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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.

Subsequent to 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 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 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. Figure 1 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 gabion (-0002), two rock check dams (-0024 and -0025), one rock berm (-0026), one earthen berm (-0027), and two straw wattles (-0023 and -0028), as shown in Figures 2 through 6. Figures 7 and 8 show the hill slope into Fishladder Canyon, and Figure 9 shows the former access road. Other storm water controls in this SMA are not associated with SWMU 16-003(o) and are not discussed in this report.

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 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. Inspections and associated maintenance activities are documented in the IP annual report, submitted to the U.S. Environmental Protection Agency by March 1 each year.

Controls at SWMU 16-003(o) were inspected five times during 2014, as described below:

1. An inspection was completed on June 3, 2014, for the rain event occurring on May 23, 2014. Inspection findings recommended installing a new rock check dam (-0025) to replace an existing rock check dam (-0016) acting as a runoff/sediment control, installing another rock check dam (-0024) as an additional runoff/sediment control, and replacing or modifying the existing gabion (-0002) acting as a runoff/sediment control. Straw wattles were installed during the inspection directly upslope of rock check dam (-0016) and directly upslope of gabion (-0002) as temporary backup control measures. After conducting a site visit on June 4, 2014, project personnel determined maintenance on the gabion (-0002) was not necessary at this time. The rock check dams were installed on June 25, 2014.
2. A second rain event inspection was completed on July 16, 2014, for the rain events occurring on July 7 and July 8, 2014, with no findings or maintenance issues.
3. A third rain event inspection was completed on July 28, 2014, for the rain event occurring on July 19, 2014, with no findings or maintenance issues.
4. A fourth rain event inspection was completed on August 13, 2014, for the rain events occurring on July 31 and August 4, 2014, with no findings or maintenance issues.
5. The IP annual erosion evaluation was completed on October 9, 2014. Inspection findings recommended installing an earth berm (-0027) and a rock berm (-0026) to replace existing straw wattles acting as runoff/sediment controls and installing an additional straw wattle (-0028) as a runoff/sediment control. These maintenance items were completed on October 24, 2014.

If you have any questions, please contact Steve Veenis at (505) 667-0013 (veenis@lanl.gov) or Woody Woodworth at (505) 665-5820 (lance.woodworth@nnsa.doe.gov).

Sincerely,

Michael T. Brandt, DrPH, CIH, Associate Director
Environment, Safety, and Health
Los Alamos National Laboratory

Sincerely,

Peter Maggiore, Assistant Manager
Environmental Projects Office
Los Alamos Field Office

MB/PM/DM/SV:sm

Enclosures: Two hard copies with electronic files – Figures for the Erosion Controls Associated with Fishladder Canyon [Solid Waste Management Unit 16-003(o)]

Cy: (w/enc.)
Woody Woodworth, DOE-NA-LA, MS A316
Steve Veenis, EP-CAP, MS M996
Public Reading Room (EPRR)
ADESH (electronic copy)

Cy: (Letter and CD and/or DVD)
Laurie King, EPA Region 6, Dallas, TX
Steve Yanicak, NMED-DOE-OB, MS M894
Jeff Walterscheid, EP-CAP, (w/ MS Word files on CD)
PRS Database

Cy: (w/o enc.)
Tom Skibitski, NMED-DOE-OB (date-stamped letter emailed)
lasomailbox@nnsa.doe.gov
Annette Russell, DOE-NA-LA (date-stamped letter emailed)
David Rhodes, DOE-NA-LA (date-stamped letter emailed)
Kimberly Davis Lebak, DOE-NA-LA (date-stamped letter emailed)
Dave McInroy, EP-CAP (date-stamped letter emailed)
Randy Erickson, ADEP (date-stamped letter emailed)
Tony Grieggs, ADESH-ENV-CP (date-stamped letter emailed)
Alison Dorries, ADESH-ENV-DO (date-stamped letter emailed)
Michael Brandt, ADESH (date-stamped letter emailed)

