west virginia department of environmental protection

Division of Water and Waste Management
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Austin Caperton, Cabinet Secretary
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CONSENT ORDER
ISSUED UNDER THE
WATER POLLUTION CONTROL ACT
WEST VIRGINIA CODE, CHAPTER 22, ARTICLE 11

TO: Arsenal Resources LLC
6031 Wallace Rd. Ext Suite 300
Wexford PA 15090

DATE: October 8, 2020

ORDER NO.: 9923

INTRODUCTION

This Consent Order is issued by the Director of the Division of Water and Waste Management (hereinafter "Director"), under the authority of West Virginia Code, Chapter 22, Article 11, Section 1 et seq. to Arsenal Resources LLC.

FINDINGS OF FACT

In support of this Order, the Director hereby finds the following:

Registration No. WVR310852

1. Arsenal Resources LLC is conducting land disturbance activity associated with the Neptune Line Water Project near Grafton, Taylor County, West Virginia. On July 17, 2017, Arsenal Resources LLC was issued Water Pollution Control Permit No. WV0116815, Registration No. WVR310852, for Stormwater Associated With Oil and Gas Related Construction Activities.

2. On March 13, 2019, West Virginia Department of Environmental Protection (WVDEP) personnel conducted an inspection of the facility. During the inspection, violations of the following sections of West Virginia Legislative Rules and the permit were observed and documented:

   a. Section B-Arsenal Resources LLC failed to comply with the approved Storm Water Pollution Prevention Plan (SWPPP). Water bars were not installed as indicated in the SWPPP from Stat. 223+00 to 220+00 and from Stat. 143+00 to 119+00. The

dewatering bag was not located a minimal distance of two hundred feet (200') from a stream, as indicated on Sheet ENV D7 of the SWPPP.

b. Section D.1-Arsenal Resources LLC failed to properly operate and maintain all erosion control devices. Perimeter controls throughout the site were nonfunctional due to bypasses. Specifically, Silt Fence (SF) was either not conjoined or was toed-in incorrectly, Super Silt Fence (SSF) was not tied together with SF, and Composite Filter Sock (CFS) was not conjoined with SF. Perimeter controls tied-in to bridge controls had bypasses. In general, maintenance was lacking throughout the project site.
c. Section G.4.e.2-Arsenal Resources LLC failed to properly implement geo-wrap and perimeter controls on the bridge at Unnamed Tributary (UNT) 20, UNT 24, UNT 29, and UNTs of Otter Run. Water bar terminus treatments were not properly implemented as detailed on Sheet ENV D12 of the SWPPP.
d. Section G.4.e.2.A.ii.f.-Arsenal Resources LLC failed to protect fill slopes. Erosion rills were starting to form in areas of concentrated flow across the right-of-way due to lack of water bars or the terminus of water bars allowing water to flow back onto the right-of-way.
e. Section G.4.e.2.A.ii.j.-Arsenal Resources LLC failed to prevent sediment-laden water from leaving the site without going through an appropriate device. At multiple locations, there were bypasses in perimeter controls that allowed sediment laden water to leave the site, some of which entered UNTs of Otter Creek, Short Run, and Shelby Run.
f. 47CSR2 Section 3.2.a.-Arsenal Resources LLC caused conditions not allowable in waters of the State by creating distinctly visible settleable solids in the following two (2) locations: Stat. 107+88, UNT 20, UNT of Otter Run (39°19' 36" N 80° 03' 21" W); and Stat. 63+50, UNT of Otter Creek (39° 20' 14" N 80° 03' 22" W).
g. 47CSR2 Section 3.2.b.- Arsenal Resources LLC caused conditions not allowable in waters of the State by creating sediment deposits in the following seven (7) locations: Stat. 210+00, UNT 12, UNT of Shelby Run (39°18'16" N 80°04'01" W); Stat. 175+25, Barnett Road Conveyance, UNT of Shelby Run (39°18'42" N 80°03'51" W); Stat. 156+00, UNT 17, UNT of Shelby Run (39°19'00" N 80°03'38" W); Stat. 107+88, UNT 20, UNT of Otter Run (39°19' 36' N 80° 03' 21" W); Stat. 98+65, UNT 21, UNT of Otter Run (39°19' 45" N 80° 03' 20" W); Stat. 68+26, UNT 29, UNT of Otter Run (39°20' 09" N 80° 03' 20" W); and Stat. 63+50, UNT of Otter Creek (39° 20' 14" N 80° 03' 22" W).

As a result of the aforementioned violations, Notice of Violation (NOV) No. W19-46-015-TDH was issued to Arsenal Resources LLC.

Registration No. WVR310983

3. Arsenal Resources LLC is conducting land disturbance activity associated with the Neptune Phase II Line Water Project near Flemington, Taylor and Barbour County, West Virginia. On January 19, 2018, Arsenal Resources LLC was issued Water Pollution Control Permit No. WV0116815, Registration No. WVR310983, for Stormwater Associated With Oil and Gas Related Construction Activities.

4. On May 7, 2019, WVDEP personnel conducted an inspection of the facility. During the inspection, violations of the following sections of West Virginia Legislative Rules and the permit were observed and documented:

   a. Section B-Arsenal Resources LLC failed to comply with the approved SWPPP. Several erosion control devices were not in place as detailed by the SWPPP. Controls were not installed along the ridge at Station 249+00 and between Station 278+00 to 274+00. Water bars were not installed from Station 224+00 to 219+50. There was an unidentified UNT at Access Road 4, and there were two (2) unidentified UNTs at Stations 212+0 to 211+00 which are not included in the SWPPP and did not have adequate stream crossings (Sheet ENV D11 of the SWPPP).
   b. Section D.1.-Arsenal Resources LLC failed to properly operate and maintain all erosion control devices. Perimeter controls were down along long sections from Station 328+00 to 320+00 and Station 240+00 to 245+00 as the result of pulling in strings of pipe that were fused together.
   c. Section G.4.e.2.-Arsenal Resources LLC failed to properly implement controls. At Station 311+00, a conveyance was installed just below WL 9 that bypasses the perimeter controls without treatment. Water bars were installed with no sumps or CFS at the terminus from 302+00 to 300+00. The Station 199+00 water bar was installed backwards and was sloped back toward the cut bank (Sheet ENV D12 of the SWPPP).
   d. Section G.4.e.2.A.ii.j-Arsenal Resources LLC failed to prevent sediment-laden water from leaving the site without going through an appropriate device. Station 286+00 WL5 perimeter controls were breached by waves of water created by equipment coming through standing water and overtopping the controls. Sediment-laden water was leaving the site and entering UNT 8 and the UNT of Simpson Creek (39° 14' 32" N 80° 07' 40" W). At Station 211+00 to 212+00, sediment deposits were visible on bottom of the UNT of Gabes Fork (39° 14' 35" N 80° 06' 26" W). At station 40+00, sediment-laden water leaving the site via a bypass under the CFS.
   e. 47CSR2 Section 3.2.a.-Arsenal Resources LLC caused conditions not allowable in waters of the State by creating distinctly visible settleable solids in the UNT of Simpson Creek (39° 14' 32" N 80° 07' 40" W).
   f. 47CSR2 Section 3.2.b.-Arsenal Resources LLC caused conditions not allowable in waters of the State by creating sediment deposits on the bottom of the UNT of Gabes Fork (39° 14' 35" N 80° 06' 26" W).

   As a result of the aforementioned violations, NOV No. W19-31-031-TDH was issued to Arsenal Resources LLC.

5. On June 7, 2019, WVDEP personnel conducted an inspection of the facility. During the inspection, violations of the following sections of West Virginia Legislative Rules and the permit were observed and documented:

   a. Section G.4.e.2.- Arsenal Resources LLC failed to properly implement controls. The timber mat crossing of UNT 23 was not installed as indicated in the approved SWPPP. The timber mat crossing lacked the geotextile fabric wrapped side boards. Improperly installed water bars were located upslope of 479+00. The water bars were constructed at an outslope greater than 5%, were oriented so that the discharge flowed

back onto the right-of-way, and/or were constructed at an upslope height less than twelve inches (12"). This deficiency caused stormwater to flow downslope on the right-of-way, and the concentrated flow stormwater was then inadequately treated by the installed sheet flow Best Management Practices (BMPs) at the base of the hill adjacent to the offsite access road conveyance at the UNT of Beards Run.

b. Section G.4.c- Arsenal Resources LLC failed to modify the SWPPP when it proved to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges. The timber mat crossing of the upslope conveyance of the old CR-17/landowner access allowed sediment laden water to enter the conveyance and leave the site. There was an ephemeral stream adjacent to 482+85 which was not indicated in the approved SWPPP. Clean run-on stormwater was flowing across the disturbed right-of-way and left the site without going through an approved device. There was a stream of water in wetland WL-28 which was crossed with timbers that lacked geotextile fabric and side boards. However, the stream was not indicated in the approved SWPPP, and perimeter controls were not installed adjacent to the stream.
c. Section B- Arsenal Resources LLC failed to comply with the approved SWPPP. The silt saver 2 (SS2) slope interceptors indicated in the approved SWPPP upslope of 479+00 and adjacent to 482+85 were not in place as described. Water bars and SS2 slope interceptors indicated in the approved SWPPP upslope of 490+00 were not in place as described. The perimeter controls adjacent to wetland WL-28 of Beards Run were not in place as indicated in the approved SWPPP. The installed water bars upslope of 479+00 lacked the water bar terminus BMP indicated in the approved SWPPP.
d. Section D.1.- Arsenal Resources LLC failed to properly operate and maintain all erosion control devices. The timber mat crossing of UNT 23 was in need of maintenance. Perimeter controls that were knocked over and/or inundated with sediment and were in need of maintenance were present throughout the area.
e. Section G.4.e.2.A.ii.f.- Arsenal Resources LLC failed to protect fill slopes. Concentrated flow was being directed over unprotected fill slopes as a result of improperly installed water bars and water bars that were not in place as indicated in the approved SWPPP.
f. Section G.4.e.2.A.ii.j - Arsenal Resources LLC failed to prevent sediment-laden water from leaving the site without going through an appropriate device. Sediment-laden water bypassed treatment due to the lack of installed BMPs, improperly installed BMPs, and/or unmaintained BMPs. In some areas, perimeter controls were overwhelmed due to the amount of stormwater being directed at them as a result of the failure to install water bars and/or slope interceptors that are indicated in the approved SWPPP.
g. 47CSR2 Section 3.2.b.- Arsenal Resources LLC caused conditions not allowable in waters of the State by creating sediment deposits in the following two (2) locations: the UNT of Beards Run conveyance (39° 15.023' X 80° 10.561') and the UNT of Beards Run (39° 15.098' X 80° 10.735')

As a result of the aforementioned violations, NOV No. W19-17-053-TJC was issued to Arsenal Resources LLC.

6. On June 10, 2019, WVDEP personnel conducted an inspection of the facility. During the inspection, violations of the following sections of West Virginia Legislative Rules and the permit were observed and documented:

   a. Section B-Arsenal Resources LLC failed to comply with the approved SWPPP. Several erosion control devices were not in place as detailed by the SWPPP. Inequivalent eight inch (8") CFS was installed (Sheet ENV D8 of the SWPPP). Throughout the project, water bars were not installed in accordance with the SWPPP (Sheet ENV D12 of the SWPPP). From Station 207+00 to 211+00, the SWPPP indicates nine (9) water bars; however, only one water bar was installed at 207+50. At Station 264+50 to 270+00, the right-of-way was disturbed, but there were no water bars. The SWPPP indicates ten (10) water bars were to be installed. At Station 211+00, the SWPPP needed to be modified to include unlabeled UNTs, clean water diversions, and energy dissipaters.
   b. Section C.3-Arsenal Resources LLC failed to take all reasonable steps to minimize or prevent any discharge which had the reasonable likelihood of adversely affecting human health or the environment. At Station 311+00 to 326+50, where SS2 was down during the May 7, 2019 inspection, the controls were still down, even though the NOV response indicated that controls were replaced after pipe had been pulled and fused.
   c. Section D.1.-Arsenal Resources LLC failed to properly operate and maintain all erosion control devices. From Station 188+00 to 225+00, SS2 was down in multiple sections, and there were large holes in the fabric. CFS was riddled with bypasses, allowing sediment-laden water to leave the site. At Station 218+50, SS2 was overtopped with sediment, and deposits had formed off-site. At Station 189+00 to 206+00, water bars were not installed in accordance with the SWPPP, sumps were small, and CFS was undersized and had bypasses. From Station 213+50 to 219+00, water bars were not installed in accordance with the SWPPP. Installed water bars were tracked through and ineffective and were allowing water to pass through and continue down the right-of-way, causing erosion rills to form. From Station 219+50 to 225+00, water bars were tracked through. The only evidence that water bars had been installed were old sumps with eight inch (8") CFS as terminus treatment. At Station 211+00, maintenance was needed on perimeter controls. At WL 5 Station 285+00, controls were in need of maintenance to remove built up deposits and increase holding capacity.
   d. Section G.4.e.2.-Arsenal Resources LLC failed to properly implement controls. The SWPPP indicates SS2 slope interceptors from Station 196+00 to 206+00. Instead inequivalent eight inch (8") CFS was installed as continuous perimeter controls, and the CFS was riddled with bypasses. The SWPPP indicates SS2 slope interceptors from Station 214+00 to 224+00, Station 240+00 to 244+00, Station 255+00 to 2650+00, Station 274+00 to 280+00, and Station 301+00 to 314+00. However, the SS2 slope interceptors were not installed. WL 5, WL 7 WL 8, WL 9, WL 10A, WL 10B, WL 12, UNT 10, and UNT 11 did not have installed SS2 as indicated in the SWPPP. From Station 299+00 to 304+00, water bars were installed without sumps containing CFS for terminus treatment.
   e. Section G.4.e.2.A.i.d.-Arsenal Resources LLC failed to stabilize clean water diversions prior to becoming functional. At Station 211+00, a clean water diversion

for a UNT that was not marked in the SWPPP was in use and was not stabilized. Scouring was present on the bottom of the channel.

f. Section G.4.e.2.A.ii.f.-Arsenal Resources LLC failed to protect fill slopes. Some areas had no installed water bars or ineffective water bars, allowing erosion rills to form in the right-of-way.
g. Section G.4.e.2.A.ii.j.-Arsenal Resources LLC failed to prevent sediment-laden water from leaving the site without going through an appropriate device. At Station 218+50, SS2 was overtopped with sediment, and deposits formed off-site. Sediment-laden water was leaving the LOD and causing conditions not allowable in the UNT of Simpson Creek (39° 14' 32" N, 80° 06' 23" W). A pipe was installed to carry clean water across the right-of-way, but no energy dissipater was installed, as detailed in the SWPPP. Sediment-laden water left the site without going through an appropriate device, which resulted in sediment deposits in UNT 8 (UNT of Simpson Creek 39° 14' 32" N, 80° 07' 40" W). The dewatering structure for the bore pit in the Rt. 76 conveyance (UNT of Simpson Creek 39°14' 41" N, 80° 08' 22" W) allowed sediment-laden water to leave the site and cause conditions not allowable in waters of the State. At Station 311+00, no controls were installed, and sediment had been deposited off the edge of the timber mats that were installed on the edge of the limits of disturbance. At Station 251+00, perimeter controls were overtopped, and sediment-laden water left the limits of disturbance.
h. Section G.4.e.2.C.i -Arsenal Resources LLC failed to dispose of all solid waste/demolition material in accordance with West Virginia Legislative Rule 33CSR1. The dewatering bag was no longer in service and had not been removed from the conveyance.
i. 47CSR2 Section 3.2.b. -Arsenal Resources LLC caused conditions not allowable in waters of the State by creating sediment deposits in the following four (4) locations: the UNT of Simpson Creek (39° 14' 32" N, 80° 06' 23" W); UNT 8, the UNT of Simpson Creek (39° 14' 32" N, 80° 07' 40" W); the Rt. 76 conveyance, the UNT of Simpson Creek (39°14' 41" N, 80° 08' 22" W); and WL 9, Station 311+00, (39° 14' 48" N, 80° 08' 00" W).

As a result of the aforementioned violations, NOV No. W19-46-039-TDH was issued to Arsenal Resources LLC.

