Final

Storm Water Pollution Prevention Plan
Interim Measures for
Parcel 21 – Solid Waste Management Unit 1

Fort Wingate Depot Activity
McKinley County, New Mexico

February 13, 2015

Contract No. W9128F-13-D-0025
Task Order No. DS01

Prepared for:

US Army Corps of Engineers

US Army Corps of Engineers
Tulsa District
1645 South 101st East Avenue
Tulsa, OK 74128

Prepared by:

ZAPATA
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Interim Measures for Parcel 21 – Solid Waste Management Unit 1
Fort Wingate Depot Activity
McKinley County, New Mexico

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14. ABSTRACT
The Storm Water Pollution Prevention Plan (SWPPP) identifies sources of pollution, including sediment, that can pollute stormwaters and nearby associated bodies of water. By identifying the sources of possible pollution, management procedures and possible barriers can be put in place to mitigate any possible pollution. The purpose of the SWPPP is to develop practices to reduce the possibility of contamination and to add possible barricades to prevent contaminated stormwater including sediment from leaving the site.

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FWDA Admin Record	2	2
Steven Smith - Ft. Worth District POC (USACE SWF)	1	2
D.J. Myers - OESS - USACE SWF*	0	1
Neal Navarro – Risk/Hazard Assessment (USACE SPK)	0	1
Admin Record - OH	0	1
Bill O'Donnell (BRACD)	0	1
Totals	**5**	**10**

BIA-NR = Bureau of Indian Affairs – Navajo representative
BIA-Z = Bureau of Indian Affairs – Zuni representative
BRACD = U. S. Army Base Realignment and Closure Division
DOI/BLM = Department of Interior Bureau of Land Management
EPA 6 = U. S. Environmental Protection Agency Region 6
FWDA ARM = Fort Wingate Depot Activity Administrative Records Manager
FWDA BEC = Fort Wingate Depot Activity Base Realignment and Closure Environmental Coordinator
FWDA EIMS = Fort Wingate Depot Activity Environmental Information Management System
NMED = New Mexico Environment Department
NN = Navajo Nation
POZ = Pueblo of Zuni
USACE SPA = U. S. Army Corps of Engineers – Albuquerque District.*
USACE SPK = U. S. Army Corps of Engineers – Sacramento District.*
USACE SWF = U. S. Army Corps of Engineers – Fort Worth District
USAEC = U. S. Army Environmental Command

*For MEC (Munitions and Explosives of Concern) investigations only.

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Acronym Page

AMEC	AMEC Environment & Infrastructure, Inc.
APP/SSHP	Accident Prevention Plan/Site Safety and Health Plan
ARM	Administrative Records Manager
BEC	BRAC Environmental Coordinator
bgs	Below Ground Surface
BIA	Bureau of Indian Affairs
BMPs	Best Management Practices
BRACD	U.S. Army Base Realignment and Closure Division
BTEX	Benzene, Toluene, Ethylene, Xylene
CESWF	USACE Fort Worth District
CGP	Construction General Permit
CY	Cubic Yards
EPA	U.S. Environmental Protection Agency
EPP	Environmental Protection Plan
ft	Feet
FWDA	Fort Wingate Depot Activity
gals.	Gallons
IM	Interim Measures
IMWP	Interim Measures Work Plan
IOSC	Installation On-Scene Coordinator
MEC	Munitions and Explosives of Concern
msl	Mean Sea Level
MTBE	Methyl tertiary-butyl ether
NFA	No Further Action
NMDGF	New Mexico Department of Game and Fish
NMED	New Mexico Environment Department
NN	Navajo Nation
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
OESS	Ordnance & Explosives Safety Specialist
PMC	PMC Environmental
POZ	Pueblo of Zuni
PWS	Performance Work Statement

Acronym Page (Continued)

RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
RFP	Request for Proposal
SCE	Stabilized Construction Entrance
SCP	Sediment Control Plan
SDS	Safety Data Sheets
SHPO	State Historic Preservation Office
SPCC	Spill Prevention, Control, and Countermeasures
SSHO	Site Safety Health Officer
SSL	Soil Screening Levels
SUXOS	Senior UXO Supervisor
SWMU	Solid Waste Management Unit
SWPPP	Stormwater Pollution Prevention Plan
T&E	Threatened and Endangered
TCPs	Traditional Cultural Properties
TO	Task Order
TPMC	TerranearPMC, LLC
TNT	2,4,6 Trinitrotoluene
USACE	U.S. Army Corps of Engineers
USACE SPA	U.S. Army Corps of Engineers – Albuquerque District
USACE SPK	U.S. Army Corps of Engineers – Sacramento District
USACE SWF	U.S. Army Corps of Engineers – Fort Worth District
USAEC	U.S. Army Environmental Command
USATHAMA	U.S. Army Toxic and Hazardous Materials Agency
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
USFWS	United States Fish and Wildlife Service
UXO	Unexploded Ordnance
UXOQCS	UXO Quality Control Supervisor
UXOSO	UXO Safety Officer
WMP	Waste Management Plan
ZAPATA	Zapata Incorporated

1.0 CONTACT INFORMATION / RESPONSIBLE PARTIES

1.1 OWNER / OPERATOR / SUBCONTRACTOR

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2.0 SITE EVALUATION, ASSESSMENT, AND PLANNING

2.1 PROJECT/SITE INFORMATION

Project/Site Name: Interim Measures for Parcel 21 – Solid Waste Management Unit 1
Project Street/Location: Fort Wingate Depot Activity
City: 7 miles east of Gallup
State: New Mexico
Zip Code: 87316
County: McKinley County
Estimated Construction Start and End Dates: May 22, 2015 thru Sept. 15, 2015
Total Area of Construction Disturbance: 3.96 acres

Latitude: 35° 30' 31.535" N
Longitude: 108° 35' 12.425" W
Method for Determining Latitude/Longitude:
☐ USGS Topographic Map (specify scale:____)
☐ EPA Web Site
☐ GPS
☑ Other (please specify): Online Mapping Service (Google Maps)

Additional Project Information:
Is the project/site located on Indian country lands, or located on a property of religious or cultural significance to an Indian tribe? ☐ Yes ☑ No

Are you applying for permit coverage as a "federal operator" as defined in Appendix A of the 2012 Construction General Permit (CGP)? ☑ Yes ☐ No

2.2 DISCHARGE INFORMATION

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? ☐ Yes ☑ No

Are there any surface waters that are located within 50 feet of your construction disturbances? ☐ Yes ☑ No

The principal drainage in the region is the South Fork Rio Puerco, an ephemeral, east-west flowing stream, located at the north end of the installation. Site drainage follows topography, which is generally slightly sloping to flat from the south to the north. With the exception of the manmade berms, the area is generally flat alluvium wash of less than 1 percent slope. There are no active water sources that discharge near the site to the Rio Puerco. There are no current existing storm drain systems in place on site. Surface runoff during rainfall/snowmelt events

generally pools locally in roadside ditches and infiltrates or evaporates and it is unlikely that significant runoff leaves Parcel 21. The Rio Puerco is not listed as "impaired" and is not designated as a Tier 2, Tier 2.5, or Tier 3 water.

2.3 NATURE OF THE CONSTRUCTION ACTIVITY

Zapata Incorporated (ZAPATA) has prepared this Storm Water Pollution Prevention Plan (SWPPP) for Interim Measures (IM) at Solid Waste Management Unit (SWMU) 1 within Parcel 21 at Fort Wingate Depot Activity (FWDA), McKinley County, New Mexico. ZAPATA was commissioned by the United States Army Corps of Engineers (USACE), Tulsa District under Contract No. W9128F-13-D-0025 to complete these remedial actions in accordance with USACE's Performance Work Statement (PWS) dated June 24, 2014, and other guidance provided by USACE to control stormwater that may occur on the site during the duration of the project. Although USACE-Tulsa District retains contractual requirements under this task order; USACE Fort Worth District will actually maintain operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications. ZAPATA will have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications as well as day-to-day operational control of those activities.

This SWPPP is a standalone document. Details regarding planned activities are contained in the *Interim Measures Workplan (IMWP), Parcel 21 – SWMU 1*, dated November 2014 (ZAPATA 2014a).

2.3.1 Overview

The management of stormwater runoff poses two concerns: managing water quantity and quality of drainage water for protection of natural waters or aquatic environments. To protect the quality of surface water of the United States, the federal Clean Water Act mandates that the discharge of stormwater from construction or development sites with one acre or more where clearing, grading, or excavation is expected shall have a SWPPP in place to protect such waters.

For the purpose of this project, the United States Environmental Protection Agency (USEPA) is the permitting Agency issuing the SWPPP. A copy of the 2012 Construction General Permit (CGP) is included as Appendix A. A Notice of Intent (NOI) will be submitted and included as Appendix B. A sign will be posted at a location in close proximity to the site containing the project name, National Pollutant Discharge Elimination System (NPDES) tracking number, and a contact name and telephone number for obtaining additional project information (see example provided in Appendix N). The sign will be placed at a location and be large enough to be read from a public right-of-way. This SWPPP will provide information and guidance to successfully protect surface waters by controlling stormwater that may become contaminated with dissolved, suspended, or floating pollutants from rain or snow that comes in contact with exposed surfaces on the project site. The primary objective of the SWPPP is to provide best management

practices (BMPs) which will decrease the potential for contaminates to enter surface waters from stormwater runoff.

2.3.2 Objective of the SWPPP

Stormwater from rain or snowfall on the site may become contaminated with dissolved, suspended, or floating pollutants when coming into contact with any exposed surfaces, equipment or material. The purpose of the SWPPP is to identify BMPs to follow in order to reduce the possibility of contamination and to add possible barricades to prevent contaminated stormwater, including sediment, from leaving the site.

The intent of a SWPPP is to identify sources of pollution, including sediment, that can pollute stormwaters and nearby associated bodies of water. By identifying the sources of possible pollution, management procedures and possible barriers can be put in place to mitigate any possible pollution. The BMPs identified in this SWPPP will be implemented by ZAPATA before the start of construction during mobilization onto the FWDA Parcel 21 - SWMU 1 site. All construction activities will be performed in accordance to the NPDES and State of New Mexico regulations.

2.3.3 Limits of SWPPP

This SWPPP meets the requirements for a SWPPP as set forth by NPDES. Any requirement of this SWPPP shall not require any action in violation of law, ordinance, or regulation. If there is any conflict between this SWPPP and any law, ordinance, or regulation, the specific part of the SWPPP in conflict should be null and void. If any part of the SWPPP is considered null and void, the remaining part will remain in effect.

2.4 SITE BACKGROUND

FWDA is an inactive United States Army depot that currently occupies approximately 15,277 acres. The FWDA was used to store, ship, and dispose of obsolete or deteriorated explosives and ammunition. The depot is located approximately 7 miles east of Gallup, New Mexico in McKinley County just off of US Route 66 and Interstate 40. **Figure 1** presents a Regional Map showing the location of FWDA. FWDA has been undergoing final environmental restoration prior to property transfer/reuse. As part of the planned property transfer to the Department of the Interior (DOI), the installation has been divided into several parcels (see **Figure 1** for parcel designations). This includes Parcel 21 – SWMU 1; which contained pre and post 1962 2,4,6 Trinitrotoluene (TNT) leaching beds, Building B503, settling tanks and other structures. At this location, explosives-contaminated soil is planned to be removed from the leaching beds and former settling tank area that exceed residential cleanup standards/Soil Screening Levels (SSLs)/cumulative risk up to 10 feet (ft) below ground surface (bgs) to obtain No Further Action (NFA).

As discussed in greater detail in the following sections, **Figures 2 through 4** portrays topographic, soils and geologic features across the FWDA installation, respectively. **Figure 5** shows an aerial map of Parcel 21 in relation to other site landmarks; including site access, haul routes and borrow sources for fill material. **Figure 6** is a detailed site map of Parcel 21 showing the locations of the pre and post leaching beds, equipment staging area and excavation loading areas. **Figure 7** shows the baseline topography; while details of the excavation and backfill plans are presented in **Figure 8 and Figure 9**, respectively.

2.4.1 Land Resources

The installation is surrounded by federally owned or administered lands for both national forest and tribal lands. Lands to the North and West of the depot are allotted to the Navajo tribal trust. Lands to the East of the depot are administered by the Bureau of Indian Affairs (BIA). The original Fort Wingate headquarters site is located immediately east of the FWDA and it is currently the location of the town of Fort Wingate which is located on BIA administered land. Land to the south and southeast is undeveloped, and is part of the Cibola National Forest.

2.4.2 Climate

FWDA is located in a climate zone categorized as a semiarid continental climate. Precipitation averages between 11 and 12 inches per year with roughly 40% falling in July, August and September, and 34% during December to March. Snowfall seldom remains on the ground more than two or three days. McKinley County winters are cold, but with low humidity and an abundance of sunshine. Severe winter weather is not common. Summer temperatures are moderated by low humidity and high elevation. Evenings are cool and daytime temperatures are comfortable. The average minimum and maximum temperature range is 31.7 degrees Fahrenheit (ºF) to 64.6ºF. The maximum high temperature recorded was 99ºF and the maximum low temperature recorded was -57ºF. It is sunny about 280 days a year (http://www.gallupedc.com/Gallup/Living-Here/Weather).

The heaviest rainfall is expected to occur in the August timeframe and is known as the local "Monsoon" season. An attempt will be made to schedule SWMU 1 excavation activities to avoid this season.

2.4.3 Topography

Topographically, FWDA may be divided into three areas: (1) the rugged north-to-south trending Hogback along the western and the southwestern boundaries; (2) the northern hill slopes of the Zuni Mountain Range in the southern portion; and (3) the alluvial plains marked by bedrock remnants in the northern portion of the installation. During rainfall and snowmelt events, streams transport sediment to low-lying areas in the northern part of the installation, creating an extensive alluvial deposit among remnants of bedrock. The streams eventually discharge to the South Fork of the Puerco River near the northern boundary of FWDA. The elevation at FWDA

ranges from 6,500 ft above Mean Sea Level (msl) to 8,250 ft above msl. **Figure 2** is a topographic map of FWDA.

2.4.4 Vegetation/Habit

FWDA is within the Great Basin Desert scrub biotic community with vegetation ranging from grasslands and sagebrush scrublands to pinyon-juniper and ponderosa pine woodlands. This is the only Desert scrub community in North America associated with cold-temperate rather than subtropical progenitors (Brown 1994). Desert scrub is most commonly found at lower elevations where temperature fluctuations and extremes are great and sandy soil is present. Woodlands are found at mid-elevations where soil moisture is higher and the minimum temperature is lower.

Parcel 21 was in heavy use until the late 1960s and was therefore disturbed on a regular basis. After closure of the sites, vegetation began to re-establish. Today, current vegetation consists primarily of native grasses, sage brush, and other shrubs.

2.4.5 Geology

In 1997, geologic mapping of portions of FWDA and a fracture trace analysis were conducted by the U.S. Geological Survey (USGS) located in Flagstaff, Arizona. Geologic units exposed at the ground surface throughout much of FWDA were identified (USACE 2014a). Results of this identification, combined with information from geologic literature, are summarized in the following subsections to provide a detailed description of the geologic and stratigraphic setting of the portion of FWDA in which Parcel 21 is located.

2.4.5.1 Soil Type

Recent alluvial sediments cover much of the land area in the investigative areas. These sediments consist predominately of silts and clays, with discontinuous bodies of sand and occasionally gravel ranging from near zero feet to almost 100 feet in thickness. To the north of the developed portion of the Administration Area, the near surface sediments are dominated by the substantially more sandy riverine deposits associated with the Rio Puerco.

Generally, the soils are loamy or loam/clay mixtures, and contain varying amounts of silt, sand, gravel, and rock fragments. All of these soils are fragile and are relatively thin, especially areas near outcrops. Wind and water cause extensive soil erosion, especially where vegetative cover is absent.

United States Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) soils mapping for Parcel 21 is shown in **Figure 3**. The primary soil type present at Parcel 21, and particularly SWMU 1, is the Aquima-Hawaikuh Silt Loam (1 to 5 % slopes). Details on the NRCS soil descriptions were included in Appendix B of the IMWP (ZAPATA 2014a).

2.4.5.2 Stratigraphy

The alluvial/riverine deposits of the area of investigation are underlain by the Triassic Petrified Forest Formation. The Petrified Forest Formation consists primarily of mudstone, claystone, and minor amounts of muddy sandstone. The Painted Desert Member is the upper member of the Petrified Forest Formation. This member consists of mudstone, siltstone, sandy-mudstone, and lenticular sandstone layers. Sandstone lenses within the Painted Desert Member are thin (generally less than 20 feet thick), laterally discontinuous, and contain high quantities of very fine, muddy matrix. As a result, the apparent permeability of these lenses, and the Painted Desert Member as a whole, is very low. The Painted Desert Member is exposed at the ground surface on the areas of higher ground surface elevations located east, south, and southwest of the TNT Leaching Beds Areas (USACE 2014a).

The Sonsela Sandstone Member (middle member of the Petrified Forest Formation) is of variable thickness (20 to 80 feet thick) and is laterally continuous. This unit is a clean, well-sorted, quartzose sandstone that contains very small amounts of matrix and therefore has a high apparent permeability. Below the Sonsela Sandstone Member is the lower member of the Petrified Forest Formation, the Blue Mesa Member. The lithology and apparent permeability of the Blue Mesa Member is similar to that of the Painted Desert Member (USACE 2014a).

The Moenkopi Formation, the San Andres Limestone, and the Glorieta Sandstone underlie the Blue Mesa Member. The lower Petrified Forest Formation and the Moenkopi Formation consist of 250 to 300 feet of mudstones and sandstones with a relatively low apparent permeability. Below this is approximately 100 feet of the San Andres Limestone underlain by approximately 120 feet of the Glorieta Sandstone (USACE 2014a).

2.4.5.3 Structural Geology

FWDA is underlain primarily by Triassic mudstone and sandstone layers that are tilted gently to the northwest at an angle of approximately 5 degrees. The structural orientation of the bedrock has a substantial effect upon the movement of groundwater. Area-wide groundwater flow generally follows the structural dip (i.e., to the north-northwest). However, in the western and southern portions of the installation, Jurassic and Cretaceous sandstone and claystone layers are exposed along the Nutria Monocline (the Hogback), which is a steeply west dipping, north trending monoclinal fold.

2.4.6 Water Resources

2.4.6.1 Wetlands

Wetlands are a sensitive and unique habitat type that can provide valuable cover and water for wildlife. During the pre-award site visit, our team completed a limited site reconnaissance of Parcel 21, which included identifying wetlands and/or hydrophobic vegetation. No wetland areas were identified within the project sites.

2.4.6.2 Surface Water

Main drainages, following the topography, flow from south to north and eventually discharge to the South Fork of the Puerco River. Two major drainage systems are located within the FWDA installation: Milk Ranch Canyon and Fenced-Up Horse Canyon. Bread Springs Wash is a minor drainage system. The southeastern corner of the installation is drained to the east by several small parallel washes feeding into Milk Ranch Canyon. The surface drainage from the remaining eastern portion of the installation flows to the northeast and also drains into Milk Ranch Canyon. The western portion of the installation is drained by a network of washes into Fenced-Up Horse Canyon, which flows north into the South Fork of the Puerto River. Bread Springs Wash drains the extreme southwestern corner of FWDA. All flow from Bread Springs Wash is diverted to the west side of the Hogback and eventually empties into the South Fork Rio Puerco west of Gallup (U.S. Army 1995).

Because of the nature of precipitation in this semi-arid region, the surface drainage is relatively shallow near headwaters. All drainages in this area are intermittent with flow occurring only during, and after, heavy rainfall events or during snowmelt. Downward erosion intensifies as the stream moves downstream, resulting in a system of well-developed steep-walled arroyos. Arroyos form because of the erodibility of localized areas of silt- and clay-rich bedrock.

No surface water bodies exist within Parcel 21. Surface runoff during rainfall /snowmelt events generally pools locally in roadside ditches and infiltrates or evaporates. There are a few road culverts with connecting drainage ditches, but based on the topography, it is unlikely that significant runoff leaves Parcel 21.

2.4.6.3 Hydrogeology

The following description of the hydrogeologic model for the northern portion of the FWDA is taken from the *Parcel 11 RCRA Facility Investigation Report* (USACE, 2014a).

The hydrogeologic conceptual model for the northern portion of FWDA was developed from previous investigations of SWMU 1 and the Administration Area as described in detail in TPMC (2006), and 3 years of groundwater monitoring (USACE, 2008, 2009 and 2010). This conceptual model is based on data collected during various investigations performed over a 25-year period. Generally, the previous investigations were attempting to characterize the impacts to groundwater associated primarily with discharges at the TNT Leaching Beds within SWMU 1, and also with releases from various locations within the Administration Area.

Because the current corrective action approach (i.e., proceeding parcel by parcel, SWMU by SWMU) had not been developed, the conceptual model uses broader terminology to describe locations to which the model applies. Thus the conceptual model is expressed in terms of geologic and geographic features and characteristics affecting groundwater flow and potential

contamination across the areas of current interest. Parcel 21 is included within the broader area called "TNT Leaching Beds and the Administration Area" in this section.

The unconsolidated materials comprising the alluvium, consist of undifferentiated silt, clay, and sand sediments, overly the claystone bedrock of the Petrified Forest formation (TPMC, 2009). These sediments form a wedge that increases in thickness from south to north through the TNT Leaching Beds and Administration Area study area. The thickness of the sediments ranges from near zero feet to almost 100 feet with the thickest sediments found near the Puerco River (TPMC, 2009).

A water bearing zone is present in the alluvium throughout the northern portion of the post that includes Parcel 21. Groundwater is typically encountered at depths of 10 to 60 feet below ground surface (bgs). The dominant and variable nature of the clay content in the alluvium creates additional hydrogeologic features that are beyond the classic model of an unconsolidated aquifer. These observed features include perched saturated zones and unsaturated zones below the water table. The clay content also influences the hydrologic parameters within the saturated zone, such as hydraulic conductivity.

In arid and semi-arid climates, such as found at FWDA, precipitation falling on much of the land surface is returned to the atmosphere through evaporation and transpiration. Groundwater in the unconsolidated sediments is potentially derived from the infiltration and percolation of precipitation that moves downward through the unsaturated sediments until it reaches the water table or the low permeability claystone bedrock. However, in most areas surface infiltration is relatively shallow and is offset by high evapotranspiration. Therefore, surface infiltration over a broad area is unlikely to be a significant source of groundwater recharge. This results in "focused recharge" where groundwater recharge occurs only in select areas such as arroyos and other impoundments (Anderholm and others, 1994; Walvoord and others, 2002).

Where there is shallow bedrock (defined as less than 15 feet bgs), such as south of the TNT leaching beds, near the former building 528, ground water accumulates on the claystone surface and moves along the erosional surface of the claystone, generally to the north and northwest. According to data presented in the groundwater monitoring reports prepared by USACE between April 2008 and April 2010 (USACE, 2008, 2009 and 2010a,b), the hydraulic gradient in the alluvial aquifer underlying the TNT Leaching Beds and Administration Area study area is generally to the northwest. These data also indicate that the regional groundwater in the Puerco River valley north of the facility has a southwesterly flow, inhibiting ground water movement from the TNT Leaching Beds and Administration Area to the north. This regional ground water flow appears to deflect the north-northwestern flow of ground water from FWDA to the west northwest, eventually causing the FWDA-derived groundwater to merge into the westerly flow of the Puerco River basin alluvial groundwater.

Based upon pre-existing and emerging data, the unconsolidated sediments found within the Administration and TNT Leaching Beds Areas appear bounded both to the south and the east by bedrock outcrops of low permeability claystone. Additionally, a south to north trending subsurface bedrock ridge appears to provide a subsurface control, partially separating the shallow groundwater underlying the TNT Leaching Beds and the Administration Area from the topographic basin to the west.

2.5 PURPOSE AND SCOPE

The purpose of the remediation and investigation activities is to complete planned soil excavation, transportation and disposal activities to be completed at the former TNT Leaching Beds and settling tanks area within Parcel 21. Soils targeted for removal include those exceeding residential cleanup standards/Soil Screening Levels (SSLs)/cumulative risk up to 10 feet (ft) below ground surface (bgs). Although more details are provided in the IMWP concerning planned excavation depth and extent, for the purpose of this SWPPP, we are assuming that the excavation will require removal of all soils within the bermed portions of the former TNT leaching beds to a depth of 10 feet. In addition, the vertical extent for the two small areas at the former settling tanks area is also assumed to be 10 feet.

Major activities planned for the key construction phases of this project include the following:

- Pre-mobilization activities including finalization of site-specific planning documents, utility clearance, filing of stormwater NOI, and coordination with FWDA, New Mexico Environment Department (NMED), and the disposal facility;
- Pre-excavation grading to include haul road improvements, lay down area preparation, and protective measures ensuring protection of work area and compliance with SWPPP BMPs;
- Potentially explosive soil (>10% TNT) homogenization within the Parcel 21 - SWMU 1 TNT Leaching Beds using heavy equipment;
- Explosives-contaminated soil excavation, stockpiling, and disposal from Parcel 21 - SWMU 1 using heavy equipment;
- Confirmation sampling;
- Backfill, compaction and final grading;
- Remove equipment and storage units;
- Reclamation seeding;
- Remove erosion and sediment control measures; and
- Post-implementation reporting.

2.6 SIZE OF CONSTRUCTION PROJECT

Total Project Area:

167 acres (Parcel 21)

Total Area of Construction Disturbances:

Pre-1962 Triangle Shaped Leaching Bed (south):	0.8022 acres
Post-1962 Square Shaped Leaching Bed (north):	3.0817 acres
Former Settling Tanks:	0.0379 acres
Area North of Former Setting Tanks:	0.0367 acres
Total Area of Construction Disturbance:	3.9585 acres

Maximum Area to be Disturbed at any one time:

3.96 acres

2.7 CONSTRUCTION SUPPORT ACTIVITIES

Construction support activities for this project include an equipment staging and storage area. This area is proposed south of the south (triangle-shaped) TNT leaching bed; using the area between former building foundations B501 and B503; approximately 150 ft by 150 ft in area. Site storage requirements will include the use of storage trailers for equipment (Connex box), several petroleum storage tanks or containers, office trailer, two portable toilets, an eye wash station and a hand wash area. The contact information for the construction support activities are the same as those listed in Section 1. See **Figure 6** for staging and storage area location.

In order to maintain uninterrupted operation of equipment, a temporary fueling station will be set up at the main staging area of Parcel 21 using a double-walled 3,000 gallon diesel fuel tank staged in a secure berm. Petroleum storage also includes auxiliary fuel tanks (100 gallons or less) on site vehicles. Quantities of motor oil and hydraulic oil kept in approved containers (5-gallons or less) may also be transported and stored in the support or crew trucks. Small quantities of petroleum products (5-gallons or less), which may include oil, grease, and hydraulic fluid for equipment maintenance, will be stored in enclosed storage areas at the laydown area on site. Containers will not be stored where a leak or spill could enter a stormwater conveyance. Installation environmental personnel will be consulted to assure procedures/ permits are met. Additional details concerning petroleum storage are included in the project specific SPCC Plan (ZAPATA 2014c).

ZAPATA will construct stabilized construction entrance and exit areas to begin operations. A decontamination area will be constructed before the exit point from the leaching beds on the side of the excavation. All required safety and labor postings will be located at the office trailer.

Additional details concerning these practices are included in Section 4, Erosion and Sediment Controls.

2.8 SEQUENCES AND ESTIMATED DATES OF CONSTRUCTION ACTIVITIES

The task order was awarded on 12 August 2014; ZAPATA's fully-executed contract was returned to the Tulsa District that same day. The project kickoff meeting was scheduled and held on 10 September 2014. A project schedule, reflective of that award and kickoff meeting date, was provided in Appendix B of the Project Management Plan (ZAPATA 2014e). This schedule is in Gantt Chart format and details individual task durations, deliverables, and due dates across the entire project. The schedule will be revised, as necessary, over the course of the project. Any change will be communicated to the project team, as soon as a necessary change is identified.

Using details provided in the Project Schedule, the phases of construction, associated stormwater controls, and anticipated dates of execution are summarized below.

Phase 1: Mobilization (05/22/2015 to 06/12/2015)

1) Fieldwork pre-kick off meeting.
2) Establish defined disposal paths.
3) Utility clearance.
4) Position Equipment and personnel for excavation operations.
5) Establish site office trailer/storage unit and portable restrooms.
6) Setup temporary petroleum storage area.
7) Pre-excavation and delineation survey and sampling.

Phase 2: Installation of BMPs at Parcel 21 – SWMU 1 (06/02/2015 to 06/08/2015)

1) Install silt fence at downstream perimeter of site.
2) Install straw waddles in small drainage ditch west of Post-1962 Leaching Bed.
3) Construct stabilized construction exit and vehicle tracking pads.

Phase 3: Soil Mixing, Excavation, and Disposal (06/09/2015 to 07/22/2015)

1) Potentially explosive soil (>10% TNT) homogenization.
2) Excavation, transportation and disposal of leaching bed soils.
3) Confirmation sampling.
4) Final Survey.

Phase 4: Backfill and Final Grading (06/19/2015 to 08/13/2015)

1) Haul backfill from borrow source to Parcel 21 – SWMU 1.
2) Backfill and final grading of excavation area.
3) Plug and abandon up to two existing monitoring wells (if impacted by construction).

Phase 5: Demobilization (08/01/2015 to 08/14/2015)

1) Demobilize heavy equipment, office unit, petroleum storage units and portable restrooms.
2) Regrade any ruts left by equipment.

Phase 6: Site Restoration (08/15/2015 to 09/15/2015)

1) Conduct re-seeding/re-vegetation.
2) Temporary stabilization of areas of exposed soil.
3) Vegetation watering (approximately one month later; included in schedule).
4) Remove temporary BMPs once permanent controls are in place.

2.9 ALLOWABLE NON-STORMWATER DISCHARGES

TABLE 2-1: LIST OF ALLOWABLE NON-STORMWATER DISCHARGES PRESENT AT THE SITE

Type of Allowable Non-Stormwater Discharge	Likely to be Present at Your Site?
Discharges from emergency fire-fighting activities	☐ YES ☒ NO
Fire hydrant flushings	☐ YES ☒ NO
Landscape irrigation	☒ YES ☐ NO
Waters used to wash vehicles and equipment	☒ YES ☐ NO
Water used to control dust	☒ YES ☐ NO
Potable water including uncontaminated water line flushings	☐ YES ☒ NO
Routine external building wash down	☐ YES ☒ NO
Pavement wash waters	☐ YES ☒ NO
Uncontaminated air conditioning or compressor condensate	☐ YES ☒ NO
Uncontaminated, non-turbid discharges of ground water or spring water	☐ YES ☒ NO
Foundation or footing drains	☐ YES ☒ NO
Construction dewatering water	☐ YES ☒ NO

Landscaping irrigation maybe used at the time of reseeding and approximately one month after reseeding to ensure proper growth of vegetation (depending on the amount of natural precipitation that has occurred). The only remaining anticipated non-stormwater discharge includes water used to control dust and equipment/vehicle washing. Dust control discharge may be conducted within any of the project areas, including haul roads and the two on-site borrow sources. Equipment decontamination is discussed in Section 5.2.4. All discharge will be limited to prevent ponding and runoff of water.

2.10 SITE MAPS

Site Maps are included in a separate section following the text which summarizes site and installation information using data from both topographic and aerial imagery. These include the following:

Figure 1 FWDA Location Map and Parcel Designations
Figure 2 FWDA Topographic Map
Figure 3 FWDA Soils Map
Figure 4 FWDA Geologic Map
Figure 5 Site Location and Access Routes
Figure 6 Parcel 21 – SWMU 1 Base Map
Figure 7 Baseline Topography and Pre-Construction Surface Flow Paths
Figure 8 Excavation Plan with BMPs
Figure 9 Backfill and Final Grading Plan
Figure 10 Silt Fence Installation Details
Figure 11 Stabilized Construction Entrance Details

3.0 DOCUMENTATION OF COMPLIANCE WITH OTHER FEDERAL REQUIREMENTS

3.1 THREATENED AND ENDANGERED SPECIES (T&E)

Although a Biological Survey was not completed under this Task Order (TO), a Biological Survey was recently completed by AMEC Environment & Infrastructure, Inc. (AMEC) for FWDA remediation activities at adjacent Parcel 18; only 2,000 feet east of SWMU 1 (refer to **Figure 1 and 5** for proximity of Parcel 18 to Parcel 21). AMEC's survey was completed on June 26, 2013, which was thoroughly reviewed by our team with information relative to SWMU 1 reported in this project's Final Environmental Protection Plan (EPP), Parcel 21 and 24, dated November 2014 (ZAPATA 2014b). As detailed in our EPP, AMEC's survey indicated that no T&E species or their habitat, wetlands, or other natural resources were anticipated to be affected. The ZAPATA team's site reconnaissance on June 5, 2014 and follow-up site visit on September 10, 2014 confirmed AMEC's biological survey; noting similar habitats and natural resources existed on Parcels 18 and 21. Below is a summary of information detailed in our EPP concerning T&E.

According to the US Fish and Wildlife Service's (USFWS) online database, nine federally-listed T&E species have the potential to occur in McKinley County. No critical habitat occurs in the project site vicinity; however, critical habitat for Mexican spotted owl does exist approximately 10 miles southeast of the project site in the Zuni Mountains. The NM Department of Game and Fish's (NMDGF) Biota Information System also identified five state threatened species as occurring in McKinley County, which are not otherwise protected under the Federal Endangered Species Act. Federal and state T&E species for McKinley County are described in **Table 3-1**.

AMEC's biological survey conducted in 2013 at nearby Parcel 18 indicated that the black-footed ferrets are the only listed species with suitable habitat occurring within FWDA. Black-footed ferrets once occupied most habitats in the western North America associated with prairie dogs (USFWS 2014b). Two reintroductions have taken place in north-central New Mexico, and the USFWS estimates that two breeding pairs currently exist in the state (USFWS 2014c). Because of their low numbers in the region, it is unlikely that any black-footed ferrets are located in the project area vicinity. Additionally, black-footed ferrets that may inhabit the project area vicinity are considered an "experimental" population under section 10j of the Endangered Species Act and do not warrant full protection under the Endangered Species Act (AMEC 2013).

The AMEC biological survey also indicated that suitable habitat for gray vireo occurs in areas throughout FWDA (AMEC 2013). Gray vireos occupy breeding sites in northern New Mexico from May through July, and tend to breed in juniper savannahs (Delong and Williams 2006). During our June 5, 2014 pre-award site visit, the ZAPATA team noted that juniper savanna habitats do exist on land surrounding the project sites, particularly SWMU 1. However, these plants were not identified within the SWMU 1 excavation boundaries; therefore it is unlikely that breeding gray vireos will reside within the project site boundaries. However, individuals may pass through the project site temporarily for foraging or migration.

TABLE 3-1: FEDERAL AND STATE T&E SPECIES FOR MCKINLEY COUNTY, NEW MEXICO

Common Name	Requirements for Habitat	NM Listing	Federal Listing	Exclusion Justification
Artic Perigrine Falcon (*Falco peregrines tundrius*)	Open areas with suitable cliffs for nesting.	Threatened	N/A	No suitable habitat in the project areas.
Bald eagle (*Haliaeetus leucocephalus*)	Forests or riparian areas within close proximity to open water suitable for foraging.	Threatened	N/A	No suitable habitat in the project areas.
Black-footed ferret (*Mustela nigripes*)	Open habitat, the same habitat used by prairie dogs: grasslands, steppe, and shrub steppe.	N/A	Endangered	Unlikely to reside in the project areas.
Costa's Hummingbird (*Calypte costae*)	Desert, semi-desert, brushy foothills and chaparral. Nests in canyons and washes.	Threatened	N/A	No suitable habitat in the project areas.
Gray vireo (*Vireo vicinior*)	Rocky hills covered with sparse bushes and scrub, in juniper, hackberry, and oak (in NM)	Threatened	N/A	No suitable habitat in the project areas.
Mexican spotted owl (*Strix occidentalis lucida*)	Old growth mixed conifer forests.	N/A	Threatened	No suitable habitat in the project areas.
Perigrine Falcon (*Falco peregrines anatum*)	Open areas with suitable cliffs for nesting.	Threatened	N/A	No suitable habitat in the project areas.
Southwestern willow flycatcher (*Empidonax traillii extimus*)	Thickets, scrublands, swamps, and open woodlands. Usually limited to areas near open water.	Endangered	Endangered	No suitable habitat in the project areas.
Whooping crane (*Grus americana*)	Marshes, shallow lakes, lagoons, salt flats, grain and stubble fields, and barrier islands.	N/A	Endangered (Experimental, Non-essential Population)	No suitable habitat in the project areas.
Yellow-billed cuckoo (*Coccyzus americanus*)	Areas of open woodlands containing deciduous trees. Nests in Cottonwoods or other riparian trees.	N/A	Candidate	No suitable habitat in the project areas.
Zuni bluehead sucker (*Catostomus discobolus yarrow)*	Shady, cobbled streams with frequent runs and pools.	Endangered	Candidate	No suitable habitat in the project areas.
Zuni fleabane (*Erigeron rhizomatus*)	Pinyon-juniper woodlands at elevations from 7,300-8,000 ft.	N/A	Threatened	No suitable habitat in the project areas.

Source: USFWS 2014a, NMDGF 2014, NatureServe 2014 N/A – Not Applicable

Additionally, burrowing owls have the potential to occupy the project sites. Burrowing owls are considered a species of concern by the USFWS and are also protected under the Migratory Bird Treaty Act. Burrowing owls are known to inhabit the Great Basin Desert scrub and are often associated with prairie dog communities (NMDGF 2007). During our pre-award site visit, no individual burrowing owls or signs of burrowing owls were noted in Parcel 21 – SWMU 1.

3.1.1 Threatened and Endangered Species Criterion

Based on the information provided in our November 2014 Final EPP and AMEC's adjacent Biological Survey at Parcel 18 completed the previous year, ZAPATA is claiming eligibility under the following criterion, as listed in Appendix D of the CGP:

- Criterion A – No federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in the site's "action area" as defined in Appendix A of the CGP.

3.1.2 Threatened and Endangered Species Protection

Although no T&E species have been identified at the project locations, individual gray vireos may pass through the project site temporarily for foraging or migration. A protocol for surveying for gray vireos at FWDA was adapted under AMEC's investigation and remediation activities at nearby Parcel 18. Due to its applicability to our investigation at Parcel 21, this protocol is included in Appendix F. Similarly, our previous site reconnaissance of Parcel 21 did not indicate individual burrowing owls or signs of burrowing owls at the project site. However, we have included guidelines and recommendations developed by NMDGF for surveying and mitigation for burrowing owls in Appendix E. If endangered or threatened species are encountered during site activities, ZAPATA will flag the area(s) and immediately notify and obtain guidance from the local NMDGF and USFWS offices as indicted in these protocols.

3.2 HISTORIC PRESERVATION

Traditional Cultural Properties (TCPs) and other cultural resources have been documented within FWDA boundaries and has been the subject of a number of studies. Based on those studies, over 750 cultural and historical sites have been identified on FWDA. Greater densities of sites occur on upland surfaces and gentle slopes, while fewer sites occur on the alluvial flats. A Programmatic Agreement among the U.S. Army, the Navajo Nation (NN), the Pueblo of Zuni (POZ), and the New Mexico State Historic Preservation Office (SHPO) was signed in 2008 which addresses FWDA's Section 106 Cultural requirements. This agreement is currently in force at FWDA for actions related to investigation and remediation activities. The U.S. Army has coordinated with the two Tribes and SHPO on all previous RCRA Facility Investigation (RFI) sampling at Parcel 21. No cultural resource sites have been encountered thus far (USACE 2014b). Thus, the project team does not anticipate encountering cultural resources on this project and no cultural resources monitoring is planned during site operations.

Prior to initiating soil remediation activities, the project team will coordinate with the Tribes and SHPO as done in the past. NMED understands the Tribal concerns for cultural sites and will work with the U.S. Army if needed. Maps showing the locations of TCPs relative to proposed investigation locations will not be included in this plan, which will be a public document when final. Instead, the consultation process will include review of the workplans by Tribal cultural resource personnel to confirm the presence or absence of identified cultural resources within the proposed investigation locations. ZAPATA's field team will be briefed on tribal concerns and potential cultural resources that may be encountered (i.e., artifact, pottery shard, or ant hill).

