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**NMED
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Environmental Management

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Date: DEC 04 2015

Refer To: ADESH-15-173

LAUR: 15-29176

Locates Action No.: n/a

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

Subject: Submittal of the Inspection and Maintenance of Erosion Controls Associated with Fishladder Canyon [Solid Waste Management Unit 16-003(o)]

Dear Mr. Kieling:

This letter documents storm water management following mitigation activities at 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.

Storm water controls designed to control surface erosion and sediment transport by establishing a permanent vegetative cover were installed during Phase II investigation activities conducted 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, the U.S. Environmental Protection Agency (EPA) issued Los Alamos National Laboratory's National Pollutant Discharge Elimination System Storm Water Individual Permit (Permit No. NM0030759). The Individual Permit (IP), which became effective on November 1, 2010, regulates storm water discharges from SWMUs and areas of concern; SWMU 16-003(o) is one of the SWMUs included in the IP. The storm water controls installed during the Phase II investigation were incorporated into the Site Discharge Pollution Prevention Plan required by the IP. The wattles and matting installed during Phase II 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 IP.

Additional controls designed to reduce flow velocities, erosion potential, and sediment transport have been installed per IP requirements at SWMU 16-003(o) and are shown in Figure 1, which is an IP site monitoring area (SMA) map showing the IP sampler location, IP storm water controls, and SWMUs associated with the SMA. Storm water controls associated with Fishladder Canyon [SWMU 16-003(o)] consist of a small gabion structure (-0002), earthen berm (-0027), straw wattles (-0023 and -0028), and rock check dams (-0024, -0025, and -0026), as shown in Figures 2 through 6. Figure 7 shows the former access road. Other storm water controls in this SMA are not associated with SWMU 16-003(o) and are not discussed.

NMED's approval with modifications for the Phase II investigation report requires an annual inspection of storm water controls associated with SWMU 16-003(o). Storm water controls are also inspected under the IP program at least once per year to evaluate whether conditions that affect erosion have changed and when a significant event occurs (such as a wildfire) that could significantly affect runoff. Controls are also inspected after significant rainfall events and in the event that sampling results exceed IP target action levels (TALs). Inspections and associated maintenance activities are documented in the IP annual report, submitted to EPA by March 1 each year.

Controls at SWMU 16-003(o) were inspected six times during 2015, as described below.

1. An inspection was completed on July 9, 2015, for the rain events occurring on June 26 and July 6, 2015, with no findings or maintenance items related to SWMU 16-003(o).
2. A second rain event inspection was completed on July 27, 2015, for rain events occurring on July 12 and July 20, 2015. Inspection findings recommended replacing the straw wattle (-0023) and removing leaf litter from rock check dam (-0025). On August 11, 2015, a new wattle (-0030) was installed directly upgradient of the existing wattle (-0023), and leaf litter was removed from rock check dam (-0025). Wattle (-0023) was retired and replaced with wattle (-0030), shown in Figure 1.
3. A third rain event inspection was completed on August 10, 2015, for the rain events occurring on July 29, July 31, August 1, and August 2, 2015. Inspection findings recommended adding additional rock to rock check dam (-0024). On August 25, 2015, additional rock was added to check dam (-0024).
4. A fourth rain event inspection was completed on August 28, 2015, for the event occurring on August 17, 2015, with no findings or maintenance items.
5. A TAL inspection was completed on September 24, 2015, with no findings or maintenance items.
6. The IP annual erosion evaluation was completed on October 28, 2015. Inspection findings recommended replacing straw wattle (-0028); a follow-up inspection was completed on November 4, 2015, and determined the area below wattle (-0028) is stable and well vegetated. No additional action needs to be completed.

If you have any questions, please contact Steve Veenis at (505) 667-0013 (veenis@lanl.gov) or David Rhodes at (505) 665-5325 (david.rhodes@nnsa.doe.gov).

