2018.

Controls at SWMU 16-003(o) were inspected five times during 2017.

- The first inspection was completed on June 20, 2017, for the June 6, 2017, rain event (maximum intensity of 0.35 in. within 30 min) and for the required annual erosion evaluation. There were no findings or maintenance items.
- The second inspection was completed on July 3, 2017, for the June 25, 2017, rain event (maximum intensity of 0.63 in. within 30 min). There were no findings or maintenance items.
- The third inspection was completed on July 24, 2017, for the July 12 and July 18 rain events (maximum intensities of 0.31 in. on both dates within 30 min). There were no findings or maintenance items.
- The fourth inspection was completed on August 9, 2017, for the July 29, 2017, rain event (maximum intensity of 0.31 in. within 30 min). There were no findings or maintenance items.
- The fifth inspection was completed on October 17, 2017, for the October 4 and October 5, 2017, rain events (maximum intensities of 0.64 in. and 0.31 in. within 30 min, respectively). There were no findings or maintenance items.

Controls at SWMU 16-003(o) were inspected two times during 2018.

- The first inspection was completed on July 26, 2018, for the July 17, 2018, rain event (maximum intensity of 0.43 in. within 30 min) and for the required annual erosion evaluation. There were no findings or maintenance items.
- The second inspection was completed on August 23, 2018, for the August 10, 2018, rain event (maximum intensity of 0.45 in. within 30 min). There were no findings or maintenance items.

If you have any questions, please contact Steve Veenis at (505) 309-1362 (steve.veenis@em-la.doe.gov) or Cheryl Rodriguez at (505) 665-5330 (cheryl.rodriguez@em.doe.gov).

Sincerely,



Arturo Q. Duran
Designated Agency Manager
Environmental Management
Los Alamos Field Office

Enclosures:

1. Figures for the Biennial Inspection and Maintenance Report on Erosion Controls Associated with Solid Waste Management Unit 16-003(o) within Fishladder Canyon (EM2018-0137)

cc (letter and enclosure[s] emailed):

L. King, EPA Region 6, Dallas, TX
R. Martinez, San Ildefonso Pueblo, NM
D. Chavarria, Santa Clara Pueblo, NM
S. Yanicak, NMED
D. Carlson, N3B
E. Evered, N3B
J. Legare, N3B
F. Lockhart, N3B
N. Lombardo, N3B
B. Robinson, N3B
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C. Rodriguez, EM-LA
emla.docs@em.doe.gov
N3B Records
Public Reading Room (EPRR)
PRS Website

EM-LA-40AD-00374

Figures for the Biennial Inspection and Maintenance Report on Erosion Controls Associated with Solid Waste Management Unit 16-003(o) within Fishladder Canyon