Any TCPs identified during our field activities will have at least a 200 foot buffer zone established. One such TCP has already been preliminary identified near the borrow source area. The ZAPATA team will adhere to the requirements listed above when in the vicinity of this area and any other areas that are identified later. If other culturally sensitive issues arise and/or suspect items are encountered, ZAPATA will immediately notify their USACE representative for further instruction. USACE will notify the Army, and the Army will immediately notify the Tribal cultural points of contact for consultation per section 1.8 of the Programmatic Agreement. A copy of the Programmatic Agreement was included in Appendix C of the EPP (ZAPATA 2014b).

3.3 SAFE DRINKING WATER ACT UNDERGROUND INJECTION CONTROL REQUIREMENTS

ZAPATA does not plan to install any of the following controls under this project:

- Infiltration trenches;
- Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate stormwater flow; and;
- Drywells, seepage pits, or improved sinkholes.

3.4 APPLICABLE FEDERAL, TRIBAL, STATE OR LOCAL PROGRAMS

Section 9.4.1.1 of the 2012 CGP describes the following New Mexico state-specific requirements for the SWPPP:

1) The SWPPP must include site-specific interim and permanent stabilization, managerial, and structural solids, erosion, and sediment control BMPs and/or other controls that are designed to prevent to the maximum extent practicable an increase in the sediment yield and flow velocity from pre-construction, pre-development conditions to assure that applicable standards in 20.6.4 New Mexico Administrative Code, including the anti-degradation policy, or waste load allocations are met. This requirement applies to discharges both during construction and after construction operations have been completed.
2) The SWPPP must identify and document the rationale for selecting these BMPs and/or other controls.

3) The SWPPP must also describe design specifications, construction specifications, maintenance schedules (including a long term maintenance plan), criteria for inspections, as well as expected performance and longevity of the BMPs.
4) Using an appropriate soil loss prediction model such as SEDCAD 4.0, RUSLE, SEDIMONT II, MULTISED, etc., the operator must demonstrate and include documentation in the SWPPP, that implementation of the site-specific practices will result in sediment yields that, to the maximum extent practicable, will not be greater than the sediment yields from pre-construction, pre-development conditions.
5) The Temporary Erosion and Sediment Control Plan (SCP) must be prepared in accordance with good engineering practices by qualified (e.g., Certified Professional in Erosion and Sediment Control [CPESC], engineers with appropriate training, etc.) erosion control specialists familiar with the use of soil loss prediction models and design of erosion and sediment control systems based on these models (or equivalent soil loss prediction tools). The operator(s) must design, implement, and maintain BMPs in the manner specified in the SWPPP.

In order to meet these state-specific requirements, ZAPATA has prepared a separate SCP, included as Appendix G.

4.0 EROSION AND SEDIMENT CONTROLS

Site excavation activities will occur primarily within the former leaching beds and former settling tank area of SWMU 1. Construction practices will be employed to minimize the amount of soil disturbed and the amount of sediment-laden run-off generated. Surface water runoff for both the pre and post 1962 TNT leaching beds and settling tank area has an overall flow from south to north; with both leaching beds divided by Arterial Roan No. 4. In addition, a drainage ditch occurs near the western perimeter of the post-1962 leaching bed; from a culvert near the intersection of Service Road No. 3A and Arterial Road No. 4. Some government maps indicated this as a small arroyo. However, our site inspections identified this stormwater conveyance as a manmade drainage ditch; likely developed after constructing FWDA roads. Straw waddles will be placed in this conveyance to minimize sediment pollution. Silt fencing will also be placed at downstream locations to the excavation areas.

Site access will be limited to a single entrance/exit for each of the two leaching bed excavation areas to minimize tracking of material off- site. This will be provided by constructing temporary dirt access roads from the adjacent paved roads for both leaching bed areas; as shown on **Figure 6**. The post-1962 (northern diamond-shaped) Leaching Bed's temporary access road will cross an observed area that has the potential for channelized flow. To mitigate potential issues during rain or snow events; a culvert will be placed at this location and filled with borrow material to provide access to the leaching bed. After backfill operations are complete, the area will be restored to its original condition and excavated material will be placed in the leaching beds.

Erosion and sediment control measures are detailed in the SCP in Appendix G and summarized in the following sections. Locations of these prevention measures are shown on **Figures 5 through 6**. **Figure 7** shows the anticipated natural buffer boundary consisting of native grasses and scrub brush for the site.

4.1 NATURAL BUFFERS OR EQUIVALENT SEDIMENT CONTROLS

There are no surface waters within 50 feet of the project's earth disturbances. Therefore, no further documentation regarding natural buffers is required.

4.2 PERIMETER CONTROLS

Silt fence is proposed to be installed around the perimeter of the site on the downhill side of all land disturbing activities in order to meet the CGP Part 13 2.1.2.2 requirement to "install sediment controls along those perimeter areas of your site that will receive stormwater from earth-disturbing activities". Previous contractors have noted a high rate of UV degradation of silt fence at other FWDA project locations. Therefore, maintenance requirements maybe more extensive for lower end silt fence products, if used. Therefore, higher grade materials will be planned for use; which will help ensure compliance with the GGP at all times. **Figures G-2 and**

G-4 in Appendix G of the SCP show the location and installation instructions, respectively, for the silt fence.

4.2.1 Installation

- 02 June 2015 Start – 13 August 2015 End.
- Refer to Figures provided in Appendix G of the SCP for specific location of silt fence.
- The fence shall run across the slope along a line of uniform elevation (perpendicular to the direction of flow). The fence should be located at least six to nine feet from the toe of steep slopes to provide sediment storage and access for maintenance and cleanout.
- A flat-bottom trench approximately four inches wide and at least six inches deep, or a V-shaped trench 8 inches deep, should be excavated.
- Place 12 inches of specified filter fabric into the trench, extending the remaining 4 inches towards the up-slope side of trench.
- Extend the six inch by six inch 14-gage wire mesh into the trench a minimum depth of eight inches.
- Backfill the trench with soil or gravel and compact. Mechanical compaction should be performed as necessary to ensure proper functioning of the fence and posts.
- On the downslope side of the trench, drive the 1.33 lb./linear foot steel posts at least 18 inches into the ground, spacing them no further than six feet apart.
- Posts should be installed, with one to two inches of the post protruding above the top of the fabric and no more than 36 inches of the post should protrude above ground. The minimum fence height (height of the filter fabric) above grade shall be 18 inches. The maximum fence height (height of the filter fabric) above grade shall be 24 inches.
- Filter fabric should be purchased in a continuous roll and cut to the length of the barrier to avoid the use of joints. When joints are necessary, filter fabric should be wrapped together only at a support post with both ends securely fastened to the post, with a minimum six inch overlap.
- Heavy duty wire tires spaced a maximum of six inches apart, should be used to attach the fabric and wire mesh to the steel posts.
- Additional installation information is provided in the SCP of Appendix G.

4.2.2 Maintenance Requirements

- At a minimum, all sediment shall be removed from the perimeter silt fence before it has accumulated to one-third of the above-ground height of the silt fence.
- Silt fence shall be inspected every 7 calendar days and within 24-hours before and after each rainfall event that produced ½ inches or more of precipitation.
- Check for areas where runoff has eroded a channel beneath the fence, or where the fence was caused to sag or collapse by runoff overtopping the fence.
- If the fence fabric tears, begins to decompose, or in any way become ineffective, replace the affected section of the fence immediately.

- Reinforced silt fence should be removed within 30 days after final site stabilization is achieved or after temporary BMPs are no longer needed. Trapped sediment should be removed or stabilized on site. Disturbed areas resulting from fence removal shall be permanently stabilized.

4.2.3 Best Management Practices

TABLE 4-1: BMP DESCRIPTION: SILT FENCES	
Installation and Maintenance Schedule:	02 June 2015 Start – 13 August 2015 End
Maintenance and Inspection:	• Perform inspection before and after rain event that produced ½ inches or more of precipitation, and weekly through the rainy season. • Silt fences will be inspected for tears, to ensure that the fabric is securely anchored to the ground surface and attached to the fence posts, to ensure that the fence posts are firmly anchored into the ground, and not likely to tip over, to ensure that flow is not bypassing the ends of the fence, and to ensure that the depth of accumulated sediments is not excessive. • Remove built-up sediments from silt fencing before they reach one-third (1/3) of the height of the fence. • Should silt fence tear or decompose, replace immediately.
Responsible Staff:	The Site Manager or designee will perform all inspections.

4.3 SEDIMENT TRACK-OUT

There will be a single entrance/exit for each of the two leaching bed excavation areas to minimize soil tracking off site as shown on **Figure 6**. For SWMU 1's Post-1962 (northern diamond-shaped) TNT leaching bed, our team will construct a temporary dirt access road between the eastern berm and Arterial Road. The access road will be in a hook configuration; trucks will enter from the north and exit from the south. A portion of this temporary access road will cross an observed area which has the potential for channelized flow near the leaching bed's eastern berm. This depression is a relatively flat channel and filled with vegetation. However, to account for any runoff that could occur at this location during heavy precipitation events, a culvert will be placed in the channel. Borrow material will be filled in around the culvert and to bring the elevation of the depression with the level of the temporary access road. After backfill operations are complete, the depression will be restored to its original condition and excavated material will be placed in the leaching beds. The culverts will be disposed of as C&D waste.

For SWMU 1's Pre-1962 (south triangle-shaped) TNT leaching bed and the smaller excavation areas near the former settling tank, our team will construct a temporary dirt covered access road off of Service Road No. 3, just south of the southern leaching bed. Haul trucks will enter the south TNT leaching bed area by entering from the intersection of Service Road No. 3 and Arterial Road No. 4 and turning west onto Service Road No. 3. Haul trucks would then enter the eastern end of the temporary access road and continue to the loading area before exiting back onto Service Road No. 3 from the western end.

A stabilized construction entrance and exit (or track outs) will be used at both entrance and exit locations to the two temporary access roads to remove excess soil from vehicle tires as they enter and leave the paved surface (see **Figure 6** for track outs in vicinity of the excavation areas). In addition, several stabilized construction entrances (SCE) either already exist (i.e., intersection of Arterial Road and Arterial Road No. 4) or will also be positioned along key intersections where trucks enter/exit paved surfaces between Parcel 21 and the FWDA borrow sources. Any pre-existing SCE will be maintained. **Figure 5** identifies locations of these SCE along the haul/access routes. The tracking pads will be gravel on top of geotextile. See **Figure G-5** of the SCP for detail specifications.

If necessary, additional controls to remove sediment from vehicle tires will be utilized. These controls may include administrative controls or mechanical removal. If track out of sediment from site operations is observed onto the pavement at the location where the unpaved access road leads to the work site, sweeping, shoveling, or other equivalent means will be used to remove sediment by the end of the same work day.

4.3.1 Installation

- 02 June 2015 Start – 13 August 2015 End.
- Refer to **Figures 5 and 6** and figures provided in Appendix G of the SCP for specific location of SCE/track outs.
- A SCE shall consist of a pad of crushed stone, recycled concrete, or other rock-like material on top of a geo-textile filter cloth.
- The SCE will have minimum dimensions of 50 feet long and 25 feet wide.
- Remove all vegetation and any objectionable material from the foundation area.
- Divert all surface runoff and drainage from stones.
- The SCE will be graded with stone to a depth of six inches and compacted. Once compaction is completed, a geo-textile fabric using the physical properties listed in Appendix G shall be placed within the SCE.
- After placement of the geotextile fabric, crushed stone, 2 to 4 inches in diameter, shall be spread on the fabric even with the site grade.
- The edges of the entrance shall be tapered out towards the road to prevent tracking of mud at the edge of the entrance.

- Construction details are illustrated in Appendix G. Additional stone will be placed in the SCE throughout the duration of the project as needed.

4.3.2 Maintenance Requirements

- At a minimum, where sediment has been tracked-out from the site onto the adjacent road, the deposited sediment shall be removed by the end of the same work day in which the track-out occurs or by the end of the next work day if track-out occurs on a non-work day. The track-out shall be removed by sweeping, shoveling, or vacuuming from hosing or sweeping or by using other similarly effective means of sediment removal. The sediment shall not be hosed or swept into any stormwater conveyance, stormwater inlet, or surface water.
- Inspect SCE every fourteen (14) calendar days and within 24 hours after each rainfall event that produces one-quarter inch or more of precipitation, or after heavy use. Check for mud and sediment buildup and pad integrity. Make daily inspections during periods of wet weather. Maintenance is required more frequently in wet weather conditions. Reshape the stone pad as needed for drainage and runoff control.
- Wash or replace stones as needed and as directed by the inspector. The stone in the entrance shall be washed or replaced whenever the entrance fails to reduce mud being carried off-site by vehicles. Frequent washing will extend the useful life of stone.
- Immediately remove mud and sediment tracked or washed onto public roads by brushing or sweeping. Mud and sediment should not be swept or brushed into inlets. Flushing should only be used when the water can be discharged to a sediment trap or basin.
- Repair any broken pavement immediately.
- Dispose of sediment in a suitable area in such a manner that it will not erode.
- Remove stabilized construction entrances as soon as they are no longer needed to provide access to the site. Bring the disturbed area to grade, and stabilize it using appropriate permanent stabilization methods.

4.3.3 Best Management Practices

TABLE 4-2: BMP DESCRIPTION: CONSTRUCTION ENTRANCE/EXIT AND TRACKING PAD (TRACK OUT)	
Installation and Maintenance Schedule:	02 June 2015 Start – 13 August 2015 End
Maintenance and Inspection:	• Visual on a daily basis and performed once every 14 days and within 24 hours of the end of a storm event of one-quarter inch or greater. • Wash or replace stones as needed. • Immediately remove mud and sediment tracked or washed onto public roads by brushing or sweeping.
Responsible Staff:	The Site Manager or designee will perform all inspections.

4.4 STOCKPILED SEDIMENT OR SOIL

Excavated soils will not be directly loaded into dump trucks, but will instead be temporarily stockpiled within the excavation limits of the TNT Leaching Beds prior to waste characterization sampling, and then ultimate T&D to the non-hazardous waste disposal facility. Therefore, any soil that is temporarily stockpiled will be located interior to perimeter controls. Proposed locations of these stockpiles are identified at strategic areas on the site in **Figure 6**. From there, excavated material from leaching bed removal activities will be placed directly in haul trucks to avoid accumulation of stockpiled material. At no time will soil stockpiles be placed outside of the existing footprint (outside of existing bermed areas) of the excavation areas.

The existing soil berms that surrounded the TNT Leaching Beds will also be removed. When these existing berms are no longer present, at the end of each day, and during non-active time periods, the stockpile(s) placed in the Leaching Beds will be surrounded with a temporary soil berm not less than 6 inches in height to limit sediment transport in the case of a storm event. Water will be sprayed over the surface of the stockpiles in a manner which creates a crust to minimize sediment transport from soil stockpiles during non-active periods. To the extent possible, soils used for backfill will be stockpiled within the boundary of the excavation.

4.4.1 Best Management Practices

TABLE 4-3: BMP DESCRIPTION: SOIL STOCKPILES	
Installation and Maintenance Schedule:	09 June 2015 Start – 22 July 2015 End
Maintenance and Inspection:	• Runoff and sediment from stockpiles shall not be distributed to a stormwater conveyance, storm drain inlet, or surface water.
Responsible Staff:	The Site Manager or designee will perform all inspections.

4.5 MINIMIZE DUST

It is anticipated that planned excavation activities at SWMU 1 will generate fugitive dust emissions. Area ambient air will be periodically monitored in real time at SWMU 1's boundary by visual assessment. If observations indicate the need for dust control, measures will be implemented at the source to limit the generation of dust to the extent possible. Dust control measures include wetting down excavated material, roads or equipment. Application of water for dust control will be limited to prevent ponding and runoff of water.

In addition, during borrow soil excavation and loading operations, water will be added to the soil as necessary to reduce dust generation and to improve soil conditions for wheel compaction in the Leaching beds. Haul roads within the work area will be maintained to reduce dust

generation. **Figure 5** is an overall project work area map indicating the location of access (haul) roads and the borrow source area that we anticipate using for interim measures at Parcel 21.

4.5.1 Installation

Water is not available on site. Therefore, water will be transported by our construction contractor (Bohunk Excavating) from Gallup, NM using dedicated water trucks. Water used for dust control (or other site purposed) will be free of contaminants. All excavations and traffic areas will be watered throughout the duration of the project to minimize dust generation using dedicated water trucks.

4.5.2 Best Management Practices

TABLE 4-4: BMP DESCRIPTION: MINIMIZE DUST	
Installation and Maintenance Schedule:	09 June 2015 Start – 13 August 2015 End
Maintenance and Inspection:	• Dust controls shall be implemented only as needed to prevent the unnecessary waste of water.
Responsible Staff:	The Site Manager or designee will perform all inspections.

4.6 MINIMIZE THE DISTURBANCE OF STEEP SLOPES

Topographic relief is low on the site. Therefore, no controls will be implemented specifically for slope protection at the site.

4.7 TOPSOIL

Due to the potential for explosive contaminated soil from the leaching beds in the top one-foot of soil, topsoil will not be preserved. All excavated material will be transported for disposal.

4.8 SOIL COMPACTION

Following the completion of excavation operations as verified through confirmation sampling or attainment of the 10 ft. depth, the excavations at SWMU 1 will be backfilled to grade using fill soil obtained from the on-site FWDA borrow areas. A small soil borrow source is located about 1/3 mile southwest of SWMU 1, while the main soil borrow area is located southwest of the Administration Area. FWDA has indicated that they will direct us to use the smaller borrow source first before using the larger borrow source southwest of the Administrative Area. Since these borrow soils have been pretested and confirmed to not contain contaminates of concern, analysis of borrow area soil samples is not planned. Available geotechnical and analytical data for the backfill soils is contained in Appendix D of the IMWP (ZAPATA 2014a). See **Figure 5** for borrow source locations and the haul routes between the borrow sources and SWMU 1.

4.8.1 Installation

Fill soil will be transported from the borrow source area and placed in the excavation areas in 12-inch lifts. Since the fill in the excavations will not be structural fill, compaction will be attained

by using the heavy equipment wheels/tracks only. During borrow soil excavation and loading operations, water will be added to the soil as necessary to reduce dust generation and to improve soil conditions for wheel compaction in excavation areas. The backfill soil will be placed into each excavation and compacted as described above until the fill soil is emplaced 1 ft. above the surrounding terrain. The sides of this 1 ft. high "mound" of backfill soil will be sloped at a ratio of 2:1. **Figure 9** presents the final grading plan for the Leaching Beds.

After completion of borrow material removal from the borrow area, the disturbed areas in the borrow area will be graded to match adjacent topography and to promote drainage, minimize erosion, and prevent ponding of water.

4.8.2 Maintenance Requirements

See section below concerning site stabilization.

4.9 STORM DRAIN INLETS

There are no storm drains located within the proposed excavation boundaries.

4.10 CONSTRUCTED STORMWATER CONVEYANCE CHANNELS

Site excavation activities will only occur within the former leaching beds and former settling tank area of SWMU 1. Surface water runoff for both the pre and post TNT leaching beds and settling tank area has an overall flow from south to north; with both leaching beds divided by Arterial Road No. 4. Currently, construction of temporary Stormwater Conveyance Channels is not planned at this location. ZAPATA will monitor and continually evaluate this need and will install if soil conditions warrant.

Although we will not have any constructed stormwater conveyance systems, measures will be implemented to minimize possible sediment pollution in the existing stormwater conveyance (drainage ditch) west of the Post-1962 Leaching Bed. Straw waddles (or sediment tubes) will be placed in the ditch just downgradient of the culvert to help reduce the effects of soil erosion by energy dissipation and retaining sediment; which could occur in this normally dry conveyance during heavy precipitation events. **Figure 8** indicates proposed locations for the straw waddles within this drainage feature.

4.10.1 Installation (Straw Waddles)

- 02 June 2015 Start – 13 August 2015 End.
- Proper site preparation is essential prior to installation to ensure straw waddles are in complete contact with the underlying soil or surface. This will be accomplished by removing all rocks, clods, vegetation or other obstructions so the installed straw waddles have direct contact with the underlying soil surface.
- Install straw waddles by laying them flat on the ground. Construct a small trench to a depth that is 20% of the waddle diameter. Lay the straw waddle in the trench and compact the

upstream straw waddle soil interface. Do not completely bury the straw waddles during installation.

- Install straw waddles so no gaps exist between the soil and bottom of the straw waddle. Lap the ends of the adjacent straw waddles a minimum of six inches to prevent flow and sediment from passing through the field joint.
- Install straw waddles in the ditch perpendicular to the water flow and extend them up the sides slopes a minimum of one foot above anticipated flow depth. Recommended spacing of straw waddles is included in a chart in **Appendix G.**
- Install straw waddles using wooden stakes (two inch by two inch or steel posts (standard "U" or "T" sections with a minimum weight of 1.25 pounds per foot) a minimum of 48-inches in length placed on two foot centers. Intertwine the stakes with the outer mesh on the downstream side, and drive the stakes in the ground to a minimum depth of 24-inches leaving less than 12-inches of stake above the exposed straw waddle.
- An acceptable alternative to the installation above is driving stakes on two foot centers on each side of the straw waddle and connecting them with natural fiber twine or steel wire to inhibit the non-weighted straw waddle from moving vertically. Straw waddles can also be secured by installing the stakes on two foot centers in a crossing manner, ensuring direct soil contact at all times.

4.10.2 Maintenance Requirements (Straw Waddles)

- Perform field monitoring to verify that installation procedures do not damage straw waddles. Replace all straw waddles damaged during installation and inspect straw waddles after installation for gaps under the straw waddles and for gaps between the joints of adjacent ends of straw waddles.
- Inspect every seven days and within 24-hours of a rainfall event of 0.5-inches or greater.
- Repair all rills, gullies, and undercutting near straw waddles.
- Remove all sediment deposits that impair the filtration capability of straw waddles when the sediment reaches 1/3 the height of the exposed straw waddle.
- Remove and/or replace installed straw waddles as required to adapt to changing construction site conditions.
- Remove straw waddles from the site when the functional longevity is exceeded as determined by the Engineer or Inspector.
- Gather straw waddles and dispose of them in regular means as non-hazardous, inert material.
- Prior to final stabilization, backfill all trenches, depressions and other ground disturbances caused by the removal of the straw waddles.

4.10.3 Best Management Practices

TABLE 4-5: BMP DESCRIPTION: STRAW WADDLES (SEDIMENT TUBES)	
Installation and Maintenance Schedule:	02 June 2015 Start – 13 August 2015 End
Maintenance and Inspection:	• Perform inspection before and after rain event that produced ½ inches or more of precipitation, and weekly through the rainy season. • Repair all rills, gullies, and undercutting near straw waddles. • Straw waddles will be inspected for gaps beneath and between any connecting straw waddles. Those that are found should either be repaired or replaced immediately. • Straw waddles should be replaced if damaged, if they have exceeded their functional longevity, or due to changing site conditions. E • Ensure that the fabric is securely anchored to the ground surface and attached to the fence posts. • Ensure that the fence posts are firmly anchored into the ground, and not likely to tip over. • Remove built-up sediments from straw waddles before they reach one-third of the height. • After removal of straw waddles, all depressions, trenches or other ground disturbances caused by the placement of the straw waddles shall be backfilled.
Responsible Staff:	The Site Manager or designee will perform all inspections.

4.11 BORROW AREAS

Soil used for backfilling the excavations at Parcel 21 will be excavated from existing above ground soil piles located within FWDA. These backfill sources will come from two main areas. A smaller borrow source is located about 1/3 mile southwest of SWMU 1; while the main soil borrow area is located southwest of the Administration Area. FWDA has indicated that they will direct us to use the smaller borrow source first before using the larger borrow source southwest of the Administrative Area. Refer to **Figure 5** for borrow source locations and the haul routes between the borrow sources and SWMU 1.

As previous contractors have been directed, borrow source soils will be removed from the west face of the existing soil piles only. At the end of each day, and during non-active time periods,

the locations of the borrow area disturbed will be contained with a soil berm not less than 6-inches in height to limit sediment transport in the case of a storm event. Water will be sprayed over the surface of the disturbed areas in a manner which creates a crust to minimize sediment transport during non-active periods.

After completion of borrow material removal from the borrow area, the disturbed areas in the borrow area will be graded to match adjacent topography and to promote drainage, minimize erosion, and prevent ponding of water.

4.12 SEDIMENT BASINS

No sediment basins will be installed during implementation of this project.

4.13 CHEMICAL TREATMENT

No chemical treatment will be conducted during implementation of this project.

4.14 DEWATERING PRACTICES

No dewatering will be conducted.

4.15 OTHER STORMWATER CONTROLS

There will be no additional BMP's. Should it be determined additional BMP's, not contained in this SWPPP, be required during field implementation, this plan will be amended. A SWPPP Amendment Log will be maintained in Appendix C. See Section 6.3 for additional information regarding SWPPP amendments.

4.16 SITE STABILIZATION

Within seven calendar days of the completion of soil disturbing activities at SWMU 1 and the borrow areas, the installation of temporary non-vegetative stabilization measures necessary to prevent erosion will be completed. Once the soil disturbing activities are completed, the silt fencing will be removed and replaced with straw bales and/or waddles as appropriate. As soon as practical given conditions at the site, all previously disturbed areas within SWMU 1 will be reseeded using a mix of native plants and grasses from a local nursery in Gallup, NM. Seeding will be conducted following site preparation and when no further disturbances are planned (i.e. backfilling, compaction, final grading, and the final site topographic survey).

4.16.1 Installation

- 15 August 2015 Start – 15 September 2015 End.
- Site conditions are anticipated to be extremely dry (arid).
- Dormant seeding will be implemented for late fall or winter seeding schedules.
- If possible, seed will be applied immediately after site preparation while the soil is loose and moist. Seed will only be applied to disturbed areas at SWMU 1.

- Tillage – If the area has been recently disturbed, no tillage is required other than raking or surface roughing to break any crust that has formed leaving a textured surface. Disk the soil for optimal germination when the soil is compacted less than six inches.
- Broadcast seeding will be applied at a rate above 100 Pure Live Seed per square foot of seeded area.
- Cover applied seed by raking or dragging a chain, and then lightly firm the area with a roller or cultipacker.
- Use mulch with temporary seed applications to retain soil moisture and reduce erosion during the establishment of vegetation. Most commonly accepted mulch used in conjunction with temporary seeding is small grain straw. This straw should be dry and free from mold damage and noxious weeds. The straw may need to be anchored with netting or emulsions to prevent it from being blown or washed away.
- Seeded areas should be kept adequately moist. Irrigate the seeded area if normal rainfall is not adequate for the germination and growth of seedlings. Water seeded areas at controlled rates that are less than the rate at which the soil can absorb water to prevent runoff. Runoff of irrigation water wastes water and can cause erosion. A subsequent watering event is tentatively scheduled approximately 30 days after completing seeding; depending on the amount of natural precipitation events that occur during that period.
- Upon completion of all construction activity and implementation of permanent stabilization measures at the site, ZAPATA will file a Notice of Termination.
- Details regarding final stabilization efforts implemented will be maintained in Appendix H.

4.16.2 Maintenance Requirements

- Soil stabilization shall be maintained in place such that a minimum of 70% coverage is obtained.
- Cover seeded with mulch to provide protection.
- Supply temporary seeding with adequate moisture. Supply water as needed, especially in abnormally hot or dry weather or on adverse sites. Control water application rates to prevent runoff.
- Inspect seeded areas for failure and make necessary repairs and reseed immediately.
- If the season prevents re-sowing, mulch is an effective temporary cover.

4.16.3 Best Management Practices

TABLE 4-6: BMP DESCRIPTION: SITE STABILIZATION	
Installation and Maintenance Schedule:	15 August 2015 Start – 15 September 2015 End
Maintenance and Inspection:	• Loosen the soil surface before broadcasting the seed. • Cover seeded with mulch to provide protection. • Supply water as needed. • Control water application rates to prevent runoff. • Inspect seeded areas for failure and make necessary repairs and reseed immediately. • File a Notice of Termination upon completion of permanent stabilization measures.
Responsible Staff:	The Site Manager or designee will perform all inspections.

5.0 POLLUTION PREVENTION STANDARDS

This portion of the SWPPP addresses general requirements for handling spills and discharges of hazardous or controlled materials along with employing methods to prevent and contain spills and discharges. The development, implementation and use of this plan are essential to ensure that spills and leaks are minimized and can be quickly contained and cleaned up. In addition to this sub-plan of the SWPPP, we have also developed a site specific Spill Prevention, Control, and Countermeasures (SPCC) plan (dated November 2014) under 40 CFR Part 112 that our team will follow while conducting field operations (ZAPATA 2014c).

Site excavation activities will occur primarily within the former leaching beds and former settling tank area of SWMU 1. Surface water runoff for both the pre and post TNT leaching beds and settling tank area has an overall flow from south to north; with both leaching beds divided by Arterial Roan No. 4. In addition, a drainage ditch occurs near the western perimeter of the post-1962 leaching bed; from a culvert near the intersection of Service Road No. 3A and Arterial Road No. 4. Straw waddles will be placed in the ditch to minimize sediment pollution. Silt fencing will also be placed at downstream locations to the excavation areas. Locations of these prevention measures are shown on **Figure 8**.

5.1 POTENTIAL SOURCES OF POLLUTION

The most likely hazardous materials planned to be on site during activities that could possibly be released to the environment consist of diesel, gasoline, motor oil and hydraulic oil associated with heavy equipment and temporary storage. All petroleum fuels are flammables. The physical and chemical properties for diesel fuel, gasoline and other petroleum products are included in Safety Data Sheets (SDS) that will be maintained on site at all times.

Vehicles and equipment used for this project will require routine maintenance, including the addition of fuels, lubricants, and coolant. In order to maintain uninterrupted operation of equipment, a temporary fueling station will be set up at the staging area of Parcel 21. This staging area is proposed south of the Pre-1962 (triangle shaped) TNT leaching bed; using the area between former building foundations B501 and B503 (see **Figure 6** for location). ZAPATA is proposing the following stationary oil storage containers with capacities of 55 gallons or greater to be temporary staged at this location:

- One 3000-gallon double-walled steel tank AST
- One 55-gallon drum of hydraulic fluid
- One 55-gallon drum of waste oil

The temporary fueling station will consist of a double-walled 3,000 gallon diesel fuel tank staged in a secure earth berm; along with up to one 55-gallon drum each of hydraulic fluid and waste oil. Quantities of motor oil and hydraulic oil kept in approved containers (5-gallons or less) may also be transported and stored in the support or crew trucks. Small quantities of petroleum

products (5-gallons or less), which may include oil, grease, and hydraulic fluid for equipment maintenance, will be stored in enclosed storage areas at the laydown area on site. Containers will not be stored where a leak or spill could enter a stormwater conveyance or arroyo. The staging area will also include our field office trailer, two portable toilets, an eye wash station, and a hand wash area located near the trailer All required safety and labor postings will be located in the trailer.

In addition to the above storage containers that will be stored in a fixed location, we are also proposing the following fuel tank capacities that exceed 55 gallons which will be mounted on heavy excavation equipment, water trucks, dump trucks or supporting vehicles. Note that all of the vehicles listed below may or may not be used or staged simultaneously while conducting interim measures at FWDA.

- One 110-gallon fuel tank for Caterpillar 325 Hydraulic Excavator
- One 108-gallon fuel tank for Caterpillar 966C Wheel Loader
- One 105-gallon fuel tank for Caterpillar 615 Elevating Motor Scraper
- One 75-gallon fuel tank for Caterpillar 140m Motor Grader
- One 70-gallon fuel tank for 4K Water Truck
- Two 105-gallon fuel tanks for two support trucks
- 100-gallon fuel tanks for dump trucks

Table 5-1 summarizes the oil storage containers that are proposed at the Parcel 21 staging area that exceed 55-gallons. It includes both fixed containers and vehicle/equipment fuel tanks that will occasionally be parked at the Parcel 21 staging area. A dedicated overnight parking area for any equipment stored at the FWDA during off hours will be established at the Parcel 21 staging area. Drip pans will be utilized whenever heavy equipment, dump truck and/or support trucks are parked for extended times onsite (i.e., during work breaks, overnight, etc.).

When including our proposed volume with vehicles/equipment that individually exceeds 55-gallons, total oil storage volume is approximately 4,188 gallons. See the project specific SPCC Plan for more details on petroleum storage (ZAPATA 2014c).

TABLE 5-1: OIL STORAGE CONTAINER INFORMATION

Proposed Fixed Oil Storage Container Information at Parcel 21 Staging Area					
Container ID/ Description	**Location**	**Volume (gals.)**	**Quantity**	**Contents**	**Container Construction**
Fuel Oil #1	Parcel 21 - SWMU 1 Staging Area	3,000	1	Diesel Fuel	Double-Walled Steel Tank
Hydraulic Fluid Drum	Parcel 21 - SWMU 1 Staging Area	55	1	Hydraulic Oil	55-Gallon Steel Drum
Waste Oil Drum	Parcel 21 - SWMU 1 Staging Area	55	1	Waste Oil	55-Gallon Steel Drum
Proposed Vehicle and Equipment Fuel Tank Capacities That Exceed 55 gallons					
Heavy Equipment #1	Caterpillar 325 Hydraulic Excavator	110	1	Diesel Fuel	Internal Fuel Tank
Heavy Equipment #2	Caterpillar 966C Wheel Loader	108	1	Diesel Fuel	Internal Fuel Tank
Heavy Equipment #3	Caterpillar 615 Elevating Motor Scraper	105	1	Diesel Fuel	Internal Fuel Tank
Heavy Equipment #4	Caterpillar 140m Motor Grader	75	1	Diesel Fuel	Internal Fuel Tank
Truck Type #1	4K Water Truck	70	1	Diesel Fuel	Internal Fuel Tank
Truck Type #2	Support Truck	105	2	Diesel Fuel	Internal Fuel Tank
Truck Type #3	Dump Truck	100	4	Diesel Fuel	Internal Fuel Tank

Potential sources to stormwater runoff include vehicle tracking, grading operations; and soil and debris excavation operations. Although the materials discussed above will be stored in an enclosed storage area, berm, and/or in vehicles; each one is still considered a potential pollutant that may occur from site activities. **Table 5-2** summarizes these materials, the potential pollutants that maybe derived from these substances, the location they are stored and estimated quantity. The quantities of materials listed in **Table 5-2** are in addition to the volumes contained within the operating systems of site equipment.

TABLE 5-2: POTENTIAL POLLUTANTS FROM CONSTRUCTION ACTIVITIES

Trade Name Material	Stormwater Pollutants	Location	Gallons Stored
Gasoline Fuel*	Benzene, ethylene, toluene, xylene (BTEX), MTBE, gasoline range organics, oil & grease, diesel-range organics	• Temporary Fueling Area at Parcel 21 Staging Area • Site Vehicles • Equipment	4,200
Diesel Fuel*			
Hydraulic Oils/Waste Oil*	Non-combustible oils	• Temporary Fueling Area at Parcel 21 Staging Area • Site Vehicles • Equipment	125
Antifreeze/Coolants*	Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc)	• Site Vehicles • Equipment	5
Leaching Bed Waste Material	Non-Hazardous Solid Waste	• Pre-1962 Leaching Bed • Post-1962 Leaching Bed • Former Settling Tanks Area	Unknown

Note: *These materials will be used and stored on-site.

5.2 SPILL PREVENTION RESPONSE

If a spill does occur, it will be reported immediately to a member of the ZAPATA Pollution Prevention Team (ZAPATA's Project Manager, SUXOS/Site Manager, Site Safety and Health Officer (SSHO) or Project Engineer). If necessary, the Pollution Prevention Team will contact FWDA's Installation On-Scene Coordinator (IOSC) and members of the USACE Support Group (USACE Program Manager, USACE Project Manager and the On-Site USACE Oversight Coordinator). The IOSC has been designated to be the FWDA Caretaker (40 CFR 264.55). The IOSC will function as the facility emergency coordinator. If the IOSC cannot be contacted then a temporary alternate contact will be another member of the FWDA Caretaker staff. Names, roles, and phone numbers of the IOSC, USACE Support Group, and Pollution Prevention Team are provided in **Table 5-4**.

In accordance with 40 CFR 264.56, the responsibilities of the IOSC include assessing the emergency, determining the need for agency notification, requesting additional manpower and resources if required, contacting emergency services if required, and coordinating mitigation, cleanup, and reporting. The IOSC will be supported by ZAPATA's Pollution Prevention Team. Detailed spill response and preventive procedures are included in **Appendix M**.

5.2.1 Categories of Levels of Spills and Discharges

Fuel spills from diesel and gasoline storage required by on-site equipment can be categorized as "major accidental" or "minor incidental" spills. A major accidental spill could result from breech of the fuel storage tank, from a vehicle collision or an unattended open valve. Minor incidental spills could result from careless operator handling of transfer equipment during fueling, broken hydraulic lines or engines that leak oil.

5.2.2 Spill Control Procedures

Fuels and oils will be stored in containers as summarized in Table 5-1. This table also summarizes the containment system(s) and/or drainage controls associated with each container. Table 5-3 summarizes the sources of a potential discharge and predicts the direction, flow rate, and quantity that could be discharged as a result of equipment failure. In addition to those containers, container storage also includes fuel tanks (approximately 100 gallons or less) and containers (5 gallons or less) on support vehicles. Containers will not be stored where a leak or spill could enter a stormwater conveyance or arroyo. An emergency spill containment and cleanup kit including such items as lined drums, absorbent pads, portable containment berms, and granular absorbent will be stored and available in the immediate work site area, either within the laydown area or within site trucks. Drip pans will be utilized whenever heavy equipment, dump truck and support trucks are parked for extended times onsite (i.e., during work breaks, overnight, etc.). A dedicated overnight parking area for any equipment stored at the FWDA during off hours will be established at the Parcel 21 staging area.

TABLE 5-3: POTENTIAL SPILL SOURCES

Proposed Fixed Oil Storage Container Information at Parcel 21 Staging Area				
Container ID/ Description	**Type of Failure**	**Volume Released (gals.)**	**Rate of Release (gallons/minute)**	**Direction of Spill**
Fuel Oil #1	Partial or complete rupture	Up to 3,000	Up to 300	In berm
	Tank spill or overfill	Up to 100	Up to 45	In berm
	Leak from tank truck	Up to 100	Up to 5	On ground or drip pans
Hydraulic Fluid	Partial or complete rupture (delivery)	Up to 55	Up to 9	On ground or in plastic catch basin or spill pallets
	Partial or complete rupture (use)	Up to 55	Up to 9	In plastic catch basin or spill pallets
Waste Oil	Partial or complete rupture (delivery)	Up to 55	Up to 9	On ground or in plastic catch basin or spill pallets
	Partial or complete rupture (use)	Up to 55	Up to 9	In plastic catch basin or spill pallets

Additional spill control procedures that will be implemented during soil mixing and excavation operations at SWMU 1 include constructing stabilized construction entrances and exits at several

key locations along the haul route. A decontamination area will be constructed before the exit point from the leaching beds on the side of the excavation. See **Figures 5 and 6** for locations.

If a spill was to occur, the ZAPATA SUXOS/Site Manager will be responsible for all spill containment and cleanup activities. If a small spill occurs on-site, ZAPATA will immediately respond with appropriately trained personnel. Any larger spills may also be cleaned up by ZAPATA personnel trained to complete the task or local spill response contractors. The source of the spill will be stopped, if possible, by closing valves, turning off pumps etc. The spill will be contained by using sorbent materials in spill kits located throughout the project work site. Sorbents, solids and recovered material will be containerized in drums. The drums will be labeled with contents and a licensed waste disposal contractor, capable of handling oil wastes, will be contacted to dispose of the recovered materials. Contact information for our local waste disposal contractor is included below in **Table 5-4**. Detailed spill response and cleanup procedures are included in Appendix M.

Should a spill occur off-site, the delivery driver will immediately contact the ZAPATA SUXOS/Site Manager as well as the responsible local and/or state emergency response agencies so that a response may be made to the spill. Action will be taken immediately to contain and recover the spilled material. The spill will be contained so that removal equipment can clean up the spill. If a spill occurs on soil, the area will be over excavated to clean soil, to verify that all spilled material is removed. If a spill occurs on concrete or pavement, brooms or vacuums may be used to ensure that all spilled material is recovered.