7. On June 10, 2019, WVDEP personnel conducted an inspection of the facility. During the inspection, violations of the following sections of West Virginia Legislative Rules and the permit were observed and documented:

a. Section B- Arsenal Resources LLC failed to comply with the approved SWPPP. Perimeter controls indicated in the SWPPP were not in place throughout the inspected area. Slope interceptors that consisted of SS2 silt fence were not in place as indicated in the approved SWPPP. Water bars lacked the installed water bar terminus BMPs that are indicated in the approved SWPPP. Water bars were not in place as indicated in the approved SWPPP. Several BMPs and stabilization practices at Access Road 7 were not in place as described in the approved SWPPP. The road surface was muddy and erodible and did not consist of a stoned surface that is at a minimum of six inches (6") thick of 1 ½ crusher- run stone atop a woven separation fabric, as indicated in the approved SWPPP (Sheet ENV D13). The site operator had been skimming mud off

the road surface and had placed a berm adjacent to UNT 32. The perimeter SS2 silt fence was not in place along UNT 32 as described in the approved SWPPP. Offsite sediment deposits that originated from this site were present in the UNT of Beards Run, downstream of the project. The pipe was installed at this crossing in the wet. Neither of the two methods indicated in the approved SWPPP of using a coffer dam and either a pump around or flume to work in the dry were utilized.

b. Section G.4.e.2.- Arsenal Resources LLC failed to properly implement controls. Improperly installed perimeter controls were present throughout the inspected area. Perimeter controls were not properly merged and/or trenched. An inequivalent CFS was used to replace the SS2 silt fence indicated in the approved SWPPP. Improperly installed water bars were present throughout the inspected area. Water bars were installed at angles greater than five percent (5%) downslope, were oriented so that the discharge flowed back onto the right-of-way, were constructed at an upslope height less than twelve inches (12"), and/or did not extend across the entire width of the disturbed right-of-way. Improperly installed temporary bridge BMPs were present throughout the inspected area. In many cases, the required second layer of timber mats was lacking. Temporary bridges were not properly tied-in to the adjacent perimeter controls, which allowed sediment laden water to bypass treatment.
c. Section G.4.c - Arsenal Resources LLC failed to modify the SWPPP when the SWPPP proved to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges. In four (4) areas, ephemeral streams ran onto the project site. There were inadequate BMPs in place, because the approved SWPPP did not indicate the need for BMPs associated with a stream crossing. These areas were adjacent to 482+85 (ephemeral UNT of Beards Run), adjacent to 400+50 (WL-18) (ephemeral UNT of Simpson Creek), wetland WL-28 (ephemeral UNT of Beards Run), and wetland WL-14 (ephemeral UNT of Simpson Creek). The lack of adequate BMPs in these concentrated flow areas caused sediment-laden water to bypass treatment and/or overtop the installed perimeter controls as a result of the quantity of stormwater being directed at them.
d. Section D.1.- Arsenal Resources LLC failed to properly operate and maintain all erosion control devices. Installed BMPs, including perimeter controls, temporary bridge BMPs, water bars, and water bar terminus BMPs, were in need of maintenance throughout the inspected area.
e. Section F.2.a. - Arsenal Resources LLC failed to immediately report to the spill alert telephone number noncompliance which may have endangered health or the environment. Offsite sediment deposits that originated from the site were present in the UNT of Simpson Creek (UNT-14) (39° 14.865' X 80° 08.448'). A coal mine opening was uncovered at the time that a pipe was being installed, which caused a large amount of water to flow across the permitted right-of-way. The installed BMPs were overwhelmed, and offsite sediment deposits were created as a result. Arsenal Resources LLC did not report this incident to the spill alert telephone number.
f. G.4.e.2.A.ii.f.- Arsenal Resources LLC failed to protect fill slopes. Concentrated flow was being directed over unprotected fill slopes as a result of improperly installed water bars and water bars indicated in the approved SWPPP that were not in place.
g. Section G.4.e.2.A.ii.j - Arsenal Resources LLC failed to prevent sediment-laden water from leaving the site without going through an appropriate device. Sediment-laden water bypassed treatment due to the lack of installed BMPs, improperly installed BMPs, and/or unmaintained BMPs. Sediment laden water left the site

without going through an appropriate device in some areas, because perimeter controls were overwhelmed due to the amount of stormwater being directed at them, as a result of the failure to install water bars and/or slope interceptors that are indicated in the approved SWPPP.

h. Section G.4.e.2.C.i – Arsenal Resources LLC failed to dispose of all solid waste/demolition material in accordance with West Virginia Legislative Rule 33CSR1. The sandbags utilized to create the cofferdam for the stream crossings of UNT-19 and UNT-21 were still in place, even though the in-stream activity had been completed for a long period of time.
i. 47CSR2 Section 3.2.b.- Arsenal Resources LLC caused conditions not allowable in waters of the State by creating sediment deposits in the following six (6) locations: the UNT of Simpson Creek (39° 14.951' X 80° 08.701'), the UNT of Simpson Creek (39° 15.086' X 80° 09.333'), the UNT of Simpson Creek (39° 14.883' X 80° 08.877'), UNT Wetland Simpson Creek (WL-22) (39° 15.378' X 80° 09.827'), the UNT of Simpson Creek (UNT-14) (39° 14.865' X 80° 08.448'), and the UNT of Beards Run (UNT-24) (39° 14.754' X 80° 10.941').

As a result of the aforementioned violations, NOV No. W19-17-054-TJC was issued to Arsenal Resources LLC.

8. On June 17, 2019, WVDEP personnel conducted an inspection of the facility. During the inspection, violations of the following sections of West Virginia Legislative Rules and the permit were observed and documented:

a. Section B-Arsenal Resources LLC failed to comply with the approved SWPPP. Several erosion control devices were not in place as detailed by the SWPPP. Along AR 5, perimeter controls were comprised of ineffective eight inch (8") CFS, instead of the SS2 indicated in the SWPPP. Appropriate sediment controls were not installed at the culverts. AR 5 was not graveled and showed signs of significant wear.
b. Section D.1.-Arsenal Resources LLC failed to properly operate and maintain all erosion control devices. Along AR 5, the CFS had been overtopped, because sediment had been pushed out by equipment, and/or equipment had run over the CFS. Maintenance was not being performed on the controls to remove the buildup of sediment.
c. Section G.4.e.2-Arsenal Resources LLC failed to properly implement controls. Along AR 5, perimeter controls were comprised of inequivalent eight inch (8") CFS, instead of SS2 as indicated in the approved SWPPP. Water bars from Station 299+00 to 304+00 were missing proper terminus treatment as indicated in the SWPPP, along with SS2 slope interceptors.
d. Section G.4.e.2.A.i.d.-Arsenal Resources LLC failed to stabilize clean water diversions prior to becoming functional. The ditch line along AR 5 is an unlabeled UNT of Simpson Creek for approximately one hundred feet (100 ft). This clean water division had been excavated and was not stabilized.
e. Section G.4.e.2.A.ii.f.-Arsenal Resources LLC failed to protect fill slopes. Erosion rills were forming at the end of water bars that were lacking terminus treatment.
f. Section G.4.e.2.A.ii.j.-Arsenal Resources LLC failed to prevent sediment-laden water from leaving the site at multiple locations along AR 5 without going through an appropriate device.

g. 47CSR2 Section 3.2.b. -Arsenal Resources LLC caused conditions not allowable in waters of the State by creating sediment deposits on the bottom of the UNT of Simpson Creek (39°14'47"N, 80°07'52"W).

As a result of the aforementioned violations, NOV No. W19-46-041-TDH was issued to Arsenal Resources LLC.

Registration No. WVR311362

9. Arsenal Resources LLC is conducting land disturbance activity associated with the Flemington Staging Area near Flemington, Taylor County, West Virginia. On June 3, 2019, Arsenal Resources LLC was issued Water Pollution Control Permit No. WV0116815, Registration No. WVR311362, for Stormwater Associated With Oil and Gas Related Construction Activities.

10. On June 17, 2019, WVDEP personnel conducted an inspection of the facility. During the inspection, a violation of the following section of the permit was observed and documented:

    a. Section G.4.b.5.-Arsenal Resources LLC failed to display a public notice sign near the entrance to the construction site.

    As a result of the aforementioned violation, NOV No. W19-46-042-TDH was issued to Arsenal Resources LLC.

Registration No. WVR311382

11. Arsenal Resources LLC is conducting land disturbance activity associated with the Comet Landslide Repair near Wendel, Taylor County, West Virginia. On July 15, 2019, Arsenal Resources LLC was issued Water Pollution Control Permit No. WV0116815, Registration No. WVR311382, for Stormwater Associated With Oil and Gas Related Construction Activities.

12. On January 15, 2020, WVDEP personnel conducted an inspection of the facility. During the inspection, violations of the following sections of the permit were observed and documented:

    a. Section D.1. -Arsenal Resources LLC failed to properly operate and maintain all erosion control devices. The concrete slurry diversion ditch needed maintenance to remove sediment deposits. The silt sock had bypasses where it was connected to adjacent pieces of sock.
    b. Section G.4.a.-Arsenal Resources LLC failed to retain a copy of the SWPPP and Groundwater Protection Plan (GPP) on site.
    c. Section G.4.e.2.-Arsenal Resources LLC failed to properly implement controls. Silt sock was overtopped by concrete slurry. The drop inlets in the concrete slurry diversion ditch did not have inlet protection.
    d. Section G.4.e.2.A.i.c.-Arsenal Resources LLC failed to reseed areas that failed to germinate within thirty (30) days after seeding. A representative of Arsenal Resources LLC stated that the work was completed in October 2019, but most of the site failed to germinate, and no other attempt was made to establish vegetative cover.

e. Section G.4.e.2.A.ii.f.-Arsenal Resources LLC failed to protect fill slopes. Erosion rills were forming on fill slopes due to lack of fill slope protection.
f. Section G.4.e.2.A.ii.j.-Arsenal Resources LLC failed to prevent sediment-laden water from leaving the site without going through an appropriate device. Unprotected drop inlets were accepting sediment-laden water from the concrete slurry diversion ditch, resulting in sediment-laden water being directed off-site without going through an appropriate device.

As a result of the aforementioned violations, NOV No. W20-46-004-TDH was issued to Arsenal Resources LLC.

13. On September 30, 2020, WVDEP personnel met with Arsenal Resources LLC's representative to discuss the terms and conditions of this Order.

ORDER FOR COMPLIANCE

Now, therefore, in accordance with Chapter 22, Article 11, Section 1 et seq. of the West Virginia Code, it is hereby agreed between the parties, and ORDERED by the Director:

1. Arsenal Resources LLC shall immediately take all measures to initiate compliance with all terms and conditions of its permit and pertinent laws and rules.

2. Within twenty (20) days of the effective date of this Order, Arsenal Resources LLC shall submit for approval a proposed plan of corrective action and schedule, outlining action items and completion dates for how and when Arsenal Resources LLC will achieve compliance with all terms and conditions of its permit and pertinent laws and rules. The plan of corrective action shall include, but not be limited to, provisions for proper remediation of all areas identified in this Order where conditions not allowable were observed and documented in waters of the State, as defined in WV Legislative Rule 47CSR2 Section 3.2. In addition, the plan of corrective action shall include, but not be limited to, provisions for submittal of a report which documents that proper remediation of the aforementioned areas has occurred. The plan of corrective action shall make reference to Permit No. WV0116815, Registration Nos. WVR310852, WVR310983, WVR311362, and WVR311382, and Order No. 9923. The plan of corrective action shall be submitted to:

Chief Inspector
Environmental Enforcement - Mail Code #031328
WVDEP
601 57th Street SE
Charleston, WV 25304

Upon approval, the plan of corrective action and schedule shall be incorporated into and become part of this Order, as if fully set forth herein. Failure to submit an approvable plan of corrective action and schedule or failure to adhere to the approved schedule is a violation of this Order.

3. Because of Arsenal Resources LLC's Legislative Rule and permit violations. Arsenal Resources LLC shall be assessed a civil administrative penalty of one hundred eight thousand two hundred dollars ($108,200) to be paid to the West Virginia Department of Environmental Protection for deposit in the Water Quality Management Fund within thirty (30) days of the effective date of this Order. Payments made pursuant to this paragraph are not tax-deductible for purposes of State or federal law. **Payment shall include a reference to the Order No. and shall be mailed to:**

Chief Inspector
Environmental Enforcement - Mail Code #031328
WV-DEP
601 57th Street SE
Charleston, WV 25304

OTHER PROVISIONS

1. Arsenal Resources LLC hereby waives its right to appeal this Order under the provisions of Chapter 22, Article 11, Section 21 of the Code of West Virginia. Under this Order, Arsenal Resources LLC agrees to take all actions required by the terms and conditions of this Order and consents to and will not contest the Director's jurisdiction regarding this Order. However, Arsenal Resources LLC does not admit to any factual and legal determinations made by the Director and reserves all rights and defenses available regarding liability or responsibility in any proceedings regarding Arsenal Resources LLC other than proceedings, administrative or civil, to enforce this Order.

2. The Director reserves the right to take further action if compliance with the terms and conditions of this Order does not adequately address the violations noted herein and reserves all rights and defenses which he may have pursuant to any legal authority, as well as the right to raise, as a basis for supporting such legal authority or defenses, facts other than those contained in the Findings of Fact.

3. If any event occurs which causes delay in the achievement of the requirements of this Order, Arsenal Resources LLC shall have the burden of proving that the delay was caused by circumstances beyond its reasonable control which could not have been overcome by due diligence (i.e., force majeure). Force majeure shall not include delays caused or contributed to by the lack of sufficient funding. Within three (3) working days after Arsenal Resources LLC becomes aware of such a delay, notification shall be provided to the Director/Chief Inspector and Arsenal Resources LLC shall, within ten (10) working days of initial notification, submit a detailed written explanation of the anticipated length and cause of the delay, the measures taken and/or to be taken to prevent or minimize the delay, and a timetable by which Arsenal Resources LLC intends to implement these measures. If the Director agrees that the delay has been or will be caused by circumstances beyond the reasonable control of Arsenal Resources LLC (i.e., force majeure), the time for performance hereunder shall be extended for a period of time equal to the delay resulting from such circumstances. A force majeure amendment granted by the Director shall be considered a binding extension of this Order and of the

requirements herein. The determination of the Director shall be final and not subject to appeal.

4. Compliance with the terms and conditions of this Order shall not in any way be construed as relieving Arsenal Resources LLC of the obligation to comply with any applicable law, permit, other order, or any other requirement otherwise applicable. Violations of the terms and conditions of this Order may subject Arsenal Resources LLC to additional penalties and injunctive relief in accordance with the applicable law.

5. The provisions of this Order are severable and should a court or board of competent jurisdiction declare any provisions to be invalid or unenforceable, all other provisions shall remain in full force and effect.

6. This Order is binding on Arsenal Resources LLC, its successors and assigns.

7. This Order shall terminate upon Arsenal Resources LLC's notification of full compliance with the "Order for Compliance" and verification of this notification by WVDEP.

Ross Schweitzer
Arsenal Resources LLC

10-21-2020
Date

Public Notice begin:

Date

Public Notice end:

Date

Katheryn Emery, P.E., Acting Director
Division of Water and Waste Management

Date

Stat. 218+00, Failure to implement water bar terminus treatment as detailed on page ENV D12 of the SWPPP.

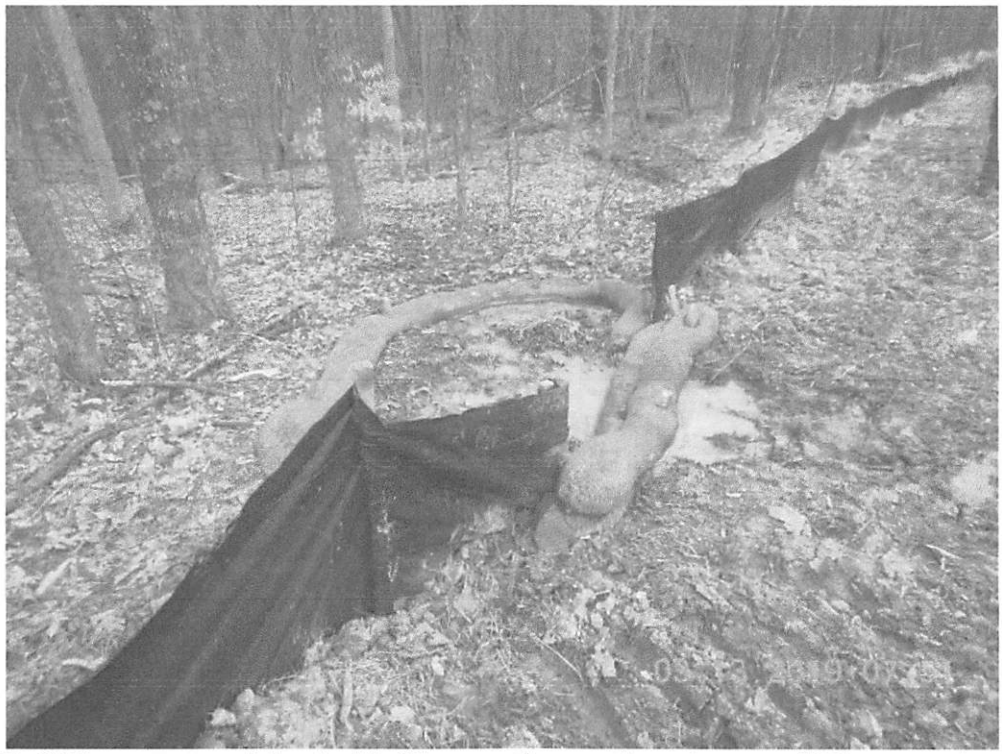
Stat. 218+00, Failure to implement water bar terminus treatment as detailed on page ENV D12 of the SWPPP.

Stat. 217+25, Perimeter controls throughout site were nonfunctional due to bypasses. Silt fence not toed-in correctly.

Stat. 213+75, Perimeter controls throughout site were nonfunctional due to bypasses. SSF not tied together with SF, creating a bypass.