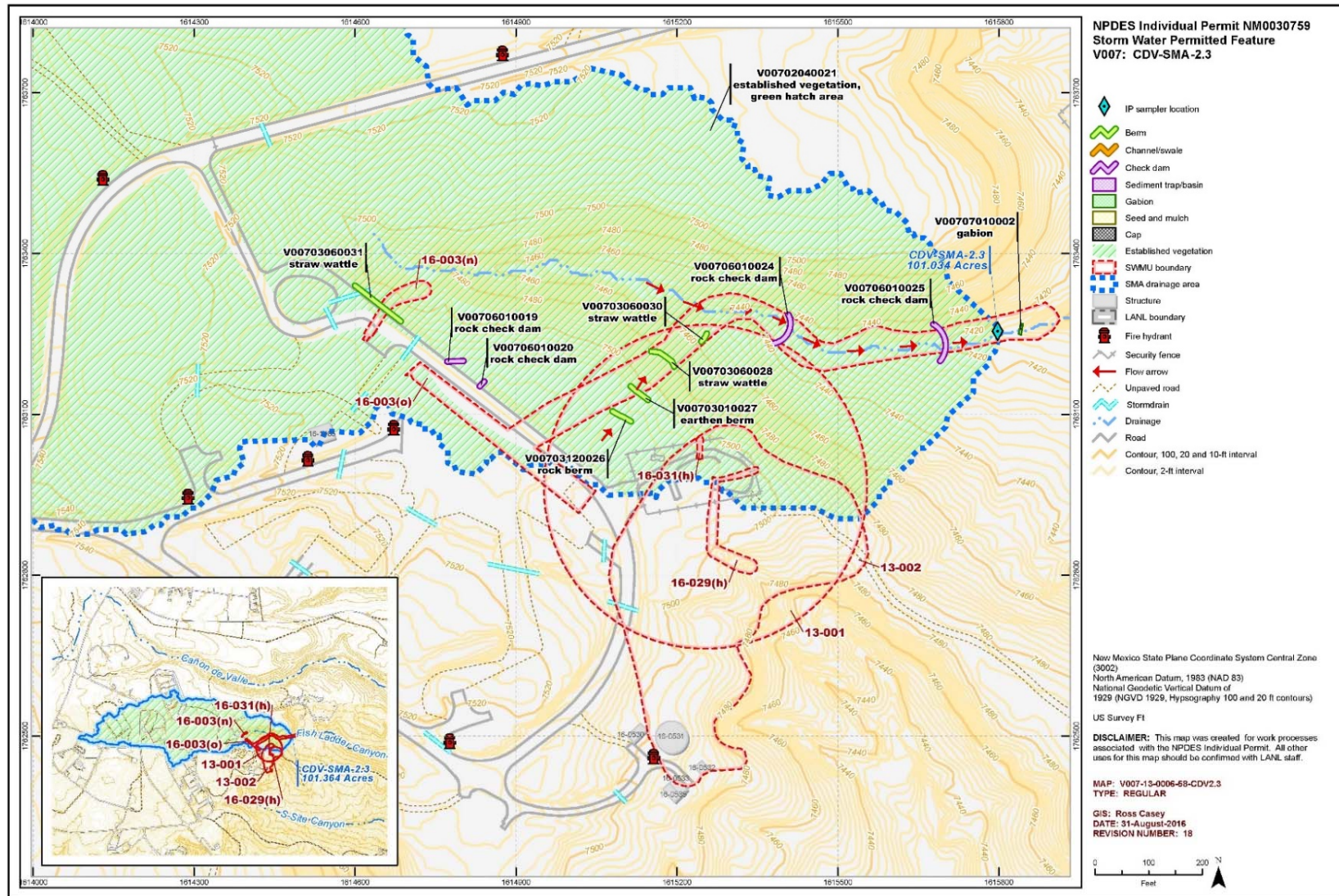


Figure 1 Locations of the Individual Permit sampler location and storm water controls as well as SWMUs associated with the SMA



Figure 2 Rock berm (V00703120026, center of photo) at the top of drainage leading into Fishladder Canyon (December 2018). Note established vegetation. Condition of control: excellent.



Figure 3 Earthen berm (V00703010027, center of photo) at the top of drainage leading into Fishladder Canyon (December 2018). Note established vegetation. Condition of control: excellent.



Figure 4 View downslope of the former fishladder location (December 2018). Note established vegetation above and below straw wattle (V007030600028, center of photo). Condition of control: good.



Figure 5 View upslope of the former fishladder location from the canyon bottom (December 2018). Note established vegetative cover and lack of erosional features. Control not visible in photo.



Figure 6 View east of former access road and straw wattle (V007030600028, center of photo, obscured by snow) (December 2018). Note established vegetation. Condition of control: very good.



Figure 7 Rock check dam (V00706010024, center of photo) in Fishladder Canyon primary drainage (December 2018). Condition of control: very good.



Figure 8 Rock check dam (V00706010025, center of photo) in primary drainage (December 2018). Note established vegetation in channel. Condition of control: excellent.



Figure 9 Gabion (V00707010002, center of photo) at access road crossing in Fishladder Canyon (December 2018). Note vegetation in channel upstream of control. Condition of control: good.



Figure 10 View west of former access road in Fishladder Canyon (December 2018). Note vegetative cover, needle cast, and downed trees along the former access road.