The cause of any spill will be determined and corrective action will be taken. The Spill Incident Report, included as Appendix D of the SPCC Plan (ZAPATA 2014c), will be completed as soon as possible after the discovery of and response to a spill. If necessary, the form will be used to convey the required information to the USEPA Region 6 RA and other agencies and includes: address and phone of the facility, date and time of discharge, type of material discharged, estimates of the quantity discharged, source, affected media, cause of discharge, injuries, mitigation activities, need for evacuation and individuals/organizations that have been contacted.

All spills will be documented and contain the following information:

- Description of the material spilled (including the quantity and manifest number, if any);
- Exact time and location of spill, including a description of the area involved;
- Containment and cleanup procedures;
- Summary of any communications with government officials, including NMED;
- Reason for spill; and
- Corrective action to prevent future spills.

TABLE 5-4: EMERGENCY CONTACT LIST

Name	Organization	Project Role	Phone
LOCAL EMERGENCY RESPONSE ORGANIZATIONS – ALL EMERGENCIES DIAL 911			
Dispatcher	Metro Dispatch	Emergency Response	(505) 722-2002
Fire Department	McKinely County Fire Dept.	Emergency Response	(505) 863-3839
State Police	New Mexico State Police	Emergency Response	(505) 863-9353
Local Police	Gallup Police	Emergency Response	(505) 863-9365
Hospital	Rehoboth McKinley Christian Hospital	Emergency Response	(505) 863-7000
U.S. ARMY CORPS OF ENGINEERS (USACE) & FORT WINGATE DEPOT ACTIVITY (FWDA)			
Allen Bassett	USACE Tulsa District	USACE Contracting Officer	(918) 669-7136
Mark Patterson	Base Realignment and Closure Office	Base Realignment & Closure Environmental Coordinator (BEC)	(330) 358-7312
Steve Smith	USACE Fort Worth District	FWDA Program Manager	(817) 886-1879
David Henry	USACE Albuquerque District	Project Manager/Project Geologist	(505) 342-3139
Mike Scoville	USACE Fort Worth District	On-Site USACE Oversight Coordinator	(817) 866-1875
Angela Lane	USACE	Project Chemist	(817) 886-1824
Dennis "DJ" Meyers	USACE Fort Worth District	Onsite Corps Ordnance & Explosives Safety Specialist (OESS)	(817) 609-5014
Richard Cruz	FWDA	FWDA Caretaker and Installation On-Scene Coordinator (IOSC)	(505) 905-6190
-	FWDA	FWDA Administrative Records Manager	(505) 905-6108
NEW MEXICO ENVIRONMENT DEPARTMENT (NMED) & ENVIRONMENTAL PROTECTION AGENCY (EPA)			
John Kieling	NMED	NMED Resource Conservation and Recovery Act (RCRA)	(505) 476-6016
Dave Cobrain	NMED	NMED Hazardous Waste Bureau	(505) 476-6055
Federal Agency	EPA	National Response Center (24 hours)	(800) 424-8802
ZAPATA INCORPORATED			
Steve Morrissette	ZAPATA (Pollution Prevention Team)	Project Manager	(402) 871-2891
Richard S. Smith	ZAPATA (Pollution Prevention Team)	Project Engineer	(704) 378-4934
Chuck Wentzel	ZAPATA (Pollution Prevention Team)	Senior UXO Supervisor / Site Manager	(704) 905-9786
Nathan Reel	ZAPATA (Pollution Prevention Team)	Site Safety and Health Officer	(704) 617-3218
Bryan Moeller	ZAPATA	Technical Manager	(704) 907-5116
George Dwiggins	ZAPATA	Corporate Safety and Health Officer	(704) 378-4913
WASTE TRANSPORTATION AND DISPOSAL			
Kevin Shafer	Bohunk Excavating	ZAPATA Spill Response Contractor	(928) 220-0077

Both our SPCC Plan and this Spill Control Plan of the SWPPP will be available at the project sites so that personnel will be able to quickly access and use the information to respond to spills. Emergency telephone numbers and any other relevant numbers will be posted in the staging area of Parcel 21 and kept readily available to all site personnel. In addition to the posted information, all project personnel will be briefed about spill control procedures, at the initial site briefing and through daily tailgate safety meetings.

Contacts for the National Response Center, emergency response contractors, appropriate agencies, and other emergency services are also provided in **Table 4** and **Appendix M**.

5.2.3 Fueling and Maintenance of Equipment or Vehicles

Outside contractors will fill the ASTs, remove waste oil drums, and deliver hydraulic fluid drums. The ZAPATA SUXOS/Site Manager or member of our Pollution Prevention Team will be present to monitor the filling, emptying, and delivery of all operations at the Parcel 21 staging area. Equipment operators will be under constant supervision and will not be allowed to congest the work area, thus limiting the potential for accidents. General fueling procedures for field team members to follow are included in **Appendix M**.

Each member of our field team will be responsible for monitoring fuel storage, delivery and construction equipment for leaks. Equipment inspections will be conducted daily. The individual that discovers a release will immediately notify the ZAPATA SUXOS/Site Manager or member of our Pollution Prevention Team via radio communication or telephone (contact information is included below in Table 4). A member of the Pollution Prevention Team will contact emergency services and a cleanup contractor, if required. Vehicle and equipment maintenance will be conducted off-site.

5.2.4 Washing of Equipment and Vehicles

As detailed in our site specific Waste Management Plan (WMP) plan (ZAPATA 2014d), decontamination of some equipment will be performed to ensure chemical analyses reflect actual concentrations at sampling locations by maintaining the quality of samples and preventing cross-contamination. Decontamination fluids include muddy water, detergents, and rinse water used to decontaminate non-disposable sampling equipment, heavy equipment, and PPE. Disposable equipment and expendable PPE intended for one-time use will not be decontaminated after use, but will be packaged for appropriate disposal.

Volumes of decontamination fluids used to clean the non-disposal sampling equipment, handheld excavation tools, and PPE are anticipated to be small. This sampling equipment includes disposable soil coring devices, or sampling tools in direct contact with sample media. All non-disposal sampling equipment and PPE that comes into contact with potentially contaminated media will be decontaminated in the established exclusion zone associated with the specific excavation using a small decontamination pad or dedicated decontamination containers. Section

5.10 of the IMWP provides details on general decontamination procedures (ZAPATA 2013a). These liquids will be containerized at the decontamination area location using clean 5-gallon buckets with a watertight lid. Depending upon the volumes generated, water from more than one sample location may be consolidated in the same bucket, or multiple buckets may be required for the same location. When filled or at the end of the sampling day, filled 5-gallon buckets will be carefully emptied using a funnel into a 55-gallon steel drum(s).

Volumes of decontamination fluids used to clean heavy excavation and transport equipment at the TNT leaching beds of Parcel 21 will be larger. This equipment includes the excavation bucket, front end loader, and haul trucks that will be in direct contact with soils that exceed SSLs. A decontamination area will be constructed before the exit point from the leaching beds on the side of the excavation. ZAPATA will gross decontaminate the backhoe bucket and front loader as needed over a decontamination pad. Haul trucks will be thoroughly decontaminated before being utilized for backfill operations. Due to the potential volume of fluid that could be generated, care will be taken to only use enough decontamination fluids necessary to adequately complete equipment decontamination. Dry decontamination may also be conducted to remove loose sediment from vehicles and equipment; thereby further reducing the generation of decontamination fluid.

The standard equipment decontamination procedures will be completed as follows:

- A decontamination wash pad will be constructed using plastic sheeting which is rolled up at the ends (typically with lumber) to contain water. The pad will be large enough to hold multiple 5-gallon buckets and equipment that requires decontamination and to provide ample working area within the pad.
- Sampling equipment will be washed using a bristle brush in potable water to which Alconox or Liquinox laboratory detergent has been added. All items will then be thoroughly rinsed with potable water and allowed to air dry.
- Decontamination should be performed on or over the plastic sheeting of the temporary decontamination pad.

Decontamination of heavy equipment will be completed as follows:

- Heavy accumulations of soil will be scraped off of heavy equipment at the leaching beds to avoid transporting potentially contaminated soil to other locations. Particular attention will also be paid to removing heavy accumulations of soil from tires before moving equipment onto roads to avoid depositing contaminated soils on roadways.
- Additional decontamination of equipment (i.e., backhoe buckets, grader and excavator blades, etc.) will be accomplished at a portable decontamination pad erected at the staging area (as described above). Hot water, high pressure sprayers will be used to remove soil from this equipment.

Accumulated wash and rinse water will be left within the decontamination pad and allowed to evaporate. At the end of the work day, any water remaining in the decontamination pad will be pumped directly into 55-gallon drums using a portable pump. Once all decontamination water has been removed and/or evaporated, the plastic liner and accumulated sediment will be disposed as solid waste at the San Juan County landfill.

After field cleaning, equipment will be handled only by personnel wearing clean gloves to prevent re-contamination. The equipment will be moved away from the cleaning area to prevent re-contamination. If the equipment is not to be immediately reused it will be covered with plastic sheeting or wrapped in aluminum foil to prevent re-contamination. The area where the equipment is stored prior to re-use must be free of contaminants.

The 55-gallon steel drum(s) used to contain all final decontamination fluids will conform to United Nations Performance-Oriented Packaging standards and DOT specifications in 49 CFR 178. The 55-gallon drum(s) will be stored in the FWDA less than 90 day storage area while awaiting final characterization and disposal. **Figure 5** indicates the location of the FWDA less than 90-day holding area at Igloo Block B. Waste characterization, transportation, and disposal is detailed in the *Final Waste Management Plan and Hazardous Waste Contingency Plan, Interim Measures for Parcel 21 – SWMU 1*, dated November 2014 (Zapata 2014d).

5.3 STORAGE, HANDLING, AND DISPOSAL OF CONSTRUCTION PRODUCTS, MATERIALS, AND WASTES

The following procedures will be followed to ensure the proper storage, handling and disposal of construction products, materials, and wastes.

5.3.1 Building Products

Building materials, supplies, personal protective equipment, hand tools, and other supplies will be stored in an orderly fashion in enclosed storage areas at the staging area on site.

TABLE 5-5: BMP DESCRIPTION: BUILDING PRODUCTS	
Installation and Maintenance Schedule:	22 May 2015 Start – 15 September 2015 End (as needed).
Maintenance and Inspection:	Weekly, as needed.
Responsible Staff:	The Site Manager.

5.3.2 Pesticides, Herbicides, Insecticides, Fertilizers, and Landscape Materials

There will be no use of pesticides, herbicides, insecticides, or fertilizers for this project. Any landscape materials used for BMPs will be stored as detailed in Section 5.3.1.

5.3.3 Diesel Fuel, Oil, Hydraulic Fluids, Other Petroleum Products, and Other Chemicals

With the exception of petroleum products for the operation and fueling of heavy equipment, bulk quantities of solvents or other materials will not be stored at the project site. Petroleum products, which may include oil, grease, and hydraulic fluid for equipment maintenance, will be stored in enclosed storage areas at the laydown area on site. Any flammable liquids will be stored in flammable cabinets compliant with National Fire Protection Association Code #30 and OSHA 1910.106. Diesel storage on site will be a temporary fueling station consisting of a double-walled 3,000 gallon diesel fuel tank staged in a secure earth berm; along with up to one 55-gallon drum each of hydraulic fluid and waste oil. Quantities of motor oil and hydraulic oil kept in approved containers (5-gallons or less) may also be transported and stored in the support or crew trucks. Small quantities of petroleum products (5-gallons or less), which may include oil, grease, and hydraulic fluid for equipment maintenance, will be stored in enclosed storage areas at the laydown area on site. Containers will not be stored where a leak or spill could enter a stormwater conveyance or arroyo. Petroleum storage also includes auxiliary fuel tanks (approximately 100 gallons or less) on site vehicles.

TABLE 5-6: BMP DESCRIPTION: PETROLEUM PRODUCTS AND OTHER CHEMICALS	
Installation and Maintenance Schedule:	22 May 2015 Start – 15 September 2015 End (as needed)
Maintenance and Inspection:	• Weekly, as needed. • A member of the Pollution Prevention Team (listed in **Table 5-4**) should monitor on-site hazardous waste storage and disposal procedures. • Waste storage areas should be kept clean, well-organized, and equipped with ample clean-up supplies as appropriate for the materials being stored. • Detailed spill response and preventive procedures are included in **Appendix M**.
Responsible Staff:	The Site Manager or any member of the Pollution Prevention Team.

Any spills resulting from the storage or use of petroleum products or other chemicals will be cleaned up immediately. All spills or leaks, regardless of their quantity, will be reported to NMED at the following numbers:

- NMED emergencies: 505-827-9329 (twenty-four hours a day);
- NMED non-emergencies: 866-428-6535 (voice mail, twenty-four hours a day);
- NMED non-emergencies and to reach an on-duty NMED staff member: 505-476-6000 (normal business hours only).

All spills will be documented and contain the following information:

- Description of the material spilled (including the quantity and manifest number, if any);
- Exact time and location of spill, including a description of the area involved;
- Containment and cleanup procedures;
- Summary of any communications with government officials, including NMED;
- Reason for spill; and
- Corrective action to prevent future spills.

Clean up of residues managed as non-hazardous, hazardous, or solid waste will be disposed of accordingly. Contacts for the National Response Center, emergency response contractors, appropriate agencies, and other emergency services are also provided in **Table 5-4**. Detailed spill response and preventive procedures are included in **Appendix M** and are detailed in the Final SPCC Plan (ZAPATA 2014c).

5.3.4 Hazardous or Toxic Waste

No hazardous or toxic waste is anticipated from excavation activities. Except for a small volume of surficial soils in the Post-1962 Leaching Beds (an estimated 5 cubic yards [CY]) that contain explosive compound concentrations above 10 percent), there is no history of munitions and explosives of concern (MEC) being encountered or expected at SWMU 1. However, due to the operational history of FWDA, there is a potential for MEC to be encountered during excavation operations in the TNT Leaching Beds. The initial work activity to be completed at the Leaching Beds will be to remove the 5 CY of soil that represent an explosive hazard, mix these soils with berm soils and soils from the top 1 foot (ft.) of the leaching beds, and reduce the explosive compound concentrations below 10%; thereby eliminating the potential explosive hazard of these soils. Since these soils will present a potential explosive hazard prior to mixing, the procedures provided in USACE Publication EM 385-1-97 will be required to be implemented. This includes having an Unexploded Ordnance (UXO) Technician Level III and Technician Level II on site during the explosive soils mixing activities. Subsequent to these activities, it is not anticipated that any MEC hazards will be encountered. However, in the unlikely event that MEC items are found during the follow-on excavation activities, all work will stop and the USACE Onsite Ordnance & Explosives Safety Specialist (OESS) will be notified immediately. Based on the determination by the OESS, all further operations on the TNT Leaching Beds may be ceased. In addition, if hazardous or toxic materials are identified at the site, the site manager will isolate the area and notify the USACE Oversight Coordinator upon receipt of data; who will in turn notify the USACE Project Manager as necessary. A contract modification may be required for any additional work activities. A list of emergency contact numbers is provided in **Table 5-4**; which will be available at the site.

The discovery of MEC at SWMU 1 may significantly delay any activities because Army safety plans will have to be prepared and approved. SWMU 1 excavation activities will be continued

only when all appropriate MEC safety procedures are in effect. Contact information for the OESS is provided in the project Accident Prevention Plan/Site Safety and Health Plan (APP/SSHP). Additional details concerning explosive soil mixing, characterization and disposal is included in the IMWP (ZAPATA 2014a).

5.3.5 Construction and Domestic Waste

All project generated trash will be properly contained and disposed. Disposal of any materials, waste, effluents, trash, garbage, oil, grease, chemicals, and the like, is permitted only in USACE authorized receptacles or other designated areas and only in accordance with applicable regulations. All excavated waste materials are anticipated to be disposed as solid waste and will be loaded directly into transport containers. No stockpiling of landfill debris will be conducted outside of the original boundaries of the excavation areas (leaching beds or settling tanks).

TABLE 5-7: BMP DESCRIPTION: CONSTRUCTION AND DOMESTIC WASTE	
Installation and Maintenance Schedule:	22 May 2015 Start – 15 September 2015 End (as needed)
Maintenance and Inspection:	• Weekly, as needed. • A member of the Pollution Prevention Team (listed in **Table 5-4**) will instruct employees and subcontractors on identification of solid waste and hazardous waste and proper disposal procedures, and encourage these procedures to be followed. • The Pollution Prevention Team will monitor waste storage and disposal procedures. • The Pollution Prevention Team will inspect the site for litter and debris.
Responsible Staff:	The Site Manager or any member of the Pollution Prevention Team.

5.3.6 Sanitary Waste

Two portable toilets, an eye wash station and a hand wash area will be available on site near the staging area of Parcel 21; away from drainage areas and traffic circulation. Upon delivery, portable toilets will be secured using stakes or straps to prevent the units from falling or being knocked over. These facilities will be provided by a local sanitary waste contractor and serviced as needed; weekly service is anticipated.

TABLE 5-8: BMP DESCRIPTION: SANITARY WASTE	
Installation and Maintenance Schedule:	22 May 2015 Start – 14 August 2015 End
Maintenance and Inspection:	• At a minimum, all portable toilets will be inspected and/or pumped when needed by no less frequently than every 7 days.
Responsible Staff:	The Site Manager.

5.3.7 Washing of Applicators and Containers used for Paint, Concrete or Other Materials

There will be no washout areas designated for paint or concrete for this project.

5.3.8 Fertilizers

No fertilizers will be used during implementation of this project.

6.0 INSPECTION AND CORRECTIVE ACTION

6.1 INSPECTION PERSONNEL AND PROCEDURES

All inspections will be performed by a 'qualified person' as defined in Part 4.1.1 of the CGP. For this project, the qualified person is the Site Manager or a qualified designee. The qualifications of the Site Manager are included in Appendix D. Inspections of the site will be performed once every 14 days and within 24 hours of the end of a storm event of one-quarter inch or greater. A rain gauge will be installed near the office trailer at Parcel 21 and maintained at the project site for determination of storm events. The inspections will verify that all BMPs and stabilized areas required in this SWPPP are implemented, maintained, and effectively minimizing erosion and preventing stormwater contamination from construction activities. Inspection reports will be maintained in Appendix I. During site operations, a copy of all inspection and corrective action reports will be maintained at the site; included a copy of this SWPPP. Once the project is complete, inspection reports will be maintained by ZAPATA as part of the project file for a period of at least 3 years from when the permit expires or is terminated.

6.2 CORRECTIVE ACTION

If, during the course of an inspection it is discovered that one of the prohibited discharges in Part 2.3.1 of the CGP is occurring or has occurred or the stormwater controls installed and being maintained are not effective enough for the discharge to meet applicable water quality standards or applicable requirements in Part 3.1 of the CGP, the EPA Regional Office will be notified by the end of the next work day. Notification will be submitted through EPA's electronic NOI system, or "eNOI", at the following web address:

http://water.epa.gov/polwaste/npdes/stormwater/EPAs-Electronic-Construction-General-Permit-Notice-of-Intent-eNOI-Home-Page.cfm.

If corrective actions are identified during the inspection, notification will be made by submission of a copy of the inspection report to the project construction manager. The corrective action will be initiated within 24 hours of the inspection report and completed as soon as practical or before the next storm event. For any corrective actions requiring a SWPPP amendment (see following section) or change to a stormwater conveyance or control design; these changes will be made within 7 days.

A corrective action log is contained in Appendix J of this SWPPP. This log will be used to describe repair, replacement, and maintenance of BMPs undertaken as a result of corrective actions and/or maintenance procedures. Actions related to the findings of inspections should reference the specific inspection report. This log will describe actions taken, date completed, and personnel that completed the work.

6.3 SWPPP AMENDMENTS

Changes and updates to this SWPPP are to be logged on the SWPPP Amendment Log contained in Appendix C. Changes logged should include additions of new BMPs, replacement of failed BMPs, significant changes in the activities or their timing on the project, changes in personnel, changes in inspection and maintenance procedures, and updates to site maps. All modifications to this SWPPP will be authorized by the person certifying this document in Section 8.0.

6.4 DELEGATION OF AUTHORITY

No delegation of authority is anticipated to apply to this project.

7.0 TRAINING

The Site Manager will be responsible for all SWPPP training. An employee training program for site workers will be developed and implemented to educate the field team about the requirements of this SWPPP. The education program will include background on the components and goals of the SWPPP, and hands-on training in erosion controls, spill prevention and response, good-housekeeping practices, proper material handling, disposal and control of wastes, equipment fueling, and proper storage and inspection procedures. A log sheet for documenting the training of construction employees on the requirements of this SWPPP is included in Appendix K. This log must be completed prior to commencement of construction activities. At a minimum, personnel will be trained to a level appropriate with their level of responsibility. Personnel installing stormwater controls shall be trained as to the appropriate location and construction of controls. Personnel responsible for maintenance activities will be trained in spill prevention and response. Personnel responsible for oversite of SWPPP activities will be trained to meet the requirements of this plan. On-site subcontractors assisting the ZAPATA field team will be required to sign the Certification Form in Appendix L.

8.0 CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: R SHANE SMITH Title: Project ENGINEER

Signature: [signature] Date: 2·12·15

9.0 REFERENCES

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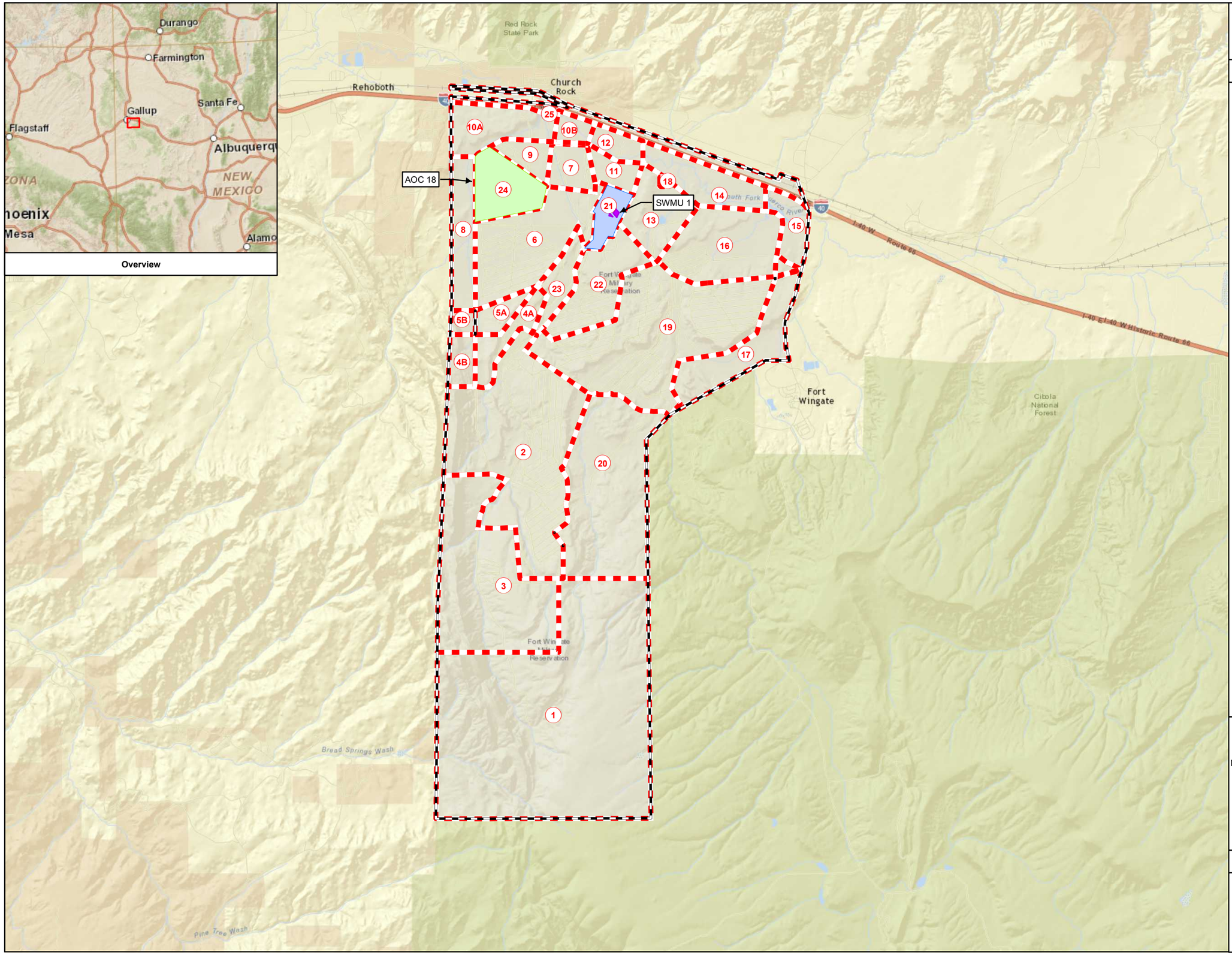
Overview



Installation Location Map & Parcel Designations
Parcel 21 & Parcel 24
Fort Wingate, NM

Project Number	Date	Figure
R20179	JANUARY 2015	1

KEY

- SWMU 1
- Parcel 21
- Parcel 24
- Parcel Boundary
- Installation Boundary

GN 0° 26' MN 9° 44'

0 3,250 6,500 Feet

Source(s)
ZAPATA, USACE, Esri

Projection
NAD 1983 StatePlane New Mexico West FIPS 3003 Feet
Note: Main Data Frame Rotated to True North

Note(s)
Engineering scale may only be accurate on a map size of 11 x 17

Magnetic Declination Date: 06/16/2014
Magnetic Declination Shifting by 0° 7' W per year

Checked By	Engineering Scale	Drawn By
SEM	1 " = 6,500 '	GIS Staff

US Army Corps of Engineers

Wingate #91
Wingate #90
Wingate #89
Fort Wingate Entrance
Administrative Area
FW26
Administrative Building #1
Access Control Gate
Borrow Source
TMW32
SWMU 1
TMW41
Stabilized Construction Entrance
Small Borrow Area
Parcel 21 Staging Area
Parcel 24 Staging Area
90-Day Storage Location
Stabilized Construction Entrance
10A
10B
25
12
14
9
7
11
18
24
21
13
8
6
22
23
16
PARKING AREA
PATROL ROAD
INTERSTATE HIGHWAY #40
WEST PATROL ROAD
CENTRAL ROAD
EAST FENCE
WEST FENCE
NORTH FENCE
SERVICE ROAD NO. 7
ARTERIAL ROAD NO. 1
SERVICE ROAD NO. 3
SERVICE ROAD NO. 2
SERVICE ROAD NO. 6
SERVICE ROAD NO. 4
SERVICE ROAD NO. 1
ARTERIAL ROAD
NORMAL MAIN AVE
KNUDSON ROAD
ARTERIAL ROAD NO. 5
A-1
A-2
A-3
A-4
A-5
A-6
A-7
A-8
A-9
A-10
A-11
A-54
B-1
B-2
B-3
B-4
B-5
B-6
O-13
6720
6760
6780
6800
6820
6840
6860

Topographic Map
Parcel 21 & Parcel 24
Fort Wingate, NM

Project Number	Date	Figure
R20179	JANUARY 2015	2

KEY

- Alluvial Monitoring Well Proposed for Abandonment
- Bedrock Monitoring Well Proposed for Abandonment
- Fence
- Stormwater Conveyance or Arroyo
- Road
- Topographic Contour (20 ft)
- Borrow Source
- Parcel 24
- Parcel 21
- SWMU 1 TNT Beds
- 90-Day Storage Location
- Parcel Boundary
- Water Body
- Installation Boundary

GN 0° 26' MN 9° 44'

0 600 1,200 Feet

Source(s)

ZAPATA, USACE, 2009 Color Infrared Aerial Photo

Projection

NAD 1983 StatePlane New Mexico West FIPS 3003 Feet
Note: Main Data Frame Rotated to True North

Note(s)

Engineering scale may only be accurate on a map size of 11 x 17

Magnetic Declination Date: 06/16/2014
Magnetic Declination Shifting by 0° 7' W per year

Checked By	Engineering Scale	Drawn By
SEM	1 " = 1,200 '	GIS Staff

US Army Corps of Engineers

Soils Map
Parcel 21 & Parcel 24
Fort Wingate, NM

Project Number	Date	Figure
R20179	JANUARY 2015	3

KEY

- Alluvial Monitoring Well Proposed for Abandonment
- Bedrock Monitoring Well Proposed for Abandonment
- Fence
- Stormwater Conveyance or Arroyo
- Road
- Borrow Source
- Parcel 24
- Parcel 21
- SWMU 1 TNT Beds
- 90-Day Storage Location
- Parcel Boundary
- Water Body
- Installation Boundary

Soil Type

- AQUIMA-HAWAIKUH SILT LOAM
- BAMAC EXTREMELY GRAVELLY SAND/LOAM
- CELAVAR-ATARQUE COMPLEX
- EVPARK-ARABRAB COMPLEX
- LAKE KNUDSON
- MIDO LOAMY FINE SAND
- OJOCAL SILT LOAM
- OJOCAL-VENADITO COMPLEX
- PLUMASANO - ROCK OUTCROP COMPLEX
- REHOBETH SILTY CLAY LOAM
- ROCK OUTCROP-RIZNO-TEKAPO COMPLEX
- ZIA SANDY LOAM

GN 0° 26' MN 9° 44'

0 600 1,200 Feet

Source(s)
ZAPATA, USACE, 2009 Color Infrared Aerial Photo

Projection
NAD 1983 StatePlane New Mexico West FIPS 3003 Feet
Note: Main Data Frame Rotated to True North

Note(s)
Engineering scale may only be accurate on a map size of 11 x 17

Magnetic Declination Date: 06/16/2014
Magnetic Declination Shifting by 0° 7' W per year

Checked By	Engineering Scale	Drawn By
SEM	1 " = 1,200 '	GIS Staff

US Army Corps of Engineers

Wingate #91
Wingate #90
Wingate #89
Fort Wingate Entrance
Administrative Area
FW26
Administrative Building #1
Access Control Gate
Borrow Source
TMW32
SWMU 1
TMW41
Small Borrow Area
Parcel 21 Staging Area
Parcel 24 Staging Area
90-Day Storage Location
PLUMASANO - ROCK OUTCROP COMPLEX
OJOCAL SILT LOAM
OJOCAL-VENADITO COMPLEX
ZIA SANDY LOAM
AQUIMA-HAWAIKUH SILT LOAM
BAMAC EXTREMELY GRAVELLY SAND/LOAM
ROCK OUTCROP-RIZNO-TEKAPO COMPLEX
INTERSTATE HIGHWAY #40
PARKING AREA
WEST PATROL ROAD
EAST PATROL ROAD
ARTERIAL ROAD
ARTERIAL ROAD NO. 1
ARTERIAL ROAD NO. 5
SERVICE ROAD NO. 2
SERVICE ROAD NO. 3
SERVICE ROAD NO. 6
SERVICE ROAD NO. 7
NORMAL MAIN AVE
KNUDSON ROAD
NORTH FENCE
WEST FENCE
A-1 A-2 A-3 A-4 A-5 A-6 A-7 A-8 A-9 A-10 A-11
B-1 B-2 B-3 B-4 B-5 B-6
A-5A
O-13
10A 10B 9 25 12 14 11 7 18 24 8 6 21 13 22 23 16

Geologic Map
Parcel 21 & Parcel 24
Fort Wingate, NM

Project Number	Date	Figure
R20179	JANUARY 2015	4

KEY

- Alluvial Monitoring Well Proposed for Abandonment
- Bedrock Monitoring Well Proposed for Abandonment
- Fence
- Stormwater Conveyance or Arroyo
- Road
- Borrow Source
- Parcel 24
- Parcel 21
- SWMU 1 TNT Beds
- 90-Day Storage Location
- Parcel Boundary
- Water Body
- Installation Boundary
- OWL ROCK FORMATION
- PETRIFIED FOREST - PAINTED DESERT
- QUATERNARY ALLUVIAL DEPOSITS
- QUATERNARY GRAVEL

GN 0° 26' MN 9° 44'

0 600 1,200 Feet

Source(s)
ZAPATA, USACE, 2009 Color Infrared Aerial Photo

Projection
NAD 1983 StatePlane New Mexico West FIPS 3003 Feet
Note: Main Data Frame Rotated to True North

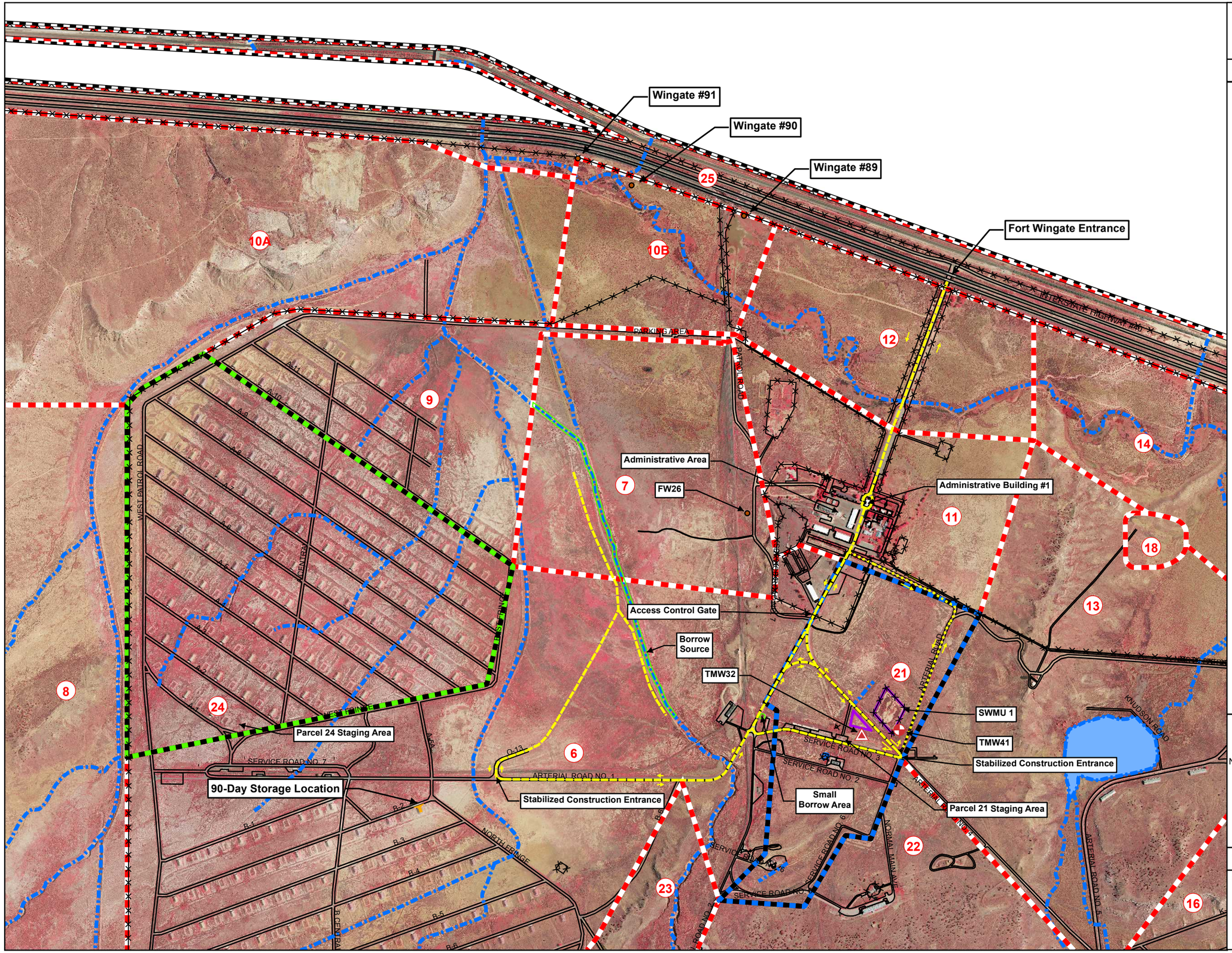
Note(s)
Engineering scale may only be accurate on a map size of 11 x 17

Magnetic Declination Date: 06/16/2014
Magnetic Declination Shifting by 0° 7' W per year

Checked By	Engineering Scale	Drawn By
SEM	1 " = 1,200 '	GIS Staff

US Army Corps of Engineers

Wingate #91
Wingate #90
Wingate #89
Fort Wingate Entrance
Administrative Area
Administrative Building #1
FW26
Access Control Gate
Borrow Source
TMW32
SWMU 1
TMW41
Small Borrow Area
Parcel 21 Staging Area
Parcel 24 Staging Area
90-Day Storage Location
QUATERNARY ALLUVIAL DEPOSITS
QUATERNARY GRAVEL
PETRIFIED FOREST FORMATION - PAINTED DESERT MEMBER
INTERSTATE HIGHWAY #40
WEST PATROL ROAD
PATROL ROAD
ARTERIAL ROAD
ARTERIAL ROAD NO. 1
ARTERIAL ROAD NO. 2
ARTERIAL ROAD NO. 4
ARTERIAL ROAD NO. 5
SERVICE ROAD NO. 2
SERVICE ROAD NO. 3
SERVICE ROAD NO. 4
SERVICE ROAD NO. 6
SERVICE ROAD NO. 7
NORMAL MAIN AVENUE
KNUDSON ROAD
NORTH FENCE
WEST FENCE
10A
10B
9
8
7
6
25
24
23
22
21
18
16
14
13
12
11
A-1
A-2
A-3
A-4
A-5
A-6
A-7
A-8
A-9
A-10
A-11
A-5A
B-1
B-2
B-3
B-4
B-5
B-6
O-13



Site Location & Access Routes
Parcel 21 & Parcel 24
Fort Wingate, NM

Project Number	Date	Figure
R20179	JANUARY 2015	5

KEY

- Alluvial Monitoring Well Proposed for Abandonment
- Bedrock Monitoring Well Proposed for Abandonment
- Fence
- Traffic Flow Direction
- Access (Haul) Route
- Alternate Access (Haul) Route
- Stormwater Conveyance or Arroyo
- Road
- Borrow Source
- Parcel 24
- Parcel 21
- SWMU 1 TNT Beds
- 90-Day Storage Location
- Parcel Boundary
- Water Body
- Installation Boundary

GN 0° 26' MN 9° 44'

0 600 1,200 Feet

Source(s)
ZAPATA, USACE, 2009 Color Infrared Aerial Photo

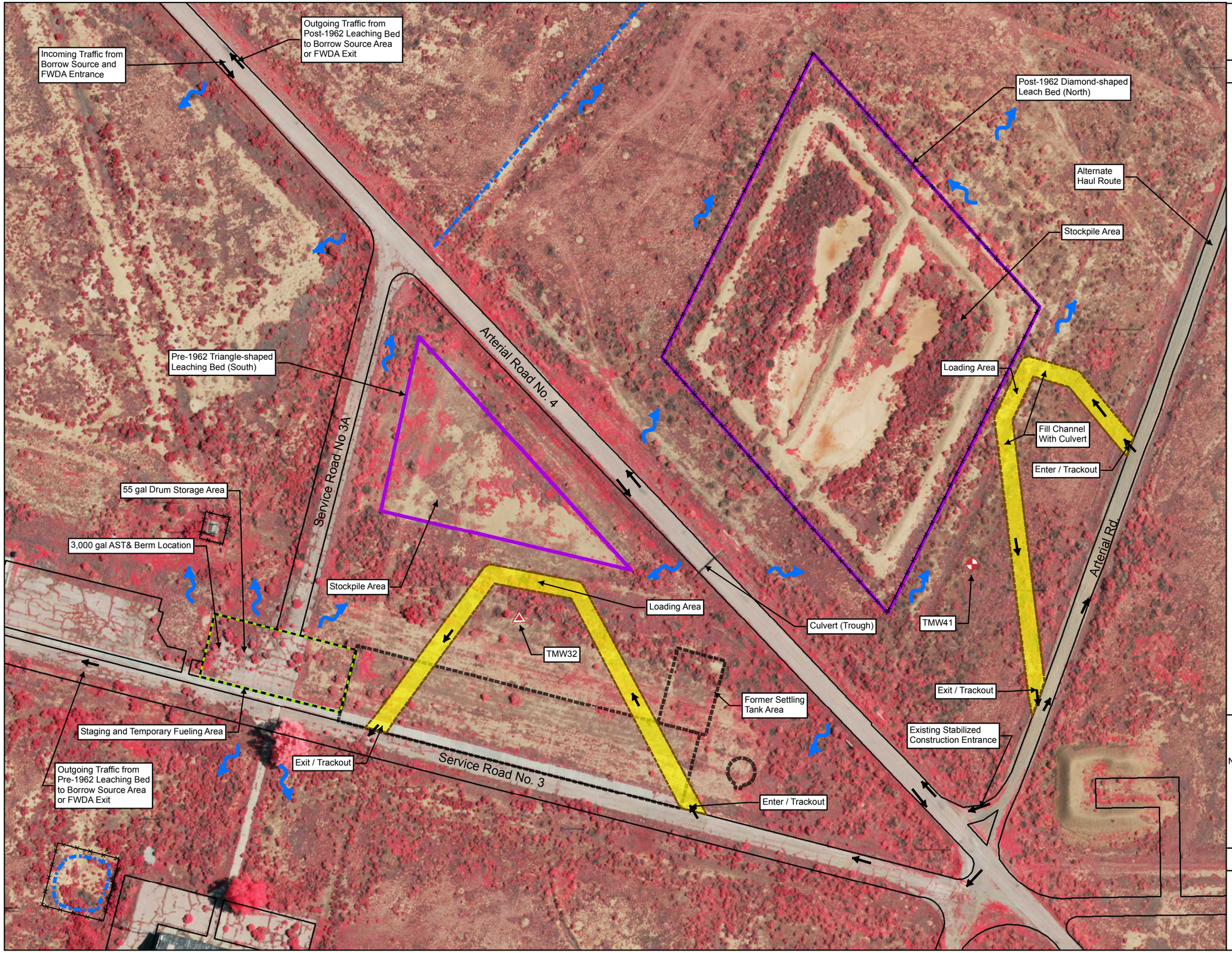
Projection
NAD 1983 StatePlane New Mexico West FIPS 3003 Feet
Note: Main Data Frame Rotated to True North