Stat. 213+75, SF not toed-in correctly.

Stat. 193+00, SF failure from either not being conjoined or toed-in correctly.



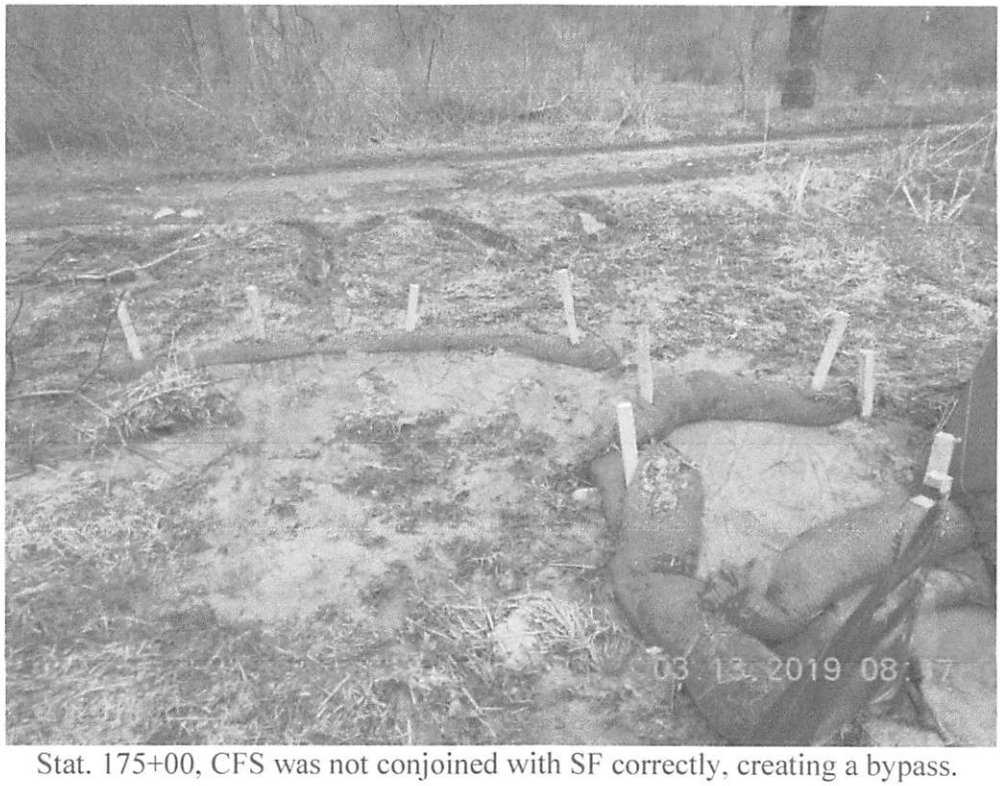
Stat. 192+75, CFS was not conjoined with SF correctly, creating a bypass. CFS was not in contact with the ground, creating bypasses.

Stat. 192+75, Sediment deposit off site via bypasses in controls.

Stat. 210+00, Perimeter controls tied-in to bridging controls that had bypasses.

Stat. 210+00, UNT 12, Arsenal caused conditions not allowable in UNT of Shelby Run at 39°18'16" N 80°04'01" W

Stat. 175+00, CFS was not conjoined with SF correctly, creating a bypass.



Stat. 175+00, CFS was not conjoined with SF correctly, creating a bypass.

Stat. 175+25

Stat. 175+25, Barnett Road Conveyance, Arsenal caused conditions not allowable in UNT of Shelby Run at 39°18'42" N 80°03'51" W

Stat. 164+00

Stat. 164+00, CFS was not in contact with the ground, creating a bypass, allowing sediment laden water to leave site.

Stat. 156+00, UNT 17, Maintenance is lacking throughout project site.

Stat. 156+00, UNT 17, Arsenal caused conditions not allowable in UNT of Shelby Run at 39°19'00" N 80°03'38" W

Stat. 155+50, Sediment deposit off site.

Maintenance is lacking throughout project site.

Stat. 142+00, Water bars were not installed as indicated in the SWPPP.

Stat. 147+75, Water bars were not installed as indicated in the SWPPP.

Stat. 112+00

Stat. 112+00, Water bars terminus treatment was not implemented as detailed on page ENV D12 of the SWPPP.

Failed to properly implement geo-wrap and perimeter controls on bridge at UNT 29, UNT of Otter Run, allowing sediment laden water to leave site and create sediment deposits on bottom of UNT of Otter Run.

Stat. 68+26, UNT 29, Arsenal caused conditions not allowable in UNT of Otter Run at 39°20' 09" N 80° 03' 20" W

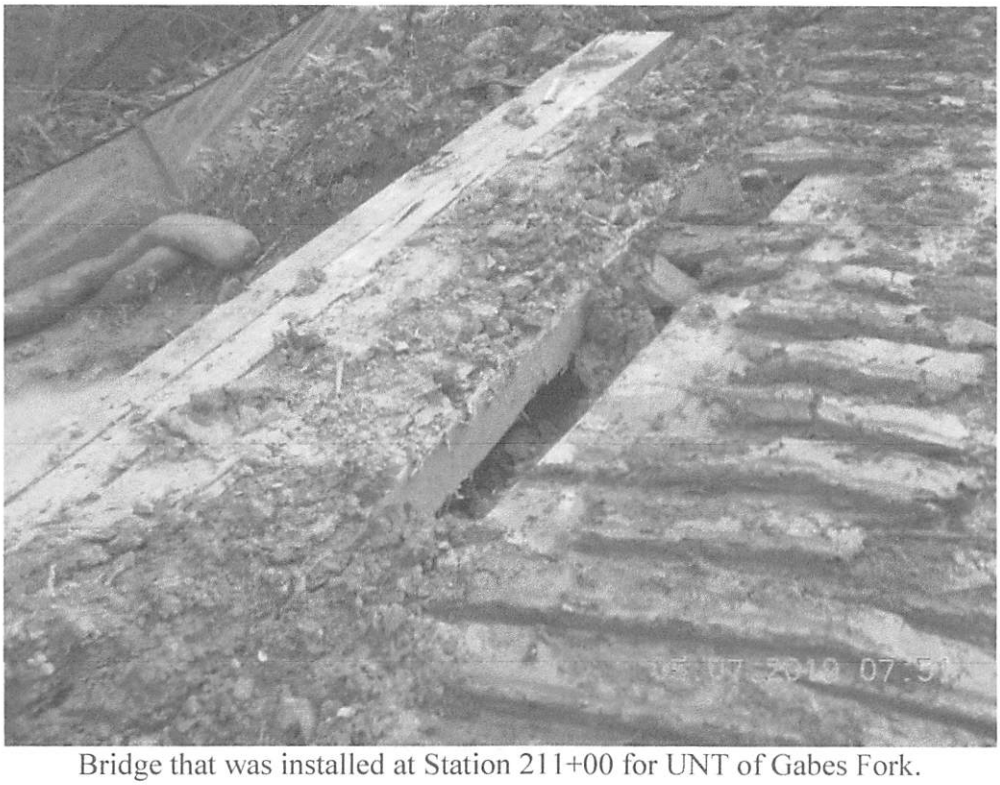
Maintenance is lacking throughout project site.

Stat. 63+50 Arsenal caused conditions not allowable in UNT of Otter Creek at 39° 20' 14" N 80° 03' 22" W

Maintenance at Station 185+00, bridge controls.

Maintenance at Station 34+15 UNT 3, bypasses on bridge controls.

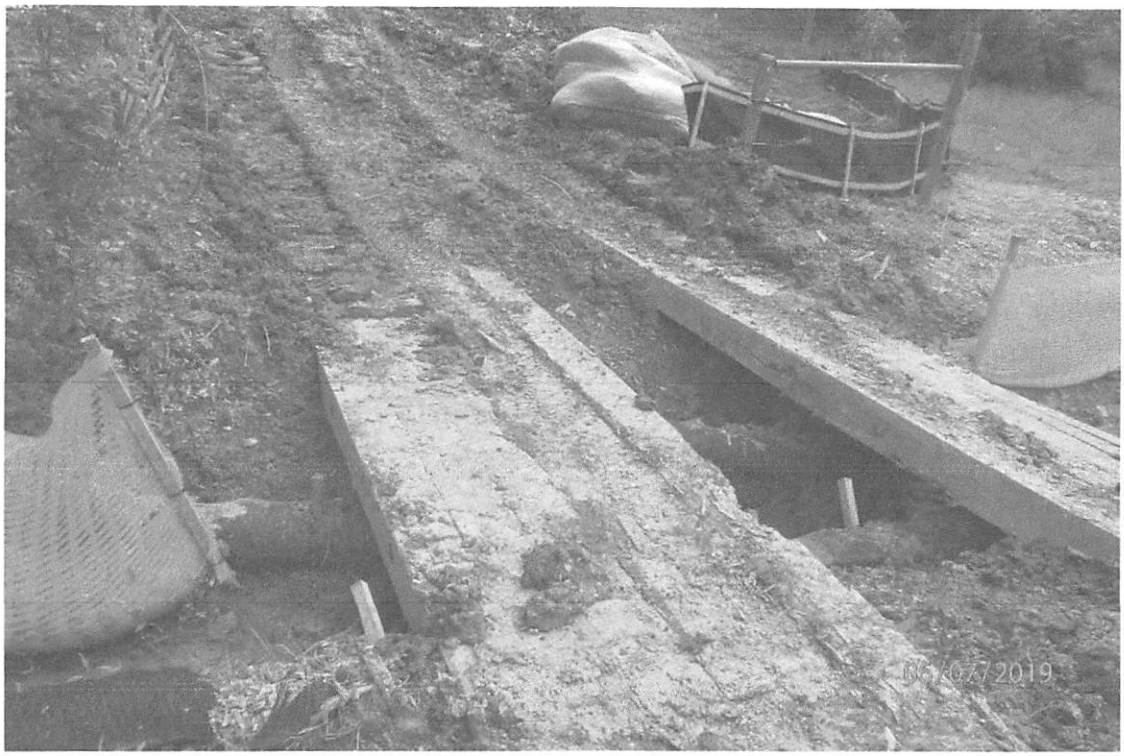
Station 211+00, unidentified UNT of Gabes Fork.



Bridge that was installed at Station 211+00 for UNT of Gabes Fork.

Below bridge installed at Station 211+00 of UNT of Gabes Run.

Sediment deposits on bottom of UNT of Gabes Run.



Timber mat crossing of UNT Beards Run conveyance of old CR 17 showing the lack of protection.

Timber mat crossing of UNT Beards Run conveyance of old CR 17 showing the lack of protection.

Offsite sediment deposits as a result of improperly installed water bars leading to the old CR 17 conveyance. Perimeter controls were recently installed in this area as well.

Offsite CNA deposits in UNT Beards Run conveyance (39° 15.023' X 80° 10.561').

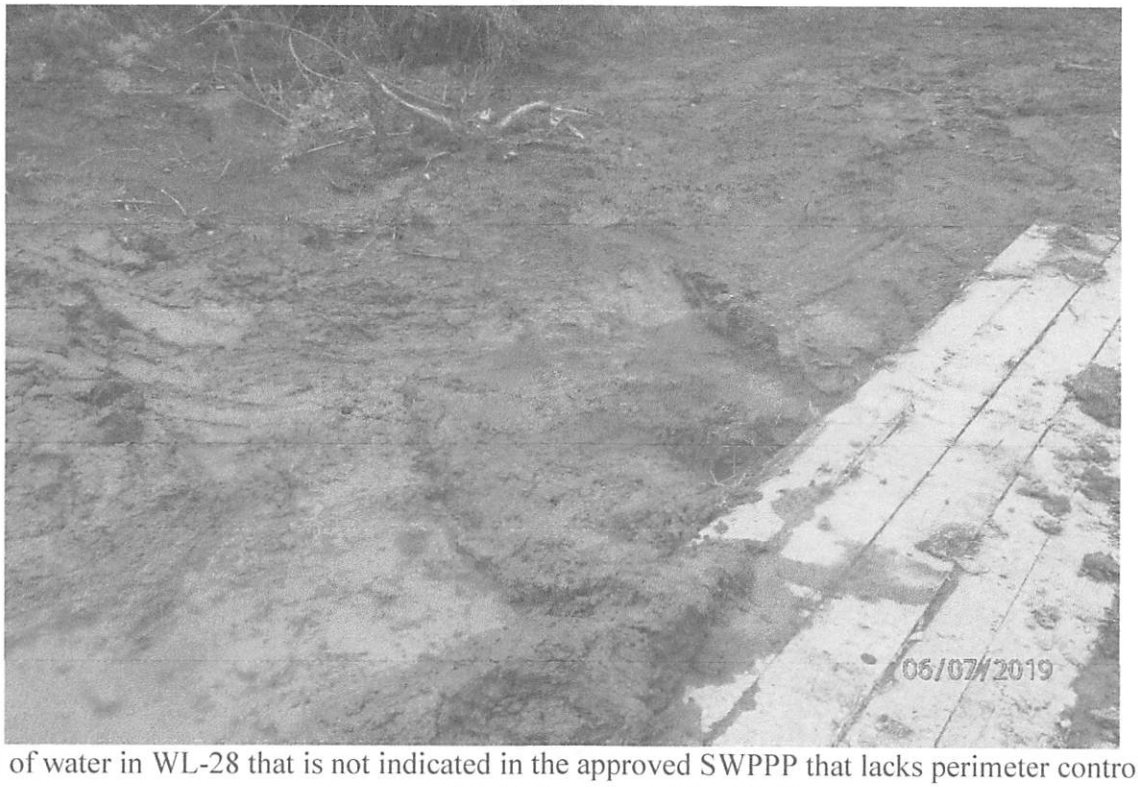
Offsite CNA deposits in UNT Beards Run conveyance (39° 15.023' X 80° 10.561').

Offsite CNA deposits in Beards Run at the culvert outlet downslope of UNT Beards Run conveyance (39° 15.023' X 80° 10.561').

Improperly installed water bar upslope of 479+00. The water bar is installed at a steep angle and has a height less than 12". The water bar allows stormwater to flow back across the right of way. The water bar also lacks outlet treatment.

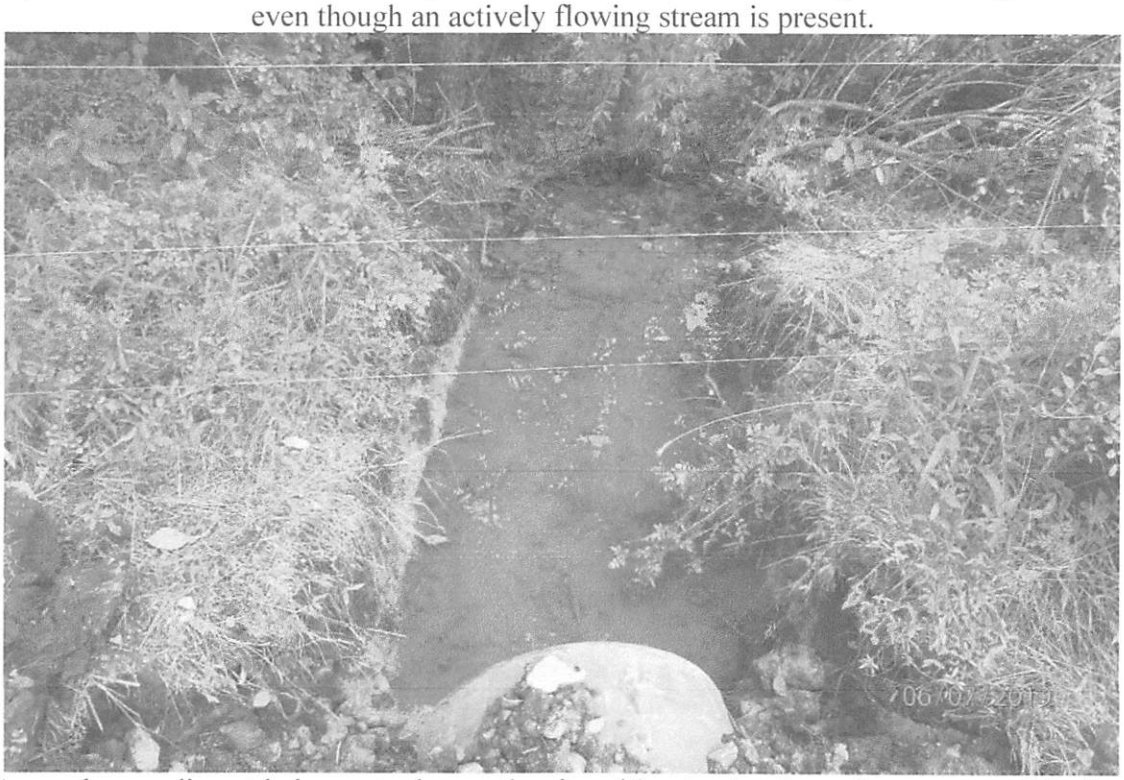
Improperly installed water bar upslope of 479+00. The water bar allows stormwater to flow back across the right of way. The water bar also lacks outlet treatment.