FIGURES

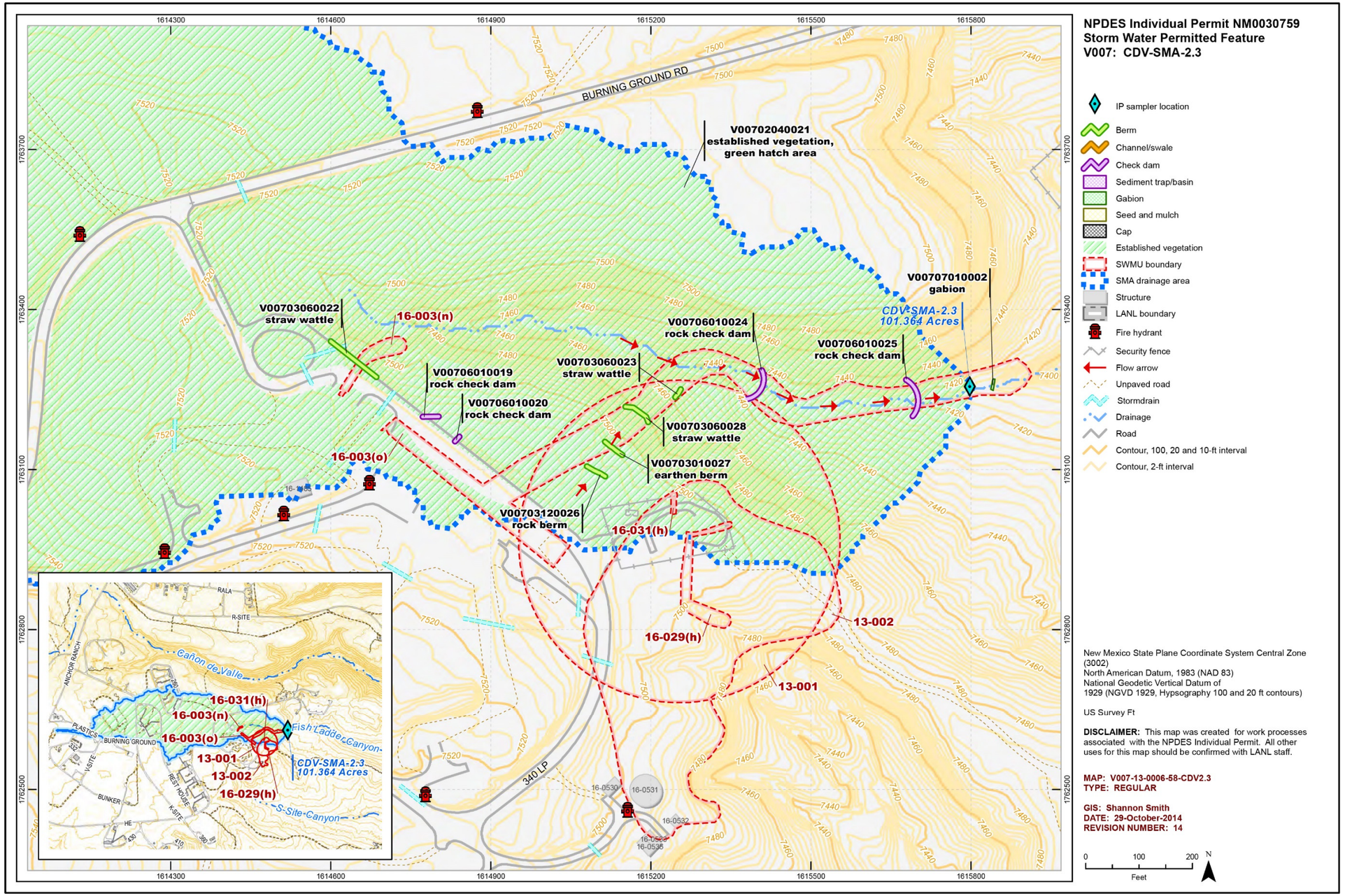

Figure 1 Locations of the IP sampler, IP storm water controls, and SWMUs associated with the IP site monitoring area

Figure 2 2014 Installation - Rock berm (V00703120026) and earth berm (V00703010027) at the top of drainage into Fishladder Canyon (11/14/2014)

Figure 3 2014 Installation – Straw wattle (V00703060028) on the slope into Fishladder Canyon (11/14/2014)

Figure 4 2014 Installation - Rock check dam (V00706010024) in the bottom of Fishladder Canyon (11/114/2014)

Figure 5 2014 Installation - Rock check dam (V00706010025) in the bottom of Fishladder Canyon (11/14/2014)

Figure 6 Gabion (V00707010002) at the crossing of the access road in Fishladder Canyon (11/14/2014)

Figure 7 View looking downslope from mesa top into Fishladder Canyon (11/14/2014). Straw wattle (V00707010028) and retired Phase II straw wattles are visible.

Figure 8 View looking upslope out of Fishladder Canyon (11/14/2014). Straw wattle (V007030600028) is visible in middle of photo, and straw wattles retired in 2013 are visible.

Figure 9 View east on access road into Fishladder Canyon (11/14/2014). Retired Phase II wattles are visible in photo.