Note(s)
Engineering scale may only be accurate on a map size of 11 x 17

Magnetic Declination Date: 06/16/2014
Magnetic Declination Shifting by 0° 7' W per year

Checked By	Engineering Scale	Drawn By
SEM	1 " = 1,200 '	GIS Staff

US Army Corps of Engineers



Parcel 21 - SWMU 1
Base Map
Fort Wingate, NM

Project Number	Date	Figure
R20179	JANUARY 2015	6

KEY

- General Flow / Draining Direction
- Alluvial Monitoring Well Proposed for Abandonment
- Bedrock Monitoring Well Proposed for Abandonment
- Traffic Flow Direction
- Fence
- Stormwater Conveyance or Arroyo
- Road
- Temporary Access Road
- Staging & Temporary Fueling Location
- Former Structure
- SWMU 1 Boundary

GN 0° 26' MN 9° 44'

0 50 100 Feet

Source(s)
ZAPATA, USACE, 2009 Color Infrared Aerial Photo

Projection
NAD 1983 StatePlane New Mexico West FIPS 3003 Feet
Note: Main Data Frame Rotated to True North

Note(s)
Engineering scale may only be accurate on a map size of 11 x 17

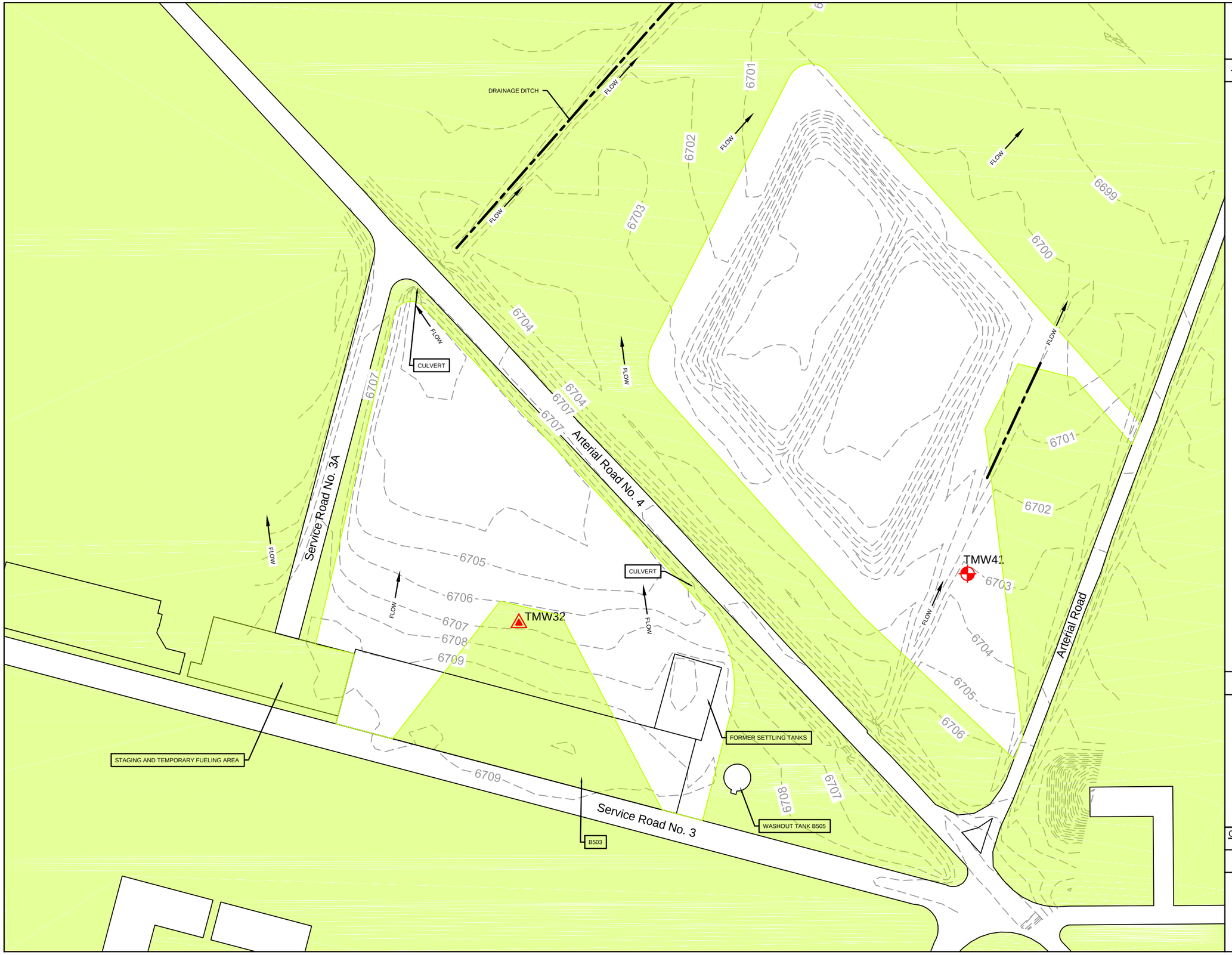
Magnetic Declination Date: 06/16/2014
Magnetic Declination Shifting by 0° 7' W per year

Checked By	Engineering Scale	Drawn By
SEM	1 " = 100 '	GIS Staff

US Army Corps of Engineers

Baseline Topography
Parcel 21 - SWMU 1
Fort Wingate, NM

Project Number	Date	Figure
R20179	November 2014	7



KEY

- Alluvial Monitoring Well Proposed for Abandonment
- Bedrock Monitoring Well Proposed for Abandonment
- 6700 Existing Topographic Contour (1ft)
- 6700 Proposed Topographic Contour (1ft)
- Drainage Ditch
- Natural Buffer Boundary Consisting of Native Grasses and Scrub Brush
- Surface Water Flow Direction

GRAPHIC SCALE
1" = 100'

0 50' 100' 200'

Source(s)
ZAPATA, USACE

Projection
NAD 1983 State Plane New Mexico FIPS 3003 Feet
Note: Main Data Frame Rotated to True North

Note(s)
Engineering scale may only be accurate on a map size of 11 x 17

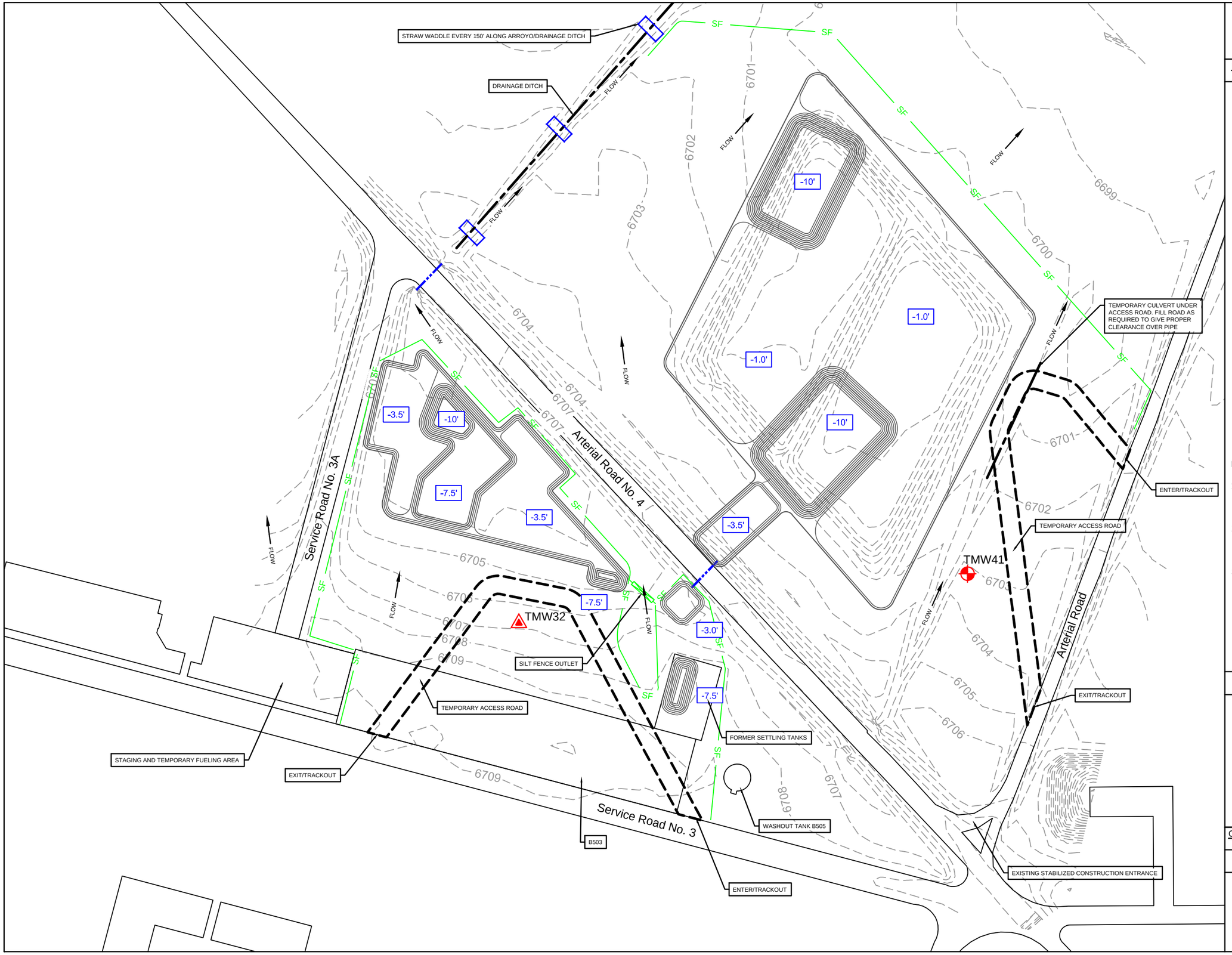
Magentic Declination date: 06/16/14
Magnetic Declination Shifting by 0° 7' W per year

Checked By	Engineering Scale	Drawn By
RSS	1" = 100'	JRM

US Army Corps of Engineers

Excavation Plan with BMPs
Parcel 21 - SWMU 1
Fort Wingate, NM

Project Number	Date	Figure
R20179	November 2014	8



KEY

- Alluvial Monitoring Well Proposed for Abandonment
- Bedrock Monitoring Well Proposed for Abandonment
- 6700 Existing Topographic Contour (1ft)
- 6700 Proposed Topographic Contour (1ft)
- Drainage Ditch
- Temporary Access Road
- Surface Water Flow Direction
- SF Silt Fence
- Straw Waddle
- -1.0' Excavation Depth

Notes:

1. Excavation Plan assumes a maximum excavation depth of 10' is required in certain areas.
2. In areas of potential concentrated flow a silt fence outlet shall be installed to reduce blowouts.
3. Areas excavated to a depth of ≥ 4' or greater will use a maximum slope of 1.5:1.

GRAPHIC SCALE
1" = 100'

0 50' 100' 200'

Source(s)
ZAPATA, USACE

Projection
NAD 1983 State Plane New Mexico FIPS 3003 Feet
Note: Main Data Frame Rotated to True North

Note(s)
Engineering scale may only be accurate on a map size of 11 x 17

Magentic Declination date: 06/16/14
Magnetic Declination Shifting by 0° 7' W per year

Checked By	Engineering Scale	Drawn By
RSS	1" = 100'	JRM

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Backfill and Final Grading Plan
Parcel 21 - SWMU 1
Fort Wingate, NM

Project Number	Date	Figure
R20179	November 2014	9

DRAINAGE DITCH

EXCAVATED AREAS TO BE FILLED TO A HEIGHT OF 1' ABOVE EXISTING GRADE AND SLOPED FOR POSITIVE DRAINAGE. SIDE SLOPES NOT TO EXCEED 2:1 (TYPICAL OF 3 AREAS)

FLOW

6699
6700
6701
6702
6703
6704
6705
6706
6707
6708
6709

Service Road No. 3A

Arterial Road No. 4

Arterial Road

Service Road No. 3

TMW32

TMW41

FORMER SETTLING TANKS

WASHOUT TANK B505

B503

KEY

- Alluvial Monitoring Well Proposed for Abandonment
- Bedrock Monitoring Well Proposed for Abandonment
- 6700 Existing Topographic Contour (1ft)
- 6700 Proposed Topographic Contour (1ft)
- Arroyo/Drainage Ditch
- Surface Water Flow Direction

GRAPHIC SCALE
1" = 100'
0 50' 100' 200'

Source(s)
ZAPATA, USACE

Projection
NAD 1983 State Plane New Mexico FIPS 3003 Feet
Note: Main Data Frame Rotated to True North

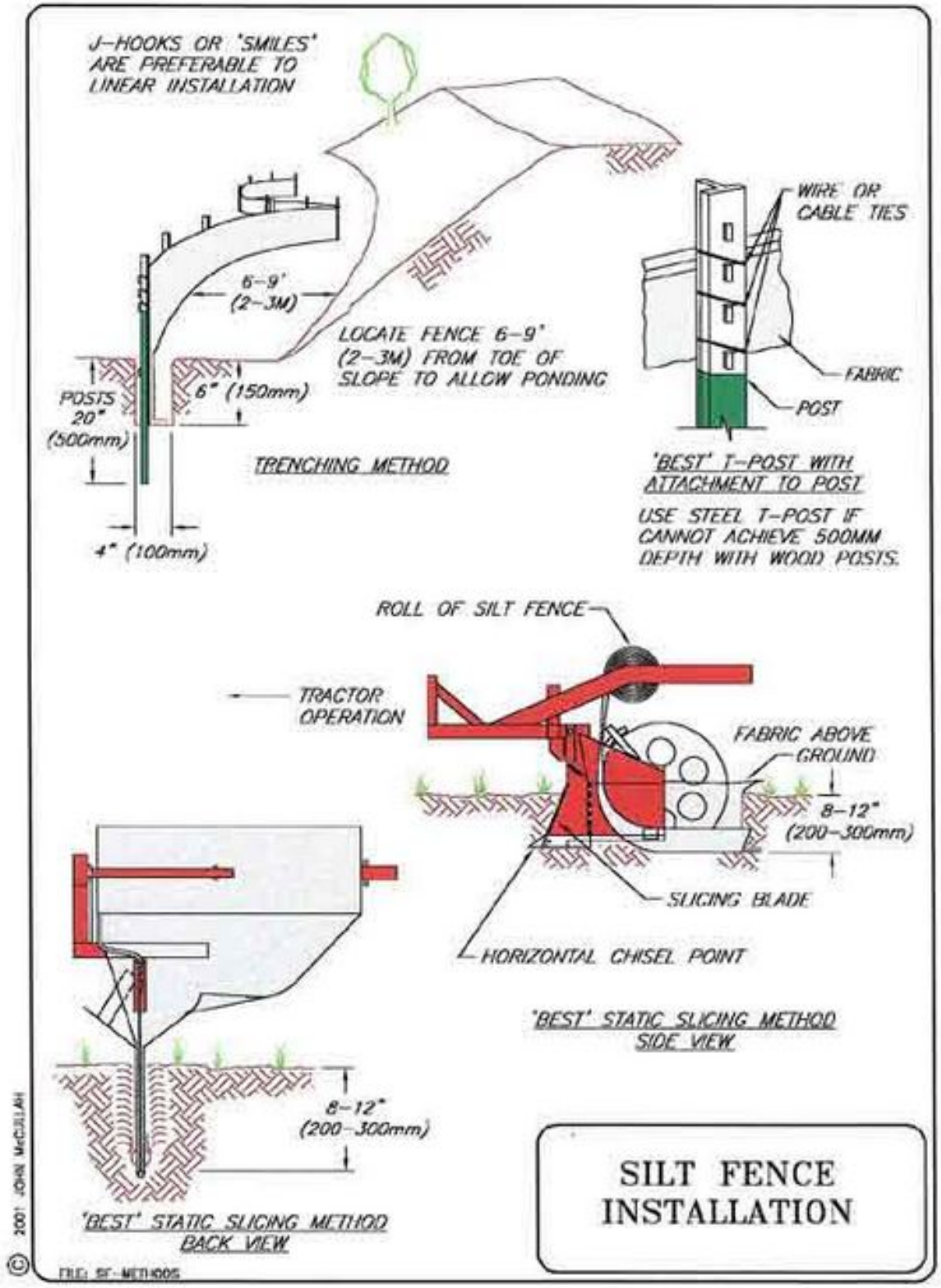
Note(s)
Engineering scale may only be accurate on a map size of 11 x 17

Magentic Declination date: 06/16/14
Magnetic Declination Shifting by 0° 7' W per year

Checked By	Engineering Scale	Drawn By
RSS	1" = 100'	JRM

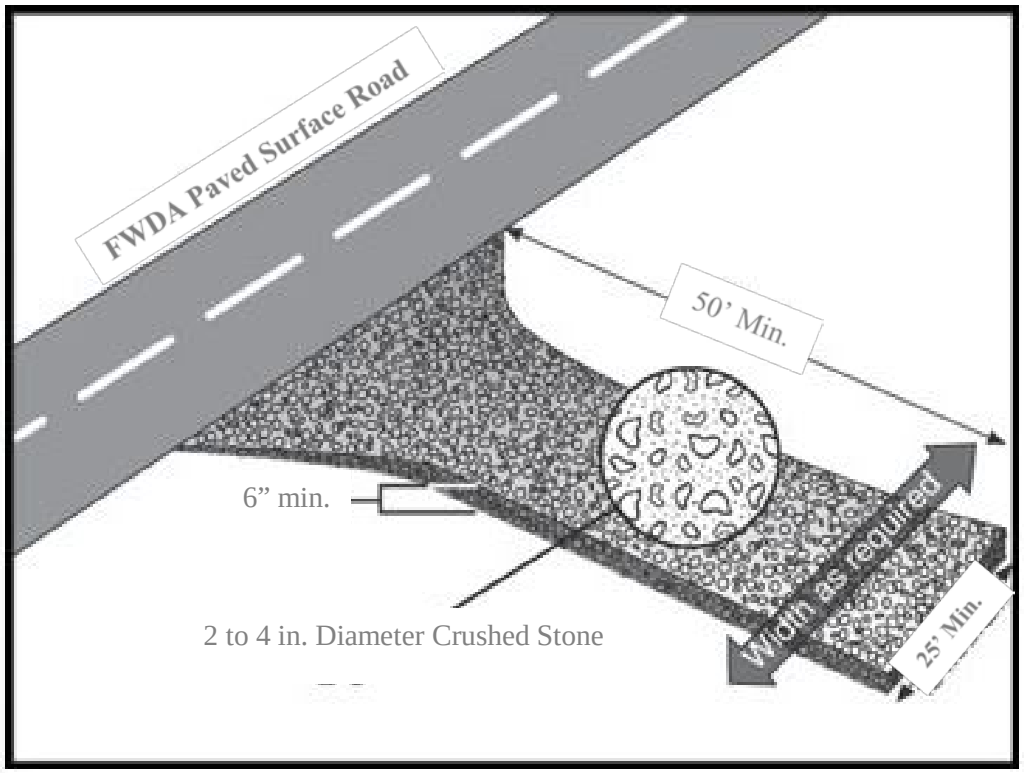
US Army Corps of Engineers

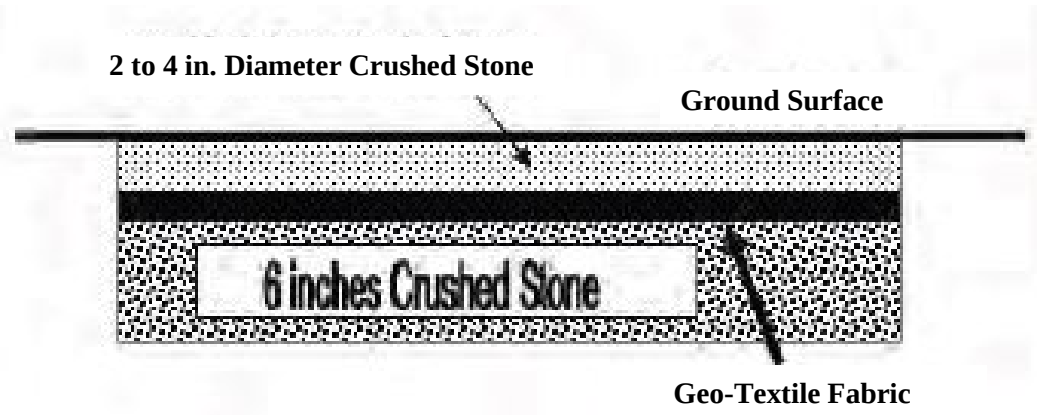
FIGURE 10 SILT FENCE INSTALLATION DETAILS



Source: http://www.salixaec.com/images/SFInstall.jpg

FIGURE 11 STABILIZED CONSTRUCTION ENTRANCE DETAILS





APPENDIX A

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT FOR DISCHARGES FROM CONSTRUCTION ACTIVITIES, DATED FEBRUARY 16, 2012

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National Pollutant Discharge Elimination System
General Permit for Discharges from
Construction Activities

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 et. seq., (hereafter CWA or the Act), as amended by the Water Quality Act of 1987, P.L. 100-4, "operators" of construction activities (defined in Part 1.1.a and Appendix A) that meet the requirements of Part 1.1 of this National Pollutant Discharge Elimination System (NPDES) general permit, are authorized to discharge pollutants in accordance with the effluent limitations and conditions set forth herein. Permit coverage is required from the "commencement of earth-disturbing activities" (see Appendix A) until "final stabilization" (see Part 2.2).

This permit becomes effective on **February 16, 2012**. For the State of Idaho (except for Indian country), this permit becomes effective on **April 9, 2012**. For areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, this permit becomes effective on **April 13, 2012**. For projects located in the following areas, this permit becomes effective on **May 9, 2012**: Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

This permit and the authorization to discharge expire at midnight, **February 16, 2017**.

Signed and issued this 16th day of February, 2012

H. Curtis Spalding
Regional Administrator, Region 1

Signed and issued this 16th day of February, 2012

William K. Honker, P.E.
Acting Director, Water Quality Protection Division, Region 6

Signed and issued this 16th day of February, 2012

John Filippelli
Director, Division of Environmental Planning & Protection, Region 2

Signed and issued this 16th day of February, 2012

Karen Flournoy
Director, Wetlands and Pesticides Division, Region 7

Signed and issued this 16th day of February, 2012

José C. Font
Acting Division Director, Carribbean Environmental Protection Division, Region 2, Caribbean Office

Signed and issued this 16th day of February, 2012

Melanie L. Pallman
Acting Assistant Regional Administrator, Office of Partneships and Regulatory Assistance, Region 8

Signed and issued this 16th day of February, 2012

Catherine A. Libertz
Assistant Director, Water Protection Division, Region 3

Signed and issued this 16th day of February, 2012

Nancy Woo
Deputy Director, Water Division, Region 9

Signed and issued this 16th day of February, 2012

James D. Giattina
Director, Water Protection Division, Region 4

Signed and issued this 16th day of February and 9th day of April, 2012

Michael J. Lidgard
Acting Director, Office of Water and Watersheds, Region 10

Signed and issued this 16th day of February and 9th day of May, 2012

Tinka G. Hyde
Director, Water Division, Region 5

Signed and issued this 13th day of April, 2012

Christine Psyk
Associate Director, Office of Water and Watersheds, Region 10

The signatures are for the permit conditions in Parts 1 through 9 and Appendices A through K.

CONTENTS

1. HOW TO OBTAIN PERMIT COVERAGE UNDER THE CGP.

To be covered under this permit, you must meet the eligibility conditions and follow the requirements for applying for permit coverage in this Part.

1.1. ELIGIBILITY CONDITIONS REQUIRED OF ALL PROJECTS.

Only those projects that meet all of the following eligibility conditions may be covered under this permit:

a. You are an "operator" of the construction project for which discharges will be covered under this permit;

Note: For the purposes of this permit, an "operator" is any party associated with a construction project that meets either of the following two criteria:

1. *The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or*
2. *The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the permit).*

Subcontractors generally are not considered operators for the purposes of this permit.

Note: Where there are multiple operators associated with the same project, all operators are required to obtain permit coverage. The following applies in these situations:

1. *If one operator has control over plans and specifications and a different operator has control over activities at the project site, they may divide responsibility for compliance with the terms of this permit as long as they develop a group SWPPP (see Part 7.1.1), which documents which operator has responsibility for each requirement of the permit.*
2. *If an operator only has operational control over a portion of a larger project (e.g., one of four homebuilders in a subdivision), the operator is responsible for compliance with all applicable effluent limits, terms, and conditions of this permit as it relates to the activities on their portion of the construction site, including protection of endangered species, critical habitat, and historic properties, and implementation of control measures described in the SWPPP in the areas under their control.*
3. *You must ensure either directly or through coordination with other permittees, that your activities do not render another party's pollutant discharge controls ineffective.*
4. *If the operator of a "construction support activity" (see Part 1.3.c) is different than the operator of the main construction site, that operator is also required to obtain permit coverage.*

b. Your project:

i. Will disturb 1 or more acres of land, or will disturb less than 1 acre of land but is part of a common plan of development or sale that will ultimately disturb 1 or more acres of land; or

ii. Your project's discharges have been designated by EPA as needing a permit under § 122.26(a)(1)(v) or § 122.26(b)(15)(ii);

c. Your project is located in an area where EPA is the permitting authority (see Appendix B);

d. Discharges from your project are not:

   i. Already covered by a different NPDES permit for the same discharge; or

   ii. In the process of having coverage under a different NPDES permit for the same discharge denied, terminated, or revoked.[1, 2]

e. You are able to demonstrate that you meet one of the criteria listed in Appendix D with respect to the protection of species that are federally-listed as endangered or threatened under the Endangered Species Act (ESA) or federally-designated critical habitat;

f. You have completed the screening process in Appendix E relating to the protection of historic properties and places; and

g. You have complied with all requirements in Part 9 imposed by the applicable state, Indian tribe, or territory in which your construction activities will occur.

1.2. ELIGIBILITY CONDITIONS THAT APPLY DEPENDING ON TYPE OF PROJECT.

You must also satisfy, if applicable, the conditions in Parts 1.2.1 through 1.2.4 in order to obtain coverage under this permit.

1.2.1. Eligibility for Emergency-Related Construction Activities.

If you are conducting earth-disturbing activities in response to a public emergency *(e.g., natural disaster, widespread disruption in essential public services)*, and the related work requires immediate authorization to avoid imminent endangerment to human health, public safety, or the environment, or to reestablish essential public services, you are authorized to discharge on the condition that a complete and accurate NOI is submitted within 30 calendar days after commencing earth-disturbing activities (see Table 1) establishing that you are eligible under this permit. You are also required to provide documentation in your SWPPP to substantiate the occurrence of the public emergency.

1.2.2. Water Quality Standards – Eligibility for New Sources.

If you are a "new source" (as defined in Appendix A), you are not eligible for coverage under this permit for discharges that EPA, prior to authorization under this permit, determines will cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. Where such a determination is made prior to authorization, EPA may notify you that an individual permit application is necessary in accordance with Part 1.4.5. However, EPA may authorize your coverage under this permit after you have included appropriate controls and implementation procedures designed to bring your discharge into compliance with water quality standards. In the absence of information demonstrating otherwise, EPA expects that compliance with the stormwater control requirements of this permit, including the requirements applicable to such discharges in Part 3.2, will result in discharges that will not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.

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[1] Parts 1.1.d.i and 1.1.d.ii do not include sites currently covered under the 2003 or 2008 CGPs, which are in the process of obtaining coverage under this permit, and sites covered under this permit, which are transferring coverage to a different operator.

[2] Notwithstanding a project being made ineligible for coverage under this permit because it falls under the description of Parts 1.1.d.i or 1.1.d.ii, above, EPA may waive the applicable requirement after specific review if it determines that coverage under this permit is appropriate.

1.2.3. Discharging to Waters with High Water Quality – Eligibility for New Sources.

If you are a "new source" (as defined in Appendix A), you are eligible to discharge to a Tier 2, Tier 2.5, or Tier 3 water only if your discharge will not lower the water quality of the applicable water. In the absence of information demonstrating otherwise, EPA expects that compliance with the stormwater control requirements of this permit, including the requirements applicable to such discharges in Part 3.3.2, will result in discharges that will not lower the water quality of the applicable water. See list of Tier 2, Tier 2.5, and Tier 3 waters in Appendix F.

Note: Your project will be considered to discharge to a Tier 2, Tier 2.5, or Tier 3 water if the first surface water to which you discharge is identified by a state, tribe, or EPA as a Tier 2, Tier 2.5, or Tier 3 water. For discharges that enter a storm sewer system prior to discharge, the first surface water to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system.

1.2.4. Use of Cationic Treatment Chemicals.

If you plan to use cationic treatment chemicals (as defined in Appendix A), you are ineligible for coverage under this permit, unless you notify your applicable EPA Regional Office in advance and the EPA office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

1.3. Types of Discharges Authorized Under the CGP.

The following is a list of discharges that are allowed under the permit provided that appropriate stormwater controls are designed, installed, and maintained:

a. Stormwater discharges, including stormwater runoff, snowmelt runoff, and surface runoff and drainage, associated with construction activity under 40 CFR § 122.26(b)(14) or § 122.26(b)(15)(i);

b. Stormwater discharges designated by EPA as needing a permit under 40 CFR § 122.26(a)(1)(v) or § 122.26(b)(15)(ii);

c. Stormwater discharges from construction support activities *(e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas)* provided:

   i. The support activity is directly related to the construction site required to have permit coverage for stormwater discharges;

   ii. The support activity is not a commercial operation, nor does it serve multiple unrelated construction projects;

   iii. The support activity does not continue to operate beyond the completion of the construction activity at the project it supports; and

   iv. Stormwater controls are implemented in accordance with Part 2 and, if applicable, Part 3, for discharges from the support activity areas.

d. The following non-stormwater discharges from your construction activity, provided that, with the exception of water used to control dust and to irrigate areas to be vegetatively stabilized, these discharges are not routed to areas of exposed soil on your site and you comply with any applicable requirements for these discharges in Part 2:

   i. Discharges from emergency fire-fighting activities;

ii. Fire hydrant flushings;

iii. Landscape irrigation;

iv. Water used to wash vehicles and equipment, provided that there is no discharge of soaps, solvents, or detergents used for such purposes;

v. Water used to control dust;

vi. Potable water including uncontaminated water line flushings;

vii. Routine external building washdown that does not use detergents;

viii. Pavement wash waters provided spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used. You are prohibited from directing pavement wash waters directly into any surface water, storm drain inlet, or stormwater conveyance, unless the conveyance is connected to a sediment basin, sediment trap, or similarly effective control;

ix. Uncontaminated air conditioning or compressor condensate;

x. Uncontaminated, non-turbid discharges of ground water or spring water;

xi. Foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated ground water; and

xii. Construction dewatering water that has been treated by an appropriate control under Part 2.1.3.4; and

e. Discharges of stormwater listed above in Parts a, b, and c, or authorized non-stormwater discharges in Part d above, commingled with a discharge authorized by a different NPDES permit and/or a discharge that does not require NPDES permit authorization.

1.4. SUBMITTING YOUR NOTICE OF INTENT (NOI).

To be covered under this permit, you must submit to EPA a complete and accurate NOI prior to commencing construction activities. The NOI certifies to EPA that you are eligible for coverage according to Part 1.1 and 1.2, and provides information on your construction operation and discharge.

Note: All "operators" (as defined in Appendix A) associated with your construction project, who meet the Part 1.1 eligibility requirements, and who elect to seek coverage under this permit, are required to submit an NOI.

Note: There are two exceptions to the requirement to submit the NOI prior to the commencement of construction activities: (1) for emergency-related projects, and (2) for new projects scheduled to commence construction activities on or after February 16, 2012, but no later than March 1, 2012. [3] *For these two types of projects, the NOI*

[3] For new projects in the State of Idaho (except Indian country), if you are scheduled to commence construction activities on or after April 9, 2012, but no later than May 9, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. For new projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, if you are scheduled to commence construction activities on or after April 13, 2012, but no later than May 13, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. For new projects in the following areas, if you are schedule to commence construction activities on or after May 9, 2012, but no later than June 8, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

must be submitted within 30 calendar days after the commencement of earth-disturbing activities (see Part 1.4.2).

Note: You must complete the development of a Stormwater Pollution Prevention Plan (SWPPP) consistent with Part 7 prior to submitting your NOI for coverage under this permit.

1.4.1. How to Submit Your NOI.

You are required to use EPA's electronic NOI system, or "eNOI system", to prepare and submit your NOI. Go to www.epa.gov/npdes/stormwater/cgpenoi to access the eNOI system and file an NOI. If you have a problem with the use of the eNOI system, contact the EPA Regional Office that corresponds to the location of your site. If you are given approval by the EPA Regional Office to use a paper NOI, and you elect to use it, you must complete the form in Appendix J.

1.4.2. Deadlines for Submitting Your NOI and Your Official Date of Permit Coverage.

Table 1 provides the deadlines for submitting your NOI and your official start date of permit coverage, which differ depending on when you commence construction activities. The following terms are used in Table 1 to establish NOI deadlines:

a. New project – a construction project that commences construction activities on or after February 16, 2012, or or April 9, 2012 for the State of Idaho (except for Indian country), or April 13, 2012 for areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

b. Existing project – a construction project that commenced construction activities prior to February 16, 2012, or April 9, 2012 for the State of Idaho (except for Indian country), or April 13, 2012 for areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

c. New operator of a new or existing project – an operator that through transfer of ownership and/or operation replaces the operator of an already permitted construction project.

Table 1 NOI Submittal Deadlines and Official Start Date for Permit Coverage.

Type of Construction Project	Deadlines for Operators to Submit NOI	Official Start Date for Permit Coverage
New project	You must submit your NOI at least 14 calendar days prior to commencing earth-disturbing activities. *Exception:* If your project qualifies as an "emergency-related project" under Part 1.2.1, you must submit your NOI by no later than 30 calendar days after commencing	You are considered covered under this permit 14 calendar days after EPA has acknowledged receipt of your NOI on the Agency's website (www.epa.gov/npdes/stormwater/cgpnoisearch), unless EPA notifies you that your authorization has been delayed or denied. *Exception:* If your project qualifies as

Type of Construction Project	Deadlines for Operators to Submit NOI	Official Start Date for Permit Coverage
	earth-disturbing activities. *Exception:* If you are scheduled to commence construction activities on or after February 16, 2012, but no later than March 1, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities.[4]	an "emergency-related project" under Part 1.2.1, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied. *Exception:* If you are scheduled to commence construction activities on or after February 16, 2012, but no later than March 1, 2012, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied.[5]

[4] For new projects in the State of Idaho (except Indian country), if you are scheduled to commence construction activities on or after April 9, 2012, but no later than May 9, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. For new projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, if you are scheduled to commence construction activities on or after April 13, 2012, but no later than May 13, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. For new projects located in the following areas, if you are scheduled to commence construction activities on or after May 9, 2012, but no later than June 8, 2012, you must submit your NOI by no later than 30 days after commencing earth-disturbing activities: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

[5] For new projects in the State of Idaho (except Indian country), if you are scheduled to commence construction activities on or after April 9, 2012, but no later than May 9, 2012, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied. For new projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, if you are scheduled to commence construction activities on or after April 13, 2012, but no later than May 13, 2012, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied. For new projects located in the following areas, if you are scheduled to commence construction activities on or after May 9, 2012, but no later than June 8, 2012, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

Type of Construction Project	Deadlines for Operators to Submit NOI	Official Start Date for Permit Coverage
Existing project	You must submit your NOI by no later than May 16, 2012.[6] However, if you have not previously obtained coverage under an NPDES permit, you must submit your NOI immediately.	You are considered covered under this permit 14 calendar days after EPA has acknowledged receipt of your NOI on the Agency's website (www.epa.gov/npdes/stormwater/cgpnoisearch), unless EPA notifies you that your authorization has been delayed or denied.[7]
New operator of a new or existing project	You must submit your NOI at least 14 calendar days before the date the transfer to the new operator will take place.	You are considered covered under this permit 14 calendar days after EPA has acknowledged receipt of your NOI on the Agency's website (www.epa.gov/npdes/stormwater/cgpnoisearch), unless EPA notifies you that your authorization has been delayed or denied.

Note: If you have missed the deadline to submit your NOI, any and all discharges from your construction activities will continue to be unauthorized under the Clean Water Act until they are covered by this or a different NPDES permit. EPA may take enforcement action for any unpermitted discharges that occur between the commencement of earth-disturbing activities and discharge authorization.

Note: Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage.

1.4.3. Your Official End Date of Permit Coverage

Once covered under this permit, your coverage will last until the date that:

- You terminate permit coverage consistent with Part 8; or
- Your discharges are permitted under a different NPDES permit or a reissued or replacement version of this permit after expiring on February 16, 2017; or
- For existing projects that continue after this permit has expired, the deadline has passed for the submission of an NOI for coverage under a reissued or replacement version of this permit and you have failed to submit an NOI by the required deadline.

1.4.4. Continuation of Coverage for Existing Permittees After the Permit Expires.

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and

[6] For existing projects located in the State of Idaho (except Indian country), NOIs must be submitted by no later than July 8, 2012. For existing projects located in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, NOIs must be submitted by no later than July 12, 2012. For existing projects located in the following areas, NOIs must be submitted no later than August 7, 2012: the Fond Du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac Du Flambeau Band of Lake Superior Chippewa in Wisconsin.

[7] Note that if you are currently covered under the 2003 or 2008 CGP, this coverage continues until your coverage under this permit begins, provided you have submitted an NOI by the deadline.

remain in force and effect for discharges that were covered prior to expiration. If you were granted permit coverage prior to the expiration date, you will automatically remain covered by this permit until the earliest of:

- Your authorization for coverage under a reissued or replacement version of this permit following your timely submittal of a complete and accurate NOI requesting coverage under the new permit; or

  Note: If you fail to submit a timely NOI for coverage under the reissued or replacement permit, your coverage will terminate on the date that the NOI was due.

- Your submittal of a Notice of Termination; or
- Issuance or denial of an individual permit for the project's discharges; or
- A final permit decision by EPA not to reissue a general permit, at which time EPA will identify a reasonable time period for covered dischargers to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will terminate at the end of this time period.

EPA reserves the right to modify or revoke and reissue this permit under 40 CFR 122.62 and 63, in which case you will be notified of any relevant changes or procedures to which you may be subject.