Wetland WL-28 showing the lack of installed perimeter controls that are indicated in the approved SWPPP.



Stream of water in WL-28 that is not indicated in the approved SWPPP that lacks perimeter controls and an appropriate timber mat bridge BMP.

Close up view of the timber mat crossing of the stream in WL-28 showing the lack of geotextile fabric even though an actively flowing stream is present.

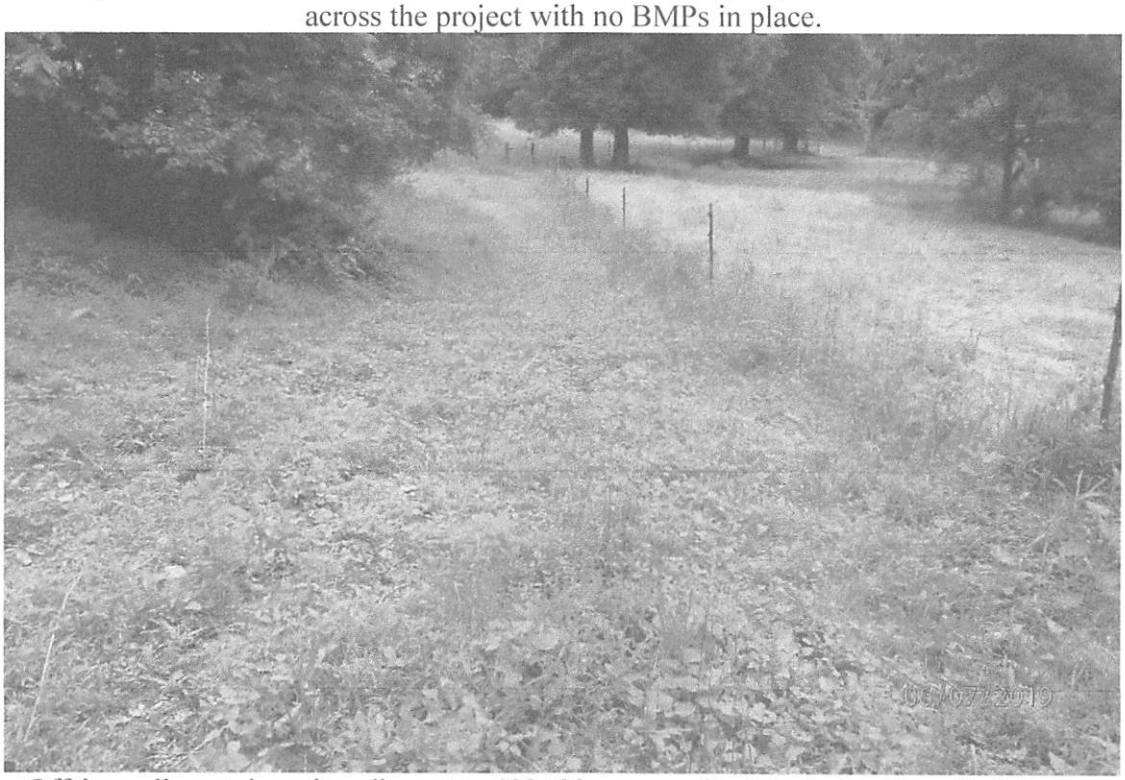


Area where sediment laden water leaves the site without going through an approved device.

Project area adjacent to 482+85 showing the lack of installed silt saver 2 indicated in the approved SWPPP. The area past the fence is where a stream of run on stormwater is flowing across the project and the plan has not been modified to adequately handle the flow.

Project area adjacent to 482+85 showing the upslope stream channel that is not indicated in the approved SWPPP.

Project area adjacent to 482+85 showing the area where the upslope ephemeral stream is allowed to flow across the project with no BMPs in place.

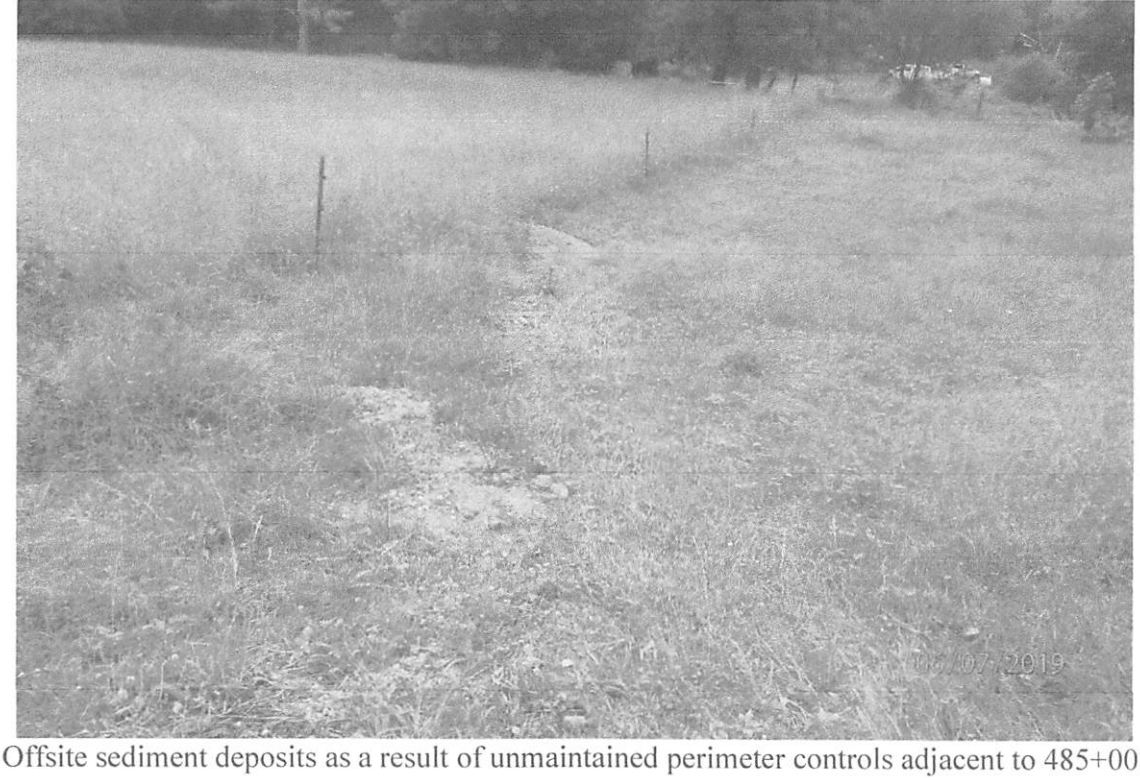


Offsite sediment deposits adjacent to 482+00 as a result of the lack of installed BMPs.

Unmaintained perimeter controls adjacent to 484+00.

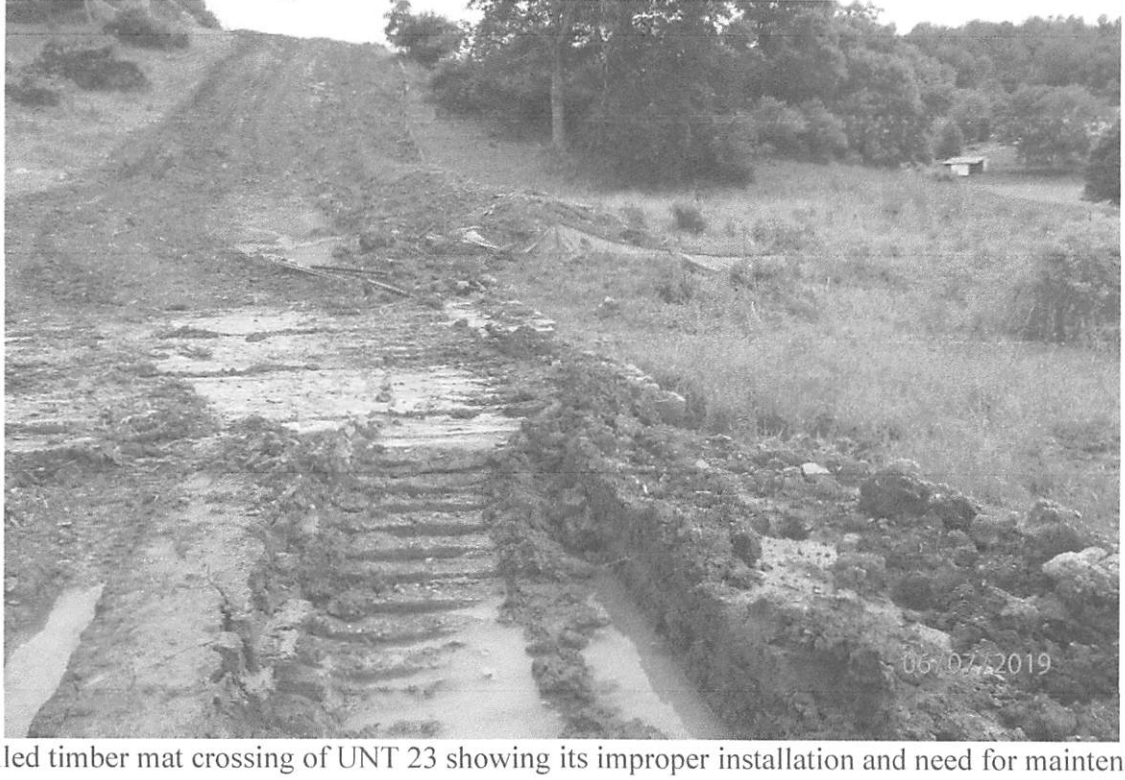
Unmaintained perimeter controls adjacent to 485+50.

Offsite sediment deposits as a result of unmaintained perimeter controls adjacent to 485+00.



Offsite sediment deposits as a result of unmaintained perimeter controls adjacent to 485+00.

Installed timber mat crossing of UNT 23 showing its improper installation and need for maintenance.



Installed timber mat crossing of UNT 23 showing its improper installation and need for maintenance.

Installed timber mat crossing of UNT 23 showing its improper installation and need for maintenance.

Installed timber mat crossing of UNT 23 showing its improper installation and need for maintenance.

Hillside upslope of 490+00 showing the lack of installed water bars and silt saver 2 slope interceptors.

Hillside upslope of 490+00 showing the lack of installed water bars and silt saver 2 slope interceptors and the associated fill slope erosion.

Stone that was placed in the stream by the site operator during the inspection at UNT Beards Run (39° 15.098' X 80° 10.735'). CNA deposits pictured downstream of the crossing.

Stone that was placed in the stream by the site operator during the inspection at UNT Beards Run (39° 15.098' X 80° 10.735'). CNA deposits pictured upstream of the crossing.

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6/10/2019

Bypass on water bar terminus treatment. 8 inch CFS installed, but SWPPP requires 18 inch.

Bypass on water bar terminus treatment.

Station 192+50 to 195+50, 6 water bars should be installed with terminus treatment.

Station 193+00, P2 fence not functional.

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6/10/2019

Station 192+00, Water bar terminus BMP not properly implemented, allowing sediment laden water to leave site.

No water bar terminus treatment.

SWPPP requires 6 water bars along with SS P2 slope interceptors as perimeter controls. However, continuous 8" CFS was installed.

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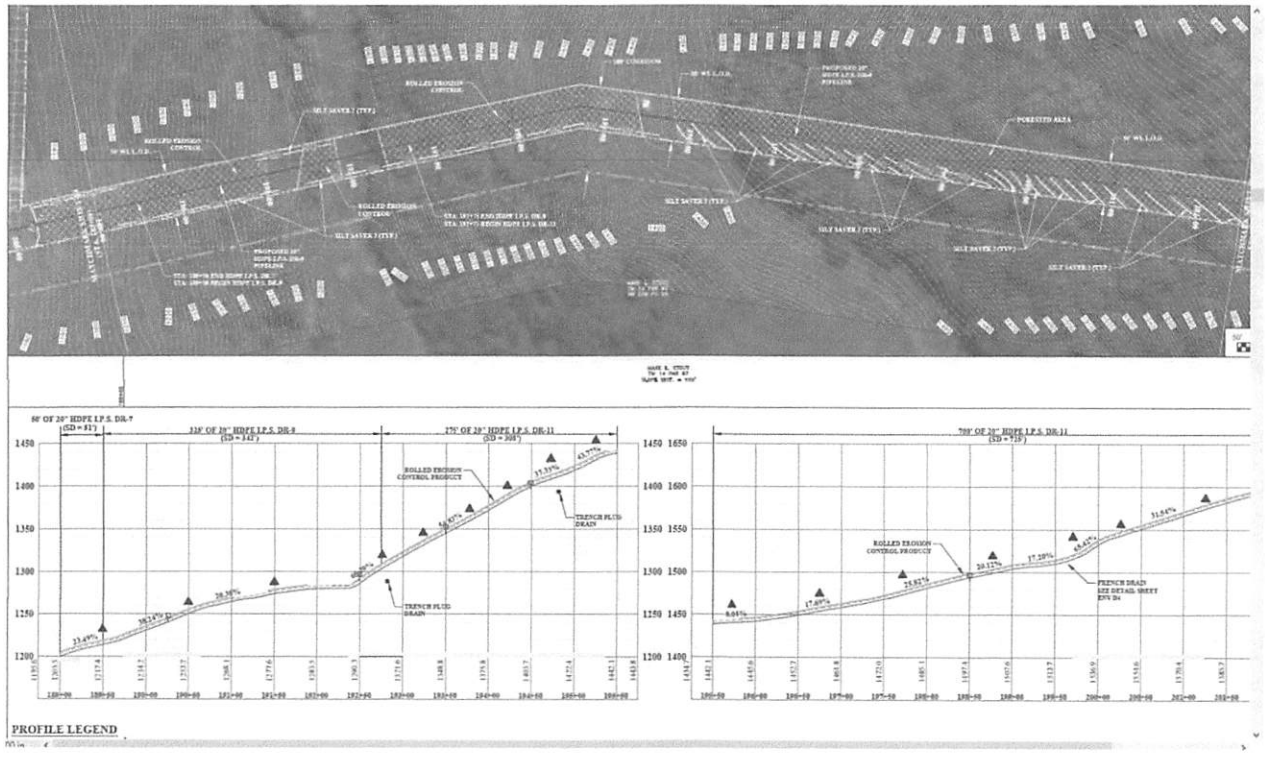
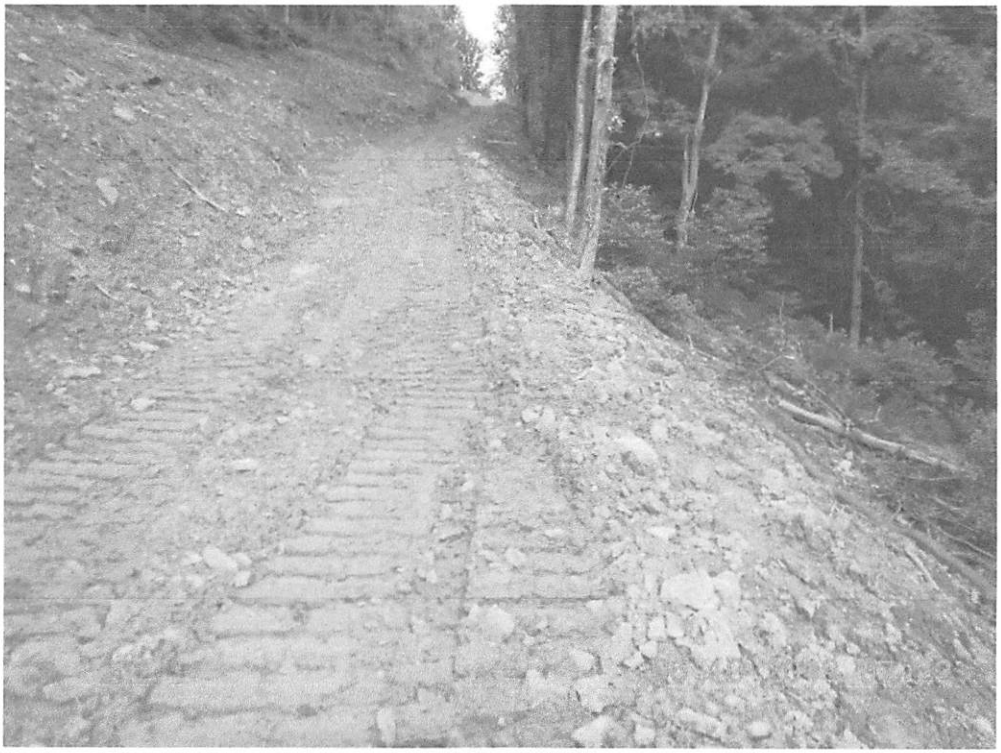
6/10/2019



Inequivalent CFS was installed instead of SS2, as required by the SWPPP. CFS is riddled with bypasses and could allow sediment laden water to leave site.



Station 199+50, No water bars installed. SWPPP requires SS2 slope interceptors.

Station 205+00, Water bars with no terminus treatment installed.

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6/10/2019

Station 207+00 to 211+00, SWPPP indicates 9 water bars with terminus treatment.

Station 207+50, Only water bar noted out of 9 required by SWPPP. Maintenance needed on sump. Water bar is ineffective, and erosion rills are starting to form.