Sincerely,



Bruce Robinson, Program Director
Environmental Remediation Program
Los Alamos National Laboratory

Sincerely,



David S. Rhodes, Supervisor
Environmental Management
Los Alamos Field Office

BR/DR/SV:sm

Attachment: Two hard copies with electronic files – Inspection and Maintenance of Erosion Controls Associated with Fishladder Canyon [Solid Waste Management Unit 16-003(o)] (EP2015-0197)

Cy: (w/att.)
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FIGURES

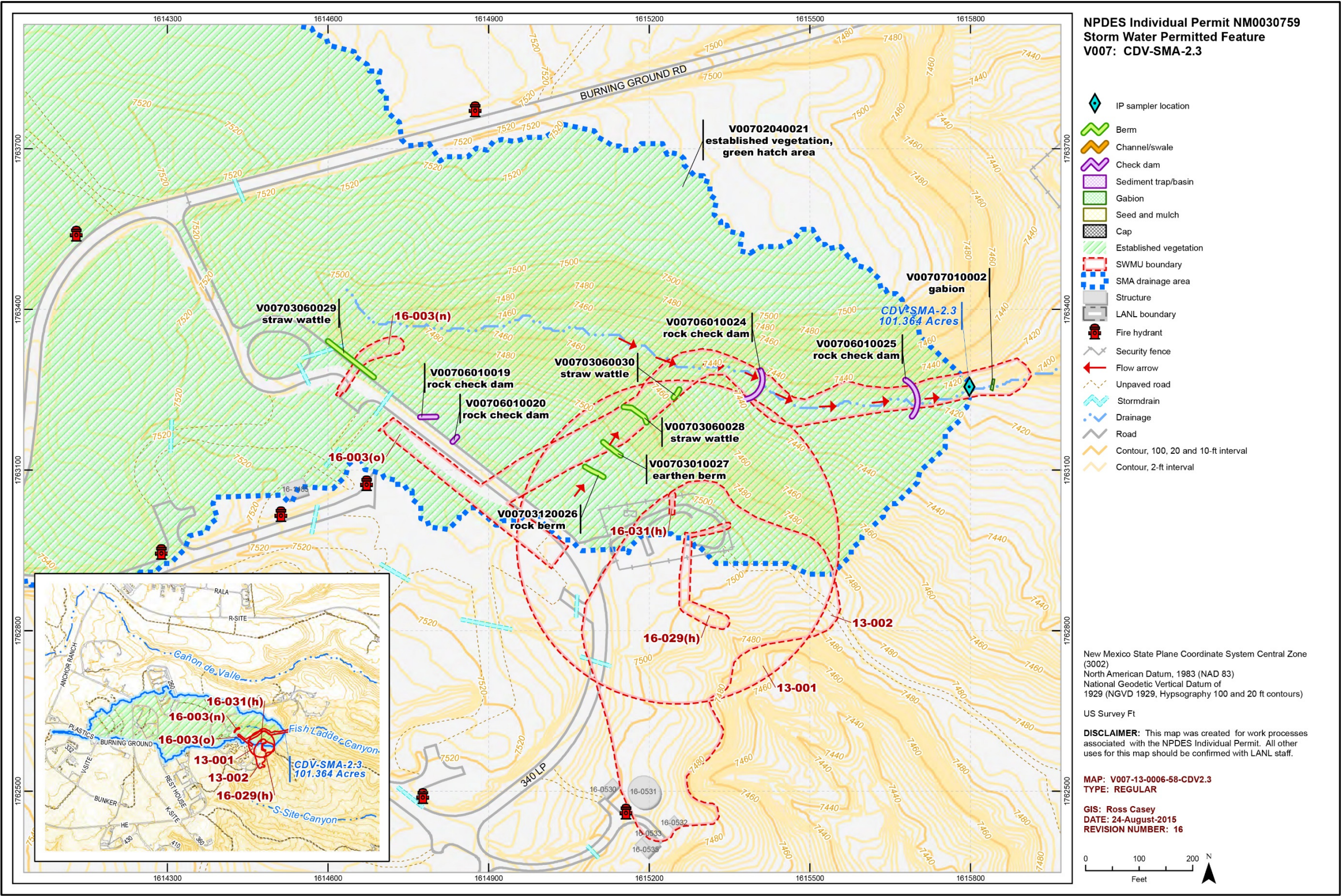


Figure 1 Locations of the IP sampler, IP storm water controls, and SWMUs associated with the IP site monitoring area



Figure 2 Rock berm (V00703120026) and earth berm (V00703010027) at the top of drainage into Fishladder Canyon (11/4/2015)



Figure 3 View looking upslope out of Fishladder Canyon (11/4/2015). Straw wattle (V007030600028) is located in middle of photo.



Figure 4 Rock check dam (V00706010024) in Fishladder Canyon (11/4/2015)



Figure 5 Rock check dam (V00706010025) in Fishladder Canyon (11/4/2015)



Figure 6 Gabion (V00707010002) at access road crossing in Fishladder Canyon (11/4/2015)



Figure 7 View west of former access road in Fishladder Canyon (11/4/2015). Straw wattle (V007030600030) is located at the western end of the former road.