1.4.5. Procedures for Denial of Coverage.

Following your submittal of a complete and accurate NOI, you may be notified in writing by EPA that you are not covered, and that you must either apply for and/or obtain coverage under an individual NPDES permit or an alternate general NPDES permit. This notification will include a brief statement of the reasons for this decision and will provide application information. Any interested person may request that EPA consider requiring an individual permit under this paragraph.

If you are already a permittee with coverage under this permit, the notice will set a deadline to file the permit application, and will include a statement that on the effective date of the individual NPDES permit or alternate general NPDES permit, as it applies to you, coverage under this general permit will terminate. EPA may grant additional time to submit the application if you request it. If you are covered under this permit and fail to submit an individual NPDES permit application or an NOI for an alternate general NPDES permit as required by EPA, then the applicability of this permit to you is terminated at the end of the day specified by EPA as the deadline for application submittal. EPA may take appropriate enforcement action for any unpermitted discharge. If you submit a timely permit application, then when an individual NPDES permit is issued to you or you are provided with coverage under an alternate general NPDES permit, your coverage under this permit is terminated on the effective date of the individual permit or date of coverage under the alternate general permit.

1.5. REQUIREMENT TO POST A NOTICE OF YOUR PERMIT COVERAGE.

You must post a sign or other notice conspicuously at a safe, publicly accessible location in close proximity to the project site. At a minimum, the notice must include the NPDES Permit tracking number and a contact name and phone number for obtaining additional project information. The notice must be located so that it is visible from the public road that is nearest to the active part of the construction site, and it must use a font large enough to be readily viewed from a public right-of-way.

2. EFFLUENT LIMITATIONS APPLICABLE TO ALL DISCHARGES FROM CONSTRUCTION SITES

You are required to comply with the following effluent limitations in this Part for discharges from your site and/or from construction support activities (see Part 1.3.c).

Note: If your project is an "existing project" (see Part 1.4.2.b) or if you are a "new operator of an existing project" (see Part 1.4.2.c), and it is infeasible for you to comply with a specific requirement in this Part because (1) the requirement was not part of the permit you were previously covered under (i.e., the 2003 or 2008 CGP), and (2) because you are prevented from compliance due to the nature or location of earth disturbances that commenced prior to February 16, 2012 (or prior to April 9, 2012 for projects in the State of Idaho (except for Indian country), or prior to April 13, 2012 for projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or prior to May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin), or because you are unable to comply with the requirement due to the manner in which stormwater controls have already been installed or were already designed prior to February 16, 2012 (or prior to April 9, 2012 for projects in the State of Idaho (except for Indian country), or prior to April 13, 2012 for projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or prior to May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin), you are required to document this fact in your SWPPP and are waived from complying with that requirement. This flexibility applies only to the requirements in Parts 2.1, and 2.3.3 through 2.3.5 (except for Parts 2.3.3.1, 2.3.3.2b, 2.3.3.3c.i, and 2.3.3.4). This only applies to those portions of your site that have already commenced earth-disturbing activities or where stormwater controls implemented in compliance with the previous permit have already been installed.

Part 2 includes the following types of requirements:

- Erosion and Sediment Control Requirements (Part 2.1)
- Stabilization Requirements (Part 2.2)
- Pollution Prevention Requirements (Part 2.3)

2.1. EROSION AND SEDIMENT CONTROL REQUIREMENTS.

You must design, install, and maintain erosion and sediment controls that minimize the discharge of pollutants from earth-disturbing activities. To meet this requirement, you must comply with the following provisions.

2.1.1. General Requirements Applicable to All Construction Sites.

2.1.1.1 ***Area of Disturbance.*** You are required to minimize the amount of soil exposed during construction activities. You are also subject to the deadlines for temporarily and/or permanently stabilizing exposed portions of your site pursuant to Part 2.2.

2.1.1.2 ***Design Requirements.***

a. You must account for the following factors in designing your stormwater controls:

i. The expected amount, frequency, intensity, and duration of precipitation;

ii. The nature of stormwater runoff and run-on at the site, including factors such as expected flow from impervious surfaces, slopes, and site drainage features. If any stormwater flow will be channelized at your site, you must design stormwater controls to control both peak flowrates and total stormwater volume to minimize erosion at outlets and to minimize downstream channel and streambank erosion; and

iii. The range of soil particle sizes expected to be present on the site.

b. You must direct discharges from your stormwater controls to vegetated areas of your site to increase sediment removal and maximize stormwater infiltration, including any natural buffers established under Part 2.1.2.1, unless infeasible. Use velocity dissipation devices if necessary to prevent erosion when directing stormwater to vegetated areas.

2.1.1.3 ***Installation Requirements.***

a. **Complete installation of stormwater controls by the time each phase of earth-disturbance has begun, unless infeasible.** By the time earth-disturbing activities in any given portion of your site have begun, unless infeasible, you must install and make operational any downgradient sediment controls (*e.g., buffers or equivalent sediment controls, perimeter controls, exit point controls, storm drain inlet protection)* that control discharges from the initial site clearing, grading, excavating, and other land-disturbing activities.

Note: Where it is infeasible to install stormwater controls prior to the initial earth disturbance, it is EPA's expectation that it will be a rare circumstance that will prevent the operator from installing such controls immediately following the initial earth disturbance.

Following the installation of these initial controls, all other stormwater controls planned for this portion of your site and described in your SWPPP must be installed and made operational as soon as conditions on the site allow.

Note: The requirement to install stormwater controls prior to earth-disturbance for each phase of the project does not apply to the earth disturbance associated with the actual installation of these controls.

b. **Use good engineering practices and follow manufacturer's specifications.** You must install all stormwater controls in accordance with good engineering practices, including applicable design specifications.

Note: Design specifications may be found in manufacturer specifications and/or in applicable erosion and sediment control manuals or ordinances. Any departures from such specifications must reflect good engineering practice and must be explained in your SWPPP.

2.1.1.4 ***Maintenance Requirements.***

a. You must ensure that all erosion and sediment controls required in this Part remain in effective operating condition during permit coverage and are protected from activities that would reduce their effectiveness.

b. You must inspect all erosion and sediment controls in accordance with the applicable requirements in Part 4.1, and document your findings in accordance with Part 4.1.7. If you find a problem (*e.g., erosion and sediment controls need to be replaced, repaired, or maintained*), you must make the necessary repairs or modifications in accordance with the following schedule:

i. Initiate work to fix the problem immediately after discovering the problem, and complete such work by the close of the next work day, if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance.

ii. When installation of a new erosion or sediment control or a significant repair is needed, you must install the new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery where feasible. If it is infeasible to complete the installation or repair within 7 calendar days, you must document in your records why it is infeasible to complete the installation or repair within the 7-day timeframe and document your schedule for installing the stormwater control(s) and making it operational as soon as practicable after the 7-day timeframe. Where these actions result in changes to any of the stormwater controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within 7 calendar days of completing this work.

2.1.2. Erosion and Sediment Control Requirements Applicable to All Sites.

2.1.2.1 **Provide Natural Buffers or Equivalent Sediment Controls.** (These requirements only apply when a surface water is located within 50 feet of your project's earth disturbances).

Note: EPA does not consider stormwater control features (e.g., stormwater conveyance channels, storm drain inlets, sediment basins) to constitute "surface waters" for the purposes of triggering the requirement to comply with this Part.

Note: Areas that you do not own or that are otherwise outside your operational control may be considered areas of undisturbed natural buffer for purposes of compliance with this part.

You must ensure that any discharges to surface waters through the area between the disturbed portions of the property and any surface waters located within 50 feet of your site are treated by an area of undisturbed natural buffer and/or additional erosion and sediment controls in order to achieve a reduction in sediment load equivalent to that achieved by a 50-foot natural buffer. Refer to Appendix G (Buffer Guidance) for information to assist you in complying with this requirement, and to Part 2.1.2.1e for exceptions to this requirement.

a. **Compliance Alternatives.** You can comply with this requirement in one of the following ways:

i. Provide and maintain a 50-foot undisturbed natural buffer; or

Note: If your earth disturbances are located 50 feet or further from a surface water, then you have complied with this alternative.

ii. Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls, which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer; or

iii. If it is infeasible to provide and maintain an undisturbed natural buffer of any size, you must implement erosion and sediment

controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Note: For the compliance alternatives in Parts 2.1.2.1a.i and 2.1.2.1a.ii, you are not required to enhance the quality of the vegetation that already exists in the buffer, or provide vegetation if none exists (e.g., arid and semi-arid areas). You only need to retain and protect from disturbance the natural buffer that existed prior to the commencement of construction. Any preexisting structures or impervious surfaces are allowed in the natural buffer provided you retain and protect from disturbance the natural buffer area outside the preexisting disturbance. Similarly, for alternatives 2.1.2.1a.ii and 2.1.2.1a.iii, you are required to implement and maintain sediment controls that achieve the sediment load reduction equivalent to the undisturbed natural buffer that existed on the site prior to the commencement of construction. In determining equivalent sediment load reductions, you may consider naturally non-vegetated areas and prior disturbances. See Appendix G for a discussion of how to determine equivalent reductions.

You must document the compliance alternative you have selected in your SWPPP, and comply with the applicable additional requirements described in Parts 2.1.2.1b and 2.1.2.1c below.

The compliance alternative selected above must be maintained throughout the duration of permit coverage, except that you may select a different compliance alternative during your period of permit coverage, in which case you must modify your SWPPP to reflect this change.

b. **Additional Requirements for the Compliance Alternatives in Parts 2.1.2.1a.i and 2.1.2.1a.ii.** If you choose either of the compliance alternatives in Parts 2.1.2.1a.i or 2.1.2.1a.ii above, throughout your period of coverage under this permit, you must comply with the following additional requirements:

   i. Ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site's erosion and sediment controls, and use velocity dissipation devices if necessary to prevent erosion caused by stormwater within the buffer;

   ii. Document in your SWPPP the natural buffer width retained on the property, and show the buffer boundary on your site plan; and

   iii. Delineate, and clearly mark off, with flags, tape, or other similar marking device all natural buffer areas.

c. **Additional Requirements for the Compliance Alternatives in Parts 2.1.2.1a.ii and 2.1.2.1a.iii.** If you choose either of the compliance alternatives in Parts 2.1.2.1a.ii and 2.1.2.1a.iii, you must document in your SWPPP the erosion and sediment control(s) you will use to achieve an equivalent sediment reduction, and any information you relied upon to demonstrate the equivalency.

d. **Additional Requirement for the Compliance Alternative in Part 2.1.2.1a.iii.** If you choose the compliance alternative in Part 2.1.2.1a.iii, you must also

include in your SWPPP a description of why it is infeasible for you to provide and maintain an undisturbed natural buffer of any size.

e. **Exceptions.**

i. If there is no discharge of stormwater to surface waters through the area between your site and any surface waters located within 50 feet of your site, you are not required to comply with the requirements in this Part. This includes situations where you have implemented control measures, such as a berm or other barrier, that will prevent such discharges.

ii. Where no natural buffer exists due to preexisting development disturbances *(e.g., structures, impervious surfaces)* that occurred prior to the initiation of planning for the current development of the site, you are not required to comply with the requirements in this Part, unless you will remove portions of the preexisting development.

Where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, you are required to comply with the requirements in this Part. For the purposes of calculating the sediment load reduction for either Part 2.1.2.1a.ii or 2.1.2.1a.iii above, you are not expected to compensate for the reduction in buffer function from the area covered by these preexisting disturbances. See Appendix G for further information on how to comply with the compliance alternatives in Part 2.1.2.1a.ii or 2.1.2.1a.iii above.

If during your project, you will disturb any portion of these preexisting disturbances, the area disturbed will be deducted from the area treated as natural buffer.

iii. For "linear construction projects" (see Appendix A), you are not required to comply with the requirements in this Part if site constraints (*e.g., limited right-of-way*) prevent you from meeting any of the compliance alternatives in Part 2.1.2.1a, provided that, to the extent practicable, you limit disturbances within 50 feet of the surface water and/or you provide supplemental erosion and sediment controls to treat stormwater discharges from earth disturbances within 50 feet of the surface water. You must also document in your SWPPP your rationale as to why it is infeasible for you to comply with the requirements in Part 2.1.2.1a, and describe any buffer width retained and/or supplemental erosion and sediment controls installed.

iv. For "small residential lot" construction (*i.e., a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre*), you have the option of complying with the requirements in Appendix G (Part G.2.3).

v. The following disturbances within 50 feet of a surface water are exempt from the requirements in this Part:

- Construction approved under a CWA Section 404 permit; or
- Construction of a water-dependent structure or water access area *(e.g., pier, boat ramp, trail)*.

You must document in your SWPPP if any of the above disturbances will occur within the buffer area on your site.

2.1.2.2 ***Install Perimeter Controls.***

a. **Installation Requirements:** You must install sediment controls along those perimeter areas of your site that will receive stormwater from earth-disturbing activities.[8]

For linear projects with rights-of-way that restrict or prevent the use of such perimeter controls, you must maximize the use of these controls where practicable and document in your SWPPP why it is impracticable in other areas of the project.

b. **Maintenance Requirements:** You must remove sediment before it has accumulated to one-half of the above-ground height of any perimeter control.

2.1.2.3 ***Minimize Sediment Track-Out.*** You must minimize the track-out of sediment onto off-site streets, other paved areas, and sidewalks from vehicles exiting your construction site. To comply with this requirement, you must:

a. Restrict vehicle use to properly designated exit points;

b. Use appropriate stabilization techniques[9] at all points that exit onto paved roads so that sediment removal occurs prior to vehicle exit;

c. Where necessary, use additional controls[10] to remove sediment from vehicle tires prior to exit; and

d. Where sediment has been tracked-out from your site onto the surface of off-site streets, other paved areas, and sidewalks, you must remove the deposited sediment by the end of the same work day in which the track-out occurs or by the end of the next work day if track-out occurs on a non-work day. You must remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any stormwater conveyance (unless it is connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water.

Note: EPA recognizes that some fine grains may remain visible on the surfaces of off-site streets, other paved areas, and sidewalks even after you have implemented sediment removal practices. Such "staining" is not a violation of Part 2.1.2.3.

2.1.2.4 **Control Discharges from Stockpiled Sediment or Soil.** For any stockpiles or land clearing debris composed, in whole or in part, of sediment or soil, you must comply with the following requirements:

[8] Examples of perimeter controls include, but are not limited to, filter berms, silt fences, and temporary diversion dikes.

[9] Examples of appropriate stabilization techniques include the use of aggregate stone with an underlying geotextile or non-woven filter fabric, or turf mats.

[10] Examples of additional controls to remove sediment from vehicle tires include, but are not limited to, wheel washing, rumble strips, and rattle plates.

Note: For the purposes of this permit, sediment or soil stockpiles are defined as the storage for multiple days of soil or other sediment material to be used in the construction project.

a. Locate the piles outside of any natural buffers established under Part 2.1.2.1a and physically separated from other stormwater controls implemented in accordance with Part 2.1;

b. Protect from contact with stormwater (including run-on) using a temporary perimeter sediment barrier;[11]

c. Where practicable, provide cover or appropriate temporary stabilization to avoid direct contact with precipitation or to minimize sediment discharge;

d. Do not hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any stormwater conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water; and

e. Unless infeasible, contain and securely protect from wind.

2.1.2.5 ***Minimize Dust.*** In order to avoid pollutants from being discharged into surface waters, to the extent feasible, you must minimize the generation of dust through the appropriate application of water or other dust suppression techniques.

2.1.2.6 ***Minimize the Disturbance of Steep Slopes.*** You must minimize the disturbance of "steep slopes" (see definition in Appendix A).

Note: The permit does not prevent or prohibit disturbance on steep slopes. For some projects, disturbance on steep slopes may be necessary for construction (e.g., a road cut in mountainous terrain). If a disturbance to steep slopes is required for the project, EPA would recognize that it is not economically achievable to avoid the disturbance to steep slopes. However, in cases where steep slope disturbances are required, minimizing the disturbances to steep slopes consistent with this requirement can be accomplished through the implementation of a number of standard erosion and sediment control practices, such as by phasing disturbances to these areas and using stabilization practices designed to be used on steep grades.

2.1.2.7 ***Preserve Topsoil.*** You must preserve native topsoil on your site, unless infeasible.

Note: Some projects may be designed to be highly impervious after construction, and therefore little or no vegetation is intended to remain. In these cases, preserving topsoil at the site would not be feasible. Some sites may not have space to stockpile topsoil on site for later use, in which case, it may also not be feasible to preserve topsoil.

Note: Stockpiling of topsoil at off-site locations, or transfer of topsoil to other locations, is an example of a practice that is consistent with the requirements in this Part.

2.1.2.8 ***Minimize Soil Compaction***. In areas of your site where final vegetative stabilization will occur or where infiltration practices will be installed, you must either:

[11] Examples include berms, dikes, fiber rolls, silt fences, sandbag, gravel bags, or straw bale.

a. **Restrict vehicle / equipment use.** Restrict vehicle and equipment use in these locations to avoid soil compaction; or

b. **Use soil conditioning techniques.** Prior to seeding or planting areas of exposed soil that have been compacted, use techniques that condition the soils to support vegetative growth, if necessary and feasible.

2.1.2.9 ***Protect Storm Drain Inlets.*** If you discharge to any storm drain inlet that carries stormwater flow from your site directly to a surface water (and it is not first directed to a sediment basin, sediment trap, or similarly effective control), and you have authority to access the storm drain inlet, you must:

a. **Installation Requirements.** Install inlet protection measures[12] that remove sediment from your discharge prior to entry into the storm drain inlet.

Note: Inlet protection measures can be removed in the event of flood conditions or to prevent erosion.

b. **Maintenance Requirements.** Clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, you must remove the deposited sediment by the end of the same work day in which it is found or by the end of the following work day if removal by the same work day is not feasible.

2.1.3. Requirements Applicable Only to Sites Using These Specific Stormwater Controls.

You are required to comply with the following requirements if you will install any of the following stormwater controls at your site:

2.1.3.1 ***Constructed Stormwater Conveyance Channels.*** Design stormwater conveyance channels to avoid unstabilized areas on the site and to reduce erosion, unless infeasible. Minimize erosion of channels and their embankments, outlets, adjacent streambanks, slopes, and downstream waters during discharge conditions through the use of erosion controls and velocity dissipation devices[13] within and along the length of any constructed stormwater conveyance channel, and at any outlet to provide a non-erosive flow velocity.

2.1.3.2 ***Sediment Basins.*** If you install a sediment basin , you must comply with the following:

a. **Design requirements.**

i. Provide storage for either (1) the calculated volume of runoff from a 2-year, 24-hour storm (see Appendix H), or (2) 3,600 cubic feet per acre drained;

ii. When discharging from the sediment basin, utilize outlet structures that withdraw water from the surface in order to minimize the discharge of pollutants, unless infeasible;

[12] Examples of inlet protection measures include fabric filters, sandbags, concrete blocks, and gravel barriers.

[13] Examples of velocity dissipation devices include check dams, sediment traps, riprap, or grouted riprap at outlets.

Note: EPA believes that the circumstances in which it is infeasible to design outlet structures in this manner are rare. Exceptions may include areas with extended cold weather, where surface outlets may not be feasible during certain time periods (although it is expected that they would be used during other periods). If you have determined that it is infeasible to meet this requirement, you must provide documentation in your SWPPP to support your determination.

iii. Prevent erosion of (1) the sediment basin using stabilization controls *(e.g., erosion control blankets)*, and (2) the inlet and outlet using erosion controls and velocity dissipation devices; and

iv. Sediment basins must be situated outside of surface waters and any natural buffers established under Part 2.1.2.1a, and must be designed to avoid collecting water from wetlands.

b. **Maintenance requirements.** Keep in effective operating condition and remove accumulated sediment to maintain at least ½ of the design capacity of the sediment basin at all times.

2.1.3.3 ***Use of Treatment Chemicals.*** If you are using polymers, flocculants, or other treatment chemicals at your site, you must comply with the following minimum requirements:

a. **Use conventional erosion and sediment controls prior to and after the application of treatment chemicals.** Use conventional erosion and sediment controls prior to chemical addition to ensure effective treatment. Chemicals may only be applied where treated stormwater is directed to a sediment control *(e.g., sediment basin, perimeter control)* prior to discharge.

b. **Select appropriate treatment chemicals**. Chemicals must be selected that are appropriately suited to the types of soils likely to be exposed during construction and discharged to locations where chemicals will be applied, and to the expected turbidity, pH, and flow rate of stormwater flowing into the chemical treatment system or area.

c. **Minimize discharge risk from stored chemicals.** Store all treatment chemicals in leak-proof containers that are kept under storm-resistant cover and surrounded by secondary containment structures *(e.g., spill berms, decks, spill containment pallets),* or provide equivalent measures, designed and maintained to minimize the potential discharge of treatment chemicals in stormwater or by any other means *(e.g., storing chemicals in covered area or having a spill kit available on site)*.

d. **Comply with state/local requirements.** Comply with relevant state and local requirements affecting the use of treatment chemicals.

e. **Use chemicals in accordance with good engineering practices and specifications of the chemical provider/supplier.** You must also use treatment chemicals and chemical treatment systems in accordance with good engineering practices, and with dosing specifications and sediment removal design specifications provided by the provider/supplier of the applicable chemicals, or document specific departures from these practices or specifications and how they reflect good engineering practice.

f. **Ensure proper training.** Ensure that all persons who handle and use treatment chemicals at the construction site are provided with appropriate, product-specific training. Among other things, the training must cover proper dosing requirements.

g. **Comply with additional requirements for the approved use of cationic chemicals.** If you have been authorized to use cationic chemicals at your site pursuant to Part 1.2.4, and the authorization is conditioned on your compliance with additional requirements necessary to ensure that the use of such chemicals will not cause an exceedance of water quality standards, you are required to comply with all such requirements.

h. **Provide proper SWPPP documentation.** You must include documentation in your SWPPP consistent with Parts 7.2.6.9 and 7.2.10.2 on the specific chemicals and chemical treatment systems you will use, and how you will comply with the requirements in this Part.

2.1.3.4 ***Dewatering Practices.*** You are prohibited from discharging ground water or accumulated stormwater that is removed from excavations, trenches, foundations, vaults, or other similar points of accumulation, unless such waters are first effectively managed by appropriate controls.[14] Uncontaminated, non-turbid dewatering water can be discharged without being routed to a control.

You must also meet the following requirements for dewatering activities:

a. **Discharge requirements.**

i. Do not discharge visible floating solids or foam;

ii. Use an oil-water separator or suitable filtration device (such as a cartridge filter) that is designed to remove oil, grease, or other products if dewatering water is found to contain these materials;

iii. To the extent feasible, utilize vegetated, upland areas of the site to infiltrate dewatering water before discharge. In no case will surface waters be considered part of the treatment area;

iv. At all points where dewatering water is discharged, comply with the velocity dissipation requirements of Part 2.1.3.1;

v. With backwash water, either haul it away for disposal or return it to the beginning of the treatment process; and

vi. Replace and clean the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications.

b. **Treatment chemical restrictions.** If you are using polymers, flocculants, or other treatment chemicals to treat dewatering water, you must comply with the requirements in Parts 2.1.3.3.

2.2. STABILIZATION REQUIREMENTS.

You are required to stabilize exposed portions of your site in accordance with the requirements of this Part.

[14] Examples of appropriate controls include, but are not limited to, sediment basins or sediment traps, sediment socks, dewatering tanks, tube settlers, weir tanks, or filtration systems (e.g., bag or sand filters) that are designed to remove sediment.

Note: For the purposes of this permit, "exposed portions of your site" means areas of exposed soil that are required to be stabilized. Note that EPA does not expect that temporary or permanent stabilization measures to be applied to areas that are intended to be left unvegetated or unstabilized following construction (e.g., dirt access roads, utility pole pads, areas being used for storage of vehicles, equipment, or materials).

2.2.1. Deadlines for Initiating and Completing Stabilization.

2.2.1.1 ***Deadline to Initiate Stabilization.*** You must initiate soil stabilization measures immediately whenever earth-disturbing activities have permanently or temporarily ceased on any portion of the site.

Note: Earth-disturbing activities have permanently ceased when clearing and excavation within any area of your construction site that will not include permanent structures has been completed.

Note: Earth-disturbing activities have temporarily ceased when clearing, grading, and excavation within any area of the site that will not include permanent structures will not resume (i.e., the land will be idle) for a period of 14 or more calendar days, but such activities will resume in the future.

The 14 calendar day timeframe above begins counting as soon as you know that construction work on a portion of your site will be temporarily ceased. In circumstances where you experience unplanned or unanticipated delays in construction due to circumstances beyond your control (e.g., sudden work stoppage due to unanticipated problems associated with construction labor, funding, or other issues related to the ability to work on the site; weather conditions rendering the site unsuitable for the continuation of construction work) and you do not know at first how long the work stoppage will continue, your requirement to immediately initiate stabilization is triggered as soon as you know with reasonable certainty that work will be stopped for 14 or more additional calendar days. At that point, you must comply with Parts 2.2.1.1 and 2.2.1.2.

Note: For the purposes of this permit, EPA will consider any of the following types of activities to constitute the initiation of stabilization:

1. *prepping the soil for vegetative or non-vegetative stabilization;*
2. *applying mulch or other non-vegetative product to the exposed area;*
3. *seeding or planting the exposed area;*
4. *starting any of the activities in # 1 – 3 on a portion of the area to be stabilized, but not on the entire area; and*
5. *finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization in Parts 2.2.1.2 and 2.2.1.3.*

This list of examples is not exhaustive.

Note: The term "immediately" is used to define the deadline for initiating stabilization measures. In the context of this provision, "immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased.

2.2.1.2 ***Deadline to Complete Stabilization Activities.*** As soon as practicable, but no later than 14 calendar days after the initiation of soil stabilization measures consistent with Part 2.2.1.1[15], you are required to have completed:

[15] EPA may determine, based on an inspection carried out under Part 4.2 and corrective actions required under Part 5.3, that the level of sediment discharge on the site makes it necessary to require a faster schedule for completing stabilization. For instance, if sediment discharges from an area of exposed soil

a. For vegetative stabilization, all activities[16] necessary to initially seed or plant the area to be stabilized; and/or

b. For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

2.2.1.3 ***Exceptions to the Deadlines for Initiating and Completing Stabilization.***

a. *Deadlines for projects occurring in arid or semi-arid areas, or drought-stricken areas*. These requirements apply if (1) your site is located in an arid area, a semi-arid area, or a drought-stricken area, as these terms are defined in Appendix A, (2) construction will occur during the seasonally dry period or during a period in which drought is predicted to occur, and (3) you are using vegetative cover for temporary or permanent stabilization. You may also comply with the deadlines in Part 2.2.1.1 instead. The deadlines for these types of projects are as follows:

i. Immediately initiate, and within 14 calendar days of a temporary or permanent cessation of work in any portion of your site complete, the installation of temporary non-vegetative stabilization measures to the extent necessary to prevent erosion;

ii. As soon as practicable, given conditions or circumstances on your site, complete all activities necessary to initially seed or plant the area to be stabilized; and

iii. If construction is occurring during the seasonally dry period, indicate in your SWPPP the beginning and ending dates of the seasonally dry period and your site conditions. You must also include the schedule you will follow for initiating and completing vegetative stabilization.

b. *Deadlines for projects that are affected by circumstances beyond the control of the permittee that delay the initiation and/or completion of vegetative stabilization as required in Parts 2.2.1.1 and/or 2.2.1.2*. If you are unable to meet the deadlines in Parts 2.2.1.1and/or 2.2.1.2 due to circumstances beyond your control[17], and you are using vegetative cover for temporary or permanent stabilization, you may comply with the following stabilization deadlines instead:

i. Immediately initiate, and within 14 calendar days complete, the installation of temporary non-vegetative stabilization measures to prevent erosion;

ii. Complete all soil conditioning, seeding, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on your site; and

that is required to be stabilized are compromising the performance of existing stormwater controls, EPA may require stabilization to correct this problem.

[16] For example, such activities might include, but are not limited to, soil conditioning, application of seed or sod, planting of seedlings or other vegetation, application of fertilizer, and, as deemed appropriate, watering.

[17] Examples include problems with the supply of seed stock or with the availability of specialized equipment, unsuitability of soil conditions due to excessive precipitation and/or flooding.

Note: You are required to have stabilized the exposed portions of your site consistent with Part 2.2.2 prior to terminating permit coverage under Part 8.2.

iii. Document the circumstances that prevent you from meeting the deadlines required in Parts 2.2.1.1and/or 2.2.1.2 and the schedule you will follow for initiating and completing stabilization.

c. *Deadlines for sites discharging to sensitive waters.* For any portion of the site that discharges to a sediment or nutrient-impaired water (see Part 3.2) or to a water that is identified by your state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 for antidegradation purposes (see Part 3.3), you are required to complete the stabilization activities specified in Parts 2.2.1.2a and/or 2.2.1.2b within 7 calendar days after the temporary or permanent cessation of earth-disturbing activities.

Note: If you qualify for the deadlines for initiating and completing stabilization in Part 2.2.1.3a or b*, you may comply with the stabilization deadlines in Part 2.2.1.3a or* b *for any portion of your site that discharges to a sensitive water.*

2.2.2. Criteria for Stabilization.

To be considered adequately stabilized, you must meet the criteria below depending on the type of cover you are using, either vegetative or non-vegetative.

2.2.2.1 ***Vegetative Stabilization.***

a. ***For all sites, except those located in arid or semi-arid areas or on agricultural lands.***

i. If you are vegetatively stabilizing any exposed portion of your site through the use of seed or planted vegetation, you must provide established uniform vegetation *(e.g., evenly distributed without large bare areas)*, which provides 70 percent or more of the density of coverage that was provided by vegetation prior to commencing earth-disturbing activities. You should avoid the use of invasive species;

ii. For final stabilization, vegetative cover must be perennial; and

iii. Immediately after seeding or planting the area to be vegetatively stabilized, to the extent necessary to prevent erosion on the seeded or planted area, you must select, design, and install non-vegetative erosion controls that provide cover *(e.g., mulch, rolled erosion control products)* to the area while vegetation is becoming established.

b. ***For sites located in arid or semi-arid areas, or drought-stricken areas.*** If you are located in an arid or semi-arid area, or a drought-stricken area, as these terms are defined in Appendix A, you are considered to have completed final stabilization if both of the following criteria are met:

i. The area you have seeded or planted must within 3 years provide established vegetation that covers 70 percent or more of the density of vegetation prior to commencing earth-disturbing activities; and

ii. In addition to seeding or planting the area to be vegetatively stabilized, to the extent necessary to prevent erosion on the seeded

or planted area, you must select, design, and install non-vegetative erosion controls that provide cover for at least 3 years without active maintenance by you.

c. ***For sites located on land used for agriculture.*** Disturbed areas on land used for agricultural purposes *(e.g., pipelines across crop or range land, staging areas for highway construction*) that are restored to their pre-construction agricultural use are not subject to these final stabilization criteria. Areas disturbed that were not previously used for agricultural activities, and areas that are not being returned to preconstruction agricultural use, must meet the conditions for stabilization in this Part**.**

2.2.2.2 ***Non-Vegetative Stabilization.*** If you are using non-vegetative controls to stabilize exposed portions of your site, or if you are using such controls to temporarily protect areas that are being vegetatively stabilized, you must provide effective non-vegetative cover[18] to stabilize any such exposed portions of your site.

2.3. POLLUTION PREVENTION REQUIREMENTS.

You are required to design, install, and maintain effective pollution prevention measures in order to prevent the discharge of pollutants. Consistent with this requirement, you must:

- Eliminate certain pollutant discharges from your site (see Part 2.3.1);
- Properly maintain all pollution prevention controls (see Part 2.3.2); and
- Comply with pollution prevention standards for pollutant-generating activities that occur at your site (see Part 2.3.3).

These requirements apply to all areas of your construction site and any and all support activities covered by this permit consistent with Part 1.3.c.

2.3.1. Prohibited Discharges.

You are prohibited from discharging the following from your construction site:

2.3.1.1 Wastewater from washout of concrete, unless managed by an appropriate control as described in Part 2.3.3.4;

2.3.1.2 Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials, unless managed by an appropriate control as described in Part 2.3.3.4;

2.3.1.3 Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;

2.3.1.4 Soaps, solvents, or detergents used in vehicle and equipment washing; and

2.3.1.5 Toxic or hazardous substances from a spill or other release.

2.3.2. General Maintenance Requirements.

You must ensure that all pollution prevention controls installed in accordance with this Part remain in effective operating condition and are protected from activities that would reduce their effectiveness. You must inspect all pollutant-generating activities and

[18] For temporary stabilization, examples of temporary non-vegetative stabilization methods include, but are not limited to, hydromulch and erosion control blankets. For final stabilization, examples of permanent non-vegetative stabilization methods include, but are not limited to, riprap, gabions, and geotextiles.

pollution prevention controls in accordance with your inspection frequency requirements in Parts 4.1.2 or 3.2.2.1 to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater discharges to receiving waters, and must document your findings in accordance with Part 4.1.7. If you find that controls need to be replaced, repaired, or maintained, you must make the necessary repairs or modifications in accordance with the following:

2.3.2.1 Initiate work to fix the problem immediately after discovering the problem, and complete such work by the close of the next work day, if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance.

2.3.2.2 When installation of a new pollution prevention control or a significant repair is needed, you must install the new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery. If it is infeasible to complete the installation or repair within 7 calendar days, you must document in your records why it is infeasible to complete the installation or repair within the 7 calendar day timeframe and document your schedule for installing the stormwater control(s) and making it operational as soon as practicable after the 7 calendar day timeframe. Where these actions result in changes to any of the pollution prevention controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within 7 calendar days of completing this work.

2.3.3. Pollution Prevention Standards.

You are required to comply with the pollution prevention standards in this Part if you conduct any of the following activities at your site or at any construction support activity areas covered by this permit (see Part 1.3.c):

- Fueling and maintenance of equipment or vehicles;
- Washing of equipment and vehicles;
- Storage, handling, and disposal of construction materials, products, and wastes; and
- Washing of applicators and containers used for paint, concrete, or other materials.

The pollution prevention standards are as follows:

2.3.3.1 ***Fueling and Maintenance of Equipment or Vehicles***. If you conduct fueling and/or maintenance of equipment or vehicles at your site, you must provide an effective means of eliminating the discharge of spilled or leaked chemicals, including fuel, from the area where these activities will take place.[19]

To comply with the prohibition in Part 2.3.1.3, you must:

a. If applicable, comply with the Spill Prevention Control and Countermeasures (SPCC) requirements in 40 CFR 112 and Section 311 of the CWA;

b. Ensure adequate supplies are available at all times to handle spills, leaks, and disposal of used liquids;

[19] Examples of effective controls include, but are not limited to, locating activities away from surface waters and stormwater inlets or conveyances, providing secondary containment *(e.g., spill berms, decks, spill containment pallets)*and cover where appropriate, and/or having spill kits readily available.

c. Use drip pans and absorbents under or around leaky vehicles;

d. Dispose of or recycle oil and oily wastes in accordance with other federal, state, tribal, or local requirements;

e. Clean up spills or contaminated surfaces immediately, using dry clean up measures where possible, and eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge; and

f. Do not clean surfaces by hosing the area down.

2.3.3.2 ***Washing of Equipment and Vehicles.***

a. You must provide an effective means of minimizing the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of washing;[20] and

b. To comply with the prohibition in Part 2.3.1.4, for storage of soaps, detergents, or solvents, you must provide either (1) cover (*e.g., plastic sheeting or temporary roofs*) to prevent these detergents from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas.

2.3.3.3 ***Storage, Handling, and Disposal of Construction Products, Materials, and Wastes.*** You must minimize the exposure to stormwater of any of the products, materials, or wastes specified below that are present at your site by complying with the requirements in this Part.

Note: These requirements do not apply to those products, materials, or wastes that are not a source of stormwater contamination or that are designed to be exposed to stormwater.

To ensure you meet this requirement, you must:

a. *For building products*[21]*:* In storage areas, provide either (1) cover (*e.g., plastic sheeting or temporary roofs*) to prevent these products from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas.

b. *For pesticides, herbicides, insecticides, fertilizers, and landscape materials:*

i. In storage areas, provide either (1) cover (e.g., *plastic sheeting or temporary roofs*) to prevent these chemicals from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas; and

ii. Comply with all application and disposal requirements included on the registered pesticide, herbicide, insecticide, and fertilizer label.

c. *For diesel fuel, oil, hydraulic fluids, other petroleum products, and other chemicals:*

[20] Examples of effective controls include, but are not limited to, locating activities away from surface waters and stormwater inlets or conveyances and directing wash waters to a sediment basin or sediment trap, using filtration devices, such as filter bags or sand filters, or using other similarly effective controls.

[21] Some examples of building products that are typically stored at construction sites include, but are not limited to, asphalt sealants, copper flashing, roofing materials, adhesives, concrete admixtures.

i. To comply with the prohibition in Part 2.3.1.3, store chemicals in water-tight containers, and provide either (1) cover *(e.g., plastic sheeting or temporary roofs)* to prevent these containers from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas *(e.g., spill kits)*, or provide secondary containment *(e.g., spill berms, decks, spill containment pallets)*; and

ii. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.

d. *For hazardous or toxic waste*[22]*:*

i. Separate hazardous or toxic waste from construction and domestic waste;

ii. Store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, tribal, or local requirements;

iii. Store all containers that will be stored outside within appropriately-sized secondary containment *(e.g., spill berms, decks, spill containment pallets)* to prevent spills from being discharged, or provide a similarly effective means designed to prevent the discharge of pollutants from these areas *(e.g., storing chemicals in covered area or having a spill kit available on site)*;

iv. Dispose of hazardous or toxic waste in accordance with the manufacturer's recommended method of disposal and in compliance with federal, state, tribal, and local requirements; and

v. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.

e. *For construction and domestic waste*[23]: Provide waste containers *(e.g., dumpster or trash receptacle)* of sufficient size and number to contain construction and domestic wastes. In addition, you must:

(1) On work days, clean up and dispose of waste in designated waste containers; and

(2) Clean up immediately if containers overflow.

[22] Examples of hazardous or toxic waste that may be present at construction sites include, but are not limited to, paints, solvents, petroleum-based products, wood preservatives, additives, curing compounds, acids.

[23] Examples of construction and domestic waste include, but are not limited to, packaging materials, scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, styrofoam, concrete, and other trash or building materials.

f. *For sanitary waste:* Position portable toilets so that they are secure and will not be tipped or knocked over.

2.3.3.4 **Washing of Applicators and Containers used for Paint, Concrete, or Other Materials.** To comply with the prohibition in Parts 2.3.1.1 and 2.3.1.2, you must provide an effective means of eliminating the discharge of water from the washout and cleanout of stucco, paint, concrete, form release oils, curing compounds, and other construction materials. To comply with this requirement, you must:

a. Direct all washwater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation;

b. Handle washout or cleanout wastes as follows:

i. Do not dump liquid wastes in storm sewers;

ii. Dispose of liquid wastes in accordance with applicable requirements in Part 2.3.3.3; and

iii. Remove and dispose of hardened concrete waste consistent with your handling of other construction wastes in Part 2.3.3.3; and

c. Locate any washout or cleanout activities as far away as possible from surface waters and stormwater inlets or conveyances, and, to the extent practicable, designate areas to be used for these activities and conduct such activities only in these areas.

2.3.4. Emergency Spill Notification.

You are prohibited from discharging toxic or hazardous substances from a spill or other release, consistent with Part 2.3.1.5. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, you must notify the National Response Center (NRC) at (800) 424-8802 or, in the Washington, DC metropolitan area, call (202) 267-2675 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 as soon as you have knowledge of the discharge. You must also, within 7 calendar days of knowledge of the release, provide a description of the release, the circumstances leading to the release, and the date of the release. State, tribal, or local requirements may necessitate additional reporting of spills or discharges to local emergency response, public health, or drinking water supply agencies.