Station 208+00, Erosion rill is present, and SS2 is overwhelmed with sediment.

Station 211+00, Outfall for flume pipe for first unlabeled UNT at this location.

Head of first unlabeled UNT at Station 211+00 is blocked.

Clean water diversions at Station 211+00 between first and second unlabeled UNT.

Second unlabeled UNT around Station 211+00. Head of culvert flume.

Tail of culvert around Station 211+00. Did not install an energy dissipater as detailed on Page ENV D10. Maintenance needed on perimeter controls.

Sediment deposits on bottom of UNT of Simpson Creek (39°14' 32" N, 80° 06' 26" W).

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6/10/2019

Water bar is ineffective, because water bypasses, resulting in erosion rills at the bottom of the slope.

Station 214+00 to 219+50, SWPP calls for SS2 slope interceptors and 10 water bars with terminus treatment.

Station 220+00, Bypasses of perimeter controls.

Station 220+50, Sumps needed maintenance.

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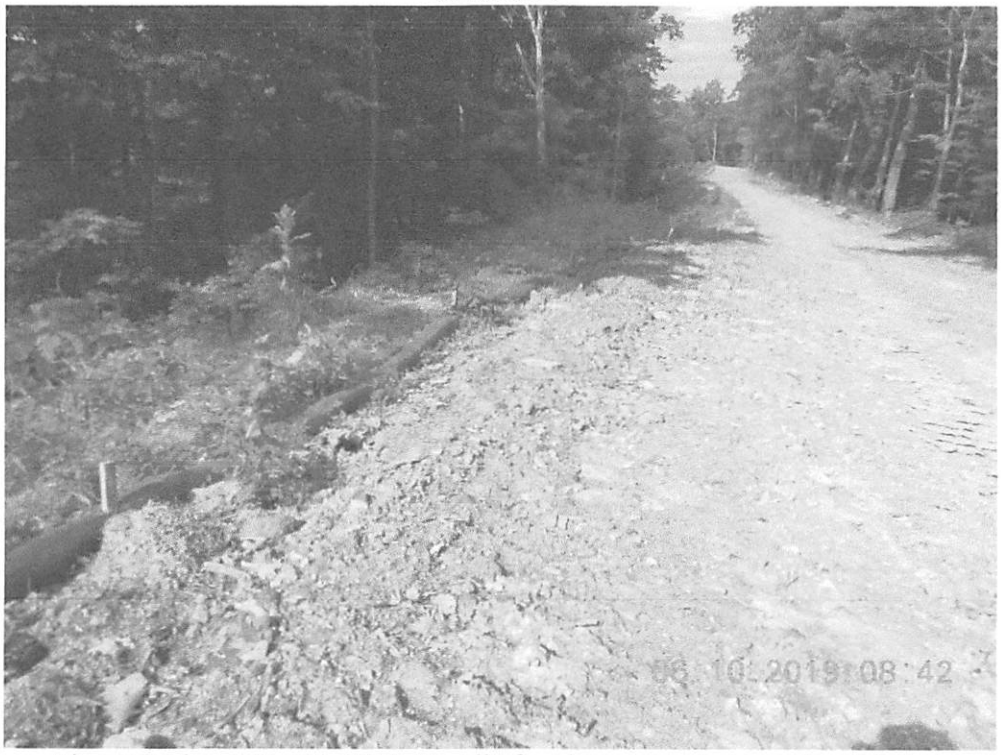
6/10/2019

Station 223+00, bypass of terminus treatment. Maintenance needed on sump and perimeter controls.



About Station 242+00, SWPPP calls for slope interceptor to be installed.

Bypasses in perimeter controls (Station 245+00).

About Station 246+00, perimeter controls in disarray, holes in fabric, and SS2 not toed-in correctly.

Station 251+00, Sediment laden water left limits of disturbance.

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6/10/2019

Station 258+00

Station 260+00, SWPPP requires SS2 slope interceptors. When controls were damaged by pulling pipe strings, 8 inch CFS was installed in its place.

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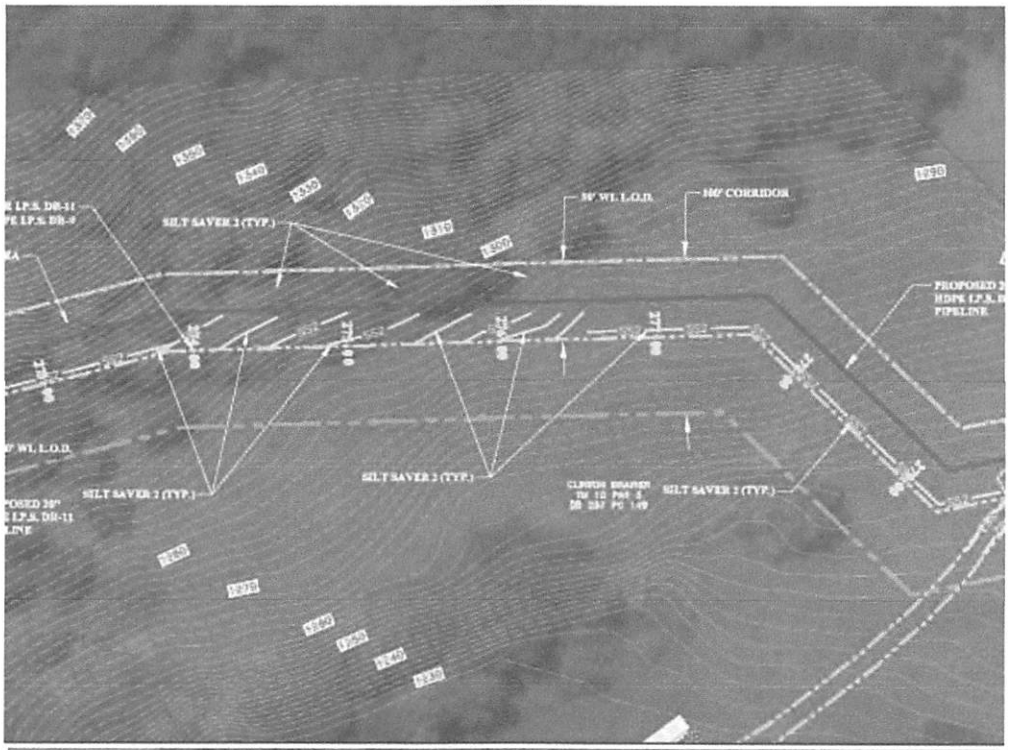
6/10/2019

Station 265+50, SWPPP requires 10 water bars. This section of ROW was entrenched, and all water stayed on right of way until about Station 271+00.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, Taylor Barbour Counties_
6/10/2019

Station 271+00, Water bars are tracked though, causing them to fail. Water can bypass and form erosion rills in tracks.



Station 274+00, SWPPP requires SS2 slope interceptors.

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6/10/2019

Station 258+00, WL 5 perimeter controls in disarray.

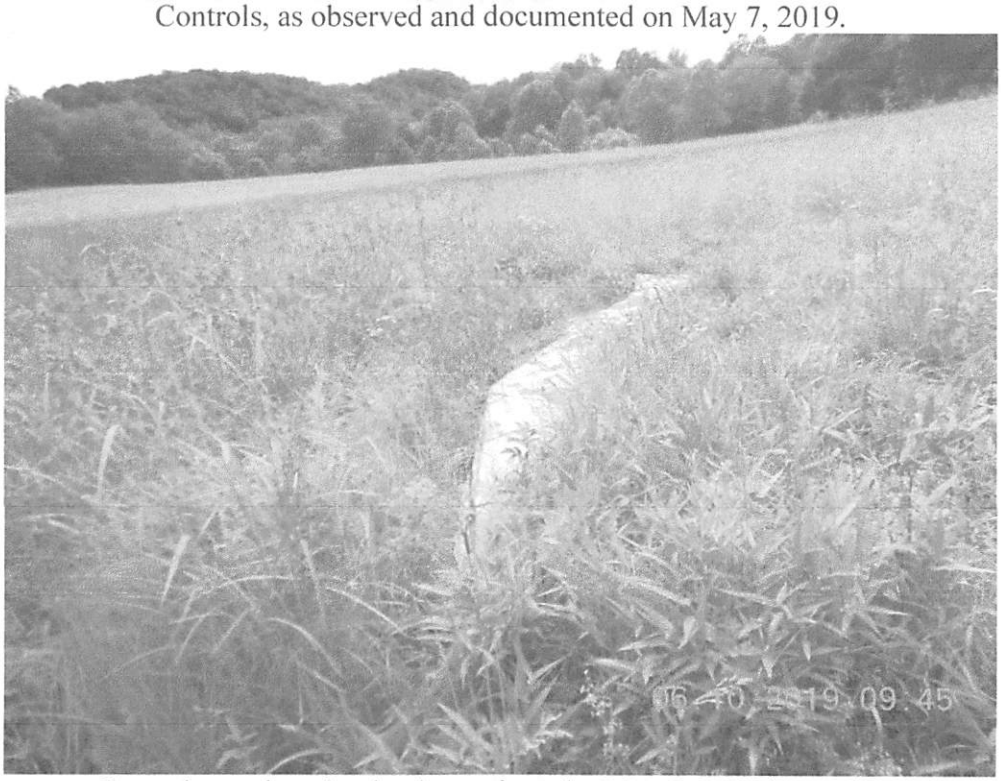
Bypass of WL5 perimeter controls

UNT 8, sediment deposits on bottom of UNT of Simpson Creek (39° 14' 32" N, 80° 07' 41" W).

Station 301+00, Water bar with no terminus treatment. SWPPP requires SS2 slope interceptors.

Station 304+00, WL 8, Required SS2 was not installed.

Controls, as observed and documented on May 7, 2019.



Controls continued to be down since the May 7, 2019 inspection.

Sediment deposits in WL 9 (39° 14' 48" N, 80° 08' 00" W).

Controls, as observed and documented on May 7, 2019.

Sediment laden water leaving site without going through an appropriate device. Deficiency had continued since the May 7, 2019 inspection.

Lack of controls, as observed and documented on May 7, 2019.

Station 317+00, Lack of controls had continued since the May 7, 2019 inspection.

Lack of controls, as observed and documented on May 7, 2019.

Station 311+00, Lack of controls had continued since the May 7, 2019 inspection.

Dewatering bag in Rt. 76 conveyance.

Sediment deposit on bottom of Rt. 76 conveyance.

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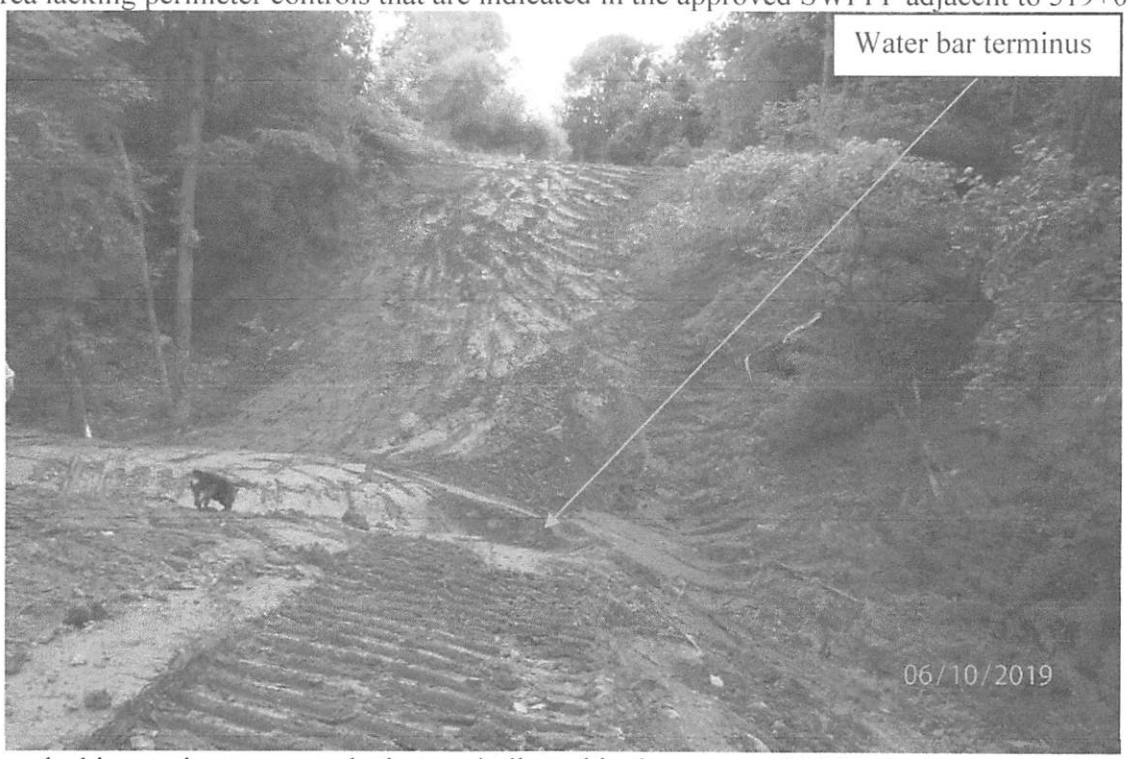
6/10/2019

Sediment deposit on bottom of Rt. 76 conveyance caused conditions not allowable on the bottom of UNT of Simpson Creek (39° 14' 42" N, 80° 08' 21" W).

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

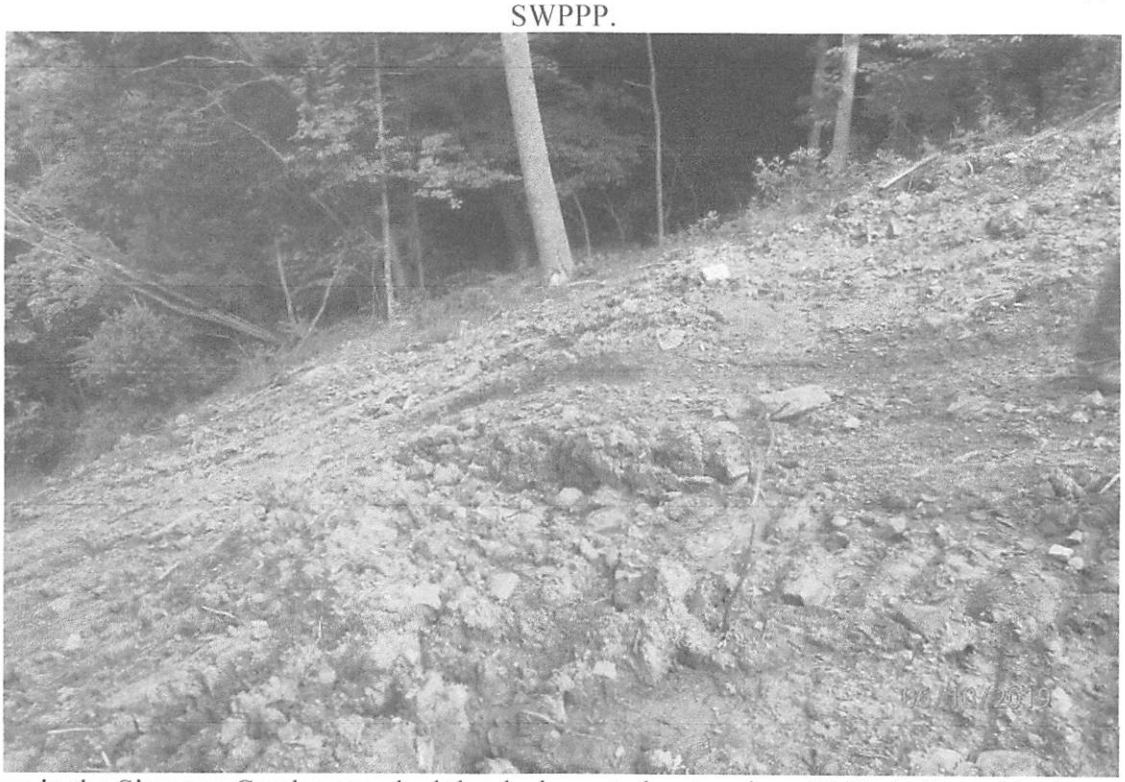
Area lacking perimeter controls that are indicated in the approved SWPPP adjacent to 519+00.



Area lacking perimeter controls that are indicated in the approved SWPPP adjacent to 502+00.
Improperly installed waterbar that lacks water bar terminus treatment.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Waterbar in the Beards Run watershed that lacks waterbar terminus BMPs indicated in the approved SWPPP.



Waterbar in the Simpson Creek watershed that lacks waterbar terminus BMPs indicated in the approved SWPPP.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Waterbar in the Beards Run watershed that lacks waterbar terminus BMPs indicated in the approved SWPPP. Improperly installed waterbar (shallow height) pictured.

Waterbar in the Beards Run watershed that lacks waterbar terminus BMPs indicated in the approved SWPPP.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Project area upslope of 447+00 showing the lack of waterbars indicated in the approved SWPPP. The approved SWPPP indicates that 9 waterbars should be installed, but only 3 were in place.

Project area upslope of 447+00 showing the lack of waterbars indicated in the approved SWPPP. The approved SWPPP indicates that 9 waterbars should be installed, but only 3 were in place.

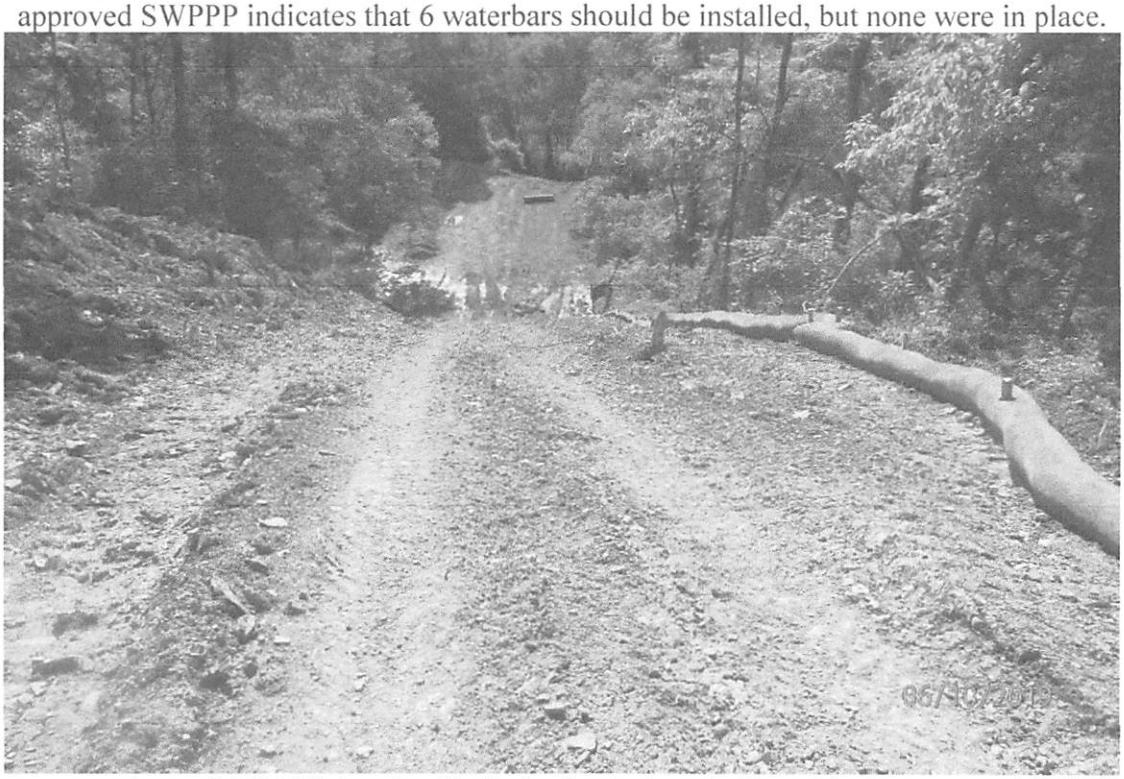
ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Project area upslope of 447+00 showing the lack of waterbars indicated in the approved SWPPP. The approved SWPPP indicates that 9 waterbars should be installed, but only 3 were in place.

Offsite sediment deposits originating from the site adjacent to 447+00 as a result of the lack of installed waterbars and the associated fill slope erosion.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Project area upslope of 433+50 showing the lack of waterbars indicated in the approved SWPPP. The approved SWPPP indicates that 6 waterbars should be installed, but none were in place.



Project area upslope of 433+50 showing the lack of waterbars indicated in the approved SWPPP. The approved SWPPP indicates that 6 waterbars should be installed, but none were in place.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Improperly installed perimeter controls (no J-Hook) adjacent to 433+50, showing accumulated sediment deposits as a result of the lack of installed waterbars upslope of this location. Area of sediment laden water bypass.

Offsite CNA deposits in wetland UNT Simpson Creek (WL-22) (39° 15.378' X 80° 09.827') that originated from the site as a result of a lack of waterbars and improperly installed BMPs.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Improperly installed perimeter control at the UNT 26 crossing. The approved SWPPP indicates that silt saver 2 will be installed, but 8-inch compost filter sock was in place.

Improperly installed perimeter control on access road 9 showing an area where sediment laden water can bypass treatment under the BMP.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Improperly merged perimeter control in the Beards Run watershed.

Improperly merged perimeter control in the Simpson Creek watershed.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Improperly installed waterbars in the Beards Run watershed showing waterbar outlets that do not have positive drainage and allow water to flow back onto the right-of-way.

Improperly installed waterbar in the Beards Run watershed that is less than 12 inches high on the uphill side.

Improperly installed perimeter control adjacent to 374+00 (WL-17-B) showing the BMP placed on a large stone which allows sediment laden water to bypass treatment.

Improperly installed perimeter control adjacent to 374+00 (WL-17-B) showing the BMP placed on a large stone which allows sediment laden water to bypass treatment.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Offsite CNA deposits in UNT Simpson Creek (39° 14.883' X 80° 08.877') that originate from the previously pictured improperly installed perimeter control.

Offsite CNA deposits in UNT Simpson Creek (39° 14.883' X 80° 08.877') that originate from the previously pictured improperly installed perimeter control.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Project area adjacent to 365+00 (WL-14) showing a perimeter control with evidence of being overtopped and the need to modify the approved SWPPP.

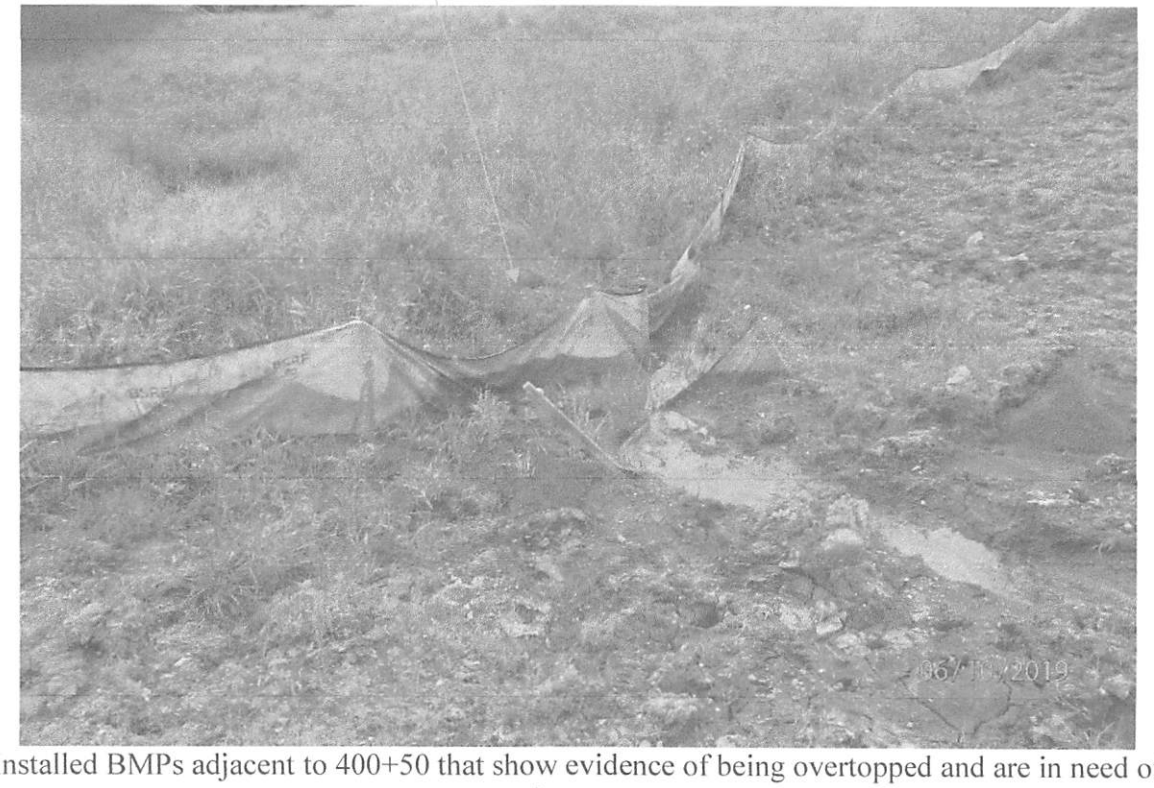
Improperly installed secondary compost filter sock BMP that was placed on large stone and allowed sediment laden water to bypass under the device. BMP and stone are placed off-site and in-stream at UNT Simpson Creek.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Offsite CNA deposits in UNT Simpson Creek (39° 14.951' X 80° 08.701') as a result of the previously pictured deficiency.

Offsite CNA deposits in UNT Simpson Creek (39° 14.951' X 80° 08.701') as a result of the previously pictured deficiency.

Project area adjacent to 400+50 (WL-18) showing where run-on stormwater is overwhelming the installed BMPs.



Installed BMPs adjacent to 400+50 that show evidence of being overtopped and are in need of maintenance.

Offsite CNA deposits in UNT Simpson Creek (39° 15.086' X 80° 09.333') that originate from the site adjacent to 400+50.

Project area upslope of 400+50 showing the stream condition and the drainage area that is producing run-on stormwater for the project.

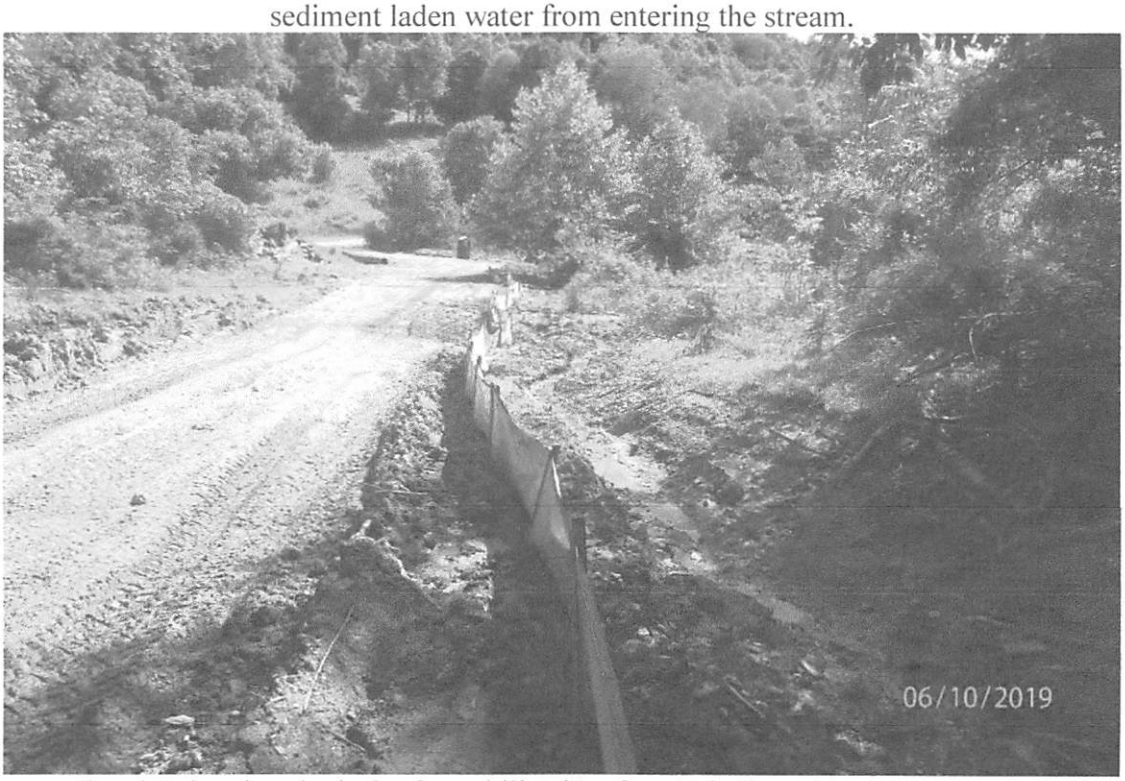
ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Access Road 7 showing the lack of a stabilized surface as indicated in the approved SWPPP. Area on the left lacking the perimeter controls indicated in the approved SWPPP.

Access Road 7 showing the lack of installed perimeter controls indicated in the approved SWPP.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Ephemeral UNT Simpson Creek showing instream disturbance and the lack of installed BMPs to prevent sediment laden water from entering the stream.



Access Road 7 showing the lack of a stabilized surface as indicated in the approved SWPPP.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Perimeter control in need of maintenance in the Beards Run watershed.

Perimeter control in need of maintenance in the Beards Run watershed.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Perimeter control adjacent to WL-27 that is in need of maintenance.

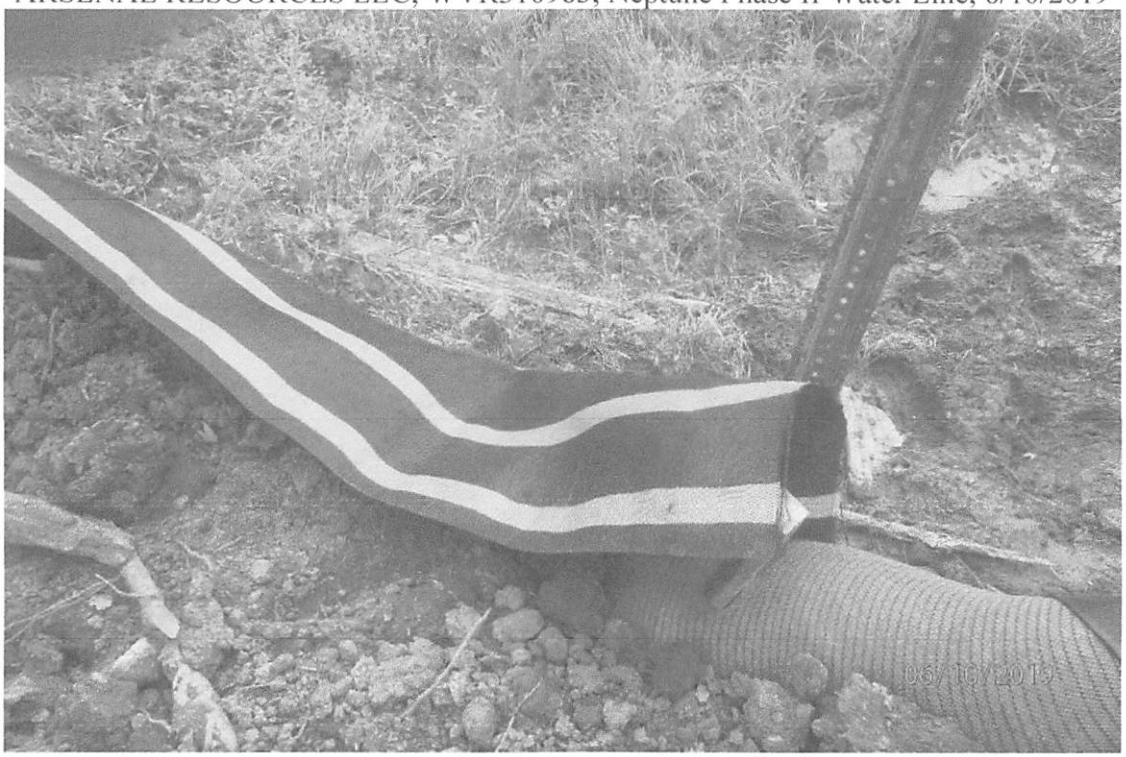
Perimeter control adjacent to WL-27 that is in need of maintenance.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Perimeter control in need of maintenance in the Simpson Creek watershed.

Perimeter control in need of maintenance in the Simpson Creek watershed.