2.3.5. Fertilizer Discharge Restrictions.

You are required to minimize discharges of fertilizers containing nitrogen or phosphorus. To meet this requirement, you must comply with the following requirements:

2.3.5.1 Apply at a rate and in amounts consistent with manufacturer's specifications, or document departures from the manufacturer specifications where appropriate in Part 7.2.7.2 of the SWPPP;

2.3.5.2 Apply at the appropriate time of year for your location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth;

2.3.5.3 Avoid applying before heavy rains that could cause excess nutrients to be discharged;

2.3.5.4 Never apply to frozen ground;

2.3.5.5 Never apply to stormwater conveyance channels with flowing water; and

2.3.5.6 Follow all other federal, state, tribal, and local requirements regarding fertilizer application.

3. WATER QUALITY-BASED EFFLUENT LIMITATIONS.

3.1. GENERAL EFFLUENT LIMITATION TO MEET APPLICABLE WATER QUALITY STANDARDS

Your discharge must be controlled as necessary to meet applicable water quality standards. You must also comply with any additional requirements that your state or tribe requires you to meet in Part 9.

In the absence of information demonstrating otherwise, EPA expects that compliance with the conditions in this permit will result in stormwater discharges being controlled as necessary to meet applicable water quality standards. If at any time you become aware, or EPA determines, that your discharge is not being controlled as necessary to meet applicable water quality standards, you must take corrective action as required in Part 5.2.1, and document the corrective actions as required in Part 5.2.2 and Part 5.4.

EPA will also impose additional water quality-based limitations on a site-specific basis, or require you to obtain coverage under an individual permit, if information in your NOI, or from other sources indicates that your discharges are not controlled as necessary to meet applicable water quality standards. This includes situations where additional controls are necessary to comply with a wasteload allocation in an EPA established or approved TMDL.

3.2. DISCHARGE LIMITATIONS FOR IMPAIRED WATERS

If you discharge to a surface water that is impaired for (1) sediment or a sediment-related parameter, such as total suspended solids (TSS) or turbidity, and/or (2) nutrients, including impairments for nitrogen and/or phosphorus, you are required to comply with the requirements in Part 3.2.2.

Note: For the purposes of this Part, "impaired waters" are waters identified as impaired on the appropriate CWA Section 303(d) list, or waters with an EPA-approved or established TMDL. Your construction site will be considered to discharge to an impaired water if the first surface water to which you discharge is identified by a state, tribe, or EPA pursuant to Section 303(d) of the CWA as not meeting an applicable water quality standard, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the first surface water to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system.

If you discharge to an impaired water that is impaired for a parameter other than a sediment-related parameter or nutrients, EPA will inform you if any additional limits or controls are necessary for your discharge to be controlled as necessary to meet water quality standards, including for it to be consistent with the assumptions of any available wasteload allocation in any applicable TMDL, or if coverage under an individual permit is necessary in accordance with Part 1.4.5.

If during your coverage under a previous permit, you were required to install and maintain stormwater controls specifically to meet the assumptions and requirements of an EPA-approved or established TMDL (for any parameter) or to otherwise control your discharge to meet water quality standards, you must continue to implement such controls as part of this permit.

3.2.1. Identify If You Discharge To An Impaired Water.

If you discharge to an impaired water, you must provide the following information in your NOI:

- A list of all impaired waters to which you discharge;
- The pollutant(s) for which the surface water is impaired; and

- Whether a TMDL has been approved or established for the waters to which you discharge.

3.2.2. Requirements for Discharges to Sediment or Nutrient-Impaired Waters.

If you discharge to a surface water that is impaired for (1) sediment or a sediment-related parameter *(e.g., total suspended solids (TSS) or turbidity)* and/or (2) nutrients *(e.g., nitrogen and/or phosphorus)*, including impaired waters for which a TMDL has been approved or established for the impairment, you are required to comply with the following stormwater control requirements, which supplement the requirements applicable to your site in other corresponding parts of the permit

3.2.2.1 ***Frequency of Site Inspection.*** You must conduct inspections at the frequency specified in Part 4.1.3.

3.2.2.2 ***Deadline to Complete Stabilization.*** You must comply with the deadlines for completing site stabilization as specified in Part 2.2.1.3c.

3.2.2.3 ***State and Tribal Requirements.*** You must comply with any additional state or tribal impairment-related requirements included in Part 9.

EPA will also impose additional water quality-based limitations on a site-specific basis, or require you to obtain coverage under an individual permit, if it is determined that the controls in the Part will not be sufficient to control discharges consistent with the assumptions and requirements of an applicable wasteload allocation of an approved or established TMDL or to prevent the site from contributing to the impairment.

3.3. DISCHARGES TO WATERS IDENTIFIED AS TIER 2, TIER 2.5, OR TIER 3.

3.3.1. Identify if You Discharge to a Tier 2, Tier 2.5, or Tier 3 Water.

If you discharge to a water identified by a state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 water, you must provide on your NOI a list of waters identified as Tier 2, Tier 2.5, or Tier 3 to which you discharge. See Appendix F for a list of Tier 2 and 3 waters.

Note: For the purposes of this permit, you are considered to discharge to a Tier 2, Tier 2.5, or Tier 3 water if the first surface water to which you discharge is identified by a state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3. Tiers 2, 2.5 and 3 refer to waters either identified by the state as high quality waters or Outstanding National Resource Waters under 40 CFR §131.12(a)(2) and (3). For discharges that enter a storm sewer system prior to discharge, the surface water to which you discharge is the first surface water that receives the stormwater discharge from the storm sewer system.

3.3.2. Requirements for New Projects Discharging to Tier 2, Tier 2.5, or Tier 3 Waters.

For new projects, if you will discharge to a Tier 2, Tier 2.5, or Tier 3 water, you are required to comply with the requirements in Parts 4.1.3 (inspection frequencies) and 2.2.1.3c (stabilization deadlines), and, if applicable, Part 9 (relevant state or tribal requirements). In addition, on a case-by-case basis, EPA may notify operators of such new projects or operators of existing projects with increased discharges that additional analyses, stormwater controls, or other permit conditions are necessary to comply with the applicable antidegradation requirements, or notify you that an individual permit application is necessary in accordance with Part 1.4.5.

4. INSPECTIONS.

4.1. SITE INSPECTIONS.

4.1.1. Person(s) Responsible for Inspecting Site.

The person(s) inspecting your site may be a person on your staff or a third party you hire to conduct such inspections. You are responsible for ensuring that the person who conducts inspections is a "qualified person."

Note: A "qualified person" is a person knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at the construction site that could impact stormwater quality, and the skills to assess the effectiveness of any stormwater controls selected and installed to meet the requirements of this permit.

4.1.2. Frequency of Inspections.

At a minimum, you must conduct a site inspection in accordance with one of the two schedules listed below, unless you are subject to Part 4.1.3 or Part 4.1.4:

4.1.2.1 At least once every 7 calendar days; or

4.1.2.2 Once every 14 calendar days and within 24 hours of the occurrence of a storm event of 0.25 inches or greater. To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, you must record the total rainfall measured for that day in accordance with Part 4.1.7.1d.

Note: Inspections are only required during the project's normal working hours.

Note: You are required to specify in your SWPPP which schedule you will be following.

Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if you have elected to inspect bi-weekly in accordance with Part 4.1.2.2 and there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

4.1.3. Increase in Inspection Frequency for Sites Discharging to Sensitive Waters.

For any portion of the site that discharges to a sediment or nutrient-impaired water (see Part 3.2) or to a water that is identified by your state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 for antidegradation purposes (see Part 3.3), instead of the inspection frequency specified in Part 4.1.2, you must conduct inspections in accordance with the following inspection frequencies:

4.1.3.1 Once every 7 calendar days; and

4.1.3.2 Within 24 hours of the occurrence of a storm event of 0.25 inches or greater. To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that

measures 0.25 inches or greater, you must record the total rainfall measured for that day in accordance with Part 4.1.7.1d.

Note: Inspections are only required during the project's normal working hours.

Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

Note: If you qualify for any of the reduced inspection frequencies in Part 4.1.4, you may conduct inspections in accordance with Part 4.1.4 for any portion of your site that discharges to a sensitive water.

4.1.4. Reductions in Inspection Frequency.

Your inspection frequency may be reduced as follows:

4.1.4.1 ***For Stabilized Areas.*** You may reduce the frequency of inspections to once per month in any area of your site where the stabilization steps in Parts 2.2.1.2a and 2.2.1.2b have been completed. If construction activity resumes in this portion of the site at a later date, the inspection frequency immediately increases to that required in Parts 4.1.2 or 4.1.3, if applicable. You must document the beginning and ending dates of this period in your records.

4.1.4.2 ***For Arid, Semi-Arid, or Drought-Stricken Areas.*** You may reduce the frequency of inspections to once per month and within 24 hours of the occurrence of a storm event of 0.25 inches or greater if your site is located in an arid, semi-arid, or drought-stricken area, as these terms are defined in Appendix A, and construction is occurring during the seasonally dry period or during a period in which drought is predicted to occur. You must document that you are using this reduced schedule and the beginning and ending dates of the seasonally dry period in your SWPPP. To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, you must record the total rainfall measured for that day in accordance with Part 4.1.7.1d.

Note: Inspections are only required during the project's normal working hours.

Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

4.1.4.3 ***For Frozen Conditions.***

a. If you are suspending earth-disturbing activities due to frozen conditions, you may temporarily suspend inspections on your site until thawing conditions (see Appendix A) begin to occur if:

i. Runoff is unlikely due to continuous frozen conditions that are likely to continue at your site for at least 3 months based on historic seasonal averages. If unexpected weather conditions (such as above freezing temperatures or rain on snow events) make discharges likely, you must immediately resume your regular inspection frequency as described in Parts 4.1.2 or 4.1.3, if applicable;

ii. Land disturbances have been suspended; and

iii. All disturbed areas of the site have been temporarily or permanently stabilized in accordance with Part 2.2.

b. If you are still conducting earth-disturbing activities during frozen conditions, you may reduce your inspection frequency to once per month if:

i. Runoff is unlikely due to continuous frozen conditions that are likely to continue at your site for at least 3 months based on historic seasonal averages. If unexpected weather conditions (such as above freezing temperatures or rain on snow events) make discharges likely, you must immediately resume your regular inspection frequency as described in Parts 4.1.2 or 4.1.3 if applicable; and

ii. Except for areas in which you are actively conducting earth-disturbing activities, disturbed areas of the site have been temporarily or permanently stabilized in accordance with Part 2.2.

You must document the beginning and ending dates of this period in your SWPPP.

4.1.5. Areas that Need to Be Inspected. During your site inspection, you must at a minimum inspect the following areas of your site:

4.1.5.1 All areas that have been cleared, graded, or excavated and that have not yet completed stabilization consistent with Part 2.2;

4.1.5.2 All stormwater controls (including pollution prevention measures) installed at the site to comply with this permit;

4.1.5.3 Material, waste, borrow, or equipment storage and maintenance areas that are covered by this permit;

4.1.5.4 All areas where stormwater typically flows within the site, including drainageways designed to divert, convey, and/or treat stormwater;

4.1.5.5 All points of discharge from the site; and

4.1.5.6 All locations where stabilization measures have been implemented.

You are not required to inspect areas that, at the time of the inspection, are considered unsafe to your inspection personnel.

4.1.6. Requirements for Inspections. During your site inspection, you must at a minimum:

4.1.6.1 Check whether all erosion and sediment controls and pollution prevention controls are installed, appear to be operational, and are working as intended to minimize pollutant discharges. Determine if any controls need to be replaced, repaired, or maintained in accordance with Parts 2.1.1.4 and 2.3.2;

4.1.6.2 Check for the presence of conditions that could lead to spills, leaks, or other accumulations of pollutants on the site;

4.1.6.3 Identify any locations where new or modified stormwater controls are necessary to meet the requirements of Parts 2 and/or 3;

4.1.6.4 At points of discharge and, if applicable, the banks of any surface waters flowing within your property boundaries or immediately adjacent to your property, check for signs of visible erosion and sedimentation *(i.e., sediment deposits)* that have occurred and are attributable to your discharge; and

4.1.6.5 Identify any and all incidents of noncompliance observed.

4.1.6.6 If a discharge is occurring during your inspection, you are required to:

a. Identify all points of the property from which there is a discharge;

b. Observe and document the visual quality of the discharge, and take note of the characteristics of the stormwater discharge, including color, odor, floating, settled, or suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollutants; and

c. Document whether your stormwater controls are operating effectively, and describe any such controls that are clearly not operating as intended or are in need of maintenance.

4.1.6.7 Based on the results of your inspection, initiate corrective action under Part 5.

4.1.7. Inspection Report.

4.1.7.1 ***Requirement to Complete Inspection Report.*** You must complete an inspection report within 24 hours of completing any site inspection. Each inspection report must include the following:

a. The inspection date;

b. Names and titles of personnel making the inspection;

c. A summary of your inspection findings, covering at a minimum the observations you made in accordance with Part 4.1.6;

d. If you are inspecting your site at the frequency specified in Part 4.1.2.2, Part 4.1.3, or Part 4.1.4.2, and you conducted an inspection because of rainfall measuring 0.25 inches or greater, you must include the applicable rain gauge or weather station readings that triggered the inspection; and

e. If you have determined that it is unsafe to inspect a portion of your site, you must describe the reason you found it to be unsafe and specify the locations that this condition applied to.

4.1.7.2 ***Signature Requirements.*** Each inspection report must be signed in accordance with Appendix I, Part I.11 of this permit.

4.1.7.3 ***Recordkeeping Requirements.*** You are required to keep a current, copy of all inspection reports at the site or at an easily accessible location, so that it can be made available at the time of an onsite inspection or upon request by EPA. For purposes of this permit, your inspection reports may be kept electronically if the records are:

a. In a format that can be read in a similar manner as a paper record;

b. Legally dependable with no less evidentiary value than their paper equivalent; and

c. Accessible to the inspector during an inspection to the same extent as a paper copy stored at the site would be, if the records were stored in paper form.

Note: See Section IX.1.7 of the Fact Sheet for a discussion on ways to ensure that electronic records satisfy this requirement. See Appendix I, Part I.11.5 for requirements relating to electronic signature of these documents.

All inspection reports completed for this Part must be retained for at least 3 years from the date that your permit coverage expires or is terminated.

4.2. INSPECTIONS BY EPA.

You must allow EPA, or an authorized representative of the EPA, to conduct the following activities at reasonable times:

4.2.1. Enter onto areas of your site, including any construction support activity areas covered by this permit (see Part 1.3.c), and onto locations where records are kept under the conditions of this permit;

4.2.2. Access and copy any records that must be kept under the conditions of this permit;

4.2.3. Inspect your construction site, including any construction support activity areas covered by this permit (see Part 1.3.c) and any stormwater controls installed and maintained at the site; and

4.2.4. Sample or monitor for the purpose of ensuring compliance.

5. CORRECTIVE ACTIONS.

5.1. "CORRECTIVE ACTIONS" DEFINED.

Corrective actions are actions you take in compliance with this Part to:

- Repair, modify, or replace any stormwater control used at the site;
- Clean up and properly dispose of spills, releases, or other deposits; or
- Remedy a permit violation.

5.2. REQUIREMENTS FOR TAKING CORRECTIVE ACTION.

You must complete the following corrective actions in accordance with the deadlines specified in this Part. In all circumstances, you must immediately take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events.

Note: In this context, the term "immediately" requires construction operators to, on the same day a condition requiring corrective action is found, take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational. However, if the problem is identified at a time in the work day when it is too late to initiative corrective action, the initiation of corrective action must begin on the following work day.

5.2.1. For any of the following conditions on your site, you must install a new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery. If it is infeasible to complete the installation or repair within 7 calendar days, you must document in your records why it is infeasible to complete the installation or repair within the 7 calendar day timeframe and document your schedule for installing the stormwater control(s) and making it operational as soon as practicable after the 7-day timeframe.

5.2.1.1 A required stormwater control was never installed, was installed incorrectly, or not in accordance with the requirements in Parts 2 and/or 3; or

5.2.1.2 You become aware that the stormwater controls you have installed and are maintaining are not effective enough for the discharge to meet applicable water quality standards or applicable requirements in Part 3.1. In this case, you must notify your EPA Regional Office by the end of the next work day. You are required to submit your notification through EPA's electronic NOI system, or "eNOI", at www.epa.gov/npdes/cgpenoi; or

5.2.1.3 One of the prohibited discharges in Part 2.3.1 is occurring or has occurred.

5.2.2. Where your corrective actions result in changes to any of the stormwater controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within 7 calendar days of completing corrective action work.

5.3. CORRECTIVE ACTION REQUIRED BY EPA.

You must comply with any corrective actions required by EPA as a result of permit violations found during an inspection carried out under Part 4.2.

5.4. CORRECTIVE ACTION REPORT.

For each corrective action taken in accordance with this Part, you must complete a corrective action report, which includes the applicable information in Parts 5.4.1 and 5.4.2. Note that these reports must be maintained in your records but do not need to be provided to EPA except upon request.

5.4.1. Within 24 hours of discovering the occurrence of one of the triggering conditions in Part 5.2.1 at your site, you must complete a report of the following:

5.4.1.1 Which condition was identified at your site;

5.4.1.2 The nature of the condition identified; and

5.4.1.3 The date and time of the condition identified and how it was identified.

5.4.2. Within 7 calendar days of discovering the occurrence of one of the triggering conditions in Part 5.2.1 at your site, you must complete a report of the following:

5.4.2.1 Any follow-up actions taken to review the design, installation, and maintenance of stormwater controls, including the dates such actions occurred;

5.4.2.2 A summary of stormwater control modifications taken or to be taken, including a schedule of activities necessary to implement changes, and the date the modifications are completed or expected to be completed; and

5.4.2.3 Notice of whether SWPPP modifications are required as a result of the condition identified or corrective action.

5.4.3. Signature Requirements. Each corrective action report must be signed and certified in accordance with Appendix I, Part I.11 of this permit.

5.4.4. Recordkeeping Requirements. You are required to keep a current copy of all corrective action reports at the site or at an easily accessible location, so that it can be made available at the time of an onsite inspection or upon request by EPA. For purposes of this permit, your corrective action reports may be kept electronically if the records are:

5.4.4.1 In a format that can be read in a similar manner as a paper record;

5.4.4.2 Legally dependable with no less evidentiary value than their paper equivalent; and

5.4.4.3 Accessible to the inspector during an inspection to the same extent as a paper copy stored at the site would be, if the records were stored in paper form.

Note: See Section IX.1.7 of the Fact Sheet for a discussion on ways to ensure that electronic records satisfy this requirement. See Appendix I, Part I.11.5 for requirements relating to electronic signature of these documents.

All corrective action reports completed for this Part must be retained for at least 3 years from the date that your permit coverage expires or is terminated.

6. STAFF TRAINING REQUIREMENTS.

Prior to the commencement of earth-disturbing activities or pollutant-generating activities, whichever occurs first, you must ensure that the following personnel understand the requirements of this permit and their specific responsibilities with respect to those requirements:

- Personnel who are responsible for the design, installation, maintenance, and/or repair of stormwater controls (including pollution prevention measures);
- Personnel responsible for the application and storage of treatment chemicals (if applicable);
- Personnel who are responsible for conducting inspections as required in Part 4.1.1; and
- Personnel who are responsible for taking corrective actions as required in Part 5.

Notes: (1) If the person requiring training is a new employee, who starts after you commence earth-disturbing or pollutant-generating activities, you must ensure that this person has the proper understanding as required above prior to assuming particular responsibilities related to compliance with this permit.

(2) For emergency-related construction activities, the requirement to train personnel prior to commencement of earth-disturbing activities does not apply, however, such personnel must have the required training prior to NOI submission.

You are responsible for ensuring that all activities on the site comply with the requirements of this permit. You are not required to provide or document formal training for subcontractors or other outside service providers, but you must ensure that such personnel understand any requirements of the permit that may be affected by the work they are subcontracted to perform.

At a minimum, personnel must be trained to understand the following if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections):

- The location of all stormwater controls on the site required by this permit, and how they are to be maintained;
- The proper procedures to follow with respect to the permit's pollution prevention requirements; and
- When and how to conduct inspections, record applicable findings, and take corrective actions.

7. STORMWATER POLLUTION PREVENTION PLAN (SWPPP).

7.1. GENERAL REQUIREMENTS.

7.1.1. Requirement to Develop a SWPPP Prior to Submitting Your NOI.

All operators associated with a construction project to be covered under this permit must develop a SWPPP.

Note: You have the option of developing a group SWPPP where you are one of several operators who will be engaged in construction activities at your site. For instance, if both the owner and the general contractor of the construction site are permitted, the owner may be the party responsible for SWPPP development, and the general contractor can choose to use this same SWPPP, as long as the SWPPP addresses the general contractor's scope of construction work and obligations under this permit.

You are required to develop your site's SWPPP prior to submitting your NOI. At a minimum, your SWPPP must include the information required in Part 7.2 and as specified in other parts of the permit. [24] You must also update the SWPPP as required in Part 7.4.

Note: If your project is an "existing project" (see Part 1.4.2.b) or if you are a new operator of an existing project" (see Part 1.4.2.c), and it is infeasible for you to comply with a specific requirement in this Part or in Parts 2.1, and 2.3.3 through 2.3.5 (except for Parts 2.3.3.1, 2.3.3.2b, 2.3.3.3c.i, and 2.3.3.4) because (1) the provision was not part of the permit you were previously covered under (i.e., the 2003 or 2008 CGP), and (2) because you are prevented from compliance due to the nature or location of earth disturbances that commenced prior to February 16, 2012 (or prior to April 9, 2012 for projects in the State of Idaho (except for Indian country), or prior to April 13, 2012 for projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or prior to May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin), or because you are unable to comply with the requirement due to the manner in which stormwater controls have already been installed or were already designed prior to February 16, 2012 (or prior to April 9, 2012 for projects in the State of Idaho (except for Indian country), or prior to April 13, 2012 for projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or prior to May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin), you are required to include documentation of the reasons why it is infeasible for you to meet the specific requirement, and then you may be waived from complying with this requirement. You must include a separate justification why it is infeasible for you to meet each of the applicable requirements.

If you prepared a SWPPP for coverage under a previous version of this NPDES permit, you must review and update your SWPPP to ensure that this permit's requirements are addressed prior to submitting your NOI.

7.2. SWPPP CONTENTS.

Your SWPPP must include the following information, at a minimum.

[24] The SWPPP does not establish the effluent limits that apply to your site's discharges; these limits are established in this permit in Parts 2 and 3.

7.2.1. Stormwater Team.

Each operator, or group of multiple operators, must assemble a "stormwater team," which is responsible for overseeing the development of the SWPPP, any later modifications to it, and for compliance with the requirements in this permit.

The SWPPP must identify the personnel (by name or position) that are part of the stormwater team, as well as their individual responsibilities. Each member of the stormwater team must have ready access to an electronic or paper copy of applicable portions of this permit, the most updated copy of your SWPPP, and other relevant documents or information that must be kept with the SWPPP.

7.2.2. Nature of Construction Activities.

The SWPPP must describe the nature of your construction activities, including the size of the property (in acres) and the total area expected to be disturbed by the construction activities (in acres), construction support activity areas covered by this permit (see Part 1.3.c), and the maximum area expected to be disturbed at any one time.

7.2.3. Emergency-Related Projects.

If you are conducting earth-disturbing activities in response to a public emergency (see Part 1.2), you must document the cause of the public emergency *(e.g., natural disaster, extreme flooding conditions, etc.)*, information substantiating its occurrence *(e.g., state disaster declaration or similar state or local declaration)*, and a description of the construction necessary to reestablish effected public services.

7.2.4. Identification of Other Site Operators.

The SWPPP must include a list of all other operators who will be engaged in construction activities at your site, and the areas of the site over which each operator has control.

7.2.5. Sequence and Estimated Dates of Construction Activities.

The SWPPP must include a description of the intended sequence of construction activities, including a schedule of the estimated start dates and the duration of the activity, for the following activities:

7.2.5.1 Installation of stormwater control measures, and when they will be made operational, including an explanation of how the sequence and schedule for installation of stormwater control measures complies with Part 2.1.1.3a and of any departures from manufacturer specifications pursuant to Part 2.1.1.3b;

7.2.5.2 Commencement and duration of earth-disturbing activities, including clearing and grubbing, mass grading, site preparation (i.e., excavating, cutting and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization;

7.2.5.3 Cessation, temporarily or permanently, of construction activities on the site, or in designated portions of the site;

7.2.5.4 Final or temporary stabilization of areas of exposed soil. The dates for stabilization must reflect the applicable deadlines to which you are subject in Part 2.2.1; and

7.2.5.5 Removal of temporary stormwater conveyances/channels and other stormwater control measures, removal of construction equipment and vehicles, and cessation of any pollutant-generating activities.

Note: If plans change due to unforeseen circumstances or for other reasons, the requirement to describe the sequence and estimated dates of construction activities is not meant

to "lock in" the operator to meeting these projections. When departures from initial projections are necessary, this should be documented in the SWPPP itself or in associated records, as appropriate.

7.2.6. Site Map.

The SWPPP must include a legible site map, or series of maps, showing the following features of your project:

Note: Included in the project site are any construction support activities covered by this permit (see Part 1.3.c).

7.2.6.1 Boundaries of the property and of the locations where construction activities will occur, including:

a. Locations where earth-disturbing activities will occur, noting any phasing of construction activities;

b. Approximate slopes before and after major grading activities. Note areas of steep slopes, as defined in Appendix A;

c. Locations where sediment, soil, or other construction materials will be stockpiled;

d. Locations of any crossings of surface waters;

e. Designated points on the site where vehicles will exit onto paved roads;

f. Locations of structures and other impervious surfaces upon completion of construction; and

g. Locations of construction support activity areas covered by this permit (see Part 1.3.c).

7.2.6.2 Locations of all surface waters, including wetlands, that exist within or in the immediate vicinity of the site. Indicate which waterbodies are listed as impaired, and which are identified by your state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 waters;

7.2.6.3 The boundary lines of any natural buffers provided consistent with Part 2.1.2.1a;

7.2.6.4 Areas of federally-listed critical habitat for endangered or threatened species;

7.2.6.5 Topography of the site, existing vegetative cover (*e.g., forest, pasture, pavement, structures*), and drainage pattern(s) of stormwater and authorized non-stormwater flow onto, over, and from the site property before and after major grading activities;

7.2.6.6 Stormwater and allowable non-stormwater discharge locations, including:

a. Locations of any storm drain inlets on the site and in the immediate vicinity of the site; and

Note: The requirement to show storm drain inlets in the immediate vicinity of the site on your site map only applies to those inlets that are easily identifiable from your site or from a publicly accessible area immediately adjacent to your site.

b. Locations where stormwater or allowable non-stormwater will be discharged to surface waters (including wetlands) on or near the site.

7.2.6.7 Locations of all potential pollutant-generating activities identified in Part 7.2.7;

7.2.6.8 Locations of stormwater control measures; and

7.2.6.9 Locations where polymers, flocculants, or other treatment chemicals will be used and stored.

7.2.7. Construction Site Pollutants.

The SWPPP must include the following:

7.2.7.1 A list and description of all the pollutant-generating activities[25] on your site.

7.2.7.2 For each pollutant-generating activity, an inventory of pollutants or pollutant constituents *(e.g., sediment, fertilizers and/or pesticides, paints, solvents, fuels)* associated with that activity, which could be exposed to rainfall, or snowmelt, and could be discharged from your construction site. You must take into account where potential spills and leaks could occur that contribute pollutants to stormwater discharges. You must also document any departures from the manufacturer's specifications for applying fertilizers containing nitrogen and phosphorus, as required in Part 2.3.5.1.

7.2.8. Non-Stormwater Discharges.

The SWPPP must also identify all sources of allowable non-stormwater discharges listed in Part 1.3.d.

7.2.9. Buffer Documentation.

If you are required to comply with Part 2.1.2.1 because a surface water is located within 50 feet of your project's earth disturbances, you must describe which compliance alternative you have selected for your site, and comply with any additional requirements to provide documentation in Part 2.1.2.1.

7.2.10. Description of Stormwater Control Measures.

7.2.10.1 ***Stormwater Control Measures to be Used During Construction Activity.*** The SWPPP must describe all stormwater control measures that are or will be installed and maintained at your site to meet the requirements of Part 2. For each stormwater control measure, you must document:

a. Information on the type of stormwater control measure to be installed and maintained, including design information;

b. What specific sediment controls will be installed and made operational prior to conducting earth-disturbing activities in any given portion of your site to meet the requirement of Part 2.1.2.2a;

c. For exit points on your site, document stabilization techniques you will use and any additional controls that are planned to remove sediment prior to vehicle exit consistent with Part 2.1.2.3; and

d. For linear projects, where you have determined that the use of perimeter controls in portions of the site is impracticable, document why you believe this to be the case (see Part 2.1.2.2a).

7.2.10.2 ***Use of Treatment Chemicals.*** If you will use polymers, flocculants, or other treatment chemicals at your site, the SWPPP must include:

a. A listing of all soil types[26] that are expected to be exposed during construction and that will be discharged to locations where chemicals

[25] Examples of pollutant-generating activities include, but are not limited to: paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal; and dewatering operations.

will be applied. Also include a listing of soil types expected to be found in fill material to be used in these same areas, to the extent you have this information prior to construction.

b. A listing of all treatment chemicals to be used at the site, and why the selection of these chemicals is suited to the soil characteristics of your site;

c. If you have been authorized by your applicable EPA Regional Office to use cationic treatment chemicals, include the specific controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards;

d. The dosage of all treatment chemicals you will use at the site or the methodology you will use to determine dosage;

e. Information from any applicable Material Safety Data Sheets (MSDS);

f. Schematic drawings of any chemically-enhanced stormwater controls or chemical treatment systems to be used for application of the treatment chemicals;

g. A description of how chemicals will be stored consistent with Part 2.1.3.3b;

h. References to applicable state or local requirements affecting the use of treatment chemicals, and copies of applicable manufacturer's specifications regarding the use of your specific treatment chemicals and/or chemical treatment systems; and

i. A description of the training that personnel who handle and apply chemicals have received prior to permit coverage, or will receive prior to use of the treatment chemicals at your site.

7.2.10.3 ***Stabilization Practices.*** The SWPPP must describe the specific vegetative and/or non-vegetative practices that will be used to comply with the requirements in Part 2.2, including:

a. If you will be complying with the stabilization deadlines specified in Part 2.2.1.3a, you must indicate in your SWPPP the beginning and ending dates of the seasonally dry period and your site conditions; and

b. If you will be complying with the stabilization deadlines specified in Part 2.2.1.3b, you must document the circumstances that prevent you from meeting the deadlines specified in Parts 2.2.1.1 and/or 2.2.1.2.

7.2.11. Pollution Prevention Procedures.

7.2.11.1 ***Spill Prevention and Response Procedures.*** The SWPPP must describe procedures that you will follow to prevent and respond to spills and leaks consistent with Part 2.3, including:

a. Procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases. Identify the name or position of the employee(s) responsible for detection and response of spills or leaks; and

[26] Information on soils may be obtained at http://websoilsurvey.nrcs.usda.gov/app/.

b. Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity consistent with Part 2.3.4 and established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period. Contact information must be in locations that are readily accessible and available.

You may also reference the existence of Spill Prevention Control and Countermeasure (SPCC) plans developed for the construction activity under Part 311 of the CWA, or spill control programs otherwise required by an NPDES permit for the construction activity, provided that you keep a copy of that other plan onsite.

Note: Even if you already have an SPCC or other spill prevention plan in existence, your plans will only be considered adequate if they meet all of the requirements of this Part, either as part of your existing plan or supplemented as part of the SWPPP.

7.2.11.2 ***Waste Management Procedures.*** The SWPPP must describe procedures for how you will handle and dispose of all wastes generated at your site, including, but not limited to, clearing and demolition debris, sediment removed from the site, construction and domestic waste, hazardous or toxic waste, and sanitary waste.

7.2.12. Procedures for Inspection, Maintenance, and Corrective Action.

The SWPPP must describe the procedures you will follow for maintaining your stormwater control measures, conducting site inspections, and, where necessary, taking corrective actions, in accordance with Part 2.1.1.4, Part 2.3.2, Part 4, and Part 5 of the permit. The following information must also be included in your SWPPP:

7.2.12.1 Personnel responsible for conducting inspections;

7.2.12.2 The inspection schedule you will be following, which is based on whether your site is subject to Part 4.1.2 or Part 4.1.3, and whether your site qualifies for any of the allowances for reduced inspection frequencies in Part 4.1.4. If you will be conducting inspections in accordance with the inspection schedule in Part 4.1.2.2 or Part 4.1.3, the location of the rain gauge on your site or the address of the weather station you will be using to obtain rainfall data;

7.2.12.3 If you will be reducing your inspection frequency in accordance with Part 4.1.4.2, the beginning and ending dates of the seasonally-defined arid period for your area or the valid period of drought. If you will be reducing your inspection frequency in accordance with Part 4.1.4.3, the beginning and ending dates of frozen conditions on your site; and

7.2.12.4 Any inspection or maintenance checklists or other forms that will be used.

7.2.13. Staff Training.

The SWPPP must include documentation that the required personnel were trained in accordance with Part 6.

7.2.14. Documentation of Compliance with Other Federal Requirements.

7.2.14.1 *Endangered Species Act.* The SWPPP must include documentation supporting your determination with respect to Part 1.1.e and Appendix D.

7.2.14.2 *Historic Properties.* The SWPPP must include documentation required by Appendix E in relation to potential impacts to historic properties.

7.2.14.3 *Safe Drinking Water Act Underground Injection Control (UIC) Requirements for Certain Subsurface Stormwater Controls.* If you are using any of the following stormwater controls at your site, as they are described below, you must document any contact you have had with the applicable state agency or EPA Regional Office responsible for implementing the requirements for underground injection wells in the Safe Drinking Water Act and EPA's implementing regulations at 40 CFR Parts 144 -147. Such controls would generally be considered Class V UIC wells:

a. Infiltration trenches (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system);

b. Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate stormwater flow; and

c. Drywells, seepage pits, or improved sinkholes (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system).

Note: For state UIC program contacts, refer to the following EPA website: http://water.epa.gov/type/groundwater/uic/whereyoulive.cfm.

7.2.15. SWPPP Certification.

You must sign and date your SWPPP in accordance with Appendix I, Part I.11.

7.2.16. Post-Authorization Additions to the SWPPP.

Once you are notified of your coverage under this permit, you must include the following documents as part of your SWPPP:

7.2.16.1 A copy of your NOI submitted to EPA along with any correspondence exchanged between you and EPA related to coverage under this permit;

7.2.16.2 A copy of the acknowledgment letter you receive from the NOI Processing Center or eNOI system assigning your permit tracking number;

7.2.16.3 A copy of this permit (an electronic copy easily available to the stormwater team is also acceptable).

7.3. ON-SITE AVAILABILITY OF YOUR SWPPP.

You are required to keep a current copy of your SWPPP at the site or at an easily accessible location so that it can be made available at the time of an on-site inspection or upon request by EPA; a state, tribal, or local agency approving stormwater management plans; the operator of a storm sewer system receiving discharges from the site; or representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS).

EPA may provide access to portions of your SWPPP to a member of the public upon request. Confidential Business Information (CBI) will be withheld from the public, but may not be withheld from EPA, USFWS, or NMFS.

Note: Information covered by a claim of confidentiality will be disclosed by EPA only to the extent of, and by means of, the procedures set forth in 40 CFR Part 2, Subpart B. In general, submitted information protected by a business confidentiality claim may

be disclosed to other employees, officers, or authorized representatives of the United States concerned with implementing the CWA. The authorized representatives, including employees of other executive branch agencies, may review CBI during the course of reviewing draft regulations.

If an onsite location is unavailable to keep the SWPPP when no personnel are present, notice of the plan's location must be posted near the main entrance of your construction site.

7.4. REQUIRED SWPPP MODIFICATIONS.

7.4.1. List of Conditions Requiring SWPPP Modification.

You must modify your SWPPP, including the site map(s), in response to any of the following conditions:

7.4.1.1 Whenever new operators become active in construction activities on your site, or you make changes to your construction plans, stormwater control measures, pollution prevention measures, or other activities at your site that are no longer accurately reflected in your SWPPP. This includes changes made in response to corrective actions triggered under Part 5. You do not need to modify your SWPPP if the estimated dates in Part 7.2.5 change during the course of construction;

7.4.1.2 To reflect areas on your site map where operational control has been transferred (and the date of transfer) since initiating permit coverage;

7.4.1.3 If inspections or investigations by site staff, or by local, state, tribal, or federal officials determine that SWPPP modifications are necessary for compliance with this permit;

7.4.1.4 Where EPA determines it is necessary to impose additional requirements on your discharge, the following must be included in your SWPPP:

a. A copy of any correspondence describing such requirements; and

b. A description of the stormwater control measures that will be used to meet such requirements.

7.4.1.5 To reflect any revisions to applicable federal, state, tribal, or local requirements that affect the stormwater control measures implemented at the site; and

7.4.1.6 If applicable, if a change in chemical treatment systems or chemically-enhanced stormwater control is made, including use of a different treatment chemical, different dosage rate, or different area of application.

7.4.2. Deadlines for SWPPP Modifications.

You must complete required revisions to the SWPPP within 7 calendar days following the occurrence of any of the conditions listed in Part 7.4.1.

7.4.3. SWPPP Modification Records.

You are required to maintain records showing the dates of all SWPPP modifications. The records must include the name of the person authorizing each change (see Part 7.2.15 above) and a brief summary of all changes.

7.4.4. Certification Requirements.

All modifications made to the SWPPP consistent with Part 7.4 must be authorized by a person identified in Appendix I, Part I.11.b.

7.4.5. Required Notice to Other Operators.

Upon determining that a modification to your SWPPP is required, if there are multiple operators covered under this permit, you must immediately notify any operators who may be impacted by the change to the SWPPP.

8. HOW TO TERMINATE COVERAGE.

Until you terminate coverage under this permit, you are required to comply with all conditions and effluent limitations in the permit. To terminate permit coverage, you must submit to EPA a complete and accurate Notice of Termination (NOT), which certifies that you have met the requirements for terminating in Part 8.

8.1. MINIMUM INFORMATION REQUIRED IN NOT.

You will be required to provide the following in your NOT:

8.1.1. NPDES permit tracking number provided by EPA when you received coverage under this permit;

8.1.2. Basis for submission of the NOT (see Part 8.2);

8.1.3. Operator contact information;

8.1.4. Name of project and address (or a description of location if no street address is available); and

8.1.5. NOT certification.

8.2. CONDITIONS FOR TERMINATING PERMIT COVERAGE.

You may terminate permit coverage only if one of the following conditions occurs at your site:

8.2.1. You have completed all earth-disturbing activities at your site and, if applicable, construction support activities covered by this permit (see Part 1.3.c), and you have met the following requirements:

8.2.1.1 For any areas that (1) were disturbed during construction, (2) are not covered over by permanent structures, and (3) over which you had control during the construction activities, you have met the requirements for final vegetative or non-vegetative stabilization in Part 2.2.2;

8.2.1.2 You have removed and properly disposed of all construction materials, waste and waste handling devices, and have removed all equipment and vehicles that were used during construction, unless intended for long-term use following your termination of permit coverage;

8.2.1.3 You have removed all stormwater controls that were installed and maintained during construction, except those that are intended for long-term use following your termination of permit coverage or those that are biodegradable; and

8.2.1.4 You have removed all potential pollutants and pollutant-generating activities associated with construction, unless needed for long-term use following your termination of permit coverage; or

8.2.2. You have transferred control of all areas of the site for which you are responsible under this permit to another operator, and that operator has submitted an NOI and obtained coverage under this permit; or

8.2.3. Coverage under an individual or alternative general NPDES permit has been obtained.

8.3. HOW TO SUBMIT YOUR NOT.

You are required to use EPA's electronic NOI system, or "eNOI system", to prepare and submit your NOT. The electronic NOT form you are required to complete is found at www.epa.gov/npdes/stormwater/cgpenoi. You will use your NOI tracking number *(i.e., the EPA number you were assigned upon authorization under the permit)* to upload the

fillable NOT form, which will ensure that EPA properly records your termination of coverage. If you have a problem with the use of the eNOI system, contact the EPA Regional Office that corresponds to the location of your site. If you are given approval by the EPA Regional Office to use a paper NOT, you must complete the form in Appendix K.

8.4. DEADLINE FOR SUBMITTING NOTS.

You must submit your NOT within 30 calendar days after any one of the triggering conditions in Part 8.2 occur.

8.5. EFFECTIVE DATE OF TERMINATION OF COVERAGE.

Your authorization to discharge under this permit terminates at midnight of the calendar day that a complete NOT is processed and posted on EPA's website (www.epa.gov/npdes/stormwater/cgpnoisearch).