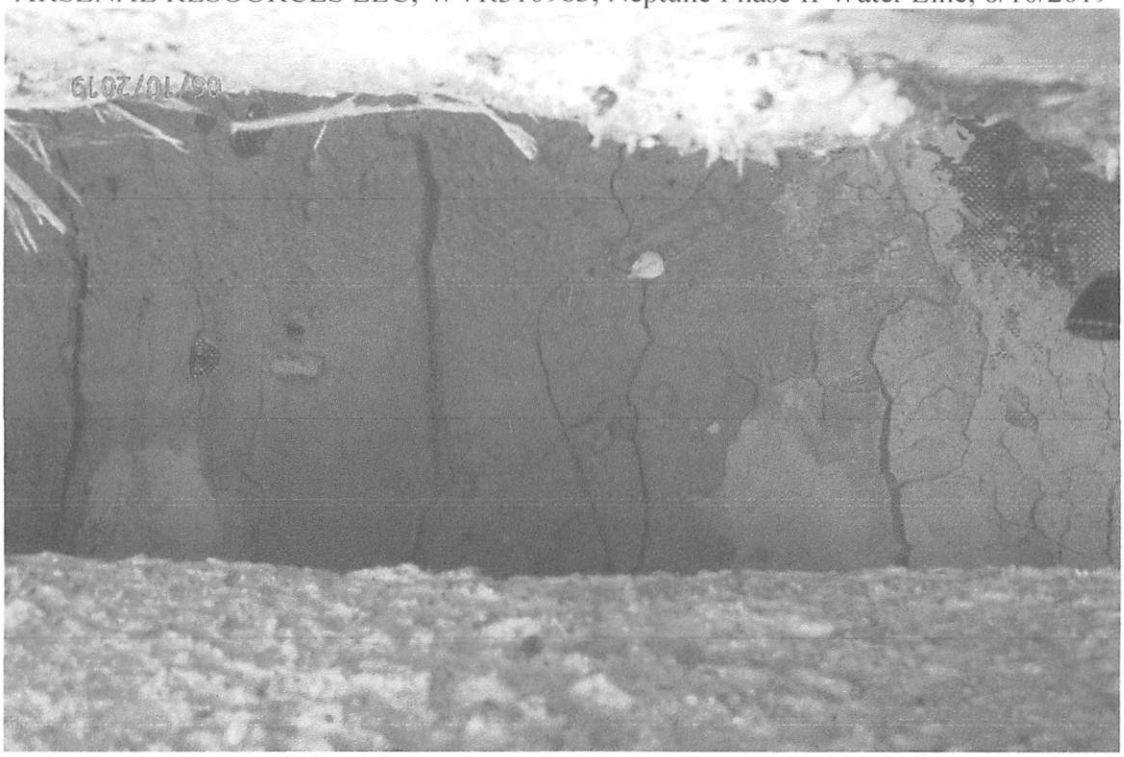
ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019



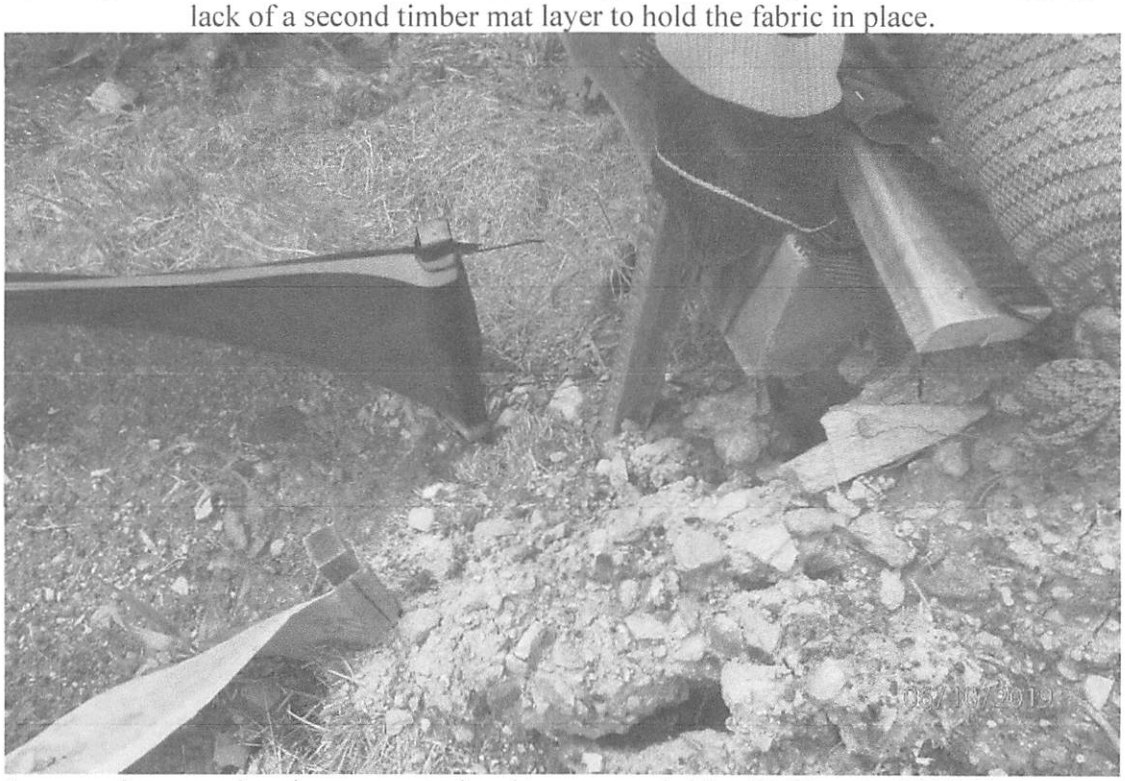
Improperly merged perimeter control and temporary bridge BMP at the UNT 23 crossing.

Improperly installed temporary bridge BMP at the UNT 23 crossing.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019



Temporary bridge BMP at the WL – 19 crossing showing the installed geotextile fabric sagging due to the lack of a second timber mat layer to hold the fabric in place.



Improperly merged perimeter control and temporary bridge BMP at the UNT 22 crossing.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Run-on ephemeral UNT Beards Run adjacent to 482+85 showing the need to modify the approved SWPPP and install additional BMPs to adequately treat stormwater from this area of the project. The approved SWPPP does not indicate a stream in this area even though the stream channel is evident.

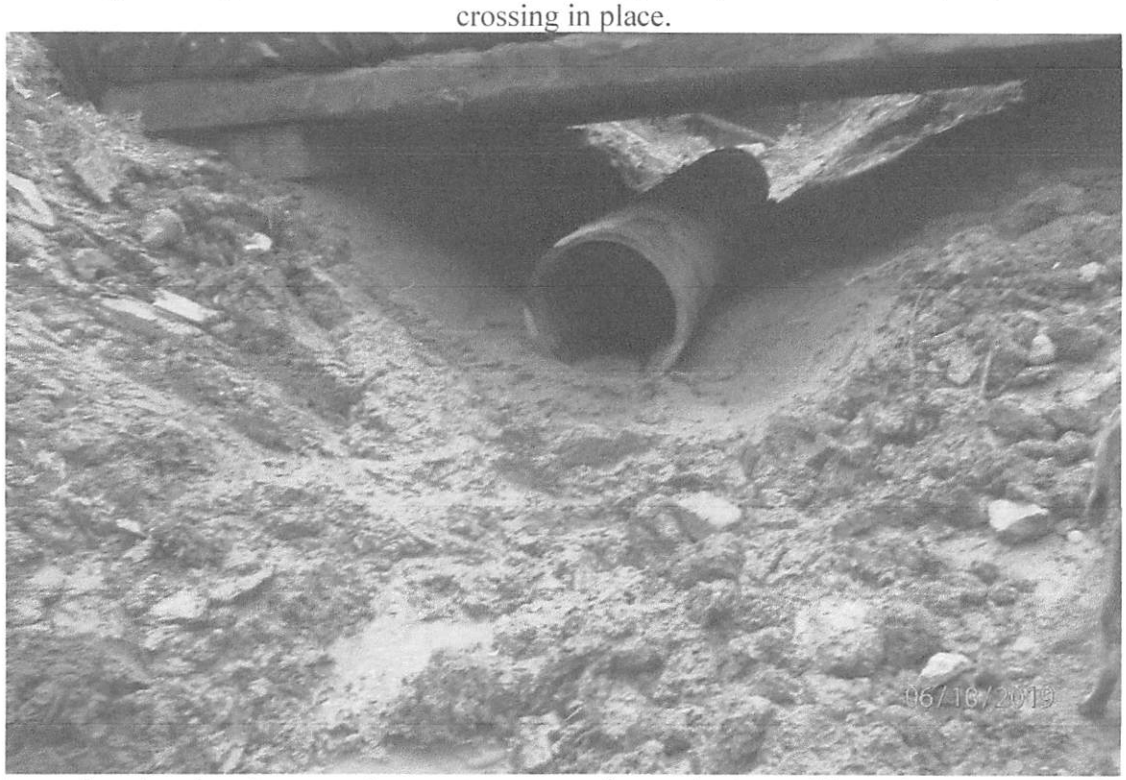
Project area downslope of the above pictured stream showing the installed perimeter controls at the time of inspection. There were no flumes, stabilized channels or temporary crossings indicated in the approved SWPPP in this area.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Wetland WL-28 showing an area where the approved SWPPP indicates the need for perimeter controls.

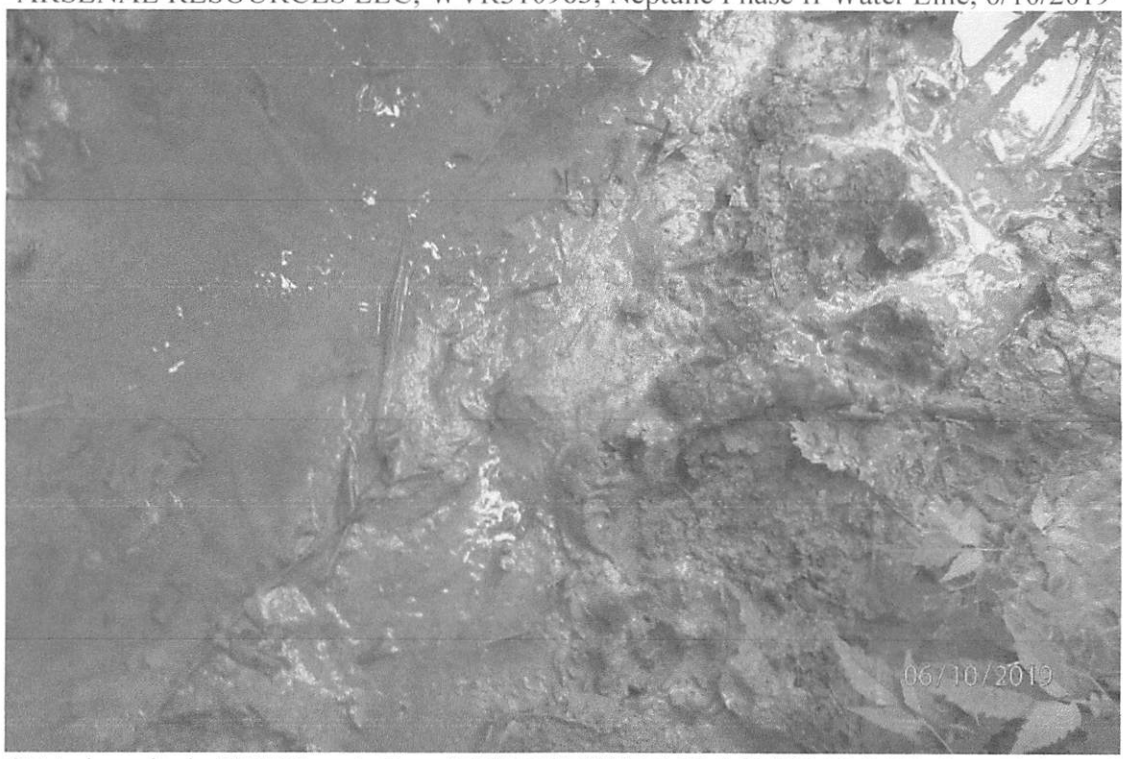
WL-28 showing the area where sediment laden water from the project is leaving the site without going through an approved device. The approved SWPPP does not indicate the need for BMPs in this area even though it is evident that a stream of water is present.

UNT 24 crossing showing the area where a stream crossing took place without the pump-around or flume crossing in place.



UNT 24 crossing showing the area where a stream crossing took place without the pump-around or flume crossing in place.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019



Offsite CNA deposits in UNT Beards Run (UNT-24) (39° 14.754' X 80° 10.941') that originate from the site.

UNT Beards Run quality upstream of the project.

Project area adjacent to UNT – 14.

UNT – 14 showing area where groundwater from a coal mine opening flowed across the project area overwhelming the installed BMPs and causing deposits in the stream.

Offsite CNA deposits that originate from site in UNT Simpson Creek (UNT-14) (39° 14.865' X 80° 08.448').

Offsite CNA deposits that originate from site in UNT Simpson Creek (UNT-14) (39° 14.865' X 80° 08.448').

Instream solid waste in UNT 21 as a result of the contractor leaving the sand bag coffer dam in the stream after the stream crossing was completed.

Instream solid waste in UNT 19 as a result of the contractor leaving the sand bag coffer dam in the stream after the stream crossing was completed.

ARSENAL RESOURCES LLC, WVR310983, Neptune Phase II Water Line, 6/10/2019

Project area showing the need for additional perimeter controls not indicated in the approved SWPPP adjacent to 467+00.

SWPPP indicates that all unpaved roads on the site shall be graveled or have other durable surface. AR 5 was not graveled and shows signs of significant wear.

Perimeter controls consisted of inequivalent 8" CFS. The SWPPP indicates that SS2 be used along AR 5. Maintenance is not being performed on the controls to remove the buildup of sediment.

In places along AR 5, the CFS had been overtopped by sediment being pushed out by the equipment, or equipment ran over the CFS, making it ineffective, allowing sediment laden water to leave AR 5 without going through an appropriate device.

SWPPP indicates that all unpaved roads on the site shall be graveled or have other durable surface. AR 5 was not graveled and shows signs of significant wear.

Sediment laden water entered the UNT of Simpson Creek at the mud hole that developed at the culvert where controls were not being maintained.

Culvert tail of UNT of Simpson Creek.

Culvert Head of UNT of Simpson Creek. Sediment controls were not installed at the culverts.

Ditch line along AR 5 is an unlabeled UNT of Simpson Creek for about 100 ft. The clean water division had been excavated and was not stabilized.

Conditions not allowable in the form of sediment deposits on the bottom of UNT of Simpson Creek (39°14'47"N, 80°07'52"W) resulting from roll-out off AR 5 in multiple locations.

Conditions not allowable, in the form of sediment deposits, on the bottom of UNT of Simpson Creek, resulting from roll-out off of AR 5 in multiple locations.

The UNT coming off the hillside runs along AR 5, is culverted under AR 5, and travels to Simpson Creek. Conditions not allowable, in the form of sediment deposits on the bottom of UNT of Simpson Creek, resulting from roll-out off AR 5 in multiple locations.

No controls were installed on this section of AR 5.

Water bars did not have proper terminus treatment, as indicated in the SWPPP, along with SS2 slope interceptors.

Erosion rills forming at the end of water bars that are lacking terminus treatment.

Lack of proper terminus treatment, as indicated in the SWPPP, along with SS2 slope interceptors.

Ditchline from WL 8 along AR 5 is pinched shut.

Controls overtopped by sediment on AR 5.

Culvert trail for WL 8 on AR 5.
Maintenance needed on perimeter controls. Sediment deposited off LOD.

Culvert trail for WL 8 on AR 5.
Controls were not installed at the culverts.

AR 5 construction entrance culvert overwhelmed.

NOTES FOR ACCESS ROAD DETAILS(CROWNED/INSLOPED)

- ALL UNPAVED ROADS ON THE SITE SHALL BE GRAVELED OR HAVE OTHER DURABLE SURFACE.
- THE MAXIMUM PITCH GRADE SHALL NOT EXCEED 15%
- THE SURFACE SHALL PITCH TOWARD THE DITCH LINE AT A MINIMUM SLOPE OF 2% TO 4%. A ROAD LOCATED IN AN AREA THAT DOES NOT HAVE HILLSIDE RUNOFF MAY BE CROWNED WITH A MINIMUM SLOPE OF 2% TO 4% FROM THE CENTER LINE.
- A DITCH SHALL BE PROVIDED ON THE INSIDE OF ANY ROAD HAVING HILLSIDE RUNOFF, WITH DITCH RELIEF CULVERTS AND/OR WATER BARS SPACED ACCORDING TO GRADE AND INSTALLED WHEREVER NECESSARY TO INSURE PROPER DRAINAGE OF RUNOFF WATER BENEATH OF THROUGH THE ACCESS ROAD.
- DITCH LINES SHALL BE CAPABLE OF PASSING THE PEAK DISCHARGE OF A 10-YEAR, 24-HOUR PRECIPITATION EVENT AND PLACED AR A SPACING USING THE FORMULA: 400/% GRADE + 75' = CULVERT SPACING.
- SEDIMENT CONTROL SHALL BE PROVIDED AT THE INLET BY SUMPS, ROCK CHECKS, OR EQUAL STRUCTURE AND THE SLOPE AT THE OUTLET END SHALL BE PROTECTED WITH AN APRON OF ROCK RIPRAP, A WATER ENERGY DISSIPATED, OR OTHER SIMILAR STRUCTURE.

From SWPPP page ENV D13

IN AREA WHERE INCIDENTAL CONSTRUCTION MAY BE NECESSARY TO REPAIR GULLIES OR RILLS IN ACCESS ROADS, THE FOLLOWING NOTE WILL BE ADHERED TO:

- **THE SURFACE SHALL BE PITCHED TOWARD THE DITCH LINE AT A MINIMUM SLOPE OF 2% TO 4%.**
- **A ROAD LOCATED IN AN AREA THAT DOESN'T HAVE HILLSIDE RUNOFF MAY BE CROWNED WITH A MINIMUM SLOPE OF 2% TO 4% FROM THE CENTER LINE.**
- **A DITCH SHALL BE PROVIDED ON THE INSIDE OF ANY ROAD HAVING HILLSIDE RUNOFF, WITH DITCH RELIEF CULVERTS AND/OR WATER BARS SPACED ACCORDING TO GRADE AND INSTALLED WHEREVER NECESSARY TO INSURE PROPER DRAINAGE OF RUNOFF WATER BENEATH OR THROUGH THE ACCESS ROAD.**
- **DITCH LINES SHALL BE CAPABLE OF PASSING THE PEAK DISCHARGE OF A 10-YEAR, 24-HOUR PRECIPITATION EVENT.**
- **DITCH RELIEF CULVERTS SHALL BE CAPABLE OF PASSING THE PEAK DISCHARGE OF A 2-YEAR, 24-HOUR PRECIPITATION EVENT AND PLACED AT A SPACING USING THE FORMULA: 400/% GRADE + 75' = CULVERT SPACING.**
- **SEDIMENT CONTROL SHALL BE PROVIDED AT THE INLET BY SUMPS, ROCK CHECKS, OR EQUAL STRUCTURE AND THE SLOPE AT THE OUTLET END SHALL BE PROTECTED WITH AN APRON OF ROCK RIPRAP, A WATER ENERGY DISSIPATER, OR OTHER SIMILAR STRUCTURE.**
- **ALL UNPAVED ROADS ON THE SITE SHALL BE GRAVELED OR HAVE OTHER DURABLE SURFACE.**

From SWPPP page AR 5.

ARSENAL RESOURCES LLC, WVR311362, Flemington Staging Area, 6/17/2019

No sign for the project.

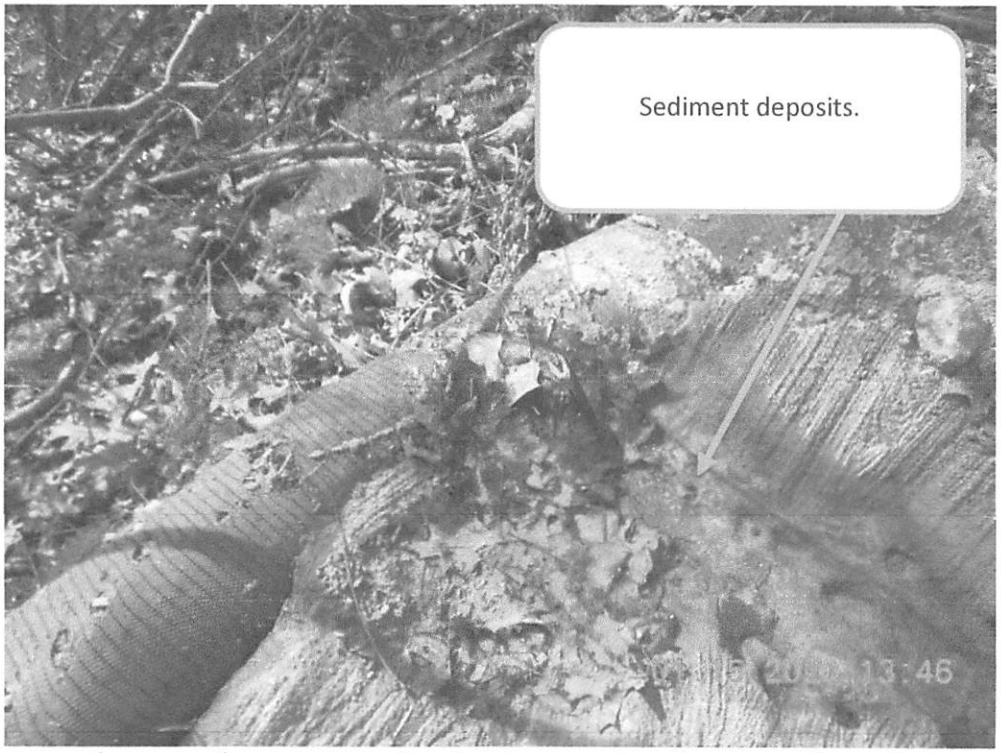
Drop inlet in concrete slurry diversion ditch with no inlet protection and sediment deposits present from unstable area above the diversion ditch.

Drop inlet in concrete slurry diversion ditch with no inlet protection and sediment deposits present from unstable area above the diversion ditch.

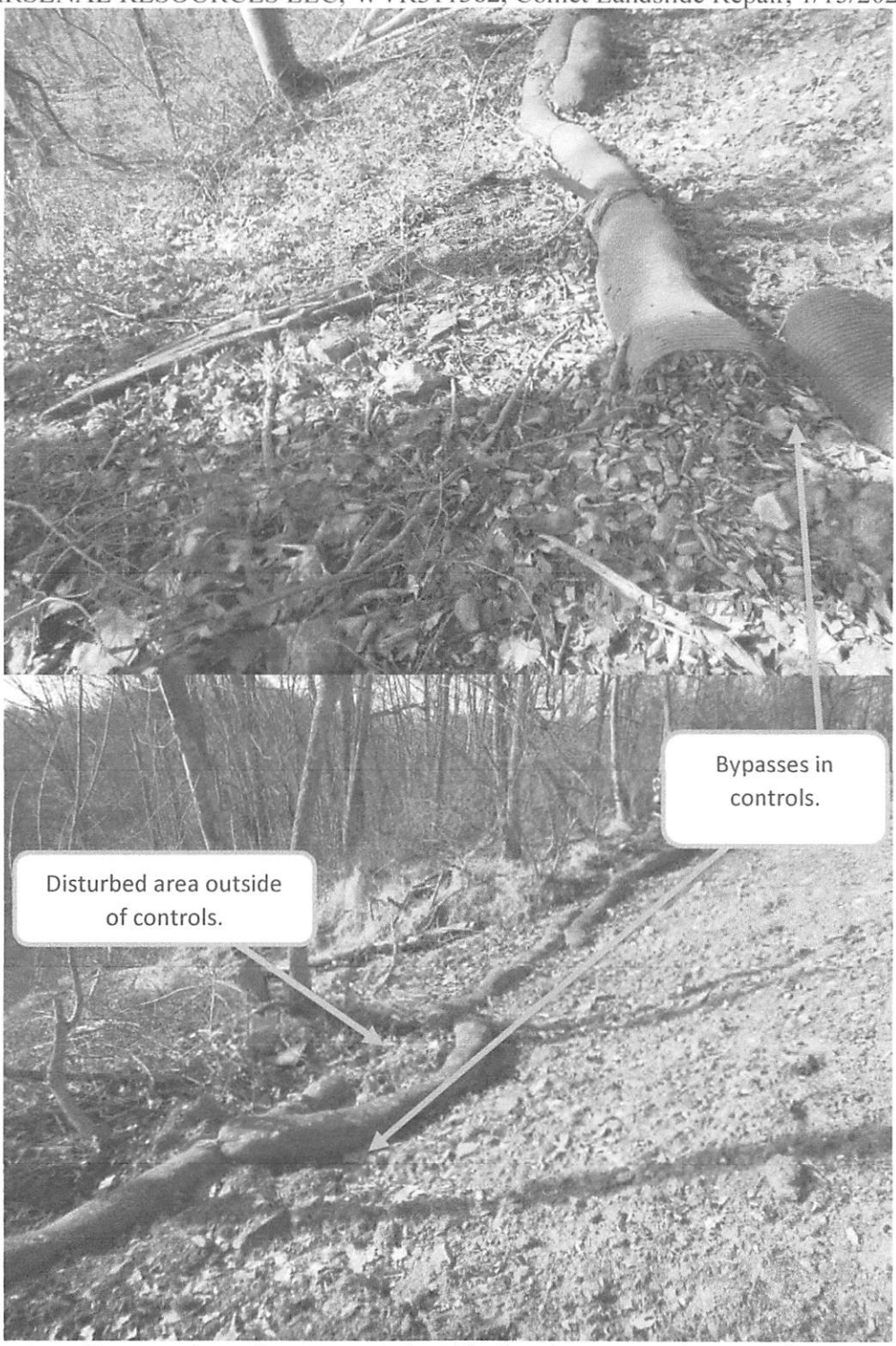
Rolling debris from unstable area above concrete slurry diversion ditch.

Area that failed to germinate and was not reseeded after 30 days.

ARSENAL RESOURCES LLC, WVR311382, Comet Landslide Repair, 1/15/2020



Concrete slurry outlet protection overtopped perimeter controls, allowing sediment laden water to leave site without going through an appropriate device.



Bypasses in perimeter controls with disturbance past the controls.

Erosion rills on fill slope due to lack of fill slope protection.

Base Penalty Calculation

(pursuant to 47CSR1-6.1)

Responsible Party: Arsenal Resources LLC **Receiving Stream:** _____

Treatment System Design Maximum Flow: _____ **MGD**

Treatment System Actual Average Flow: _____ **MGD** (if known)

Enter FOF# and rate each finding as to Potential and Extent.

1)	Potential for Harm Factor	Factor Range	FOF#												
			2a, 4a	2b, 4b, 12a	2c, 4c, 12c	2d, 5e, 6f, 7f, 12e	2f, 4e	2g, 4f, 5g, 6i, 7i, 8g	5a, 6d, 7b	5b, 7c	5c, 6a, 7a	5d, 6c, 7d	6b	6e	6h, 7h
a)	Amount of Pollutant Released	1 to 3	1	1	1	1	1	1	1	1	1	1	1	1	1
b)	Toxicity of Pollutant	0 to 3	1	1	1	1	1	1	1	1	1	1	1	1	1
c)	Sensitivity of the Environment	0 to 3	1	1	1	1	1	1	1	1	1	1	1	1	1
d)	Length of Time	1 to 3	1	1	1	1	1	1	2	1	2	2	1	1	1
e)	Actual Exposure and Effects thereon	0 to 3	1	1	1	1	1	1	1	1	1	1	1	1	1
	Average Potential for Harm Factor		1	1	1	1	1	1	1.2	1	1.2	1.2	1	1	1
2)	**Extent of Deviation Factor**	**Factor Range**													
	Degree of Non-Compliance	1 to 3	3	3	3	3	3	3	3	3	3	3	3	3	3

Potential for Harm Factors:

1)c - Sensitivity of the Environment Potentially Affected (0 for "dead" stream)

1)d - Length of Time of Violation

1)e - Actual Human/Environmental Exposure and Resulting Effects thereon

Examples/Guidance:

Note: Rate as 1 for Minor, 2 for Moderate and 3 for Major. Rate as 0 if it does not apply.

Minor = exceedance of permit limit by <=40% for Avg. Monthly or <=100% for Daily Max., exceed numeric WQ standard by <= 100%, or report doesn't contain some minor information.

Moderate = exceedance of permit limit by >= 41% and <= 300% for Avg. Monthly , >= 101% and <= 600% for Daily Max., exceed numeric WQ standard by >= 101% and <= of 600% or report doesn't fully address intended subject matter.

Major = exceedance of permit limit by >= 301% for Avg. Monthly, >= 601% for Daily Max., exceed numeric WQ standard by >= 601%, failure to submit a report, failure to obtain a permit, failure to report a spill, etc. Note that a facility in SNC should be rated as major for length of time and degree of non-compliance.

Narrative WQ standard violations - case-by-case.

Continue rating Findings of Facts (FOF) here, if necessary. Otherwise, continue on Page 3.

1)	Potential for Harm Factor	Factor Range	FOF#												
			7e	8a	8b	8c	8d	8e	10a	12b	12d	12f			
a)	Amount of Pollutant Released	1 to 3	1	1	1	1	1	1	1	1	1	1			
b)	Toxicity of Pollutant	0 to 3	0	1	1	1	1	1	0	0	1	1			
c)	Sensitivity of the Environment	0 to 3	0	1	1	1	1	1	0	0	1	1			
d)	Length of Time	1 to 3	1	3	3	3	2	2	1	1	1	1			
e)	Actual Exposure and Effects thereon	0 to 3	0	1	1	1	1	1	0	0	1	1			
	Average Potential for Harm Factor		0.4	1.4	1.4	1.4	1.2	1.2	0.4	0.4	1	1	No	No	No
2)	**Extent of Deviation Factor**	**Factor Range**													
	Degree of Non-Compliance	1 to 3	3	3	3	3	3	3	1	3	3	3			

		Extent of Deviation from Requirement		
		Major	**Moderate**	**Minor**
Potential for Harm to Human Health or the Environment	**Major**	$8,000 to $10,000	$6,000 to $8,000	$5,000 to $6,000
	Moderate	$4,000 to $5,000	$3,000 to $4,000	$2,000 to $3,000
	Minor	$1,500 to $2,000	$1,000 to $1,500	Up to $1,000

FOF #	Potential for Harm	Extent of Deviation	Penalty	Multiple Factor	Base Penalty
2a, 4a	Minor	Major	$2,000	2	$4,000
2b, 4b, 12a	Minor	Major	$2,000	3	$6,000
2c, 4c, 12c	Minor	Major	$2,000	3	$6,000
2d, 5e, 6f, 7f, 12e	Minor	Major	$2,000	3	$6,000
2f, 4e	Minor	Major	$2,000	3	$6,000
2g, 4f, 5g, 6i, 7i, 8g	Minor	Major	$2,000	21	$42,000
5a, 6d, 7b	Moderate	Major	$4,200	1	$4,200
5b, 7c	Minor	Major	$2,000	1	$2,000
5c, 6a, 7a	Moderate	Major	$4,200	1	$4,200
5d, 6c, 7d	Moderate	Major	$4,200	1	$4,200
6b	Minor	Major	$2,000	1	$2,000
6e	Minor	Major	$2,000	1	$2,000
6h, 7h	Minor	Major	$2,000	1	$2,000
7e	Minor	Major	$1,700	1	$1,700
8a	Moderate	Major	$4,400	1	$4,400
8b	Moderate	Major	$4,400	1	$4,400
8c	Moderate	Major	$4,400	1	$4,400
8d	Moderate	Major	$4,200	1	$4,200
8e	Moderate	Major	$4,200	1	$4,200
10a	Minor	Minor	$400	1	$400
12b	Minor	Major	$1,700	1	$1,700
12d	Minor	Major	$2,000	1	$2,000
12f	Minor	Major	$2,000	1	$2,000
0	FALSE	FALSE	FALSE	1	$0
0	FALSE	FALSE	FALSE	1	$0
0	FALSE	FALSE	FALSE	1	$0
Total Base Penalty					$120,000

Penalty Adjustment Factors

(pursuant to 47CSR1-6.2)

Penalty Adjustment Factor

6.2.b.1 - Degree of or absence of willfulness and/or negligence - 0% to 30% increase

6.2.b.4 - Previous compliance/noncompliance history - 0% to 100% increase - based upon review of last three (3) years - Warning = maximum of 5% each, N.O.V. = maximum of 10% each, previous Order = maximum of 25% each - Consistent DMR violations for <1 year = 10% maximum, for >1 year but <2 years = 20% maximum, for >2 years but <3 years = 30% maximum, for >3 years = 40 % maximum

6.2.b.6 - Economic benefits derived by the responsible party (increase to be determined)

6.2.b.7 - Public Interest (increase to be determined)

6.2.b.8 - Loss of enjoyment of the environment (increase to be determined)

6.2.b.9 - Staff investigative costs (increase to be determined)

6.2.b.10 - Other factors

Size of Violator: 0 - 50% decrease

NOTE: This factor is not available to discharges that are causing a water quality violation. This factor does not apply to a commercial or industrial facility that employees or is part of a corporation that employees more than 100 individuals.

Avg. Daily WW Discharge Flow (gpd)	% Reduction Factor
< 5,000	50
5,000 to 9,999	40
10,000 to 19,999	30
20,000 to 29,999	20
30,000 to 39,999	10
40,000 to 99,999	5
> 100,000	0

Additional Other factors to be determined for increases or decreases on a case-by-case basis.

Public Notice Costs (cost for newspaper advertisement)

6.2.b.2 - Good Faith - 10% decrease to 10% increase

6.2.b.3 - Cooperation with the Secretary - 0% to 10% decrease

6.2.b.5 - Ability to pay a civil penalty - 0% to 100% decrease

Base Penalty Adjustments

(pursuant to 47CSR1-6.2)

Penalty Adjustment Factor	% Increase	% Decrease	Base Penalty Adjustments
6.2.b.1 - Willfulness and/or negligence -	10		$12,000
6.2.b.4 - Compliance/noncompliance history -			$0
6.2.b.6 - Economic benefits - (flat monetary increase)			$0
6.2.b.7 - Public Interest - (flat monetary increase)			$0
6.2.b.8 - Loss of enjoyment - (flat monetary increase)			$0
6.2.b.9 - Investigative costs - (flat monetary increase)	$170		$170
6.2.b.10 - Other factors (size of violator)			$0
6.2.b.10 - Additional Other Factors - Increase (flat monetary increase)			$0
6.2.b.10 - Additional Other Factors - Decrease (flat monetary decrease)			$0
Public Notice Costs (flat monetary increase)	$30		$30
6.2.b.2 - Good Faith - Increase			$0
6.2.b.2 - Good Faith - Decrease		10	($12,000)
6.2.b.3 - Cooperation with the Secretary		10	($12,000)
6.2.b.5 - Ability to Pay			$0
Penalty Adjustments			**($11,800)**
Penalty =			**$108,200**

Estimated Economic Benefit Item	Estimated Benefit ($)
Monitoring & Reporting	
Installation & Maintenance of Pollution Control Equipment	
O&M expenses and cost of equipment/materials needed for compliance	
Permit Application or Modification	
Competitive Advantage	
Estimated Economic Benefit	**$0**

Comments: Economic benefit not warranted.