9. PERMIT CONDITIONS APPLICABLE TO SPECIFIC STATES, INDIAN COUNTRY LANDS, OR TERRITORIES

The provisions in this Part provide modifications or additions to the applicable conditions of this permit to reflect specific additional conditions required as part of the state or tribal CWA Section 401 certification process, or the Coastal Zone Management Act (CZMA) certification process, or as otherwise established by the permitting authority. The specific additional revisions and requirements only apply to activities in those specific states, Indian country, and areas in certain states subject to construction projects by Federal Operators. States, Indian country, and areas subject to construction by Federal Operators not included in this Part do not have any modifications or additions to the applicable conditions of this permit

9.1. Region 1

9.1.1. MAR120000: Commonwealth of Massachusetts (except Indian country).

9.1.1.1 You must comply with the Massachusetts Clean Waters Act (Ch. 21, ss. 26-53).

9.1.1.2 You must comply with the conditions in 314 CMR 4.00- Massachusetts Surface Water Quality Standards.

9.1.1.3 You must comply with the conditions in 314 CMR 3.00- Massachusetts Surface Water Discharge Permit Program.

9.1.1.4 You must comply with the Wetlands Protection Act (Ch. 131 s. 40) and its regulations, 310 CMR 10.00 and any Order of Conditions issued by a Conservation Commission or a Superseding Order of Conditions issued by the Massachusetts Department of Environmental Protection.

9.1.1.5 You must comply with the Massachusetts Storm Water Performance Standards, as prescribed by state regulations promulgated under the authority of the Massachusetts Clean Waters Act, MGL Ch. 21, ss 26-53 and the Wetlands Protection Act, Ch. 131, s. 40.

9.1.1.6 You must comply with the conditions in 314 CMR 9.00 – Water Quality Certification for Discharges of Dredged or Fill Material, Dredging, and Dredged Material Disposal in Waters of the United States within the Commonwealth.

9.1.1.7 You must comply with the Massachusetts Endangered Species Act (MESA), MGL Ch. 313A and regulations at 321 CMR 10.00 and any actions undertaken to comply with this stormwater general permit shall not result in non-compliance with the MESA.

9.1.1.8 Activities covered under this general permit shall not interfere with the implementation of mosquito control work conducted in accordance with Chapter 252 including s. 5A thereunder and MassDEP Guideline Number BRP G01-02, West Nile Virus Application of Pesticides to Wetland Resource Areas and Buffer Zones, and Public Water Supplies.

9.1.1.9 The Department may request a copy of the Stormwater Pollution Prevention Plan (SWPPP) and the permittee is required to submit the SWPPP to the Department within 14 days of such request. The Department may conduct an inspection of any facility covered by this permit to ensure compliance with state law requirements, including state water quality standards. The Department may enforce its certification conditions.

9.1.1.10 The Department may require the permit holder to perform water quality monitoring during the permit term if monitoring is necessary for the protection of public health or the environment as designated under the authority at 314 CMR 3.00.

9.1.1.11 The Department may require the permit holder to provide measurable verification of the effectiveness of Best Management Practices (BMPs) and other control measures used in the stormwater management program, including water quality monitoring.

9.1.1.12 The Department has determined that compliance with this permit does not protect the permit holder from enforcement actions deemed necessary by the Department under its associated regulations to address an imminent threat to public health or a significant adverse environmental impact which results in a violation of the Massachusetts Clean Waters Act, Ch. 21, ss. 26-53.

9.1.1.13 The Department reserves the right to modify this 401 Water Quality Certification if any changes, modifications, or deletions are made to this general permit. In addition, the Department reserves the right to add and/or alter the terms and conditions of this 401 Water Quality Certification to carry out its responsibilities during the term of this general permit with respect to water quality, including any revisions to 314 CMR 4.00, Massachusetts Surface Water Quality Standards.

9.1.1.14 Should any violation of the Massachusetts Surface Water Quality Standards, 314 CMR 4.00, or the conditions of this 401 Water Quality Certification occur, the Department will direct the permit holder to correct the violation(s). The Department has the right to take any action as authorized by the General Laws of the Commonwealth to address the violation(s) of this permit or the Massachusetts Clean Waters Act and the regulations promulgated thereunder. Substantial civil and criminal penalties are authorized under MGL Ch. 21, s. 42 for discharging into Masachusetts' waters in violation of an order or permit issued by this Department. This 401 Water Quality Certification does not relieve the permit holder of the duty to comply with other applicable Massachusetts statutes and regulations.

9.1.2. NHR120000: State of New Hampshire.

9.1.2.1 If you disturb 100,000 square feet or more of contiguous area, you must also apply for an Alteration of Terrain (AoT) permit from DES pursuant to RSA 485-A:17 and Env-Ws 1500. This requirement also applies to a lower disturbance threshold of 50,000 square feet or more when construction occurs within the protected shoreline under the Shoreland Water Quality Protection Act (see RSA 483-B and Env-Ws 1400). A permit application must also be filed if your project disturbs an area of greater than 2,500 square feet, is within 50 feet of any surface water, and has a flow path of 50 feet or longer disturbing a grade of 25 percent or greater. Project sites with disturbances smaller than those discussed above, that have the potential to adversely affect state surface waters, are subject to the conditions of an AoT General Permit by Rule.

9.1.2.2 You must determine that any excavation dewatering discharges are not contaminated before they will be authorized as an allowable non-stormwater discharge under this permit (see Part 1.3.d). The water is considered uncontaminated if there is no groundwater contamination within 1,000 feet of the source of the groundwater to be treated and discharged.

Information on groundwater contamination can be generated over the Internet via the NHDES web site http://des.nh.gov/ at the OneStop Web Geographic Information System at http://www2.des.state.nh.us/gis/onestop. If it is determined that the groundwater to be dewatered is near a remediation or other waste site you must apply for the Remediation General Permit (see http://www.epa.gov/region1/npdes/rgp.html.)

9.1.2.3 You must treat any uncontaminated excavation dewatering discharges as necessary to remove suspended solids and turbidity. The discharges must be sampled at a location prior to mixing with stormwater at least once per week during weeks when discharges occur. Samples must be analyzed for total suspended solids (TSS) and must meet monthly average and daily maximum TSS limits of 50 milligrams per liter (mg/L) and 100 mg/L, respectively. TSS (a.k.a. Residue, Nonfilterable) sampling and analysis must be performed in accordance with Tables IB and II in 40 CFR 136.3 (see: http://www.access.gpo.gov/nara/cfr/waisidx_02/40cfr136_02.html). Records of any sampling and analysis must be maintained and kept with the SWPPP for at least three years after final site stabilization.

9.1.2.4 Construction site owners and operators must consider opportunities for post-construction groundwater recharge using infiltration best management practices (BMPs) during site design and preparation of the stormwater pollution prevention plan (SWPPP). If your construction site is in a town that is required to obtain coverage under the NPDES General Permit for discharges from Municipal Separate Storm Sewer Systems (MS4) you may be required to use such practices. The SWPPP must include a description of any on-site infiltration that will be installed as a post-construction stormwater management measure or reasons for not employing such measures such as 1) The facility is located in a wellhead protection area as defined in RSA 485-C:2; or 2) The facility is located in an area where groundwater has been reclassified to GAA, GAI or GA2 pursuant to RSA 485-C and Env-Ws 420; or 3) Any areas that would be exempt from the groundwater recharge requirements contained in Env-Ws 1507.04(e), including all land uses or activities considered to be a "High-load Area" (see Env-Wq 1502.26). For design considerations for infiltration measures see Volume II of the NH Stormwater Manual.

9.1.2.5 Appendix F contains a list of Tier 2, or high quality waters. Although there is no official list of tier 2 waters, it can be assumed that all NH surface waters are tier 2 for turbidity unless 1) the surface water that you are proposing to discharge into is listed as impaired for turbidity in the states listing of impaired waters (see Surface Water Quality Watershed Report Cards at http://des.nh.gov/organization/divisions/water/wmb/swqa/report_cards.htm or 2) sampling upstream of the proposed discharge location shows turbidity values greater than 10 NTU. A single grab sample collected during dry weather (no precipitation within 48 hours) is acceptable.

9.1.2.6 To ensure compliance with RSA 485-C, RSA 485-A, RSA 485-A:13, I(a), Env-Wq 1700 and Env-Wq 302, the following information may be requested by NHDES. This information must be kept on site unless you receive a written request from NHDES that it be sent to the address shown in Part 9.1.2.7.

a. A site map required in Part 7.2.6, showing the type and location of all post-construction infiltration BMPs utilized at the facility or the reason(s) why none were installed;

b. A list of all non-stormwater discharges that occur at the facility, including their source locations and the control measures being used (see Part 1.3.d).

c. Records of sampling and analysis of TSS required for construction dewatering discharges (see Part 9.1.2.3).

9.1.2.7 All required or requested documents must be sent to:

NH Department of Environmental Services, Wastewater Engineering Bureau, Permits & Compliance Section
P.O. Box 95
Concord, NH 03302-0095

9.1.2.8 When NHDES determines that additional water quality certification requirements are necessary to protect water quality, it may require individual discharges to meet additional conditions to obtain or continue coverage under the CGP. Any such conditions must be supplied to the permittee in writing. Any required pollutant loading analyses and any designs for structural best management practices necessary to protect water quality must be prepared by a civil or sanitary engineer registered in New Hampshire.

9.2. Region 4

9.2.1. FLR12000I: Indian country within the State of Florida.

9.2.1.1 **Seminole Tribe of Florida**. The following conditions apply only for discharges on federal trust lands of the Seminole Tribe of Florida (Big Cypress, Brighton, Hollywood, Immokalee, and Tampa Reservations):

a. Any discharges into waters of the Seminole Tribe of Florida shall not cause an exceedance in Turbidity of 29 NTU above natural background conditions.

b. Unless otherwise specified by previous permits or criteria, a storm event of three (3) day duration and twenty five (25) year return frequency shall be used in computing off-site discharge on Seminole Lands as agreed upon in the Water Rights Compact agreement attached to Public Law 100-228 (December 31, 1987), Seminole Indian Land Claims Settlement Act of 1987.

c. The Seminole Tribe of Florida accepts a 20' X 20' stabilization at entry/exit points.

9.3. Region 5

MNR12000I: Indian country within the State of Minnesota.

9.3.1.1 **Fond du Lac Band of Lake Superior Chippewa.** The following conditions apply only to discharges on the Fond du Lac Band of Lake Superior Chippewa Reservation.

a. A copy of the Storm Water Pollution Prevention Plan must be submitted to the following office at least thirty (30) days in advance of sending the Notice of Intent (NOI) to EPA:

Fond du Lac Reservation
Office of Water Protection
1720 Big Lake Road
Cloquet, MN 55720

CGP applicants are encouraged to work with the FDL Office of Water Protection in the identification of all proposed receiving waters.

b. Copies of the Notice of Intent (NOI) and the Notice of Termination (NOT) must be sent to the Fond du Lac Office of Water Protection at the same time they are submitted to EPA.

c. The turbidity limit shall NOT exceed 10% of natural background as determined by the Office of Water protection staff.

d. Turbidity sampling must take place within 24 hours of a ½ -inch or greater rainfall event. The results of the sampling must be reported to the Officce of Water Protection staff within 7 days of sample collection. All sample reporting must include the date and time, location (GPS:UTM/Zone 15), and NTU.

e. Discharges to receiving waters with open water must be sampled for turbidity prior to any authorized discharge as determined by Office of Water Protection staff.

f. This certification does not pertain to any new discharge to Outstanding Reservation Resource Waters (ORRW) as described in §105 b.3 of the Fond du Lac Water Quality Standards (Ordinance #12/98). Although additional waters may be designated in the future, currently Perch Lake, Rice Portage Lake, Miller Lake, Deadfish Lake and Jaskari Lake are designated as ORRWs. New dischargers wishing to discharge to an ORRW must obtain an individual permit for stormwater discharges from large and small construction activities.

g. All work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in the Water Quality Standards of the Fond du Lac Reservation, Ordinance 12/98 as amended. This includes, but is not limited to, the prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of water of the Fond du Lac Reservation for any of the uses designated in the Water Quality Standards of the Fond du Lac Reservation. These uses include wildlife, aquatic life, warm and cold water fisheries, subsistence fishing (netting), primary contact recreation, cultural, wild rice areas, aesthetic waters, agriculture, navigation and commercial.

h. Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the Fond du Lac Reservation. All spills must be reported to the appropriate emergency management agency, and measures shall be taken immediately to prevent the pollution of waters of the Fond du Lac reservation, including groundwater.

i. This certification does not authorize impacts to cultural, historical, or archeological features or sites, or properties that may be eligible for such listing.

9.3.1.2 **Grand Portage Band of Lake Superior Chippewa.** The following conditions apply only to discharges on the Grand Portage Band of Lake Superior Chippewa Reservation.

a. The CGP authorization is for construction activities that may occur within the exterior boundaries of the Grand Portage Reservation in

accordance to the Grand Portage Land Use Ordinance. The CGP regulates stormwater discharges associated with construction sites of one acre or more in size. Only those activities specifically authorized by the CGP are authorized by this certification (the "Certification"). This Certification does not authorize impacts to cultural, historical, or archeological features or sites, or properties that may be eligible for listing as such.

b. All construction stormwater discharges authorized by the CGP must comply with the Water Quality Standards and Water Resources Ordinance, as well as Applicable Federal Standards (as defined in the Water Resources Ordinance). As such, appropriate steps must be taken to ensure that petroleum products or other chemical pollutants are prevented from entering the Waters of the Reservation (as defined in the Water Resources Ordinance). All spills must be reported to the appropriate emergency-management agency, and measures must be taken to prevent the pollution of the Waters of the Reservation, including groundwater.

c. A copy of the Storm Water Pollution Prevention Plan (the "Plan") required by the CGP must be submitted to the Board at least 30 days in advance of sending the requisite Notice of Intent to EPA. The Board may require monitoring of storm-water discharges as determined on a case-by-case basis. If the Board determines that a monitoring plan is necessary, the monitoring plan must be prepared and incorporated into the Plan before the Notice of Intent is submitted to the EPA. The Plan should be sent to:

   Grand Portage Environmental Resources Board
   P.O. Box 428
   Grand Portage, MN 55605

   Copies of the Notice of Intent and Notice of Termination required under the General Permit must be submitted to the Board at the address above at the same time they are submitted to the EPA.

d. If requested by the Grand Portage Environmental Department, the permittee must provide additional information necessary for a case-by-case eligibility determination to assure compliance with the Water Quality Standards and any Applicable Federal Standards.

e. Discharges that the Board has determined to be or that may reasonably be expected to be contributing to a violation of Water Quality Standards or Applicable Federal Standards are not authorized by this Certification.

f. The Board retains full authority provided by the Water Resources Ordinance to ensure compliance with and to enforce the provisions of the Water Resource Ordinance and Water Quality Standards, Applicable Federal Standards, and these Certification conditions.

g. Appeals related to Board actions taken in accordance with any of the preceding conditions may be heard by the Grand Portage Tribal Court.

9.3.2. WIR12000I: Indian country within the State of Wisconsin.

9.3.2.1 **Bad River Band of the Lake Superior Tribe of Chippewa Indians.** The following conditions apply only to discharges on the Bad River Band of the Lake Superior Tribe of Chippewa Indians Reservation.

a. Only those activities specifically authorized by the CGP are authorized by this Certification. This Certification does not authorize impacts to cultural properties, or historical sites, or properties that may be eligible for listing as such.[27, 28]

b. Operators are not eligible to obtain authorization under the CGP for all new discharges to an Outstanding Tribal Resource Water (or Tier 3 water).[29] Outstanding Tribal Resource Waters, or Tier 3 waters, include the following: Kakagon Slough and the lower wetland reaches of its tributaries that support wild rice, Kakagon River, Bad River Slough, Honest John Lake, Bog Lake, a portion of Bad River, from where it enters the Reservation through the confluence with the White River, and Potato River.[30]

c. Projects utilizing cationic treatment chemicals[31] within the Bad River Reservation boundaries are not eligible for coverage under the CGP.[32]

d. All projects which are eligible for coverage under the CGP and are located within the exterior boundaries of the Bad River Reservation shall be implemented in such a manner that is consistent with the Tribe's Water Quality Standards (WQS).[33]

e. An operator proposing to discharge to an Outstanding Resource Water (or Tier 2.5 water) under the CGP must comply with the antidegradation provisions of the Tribe's WQS. Outstanding Resource Waters, or Tier 2.5 waters, include the following: a portion of Bad River, from downstream the confluence with the White River to Lake Superior, White River, Marengo River, Graveyard Creek, Bear Trap Creek, Wood Creek, Brunsweiler River, Tyler Forks, Bell Creek, and Vaughn Creek.[34] The antidegradation demonstration materials described in provision E.4.iii. must be submitted to the following address:

   Bad River Tribe's Natural Resources Department
   Attn: Water Resources Specialist
   P.O. Box 39
   Odanah, WI 54861

f. An operator proposing to discharge to an Exceptional Resource Water (or Tier 2 water) under the CGP must comply with the antidegradation provisions of the Tribe's WQS. Exceptional Resource Waters, or Tier 2 waters, include the following: any surface water within the exterior boundaries of the Reservation that is not specifically classified as an Outstanding Resource Water (Tier 2.5 water) or an Outstanding Tribal

[27] Bad River Band of Lake Superior Tribe of Chippewa Indians Water Quality Standards adopted by Resolution No. 7-6-11-441 (hereafter, Tribe's WQS).

[28] 36 C.F.R §800.16(l)(2).

[29] Tribe's WQS: See provisions E.3.ii and E.4.iv.

[30] Tribe's WQS: See provision E.2.iii.

[31] See definition of cationic treatment chemicals in Appendix A of the CGP

[32] Tribe's WQS: See provisions E.6.ii.a and E.6.ii.c.

[33] See Footnote 27.

[34] Tribe's WQS: See provision E.2.ii.

Resource Water (Tier 3 water).[35] The antidegradation demonstration materials described in provision E.4.ii. must be submitted to the following address:

Bad River Tribe's Natural Resources Department
Attn: Water Resources Specialist
P.O. Box 39
Odanah, WI 54861

g. A discharge to a surface water within the Bad River Reservation boundaries shall not cause or contribute to an exceedance of the turbidity criterion included in the Tribe's WQS, which states: Turbidity shall not exceed 5 NTU over natural background turbidity when the background turbidity is 50 NTU or less, or turbidity shall not increase more than 10% when the background turbidity is more than 50 NTU.[36]

h. All projects which are eligible for coverage under the CGP within the exterior boundaries of the Bad River Reservation must comply with the Bad River Reservation Wetland and Watercourse Protection Ordinance, or Chapter 323 of the Bad River Tribal Ordinances, including the erosion and sedimentation control, natural buffer, and stabilization requirements. Questions regarding Chapter 323 and requests for permit applications can be directed to the Wetlands Specialist in the Tribe's Natural Resources Department at (715) 682-7123 or wetlands@badriver-nsn.gov.

i. An operator of a project, which is eligible for coverage under the CGP, that would result in an allowable discharge under the CGP occurring within the exterior boundaries of the Bad River Reservation must notify the Tribe prior to the commencing earth-disturbing activities.[37] The operator must submit a copy of the Notice of Intent (NOI) to the following addresses at the same time it is submitted to the U.S. EPA:

Bad River Tribe's Natural Resources Department
Attn: Water Resources Specialist
P.O. Box 39
Odanah, WI 54861

Bad River Tribe's Natural Resources Department
Attn: Tribal Historic Preservation Officer (THPO)
P.O. Box 39
Odanah, WI 54861

The operator must also submit a copy of the Notice of Termination (NOT) to the above addresses at the same time it is submitted to the U.S. EPA.

j. The THPO must be provided 30 days to comment on the project.[38]

k. The operator must obtain THPO concurrence in writing. This written concurrence will outline measures to be taken to prevent or mitigate effects to historic properties. For more information regarding the specifics

[35] Tribe's WQS: See provision E.2.i.

[36] Tribe's WQS: See provision E.7.iii.

[37] See footnotes 27 and 28.

[38] 36 C.F.R. § 800.3(c)(4).

of the cultural resources process, see 36 CFR Part 800. A best practice for an operator is to consult with the THPO during the planning stages of an undertaking.[39]

l. An operator of a project, which is eligible for coverage under the CGP, that would result in an allowable discharge under the CGP occurring within the exterior boundaries of the Bad River Reservation must submit a copy of the Stormwater Pollution Prevention Plan (SWPPP) to the following address at the same time as submitting the NOI:[40]

Bad River Tribe's Natural Resources Department
Attn: Water Resources Specialist
P.O. Box 39
Odanah, WI 54861

m. Any corrective action reports that are required under the CGP must be submitted to the following address within one (1) working day of the report completion:[41]

Bad River Tribe's Natural Resources Department
P.O. Box 39
Odanah, WI 54861

n. An operator shall be responsible for meeting any additional permit requirements imposed by the U.S. EPA necessary to comply with the Tribe's antidegradation policies if the discharge point is located upstream of waters designated by the Tribe.[42]

9.3.2.2 **Lac du Flambeau Band of Lake Superior Chippewa Indians.** The following conditions apply only to discharges on the Lac du Flambeau Band of Lake Superior Chippewa Indians Reservation.

a. A copy of the Storm Water Pollution Prevention Plan must be submitted to the following office at least thirty (30) days in advance of sending the Notice of Intent (NOI) to EPA:

Lac du Flambeau
Tribal Land Management
P. O. Box 279
Lac du Flambeau, WI 54538

CGP applicants are encouraged to work with the LdF Office of Water Protection in the identification of all proposed receiving waters.

b. Copies of the NOI and the Notice of Termination (NOT) must be sent to the LdF Water Resource Program at the same time they are submitted to EPA.

c. All work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in the Water Quality Standards of the Lac du Flambeau Reservation. This includes, but is not limited to, the

[39] 36 C.F.R. § 800.3(b).

[40] See footnote 27.

[41] See footnote 27.

[42] See footnote 27.

prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of water of the Lac du Flambeau Reservation for any of the uses designated in the Water Quality Standards of the Lac du Flambeau Reservation.

d. Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the Lac du Flambeau Reservation. All spills must be reported to the appropriate emergency management agency, and measures shall be taken immediately to prevent the pollution of waters of the Lac du Flambeau Reservation, including groundwater.

e. This certification does not authorize impacts to cultural, historical, or archeological features or sites, or properties that may be eligible for such listing.

Note: Facilities within the Sokaogon Chippewa Community are not eligible for stormwater discharge coverage under this permit. Contact the Region 5 office for an individual permit application.

9.4. Region 6

9.4.1. NMR120000: State of New Mexico, except Indian country.

9.4.1.1 In addition to all other provisions of this permit, operators who intend to obtain authorization under this permit for all new and existing stormwater discharges must satisfy the following condition:

The SWPPP must include site-specific interim and permanent stabilization, managerial, and structural solids, erosion, and sediment control best management practices (BMPs) and/or other controls that are designed to prevent to the maximum extent practicable an increase in the sediment yield and flow velocity from pre-construction, pre-development conditions to assure that applicable standards in 20.6.4 NMAC, including the antidegradation policy, or waste load allocations (WLAs) are met. This requirement applies to discharges both during construction and after construction operations have been completed. The SWPPP must identify, and document the rationale for selecting these BMPs and/or other controls. The SWPPP must also describe design specifications, construction specifications, maintenance schedules (including a long term maintenance plan), criteria for inspections, and expected performance and longevity of these BMPs. BMP selection must be made based on the use of appropriate soil loss prediction models (e.g., SEDCAD 4.0, RUSLE, SEDIMOT II, MULTISED, etc.), or equivalent, generally accepted (by professional erosion control specialists), soil loss prediction tools. The operator(s) must demonstrate, and include documentation in the SWPPP, that implementation of the site-specific practices will assure that the applicable standards or WLAs are met, and will result in sediment yields and flow velocities that, to the maximum extent practicable, will not be greater than the sediment yield levels and flow velocities from pre-construction, pre-development conditions. The SWPPP must be prepared in accordance with good engineering practices by qualified (e.g., CPESC certified, engineers with appropriate training, etc.) erosion control specialists familiar with the use of soil loss prediction models and design of erosion and sediment control systems based on these models (or equivalent soil loss prediction tools). Qualifications of the preparer (e.g., professional certifications, description of appropriate training) must be

documented in the SWPPP. The operator(s) must design, implement, and maintain BMPs in the manner specified in the SWPPP.

9.4.1.2 Operators are not eligible to obtain authorization under this permit for all new and existing stormwater discharges to outstanding national resource waters (ONRWs) (also referred to as "Tier 3" waters).

9.4.1.3 For temporary stabilization, instead of the deadline for initiating and completing stabilization in Part 2.2.1.3a, operators must comply with the deadlines in Parts 2.2.1.1 and 2.2.1.2.

9.4.1.4 Instead of the criteria for vegetative stabilization in Part 2.2.2.1.a, operators must provide a uniform vegetation (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for all unpaved areas and areas not covered by permanent structures. The adjustment to allow for less than 100 % native vegetative cover (e.g., 50 % native vegetative cover x 70 % = 35 %) is acceptable.

9.4.1.5 The following replaces the criteria for final vegetative stabilization in Part 2.2.2.1.b:

- The area you have seeded and planted must within 3 years provide established vegetation that achieves 70% of the native background vegetative cover for all unpaved areas and areas not covered by permanent structures; and
- In addition to to seeding or planting the area to be vegetatively stabilized, you must select, design, and install non-vegetative erosion controls that provide cover for at least 3 years without active maintenance by you.

In addition, permittees are only authorized to used this option as a method for final vegetative stabilization for purposes of filing a Notice of Termination (NOT) under the following conditions:

If this option is selected, you must notify NMED at the address listed in Part 9.4.1.6 at the time the NOT is submitted to EPA. The information to be submitted includes:

- A copy of the NOT;
- Contact information, including individual name or title, address, and phone number for the party responsible for implementing the final stabilization measures; and
- The date that the permanent vegetative stabilization practice was implemented and the projected timeframe that the 70 % native vegetative cover requirements are expected to be met. (Note that if more than three years is required to establish 70 % of the natural vegetative cover, this technique cannot be used or cited for fulfillment of the final stabilization requirement – you remain responsible for establishment of final stabilization).

NMED also requires that operators periodically (minimum once/year) inspect and properly maintain the area until the criteria for final stabilization, as specified in Part 2.2 of the CGP, have been met. Operators must prepare an inspection report documenting the findings of these inspections and signed in accordance with Appendix I, Part I.11. This inspection record must be

retained along with the SWPPP for three years after the NOT is submitted for the site and additionally submitted to NMED at the address listed in Part 9.4.1.6. The inspections at a minimum must include the following:

- Observations of all areas of the site disturbed by construction activity;
- Best Management Practices (BMPs)/post-construction stormwater controls must be observed to ensure they are effective;
- An assessment of the status of vegetative re-establishment; and
- Corrective actions required to ensure vegetative success within three years, and control of pollutants in stormwater runoff from the site, including implementation dates.

9.4.1.6 Copies of all documents submitted to EPA in non-electronic format must be sent to the following address:

Program Manager
Point Source Regulation Section
Surface Water Quality Bureau
New Mexico Environment Department
P.O. Box 5469
Santa Fe, New Mexico 87502

9.4.2. NMR12000I: Indian country within the State of New Mexico.

9.4.2.1 **Pueblo of Sandia**. The following conditions apply only to discharges on the Pueblo of Sandia Reservation:

a. Copies of all Notices of Intent submitted to the EPA must also be sent concurrently to the Pueblo of Sandia at the following address. Discharges are not authorized by this permit unless an accurate and complete NOI has been submitted to the Pueblo of Sandia.

Regular U.S. Delivery Mail:
Pueblo of Sandia Environment Department
Attention: Water Quality Manager
481 Sandia Loop
Bernalillo, New Mexico 87004

b. The Pueblo of Sandia will not allow the Rainfall Erosivity Waivers (see Appendix C) to be granted for any small construction activities.

c. The Stormwater Pollution Prevention Plan (SWPPP) must be available to the Pueblo of Sandia Environment either electronically or hard copy upon request for review. The SWPPP must be made available at least fourteen (14) days before construction begins. The fourteen (14) day period will give Tribal staff time to become familiar with the project site, prepare for construction inspections, and determine compliance with the Pueblo of Sandia Water Quality Standards. Failure to provide a SWPPP to the Pueblo of Sandia may result in denial of the discharge or construction delay.

d. An "Authorization to Proceed Letter" with site specific mitigation, site and project requirements will be sent out to the permittee when a review of the NOI and SWPPP is completed by the Pueblo of Sandia

Environment Department. This approval will allow the construction to proceed if all applicable requirements are met.

e. Before submitting a Notice of Termination (NOT), permittees must clearly demonstrate to the Pueblo of Sandia Environment Department though a site visit or documentation that requirements for site stabilization have been met and any temporary erosion control structures have been removed. A short letter stating the stabilization requirements have been met will be sent to the permittee to add to the permittees NOT submission to EPA.

f. Copies of all NOT submitted to the EPA must also be sent concurrently to the Pueblo of Sandia at the following address:

Regular U.S. Delivery Mail:
Pueblo of Sandia Environment Department
Attention: Water Quality Manager
481 Sandia Loop
Bernalillo, New Mexico 87004

9.4.3. OKR12000F: Discharges in the State of Oklahoma that are not under the authority of the Oklahoma Department of Environmental Quality, including activities associated with oil and gas exploration, drilling, operations, and pipelines (includes SIC Groups 13 and 46, and SIC codes 492 and 5171), and point source discharges associated with agricultural production, services, and silviculture (includes SIC Groups 01, 02, 07, 08, 09).

In accordance with Section 303 of the Clean Water Act and Oklahoma's Water Quality Standards (OAC 785: 45):

9.4.3.1 For activities located within the watershed of any Oklahoma Scenic River, including the Illinois River, Flint Creek, Barren Fork Creek, Upper Mountain Fork, Little Lee Creek, and Big Lee Creek or any water or watershed designated "ORW" (Outstanding Resource Water) in Oklahoma's Water Quality Standards, this permit may only be used to authorize discharges from temporary construction activities. Certification is denied for any on-going activities such as sand and gravel mining or any mineral mining.

9.4.3.2 For activities located within the watershed of any Oklahoma Scenic River, including the Illinois River, Flint Creek, Barren Fork Creek, Upper Mountain Fork, Little Lee Creek, and Big Lee Creek or any water or watershed designated "ORW" (Outstanding Resource Water) in Oklahoma's Water Quality Standards, certification is denied for any discharges originating from support activities, including concrete and asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, or borrow areas.

9.5. Region 8

9.5.1. MTR12000I: Indian country within the State of Montana

9.5.1.1 **The Confederated Salish and Kootenai Tribes of the Flathead Nation**. The following conditions apply only to discharges on the Confederated Salish and Kootenai Tribes of the Flathead Nation Reservation:

a. Permittees must send the Stormwater Pollution Prevention Plan (SWPPP) to the Tribes at least 30 days before construction starts.

b. Before submitting the Notice of Termination (NOT), permittees must clearly demonstrate to an appointed tribal staff person during an on-site inspection that requirements for site stabilization have been met.

c. The permittee must send a copy of the Notice of Intent (NOI) and the Notice of Termination (NOT) to the tribes.

d. Permittees may submit their SWPPPs and NOTs electronically to clintf@cskt.org.

Written NOI's, SWPPPs and NOT's may be mailed to:
Clint Folden, Water Quality Regulatory Specialist
Confederated Salish and Kootenai Tribes
Natural Resources Department
P.O. Box 278
Pablo, MT 59855

9.5.1.2 Fort Peck Tribes. The following conditions apply only to discharges on the Fort Peck Reservation:

Permittees must notify the Fort Peck Office of Environmental Protection (OEP) two weeks prior to commencing construction.

9.6. Region 9

9.6.1. AZR12000I: Indian country within the State of Arizona.

9.6.1.1 **Hualapai Tribal Lands**. The following condition applies only for discharges on the Hualapai Reservation:

All notices of intent for proposed stormwater discharges under the CGP and all pollution prevention plans for stormwater discharges on Hualapai Tribal lands shall be submitted to Water Resources Program through the Tribal Chairman for review and approval, P.O. Box 179, Peach Springs, AZ 86434.

9.6.2. CAR12000I: Indian country within the State of California.

9.6.2.1 **Big Pine Paiute Tribe of the Owens Valley**. Big Pine Tribal Water Quality Standards Section VII(e): If a proposed action has the possibility to adversely affect the water quality of Big Pine Creek, an application must be filed with the Tribal Environmental Office. The application must describe the action proposed and its effects on the creek, how this information was derived, and a justification for the action. Upon satisfying these requirements, the Tribal Environmental Office will recommend or not recommend this proposal to be considered by the Tribal Council. Tribal Council will make a determination whether to consider the proposal further. If the Tribal Council wishes to consider the application further, the public participation process will take place (see paragraph VII(d)). The Tribal Council has the sole authority in permitting degradation to Big Pine Creek. If the Tribal Council makes the decision to allow degradation, they will submit their decision to the USEPA for review and approval.

9.6.3. GUR120000: The Island of Guam. Permittees must adhere with imposed conditions for the project, in accordance with section 307(c)(1), of the Coastal Zone Management Act, 15 CFR part 930.

9.6.4. MPR120000: Commonwealth of the Northern Mariana Islands (CNMI).

9.6.4.1 An Earthmoving and Erosion Control Permit must be obtained from DEQ prior to any construction activity covered under the NPDES General Permit.

9.6.4.2 All conditions and requirements set forth in the United States Environmental Protection Agency (USEPA), National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Construction Activities must be complied with.

9.6.4.3 A stormwater pollution prevention plan (SWPPP) for stormwater discharges from construction activities must be approved by the Director of DEQ prior to submission of the Notice of Intent (NOI).

9.6.4.4 A NOI to be covered by the General Permit for Discharges from Construction Activities must be submitted to DEQ and USEPA, Region IX, in the form prescribed by USEPA, accompanied by a SWPPP approval letter from DEQ.

9.6.4.5 The NOI must be postmarked fourteen (14) calendar days prior to any stormwater discharges and a copy is submitted to the Director of DEQ no later than seven (7) calendar days prior to any stormwater discharges.

9.6.4.6 Copies of all monitoring reports required by the NPDES General Permit are submitted to DEQ.

9.6.4.7 In accordance with Section 10.3(h) and (i) of the CNMI Water Quality Standards, DEQ reserves the right to deny coverage under this permit and require submittal of an application for an individual NPDES permit based on review of the NOI or other information made available to the Director.

9.6.5. NVR12000I: Indian country within the State of Nevada.

9.6.5.1 **Pyramid Lake Paiute Tribe**. The following conditions apply only for discharges on the Pyramid Lake Paiute Reservation:

a. A SWPPP for stormwater discharges from project construction activities must be submitted to, and approved by, the PLPT Environmental Department director, prior to the submission of a Notice of Intent (NOI or eNOI) to EPA.

b. The applicant is to submit a hard copy of the Notice of Intent (NOI or eNOI) and a draft or final copy of the Stormwater Pollution Prevention Plan (SWPPP) by U.S. Mail to the Pyramid Lake Environmental Department at the address below:

Pyramid Lake Tribe Environmental Department
P.O. Box 256
Nixon, NV 89424

c. The applicant is to concurrently submit to the PLPT Environmental Department, hard copies of any other forms submitted to the EPA, including waivers, reporting, and Notice of Termination (NOT).

9.7. Region 10

9.7.1. IDR120000: The State of Idaho, except those located on Indian country.

For the complete text of Idaho's certification including the full anti-degradation analysis, please visit the IDEQ website at http://www.deq.idaho.gov/media/821491-usepa-npdes-general-permit-storm-water-discharges-401-certification-final-0412.pdf

9.7.1.1 The Idaho Department of Environmental Quality's (DEQ) certification of this permit does not constitute authorization of your permitted activities by any other state or federal agency or private person or entity. DEQ's certification does not excuse you from the obligation to obtain any other necessary

approvals, authorizations or permits, including without limitation, the approval from the owner of a private water conveyance system, if one is required, to use the system in connection with the permitted activities.

9.7.1.2 Idaho's Antidegradation Policy. Idaho Water Quality Standards (WQS) (IDAPA 58.01.02) contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

a. Tier 1 Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier 1 review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.05).
b. Tier 2 Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.06).
c. Tier 3 Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.07).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (Idaho Code § 39-3603(2)(b)(i)). Any water body not fully supporting its beneficial uses will be provided Tier 1 protection for that use, unless specific circumstances warranting Tier 2 protection are met (Idaho Code § 39-3603(2)(b)(iii)). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (Idaho Code § 39-3603(2)(b)). The primary pollutants of concern associated with stormwater discharges from construction activities are sediment and turbidity (as Total Suspended Solids). Other potential pollutants include the following: phosphorus, nitrogen and other nutrients from fertilizers; pesticides; petroleum products; construction chemicals; and solid wastes.

9.7.1.3 Protection and Maintenance of Existing Uses (Tier 1 Protection). In order to protect and maintain designated and existing beneficial uses, a permitted discharge must comply with narrative and numeric criteria of the Idaho WQS, as well as other provisions of the WQS such as Section 055, which addresses water quality limited waters. The permittee must notify the appropriate DEQ Regional Office (see table in Part 9.7.1.8 below for contact information) of any potential discharges to impaired waters - water bodies identified as "impaired" for sediment or a sediment-related parameter, such as total suspended solids (TSS) or turbidity, and/or nutrients, including impairments for nitrogen and/or phosphorus.

To determine the support status of the affected water body, the permittee must use the most current EPA-approved Integrated Report, available on Idaho DEQ's website: http://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/integrated-report.aspx. Impaired waters are identified in Categories 4 and 5 of the Integrated Report. Category 4(a) reflects impaired waters for which a TMDL has been approved by EPA. Category 5

contains waters which have been identified as "impaired" but do not yet have an EPA-approved TMDL.

DEQ's webpage also has a link to the state's map-based Integrated Report which presents information from the Integrated Report in a searchable, map-based format: http://mapcase.deq.idaho.gov/wq2010/.

In addition to complying with the Part 3.2.2 requirements for any sediment or nutrient-impaired waters, permittee(s) must also comply with Idaho's numeric turbidity criteria, developed to protect aquatic life uses. The criterion states, "Turbidity shall not exceed background turbidity by more than 50 NTU instantaneously or more than 25 NTU for more than 10 consecutive days" (IDAPA 58.01.02250.02.e). For Waters of the State which have been identified as impaired due to sedimentation/siltation, the permittee must conduct turbidity monitoring as described below in Part 9.7.1.6

9.7.1.4 Protection of High-Quality Waters (Tier 2 Protection). To determine the support status of the affected water body, the permittee must use the most current EPA-approved Integrated Report, available on Idaho DEQ's website: http://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/integrated-report.aspx. DEQ's webpage also has a link to the state's map-based Integrated Report which presents information from the Integrated Report in a searchable, map-based format: http://mapcase.deq.idaho.gov/wq2010/.

DEQ retains the authority to determine that a 303(d) listed water body is actually a high quality water body if there is biological, chemical or physical data to support such a determination. In cases where information submitted with the NOI, or available from other sources, indicates that further Tier 2 analysis is necessary and/or additional conditions are needed, either for a new project or an existing project with a significantly increased discharge, EPA and DEQ will conduct a review and require any appropriate additional controls. If during this review, EPA and DEQ decide that an additional Tier 2 protection is warranted, then EPA may either change the terms of coverage or terminate coverage under the CGP and require an individual permit.

9.7.1.5 Protection of Outstanding Resource Waters (Tier 3 Protection). Idaho's antidegradation policy requires that the quality of outstanding resource waters (ORWs) be maintained and protected from the impacts of point source discharges. No water bodies in Idaho have been designated as outstanding resource waters to date; however, it is possible that waters may become designated during the term of the CGP. Any applicant proposing to discharge to an ORW must obtain an individual NPDES permit from EPA.

9.7.1.6 Turbidity Monitoring. For Waters of the State which are identified in the Integrated Report as impaired for sedimentation/siltation, the permittee must conduct turbidity monitoring each day during construction activities when the project is not stabilized per Part 2.2 or shut down per Part 4.1.4.3 of the CGP. A properly and regularly calibrated turbidimeter is required.

A sample must be taken twice daily at an undisturbed area immediately upstream of the project area to establish background turbidity levels for each monitoring event. Background turbidity, location, date and time must be recorded prior to monitoring downstream of the project area.

A sample must also be taken twice daily immediately downstream from any point of discharge, and within any visible plume. The turbidity, location, date

and time must be recorded. The downstream sample(s) must be taken immediately following the upstream sample(s) in order to obtain meaningful and representative results.

Results from the compliance point sampling or observation must be compared to the background levels to determine whether project activities are causing an exceedance of state WQS. If the downstream turbidity is 50 NTUs or more than the upstream turbidity, or a plume is observed, then the project is causing an exceedance of the WQS. The permittee must inspect the condition of project BMPs. If the BMPs are functioning to their fullest capability, then the permittee must modify project activities and/or BMPs to correct the violation.

Copies of daily logs for turbidity monitoring must be available to DEQ upon request. The report must describe all exceedances and subsequent actions taken, including the effectiveness of the action.

9.7.1.7 Equivalent Analysis Waiver. Use of the "Equivalent Analysis Waiver" in Appendix C (Part C.3) of the CGP is not authorized.

9.7.1.8 Reporting of Discharges Containing Hazardous Materials or Petroleum Products. Any spill of hazardous materials must be immediately reported to the appropriate DEQ regional office (see table of contacts, below) (IDAPA 58.01.02.850.03). Spills of petroleum products that exceed 25 gallons or that cause a visible sheen on nearby surface waters should be reported to DEQ within 24-hours. Petroleum product spills of less than 25 gallons or spills that do not cause a sheen on nearby surface waters shall only be reported to DEQ if clean-up cannot be accomplished within 24-hours (IDAPA 58.01.02.851.04).

DEQ Regional Office	Contact Name	Phone Number
Boise	Lance Holloway	208-373-0550
Coeur d'Alene	June Bergquist	208-769-1422
Idaho Falls	Troy Saffle	208-528-2650
Lewiston	John Cardwell	208-799-4370
Pocatello	Greg Mladenka	208-236-6160
Twin Falls	Balthasar Buhidar	208-736-2190

Outside of regular business hours, qualified spills shall be reported to the State Communications Center (1-800-632-8000 or 208-846-7610).

9.7.2. ORR12000I: Indian country within the State of Oregon.

9.7.2.1 **Confederated Tribes of the Umatilla Indian Reservation**. The following conditions apply only to discharges on the Umatilla Indian Reservation:

a. The operator shall be responsible for achieving compliance with the Confederated Tribes of the Umatilla Indian Reservations (CTUIR) Water Quality Standards.

b. The operator shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the CTUIR Water Resources Program at the address below, at the same time it is submitted to EPA.

c. The operator shall be responsible for submitting all Stormwater Pollution Prevention Plans (SWPPP) required under this permit to the CTUIR Water Resources Program for review and determination that the SWPPP is sufficient to meet Tribal Water Quality Standards, prior to the beginning of any discharge activities taking place.

d. The operator shall be responsible for reporting an exceedance to Tribal Water Quality Standards to the CTUIR Water Resources Program at the same time it is reported to EPA.

Confederated Tribes of the Umatilla Indian Reservation
Water Resources Program
46411 Timine Way
Pendleton, OR 97801

e. The CTUIR Tribal Historic Preservation Office (THPO) requests copies of each NOI which will define whether or not the undertaking has the potential to affect historic properties, and if so, define the undertaking's area of potential effect (APE).

f. The THPO must be provided 30 days to comment on the APE as defined in the permit application.

g. If the project is an undertaking, a cultural resource investigation must occur. All fieldwork must be conducted by qualified personnel (as outlined by the Secretary of Interior's Standards and Guidelines; http://www.nps.gov/history/local-law/arch_stnds_0.htm) and documented using Oregon Reporting Standards (http://egov.oregon.gov/OPRD/HCD/ARCH/arch_pubsandlinks.shtml). The resulting report must be submitted to the THPO and the THOP must concur with the findings and recommendations before any ground disturbing work can occur. The THPO requires 30 days to review all reports.

h. The operator must obtain THPO concurrence in writing. If historic properties are present, this written concurrence will outline measures to be taken to prevent or mitigate effects to historic properties.

i. For more information regarding the specifics of the cultural resources process, see 36 CFR Part 800.

Confederated Tribes of the Umatilla Indian Reservation
Cultural Resources Protection Program
Tribal Historic Preservation Office
46411 Timine Way
Pendleton, OR 97801

9.7.2.2 Confederated Tribes of the Warm Springs Reservation of Oregon. The following conditions apply only for discharges on the Warm Springs Reservation:

a. All activities covered by this NPDES general permit occurring within a designated riparian buffer zone as established in Ordinance 74 (Integrated Resource Management Plan or IRMP) must be reviewed, approved and permitted through the Tribe's Hydraulic Permit Application process, including payment of any applicable fees.

b. All activities covered by this NPDES permit must follow all applicable land management and resource conservation requirements specified in the IRMP.

c. Operators of activities covered by this NPDES general permit must submit a Storm Water Pollution Prevention Plan to the Tribe's Water Control Board at the following address for approval at least 30 days prior to beginning construction activity:

Chair, Warm Springs Water Control Board
P.O. Box C
Warm Springs, Oregon 97761

d. The operator shall be responsible for achieving compliance with the Water Quality Standards of the Confederated Tribes of the Warm Springs Reservation of Oregon. The operator shall be responsible for reporting an exceedance to Tribal Water Quality Standards to the Water Control Board at the address above.

e. The operator shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the CTWS, Branch of Natural Resources, Tribal Environmental Office at the address above, at the same time it is submitted to EPA.

f. The CTWS Tribal Historic Preservation Officer (THPO) requests copies of each NOI which will define whether or not the undertaking has the potential to affect historic properties, and if so, define the undertaking's area of potential effect (APE).

g. The THPO must be provided 30 days to comment on the APE as defined in the permit application.

h. If the project is an undertaking, a cultural resource investigation must occur. All fieldwork must be conducted by qualified personnel (as outlined by the Secretary of Interior's Standards and Guidelines; http://www.nps.gov/history/local-law/arch_stnds_0.htm) and documented using Oregon Reporting Standards (http://egov.oregon.gov/OPRD/HCD/ARCH/arch_pubsandlinks.shtml). The resulting report must be submitted to the THPO and the THOP must concur with the findings and recommendations before any ground disturbing work can occur. The THPO requires 30 days to review all reports.

i. The operator must obtain THPO concurrence in writing. If historic properties are present, this written concurrence will outline measures to be taken to prevent or mitigate effects to historic properties.

j. For more information regarding the specifics of the cultural resources process, see 36 CFR Part 800.

9.7.3. WAR12000F: Areas in the State of Washington, except those located on Indian country, subject to construction by Federal Operators.

9.7.3.1 Discharges shall not cause or contribute to a violation of surface water quality standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200 WAC), sediment management standards (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (40 CFR Part 131.36). Discharges that are not in compliance with these standards are not authorized.

9.7.3.2 Prior to the discharge of stormwater and non-stormwater to waters of the state, the permittee shall apply all known, available, and reasonable methods of prevention, control, and treatment (AKART). This includes the preparation and implementation of an adequate Stormwater Pollution Prevention Plan (SWPPP), with all appropriate best management practices (BMPs) installed and maintained in accordance with the SWPPP and the terms and conditions of this permit.

9.7.3.3 Sampling & Numeric Effluent Limitations – For Sites Discharging to Certain Waterbodies on the 303(d) List

a. Permittees that discharge to water bodies listed as impaired by the State of Washington under Section 303(d) of the Clean Water Act for turbidity, fine sediment, high pH or phosphorus, shall conduct water quality sampling according to the requirements of this subsection.

Parameter identified in 303(d) listing	Parameter/Units	Analytical Method	Sampling Frequency	Water Quality Standard
Turbidity Fine Sediment Phosphorus	Turbidity/NTU	SM2130 or EPA180.1	Weekly, if discharging	If background is 50 NTU or less: 5 NTU over background; or If background is more than 50 NTU: 10% over background
High pH	pH/Standard Units	pH meter	Weekly, if discharging	In the range of 6.5 – 8.5

b. The operator must retain all monitoring results required by this section as part of the SWPPP. All data and related monitoring records must be provided to EPA or the Washington State Department of Ecology (Ecology) upon request.

c. The operator must notify EPA when the discharge turbidity or discharge pH exceeds the water quality standards as defined in 5.b and 6.b below. All such reports must be submitted within 30 day s of measurement to EPA at the following address:

USEPA – Region 10
NPDES Compliance Unit - Attn: Federal Facilities Compliance Officer
1200 6th Avenue, Suite 900
OCE-133
Seattle, WA 98101
(206) 553-1846

d. All references and requirements associated with Section 303(d) of the Clean Water Act mean the most current EPA approved listing of impaired waters that exists on January 29, 2009, or the date when the operator's complete NOI is received by EPA, whichever is later. The most

recent EPA approved 303(d) list is available on Ecology's website at www.ecy.wa.gov/programs/wq/303d/2008/index.html.

e. Discharges to waterbodies on the 303(d) list for turbidity, fine sediment, or phosphorus

i. Permittees which discharge to waterbodies on the 303(d) list for turbidity, fine sediment, or phosphorus shall conduct turbidity sampling at the following locations to evaluate compliance with the water quality standard for turbidity:

(1) Background turbidity shall be measured in the 303(d) listed receiving water immediately upstream (upgradient) or outside the area of influence of the discharge.

(2) Discharge turbidity shall be measured at the point of discharge into the 303(d) listed receiving waterbody, inside the area of influence of the discharge; or

(3) Alternatively, discharge turbidity may be measured at the point where the discharge leaves the construction site, rather than in the receiving waterbody.

Based on sampling, if the discharge turbidity ever exceeds the water quality standard for turbidity (more than 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or more than a 10% increase in turbidity when the background turbidity is more than 50 NTU), all future discharges shall comply with a numeric effluent limit which is equal to the water quality standard for turbidity. If the receiving water background turbidity is 50 NTU or less, the water quality standard is 5 NTU over background. If the receiving water background turbidity is more than 50 NTU, the water quality standard is 10% over background.

If a future discharge exceeds the water quality standard for turbidity, the permittee shall:

(1) Review the SWPPP for compliance with the permit and make appropriate revisions within seven days of the discharge that exceeded the standard.

(2) Fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, but no later than ten days of the discharge that exceeded the standard.

(3) Document BMP implementation and maintenance in the site log book.

(4) Continue to sample daily until discharge turbidity meets the water quality standard for turbidity.

f. Discharges to waterbodies on the 303(d) list for High pH

i. Permittees which discharge to waterbodies on the 303(d) list for high pH shall conduct sampling one of the following locations to evaluate compliance with the water quality standard for pH (in the range of 6.5 – 8.5):

(1) pH shall be measured at the point of discharge into the 303(d) listed waterbody, inside the area of influence of the discharge; or,

(2) Alternatively, pH may be measured at the point where the discharge leaves the construction site, rather than in the receiving water.

ii. Based on the sampling set forth above, if the pH ever exceeds the water quality standard for pH (in the range of 6.5 – 8.5), all future discharges shall comply with a numeric effluent limit which is equal to the water quality standard for pH. If a future discharge exceeds the water quality standard for pH, the permittee shall:

(1) Review the SWPPP for compliance with the permit and make appropriate revisions within 7 days of the discharge.

(2) Fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, but no later than 10 days of the discharge that exceeded the standards.

(3) Document BMP implementation and maintenance in the site log book.

(4) Continue to sample daily until discharge meets the water quality standard for pH (in the range of 6.5 – 8.5).

9.7.3.4 Sampling & Limitations – For Sites Discharging to TMDLs

a. Discharges to a waterbodies subject to an applicable Total Maximum Daily Load (TMDL) for turbidity, fine sediment, high pH, or phosphorus, shall be consistent with the assumptions and requirements of the TMDL.

i. Where an applicable TMDL sets specific waste load allocations or requirements for discharges covered by this permit, discharges shall be consistent with any specific waste load allocations or requirements established by the applicable TMDL.

(1) Discharges shall be sampled weekly, or as otherwise specified by the TMDL, to evaluate compliance with the specific waste load allocations or requirements.

(2) Analytical methods used to meet the monitoring requirements shall conform to the latest revision of the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136.

ii. Where an applicable TMDL has established a general waste load allocation for construction stormwater discharges, but no specific requirements have been identified, compliance with this permit will be assumed to be consistent with the approved TMDL.

iii. Where an applicable TMDL has not specified a waste load allocation for construction stormwater discharges, but has not excluded these discharges, compliance with this permit will be assumed to be consistent with the approved TMDL.

iv. Where an applicable TMDL specifically precludes or prohibits discharges from construction activity, the operator is not eligible for coverage under this permit.

b. Applicable TMDL means a TMDL for turbidity, fine sediment, high pH, or phosphorus, which has been completed and approved by EPA prior to February 16, 2012, or prior to the date the operator's complete NOI is received by EPA, whichever is later.

Completed TMDLs are available on Ecology's website at www.ecy.wa.gov/programs/wq/tmdl/TMDLsbyWria/TMDLbyWria.html, or by phone at (360) 407-6460.

9.7.4. WAR12000I: Indian country within the State of Washington

9.7.4.1 **Kalispel Tribe**. The following conditions apply only for discharges on the Kalispel Reservation:

a. The operator shall be responsible for achieving compliance with the Kalispel Tribe's Water Quality Standards, and;

b. The operator shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the Kalispel Tribe Natural Resources Department (KNRD) at the same time as it is submitted to the EPA, and;

c. The operator shall submit all Storm Water Pollution Prevention Plans (SWPPP) to KNRD thirty (30) days prior to beginning any discharge activities for review, and;

d. The operator shall be responsible for reporting any exceedance of Tribal Water Quality Standards to KNRD at the same time it is reported to EPA, and;

e. Prior to any land disturbing activities on the Kalispel Indian Reservation and its dependent communities, the operator shall attain a cultural resource clearance letter from KNRD.

f. All tribal correspondence pertaining to the General Permit for Discharges from Construction Activities shall be sent to:

Kalispel Tribe Natural Resources Department
Water Resources Program
PO Box 39
Usk, WA 99180

9.7.4.2 **Lummi Nation**. The following conditions apply only for discharges on the Lummi Reservation:

a. Pursuant to Lummi Code of Laws (LCL) 17.05.020(a), the operator must also obtain a land use permit from the Lummi Planning Department as provided in Title 15 of the Lummi Code of Laws and regulations adopted thereunder.

b. Pursuant to LCL 17.05.020(a), each operator shall develop and submit a Stormwater Pollution Prevention Plan to the Lummi Water Resources Division for review and approval by the Water Resources Manager prior to beginning any discharge activities.

c. Pursuant to LCL Title 17, each operator shall be responsible for achieving compliance with the Water Quality Standards for Surface Waters of the Lummi Indian Reservation (Lummi Administrative Regulations [LAR] 17 LAR 07.010 together with supplements and amendments thereto).

d. Each operator shall submit a signed hard copy of the Notice of Intent (NOI) to the Lummi Water Resources Division at the same time it is submitted electronically to the Environmental Protection Agency (EPA) and shall provide the Lummi Water Resources Division the acknowledgement of receipt of the NOI from the EPA and the associated NPDES tracking number provided by the EPA within 7 calendar days of receipt by EPA.

e. Each operator shall submit a signed hard copy of the Notice of Termination (NOT) to the Lummi Water Resources Division at the same time it is submitted electronically to the EPA and shall provide the Lummi Water Resources Division the EPA acknowledgement of receipt of the NOT.

f. Stormwater Pollution Prevention Plans, Notice of intent, Notice of Termination and associated correspondence with the EPA shall be submitted to:

Lummi Natural Resources Department
ATTN: Water Resources Manager
2616 Kwina Road
Bellingham, WA 98226-9298

g. Please see the Lummi Nation website (www.lummi-nsn.gov) and/or the Lummi Natural Resources Department website (http://lnnr.lummi-nsn.gov/LummiWebsite/Website.php?PageID=53) to review a copy of Title 17 of the Lummi Code of Laws, associated regulations, and the references upon which the conditions identified above are based.

9.7.4.3 **Makah Tribe**. The following conditions apply only for discharges on the Makah Reservation:

a. The operator shall be responsible for achieving compliance with the Makah Tribe's Water Quality Standards.

b. The operator shall submit a Storm Water Pollution Prevention Plan to the Makah Tribe Water Quality Program and Makah Fisheries Habitat Division for review and approval at least thirty (30) days prior to beginning any discharge activities.

c. The operator shall submit a copy of the Notice of Intent to the Makah Tribe Water Quality Program and Makah Fisheries Habitat Division at the same time it is submitted to EPA.

d. Storm Water Pollution Prevention Plans and Notices of Intent shall be submitted to:

Ray Colby
Makah Tribal Water Quality
Water Quality Specialist
(360) 645-3162
colby.ray@centurytel.net
PO Box 115
Neah Bay, WA 98357

9.7.4.4 **Puyallup Tribe of Indians**. The following conditions apply only for discharges on the Puyallup Reservation:

a. Each permittee shall be responsible for achieving compliance with the Puyallup Tribe's Water Quality Standards, including antidegradation provisions. The Puyallup Natural Resources Department will conduct an antidegradation review for permitted activities that have the potential to lower water quality. The antidegradation review will be consistent with the Tribe's Antidegradation Implementation Procedures.

b. The permittee shall be responsible for meeting any additional permit requirements imposed by EPA necessary to comply with the Puyallup Tribe's antidegradation policies if the discharge point is located within 1 linear mile upstream of waters designated by the Tribe.

c. Each permittee shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the Puyallup tribal Natural Resources Department at the address listed below at the same time it is submitted to EPA.

Puyallup Tribe of Indians
3009 E. Portland Avenue
Tacoma, WA 98404
ATTN: Natural Resources Department – Bill Sullivan and Char Naylor

d. All supporting documentation and certifications in the NOI related to coverage under the general permit for Endangered Species Act purposes shall be submitted to Bill Sullivan and Char Naylor in the Puyallup Tribal Natural Resources Department for review.

e. If EPA requires coverage under an individual or alternative permit, the permittee shall submit a copy of the permit to Bill Sullivan and Char Naylor in the Puyallup Tribal Natural Resources Department at the address listed above.

f. The permittee shall submit all stormwater pollution prevention plans to Bill Sullivan and Char Naylor in the Puyallup Tribal Natural Resources Department for review and approval prior to beginning any activities resulting in a discharge to tribal waters.

g. The permittee shall conduct benchmark monitoring for turbidity and nutrients, complying with Section 3 monitoring requirements.

h. The permittee shall notify Bill Sullivan and Char Naylor prior to conducting inspections at construction sites generating stormwater discharged to tribal waters.

Appendix A - Definitions and Acronyms

Definitions

"Action Area" – all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. See 50 CFR 402. For the purposes of this permit and for application of the Endangered Species Act requirements, the following areas are included in the definition of action area:

- The areas on the construction site where stormwater discharges originate and flow toward the point of discharge into the receiving waters (including areas where excavation, site development, or other ground disturbance activities occur) and the immediate vicinity. (Example: Where bald eagles nest in a tree that is on or bordering a construction site and could be disturbed by the construction activity or where grading causes stormwater to flow into a small wetland or other habitat that is on the site that contains listed species.)
- The areas where stormwater discharges flow from the construction site to the point of discharge into receiving waters. (Example: Where stormwater flows into a ditch, swale, or gully that leads to receiving waters and where listed species (such as listed amphibians) are found in the ditch, swale, or gully.)
- The areas where stormwater from construction activities discharge into receiving waters and the areas in the immediate vicinity of the point of discharge. (Example: Where stormwater from construction activities discharges into a stream segment that is known to harbor listed aquatic species.)
- The areas where stormwater controls will be constructed and operated, including any areas where stormwater flows to and from the stormwater controls. (Example: Where a stormwater retention pond would be built.)
- The areas upstream and/or downstream from the stormwater discharge into a stream segment that may be affected by these discharges. (Example: Where sediment discharged to a receiving stream settles downstream and impacts a breeding area of a listed aquatic species.)

"Agricultural Land" - cropland, grassland, rangeland, pasture, and other agricultural land, on which agricultural and forest-related products or livestock are produced and resource concerns may be addressed. Agricultural lands include cropped woodland, marshes, incidental areas included in the agricultural operation, and other types of agricultural land used for the production of livestock.

"Antidegradation Policy" or "Antidegradation Requirements" - the water quality standards regulation that requires States and Tribes to establish a three-tiered antidegradation program:

1. Tier 1 maintains and protects existing uses and water quality conditions necessary to support such uses. An existing use can be established by demonstrating that fishing, swimming, or other uses have actually occurred since November 28, 1975, or that the water quality is suitable to allow such uses to occur. Where an existing use is established, it must be protected even if it is not listed in the water quality standards as a designated use. Tier 1 requirements are applicable to all surface waters.
2. Tier 2 maintains and protects "high quality" waters -- water bodies where existing conditions are better than necessary to support CWA § 101(a)(2) "fishable/swimmable"

uses. Water quality can be lowered in such waters. However, State and Tribal Tier 2 programs identify procedures that must be followed and questions that must be answered before a reduction in water quality can be allowed. In no case may water quality be lowered to a level which would interfere with existing or designated uses.

3. Tier 3 maintains and protects water quality in outstanding national resource waters (ONRWs). Except for certain temporary changes, water quality cannot be lowered in such waters. ONRWs generally include the highest quality waters of the United States. However, the ONRW classification also offers special protection for waters of exceptional ecological significance, i.e., those which are important, unique, or sensitive ecologically. Decisions regarding which water bodies qualify to be ONRWs are made by States and authorized Indian Tribes.

"Arid Areas" – areas with an average annual rainfall of 0 to 10 inches.

"Bank" (e.g., stream bank or river bank) – the rising ground bordering the channel of a water of the U.S.

"Bluff" – a steep headland, promontory, riverbank, or cliff.

"Borrow Areas" – the areas where materials are dug for use as fill, either onsite or off-site.

"Bypass" – the intentional diversion of waste streams from any portion of a treatment facility. See 40 CFR 122.41(m)(1)(i).

"Cationic Treatment Chemical" – polymers, flocculants, or other chemicals that contain an overall positive charge. Among other things, they are used to reduce turbidity in stormwater discharges by chemically bonding to the overall negative charge of suspended silts and other soil materials and causing them to bind together and settle out. Common examples of cationic treatment chemicals are chitosan and cationic PAM.

"Commencement of Earth-Disturbing Activities" - the initial disturbance of soils (or 'breaking ground') associated with clearing, grading, or excavating activities or other construction-related activities (e.g., stockpiling of fill material).

"Commencement of Pollutant-Generating Activities" – at construction sites (for the purposes of this permit) occurs in any of the following circumstances:

- Clearing, grubbing, grading, and excavation has begun;
- Raw materials related to your construction activity, such as building materials or products, landscape materials, fertilizers, pesticides, herbicides, detergents, fuels, oils, or other chemicals have been placed at your site;
- Use of authorized non-stormwater for washout activities, or dewatering activities, have begun; or
- Any other activity has begun that causes the generation of or the potential generation of pollutants.

"Construction Activities" – earth-disturbing activities, such as the clearing, grading, and excavation of land.

"Construction and Development Effluent Limitations and New Source Performance Standards" (C&D Rule) – as published in 40 CFR § 450 is the regulation requiring effluent limitations guidelines

(ELG's) and new source performance standards (NSPS) for controlling the discharge of pollutants from construction sites.

"Construction Site" – the land or water area where construction activities will occur and where stormwater controls will be installed and maintained. The construction site includes construction support activities, which may be located at a different part of the property from where the primary construction activity will take place, or on a different piece of property altogether. The construction site is often a smaller subset of the lot or parcel within which the project is taking place.

"Construction Support Activities" – a construction-related activity that specifically supports the construction activity and involves earth disturbance or pollutant-generating activities of its own, and can include activities associated with concrete or asphalt batch plants, equipment staging yards, materials storage areas, excavated material disposal areas, and borrow areas.

"Construction Waste" – discarded material (such as packaging materials, scrap construction materials, masonry products, timber, steel, pipe, and electrical cuttings, plastics, and styrofoam).

"Conveyance Channel" – a temporary or permanent waterway designed and installed to safely convey stormwater flow within and out of a construction site.

"Corrective Action" – for the purposes of the permit, any action taken to (1) repair, modify, or replace any stormwater control used at the site; (2) clean up and dispose of spills, releases, or other deposits found on the site; and (3) remedy a permit violation.

"Critical Habitat" – as defined in the Endangered Species Act at 16 U.S.C. 1531 for a threatened or endangered species, (i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of the Endangered Species Act, on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of the Endangered Species Act, upon a determination by the Secretary that such areas are essential for the conservation of the species.

"CWA" – the Clean Water Act or the Federal Water Pollution Control Act, 33 U.S.C. section 1251 et seq.

"Dewatering" – the act of draining rainwater and/or groundwater from building foundations, vaults, and trenches.

"Discharge" – when used without qualification, means the "discharge of a pollutant."

"Discharge of a Pollutant" – any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source," or any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. See 40 CFR 122.2.

"Discharge Point" – for the purposes of this permit, the location where collected and concentrated stormwater flows are discharged from the construction site.

"Discharge-Related Activity" – activities that cause, contribute to, or result in stormwater and allowable non-stormwater point source discharges, and measures such as the siting, construction, and operation of stormwater controls to control, reduce, or prevent pollutants from being discharged.

"Discharge to an Impaired Water" – for the purposes of this permit, a discharge to an impaired water occurs if the first water of the U.S. to which you discharge is identified by a State, Tribe, or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting an applicable water quality standard, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the water of the U.S. to which you discharge is the first water of the U.S. that receives the stormwater discharge from the storm sewer system.

"Domestic Waste" – for the purposes of this permit, typical household trash, garbage or rubbish items generated by construction activities.

"Drainageway" – an open linear depression, whether constructed or natural, that functions for the collection and drainage of surface water.

"Drought-Stricken Area" – for the purposes of this permit, an area in which the National Oceanic and Atomospheric Administration's U.S. Seasonal Drought Outlook indicates for the period during which the construction will occur that any of the following conditions are likely: (1) "Drought to persist or intensify", (2) "Drought ongoing, some improvement", (3) "Drought likely to improve, impacts ease", or (4) "Drought development likely". See http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.gif.

"Earth-Disturbing Activity" or "Land-Disturbing Activity" – actions taken to alter the existing vegetation and/or underlying soil of a site, such as clearing, grading, site preparation (e.g., excavating, cutting, and filling), soil compaction, and movement and stockpiling of top soils.

"Effective Operating Condition" – for the purposes of this permit, a stormwater control is kept in effective operating condition if it has been implemented and maintained in such a manner that it is working as designed to minimize pollutant discharges.

"Effluent Limitations" – for the purposes of this permit, any of the Part 2 or Part 3 requirements.

"Effluent Limitations Guideline" (ELG) – defined in 40 CFR § 122.2 as a regulation published by the Administrator under section 304(b) of CWA to adopt or revise effluent limitations.

"Electronic Notice of Intent" (eNOI) – EPA's online system for submitting electronic Construction General Permit forms.

"Eligible" – for the purposes of this permit, refers to stormwater and allowable non-stormwater discharges that are authorized for coverage under this general permit.

"Emergency-Related Project" – a project initiated in response to a public emergency (e.g., natural disaster, disruption in essential public services), for which the related work requires immediate authorization to avoid imminent endangerment to human health or the environment, or to reestablish essential public services.

"Endangered Species" – defined in the Endangered Species Act at 16 U.S.C. 1531 as any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary to constitute a pest whose

protection under the provisions of this Act would present an overwhelming and overriding risk to man.

"Excursion" – a measured value that exceeds a specified limit.

"Existing Project" – a construction project that commenced construction activities prior to February 16, 2012 (April 9, 2012 for the State of Idaho, except for Indian Country; April 13, 2012 for areas in the state of Washington, except for Indian Country, subject to construction activity by a Federal Operator; May 9, 2012 for projects in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin).

"Exit Points" – any points of egress from the construction site to be used by vehicles and equipment during construction activities.

"Exposed Soils" – for the purposes of this permit, soils that as a result of earth-disturbing activities are left open to the elements.

"Federal Operator" – an entity that meets the definition of "Operator" in this permit and is either any department, agency or instrumentality of the executive, legislative, and judicial branches of the Federal government of the United States, or another entity, such as a private contractor, performing construction activity for any such department, agency, or instrumentality.

"Final Stabilization" – on areas not covered by permanent structures, either (1) vegetation has been established, or for arid or semi-arid areas, will be established that provides a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the natural background vegetative cover, or (2) non-vegetative stabilization methods have been implemented to provide effective cover for exposed portions of the site.

"Hazardous Materials" or "Hazardous Substances" or "Hazardous or Toxic Waste" – for the purposes of this permit, any liquid, solid, or contained gas that contain properties that are dangerous or potentially harmful to human health or the environment. See also 40 CFR §261.2.

"Historic Property" – as defined in the National Historic Preservation Act regulations means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

"Impaired Water" or "Water Quality Impaired Water" or "Water Quality Limited Segment" – for the purposes of this permit, waters identified as impaired on the CWA Section 303(d) list, or waters with an EPA-approved or established TMDL. Your construction site will be considered to discharge to an impaired water if the first water of the U.S. to which you discharge is identified by a state, tribe, or EPA pursuant to Section 303(d) of the CWA as not meeting an applicable water quality standard, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the first water of the U.S. to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system.

"Impervious Surface" – for the purpose of this permit, any land surface with a low or no capacity for soil infiltration including, but not limited to, pavement, sidewalks, parking areas and driveways, packed gravel or soil, or rooftops.

"Indian Country" or "Indian Country Lands" – defined at 40 CFR §122.2 as:

1. All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;
2. All dependent Indian communities with the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and
3. All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-ways running through the same.

"Infeasible" – for the purpose of this permit, infeasible means not technologically possible or not economically practicable and achievable in light of best industry practices. EPA notes that it does not intend for any permit requirement to conflict with state water rights law.

"Install" or "Installation" – when used in connection with stormwater controls, to connect or set in position stormwater controls to make them operational.

"Intermittent (or Seasonal) Stream" – one which flows at certain times of the year when groundwater provides water for stream flow, as well as during and immediately after some precipitation events or snowmelt.

"Jar test" – a test designed to simulate full-scale coagulation/flocculation/sedimentation water treatment processes by taking into account the possible conditions.

"Landward" – positioned or located away from a waterbody, and towards the land.

"Level Spreader" – a temporary stormwater control used to spread stormwater flow uniformly over the ground surface as sheet flow to prevent concentrated, erosive flows from occurring.

"Linear Project" – includes the construction of roads, bridges, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area.

"Minimize" – to reduce and/or eliminate to the extent achievable using stormwater controls that are technologically available and economically practicable and achievable in light of best industry practices.

"Municipal Separate Storm Sewer System" or "MS4" – defined at 40 CFR §122.26(b)(8) as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

1. Owned and operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
2. Designed or used for collecting or conveying stormwater;
3. Which is not a combined sewer; and

4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR §122.2.

"National Pollutant Discharge Elimination System" (NPDES) – defined at 40 CFR §122.2 as the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of CWA. The term includes an 'approved program.'

"Native Topsoil" – the uppermost layer of naturally occurring soil for a particular area, and is often rich in organic matter, biological activity, and nutrients.

"Native Vegetation" – the species of plants that have developed for a particular region or ecosystem and are considered endemic to that region or ecosystem.

"Natural Buffer" – for the purposes of this permit, an area of undisturbed natural cover surrounding surface waters within which construction activities are restricted. Natural cover includes the vegetation, exposed rock, or barren ground that exists prior to commencement of earth-disturbing activities.

"Natural Vegetation" – vegetation that occurs spontaneously without regular management, maintenance or species introductions, removals, and that generally has a strong component of native species.

"New Operator of a New or Existing Project" – an operator that through transfer of ownership and/or operation replaces the operator of an already permitted construction project.

"New Project" – a construction project that commences construction activities on or after February 16 (or on or after April 9, 2012 for the State of Idaho, except for Indian Country; April 13, 2012 for areas in the state of Washington, except for Indian Country, subject to construction activity by a Federal Operator; May 9, 2012 for projects in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin).

"New Source" – for the purpose of this permit, a construction project that commenced construction activities after February 1, 2010.

"New Source Performance Standards (NSPS)" – for the purposes of this permit, NSPS are technology-based standards that apply to construction sites that are new sources under 40 CFR 450.24.

"Non-Stormwater Discharges" – discharges that do not originate from storm events. They can include, but are not limited to, discharges of process water, air conditioner condensate, non-contact cooling water, vehicle wash water, sanitary wastes, concrete washout water, paint wash water, irrigation water, or pipe testing water.

"Non-Turbid" – a discharge that does not cause or contribute to an exceedence of turbidity-related water quality standards.

"Notice of Intent" (NOI) – the form (electronic or paper) required for authorization of coverage under the Construction General Permit.

"Notice of Termination" (NOT) – the form (electronic or paper) required for terminating coverage under the Construction General Permit.

"Operational" – for the purpose of this permit, stormwater controls are made "operational" when they have been installed and implemented, are functioning as designed, and are properly maintained.

"Operator" – for the purpose of this permit and in the context of stormwater discharges associated with construction activity, any party associated with a construction project that meets either of the following two criteria:

1. The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or
2. The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the permit).

This definition is provided to inform permittees of EPA's interpretation of how the regulatory definitions of "owner or operator" and "facility or activity" are applied to discharges of stormwater associated with construction activity.

"Ordinary High Water Mark" – the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and/or the presence of litter and debris.

"Outfall" – see "Discharge Point."

"Permitting Authority" – for the purposes of this permit, EPA, a Regional Administrator of EPA, or an authorized representative.

"Point(s) of Discharge" – see "Discharge Point."

"Point Source" – any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

"Pollutant" – defined at 40 CFR §122.2. A partial listing from this definition includes: dredged spoil, solid waste, sewage, garbage, sewage sludge, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial or municipal waste.

"Pollutant-Generating Activities" – at construction sites (for the purposes of this permit), those activities that lead to or could lead to the generation of pollutants, either as a result of earth-disturbance or a related support activity. Some of the types of pollutants that are typically found at construction sites are:

- sediment;
- nutrients;
- heavy metals;
- pesticides and herbicides;
- oil and grease;
- bacteria and viruses;

- trash, debris, and solids;
- treatment polymers; and
- any other toxic chemicals.

"Pollution Prevention Measures" – stormwater controls designed to reduce or eliminate the addition of pollutants to construction site discharges through analysis of pollutant sources, implementation of proper handling/disposal practices, employee education, and other actions.

"Polymers" – for the purposes of this permit, coagulants and flocculants used to control erosion on soil or to enhance the sediment removal capabilities of sediment traps or basins. Common construction site polymers include polyacrylamide (PAM), chitosan, alum, polyaluminum chloride, and gypsum.

"Prohibited Discharges" – discharges that are not allowed under this permit, including:

1. Wastewater from washout of concrete;
2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
4. Soaps or solvents used in vehicle and equipment washing;
5. Toxic or hazardous substances from a spill or other release; and
6. Waste, garbage, floatable debris, construction debris, and sanitary waste from pollutant-generating activities.

"Provisionally Covered Under this Permit" – for the purposes of this permit, EPA provides temporary coverage under this permit for emergency-related projects prior to receipt of a complete and accurate NOI. Discharges from earth-disturbing activities associated with the emergency-related projects are subject to the terms and conditions of the permit during the period of temporary coverage.

"Receiving Water" – a "Water of the United States" as defined in 40 CFR §122.2 into which the regulated stormwater discharges.

"Run-On" – sources of stormwater that drain from land located upslope or upstream from the regulated site in question.

"Semi-Arid Areas" – areas with an average annual rainfall of 10 to 20 inches.

"Site" – for construction activities, the land or water area where earth-disturbing activities take place, including construction support activities.

"Small Construction Activity" – defined at 40 CFR §122.26(b)(15) and incorporated here by reference. A small construction activity includes clearing, grading, and excavating resulting in a land disturbance that will disturb equal to or greater than one (1) acre and less than five (5) acres of land or will disturb less than one (1) acre of total land area but is part of a larger common plan of development or sale that will ultimately disturb equal to or greater than one (1) acre and less than five (5) acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site.

"Small Residential Lot" – for the purpose of this permit, a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre.

"Snowmelt" – the conversion of snow into overland stormwater and groundwater flow as a result of warmer temperatures.

"Spill" – for the purpose of this permit, the release of a hazardous or toxic substance from its container or containment.

"Stabilization" – the use of vegetative and/or non-vegetative cover to prevent erosion and sediment loss in areas exposed through the construction process.

"Steep Slopes" – where a state, Tribe, local government, or industry technical manual (e.g., stormwater BMP manual) has defined what is to be considered a "steep slope", this permit's definition automatically adopts that definition. Where no such definition exists, steep slopes are automatically defined as those that are 15 percent or greater in grade.

"Storm Sewer System" – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) designed or used for collecting or conveying stormwater.

"Stormwater" – stormwater runoff, snow melt runoff, and surface runoff and drainage.

"Stormwater Control Measure" - refers to any stormwater control, BMP, or other method (including narrative effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States.

"Stormwater Controls" – see "Stormwater Control measure."

"Stormwater Discharge Associated with Construction Activity" – as used in this permit, a discharge of pollutants in stormwater to waters of the United States from areas where land-disturbing activities (e.g., clearing, grading, or excavation) occur, or where construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck chute washdown, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants), are located.

"Stormwater Inlet" – a structure placed below grade to conduct water used to collect stormwater runoff for conveyance purposes.

"Stormwater Team" – the group of individuals responsible for oversight of the development and modifications of the SWPPP, and oversight of compliance with the permit requirements. The individuals on the "Stormwater Team" must be identified in the SWPPP.

"Storm Event" – a precipitation event that results in a measurable amount of precipitation.

"Storm Sewer" – a system of pipes (separate from sanitary sewers) that carries stormwater runoff from buildings and land surfaces.

"Subcontractor" – for the purposes of this permit, an individual or company that takes a portion of a contract from the general contractor or from another subcontractor.

"Surface Water" – a "Water of the United States" as defined in 40 CFR §122.2.

"SWPPP" (Stormwater Pollution Prevention Plan) – a site-specific, written document that, among other things: (1) identifies potential sources of stormwater pollution at the construction site; (2) describes stormwater control measures to reduce or eliminate pollutants in stormwater discharges from the construction site; and (3) identifies procedures the operator will implement to comply with the terms and conditions of this general permit.

"Temporary Stabilization" – a condition where exposed soils or disturbed areas are provided a temporary vegetative and/or non-vegetative protective cover to prevent erosion and sediment loss. Temporary stabilization may include temporary seeding, geotextiles, mulches, and other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re-disturb this area.

"Thawing Conditions" – for the purposes of this permit, thawing conditions are expected based on the historical likelihood of two or more days with daytime temperatures greater than 32˚F. This date can be determined by looking at historical weather data. Note: the estimation of thawing conditions is for planning purposes only. During construction the permittee will be required to conduct site inspections based upon actual conditions (i.e., if thawing conditions occur sooner than expected, the permittee will be required to conduct inspections at the regular frequency).

"Threatened Species" – defined in the Endangered Species Act at 16 U.S.C. 1531 as any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

"Tier 2 Waters" – for antidegradation purposes, pursuant to 40 CFR 131.12(a)(2), those waters thatare characterized as having water quality that exceeds the levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water.

"Tier 2.5 Waters" – for antidegradation purposes, those waters designated by States or Tribes as requiring a level of protection equal to and above that given to Tier 2 waters, but less than that given Tier 3 waters. Some States have special requirements for these waters.

"Tier 3 Waters" – for antidegradation purposes, pursuant to 40 CFR 131.12(a)(3), Tier 3 waters are identified by states as having high quality waters constituting an Outstanding Natural Resource Water (ONRW), such as waters of National Parks and State Parks, wildlife refuges, and waters of exceptional recreational or ecological significance.

"Total Maximum Daily Load" or "TMDL" – the sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for nonpoint sources and natural background. If receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure.

"Toxic Waste" – see "Hazardous Materials."

"Turbidity" – a condition of water quality characterized by the presence of suspended solids and/or organic material.

"Uncontaminated Discharge" – a discharge that does not cause or contribute to an exceedence of applicable water quality standards.

"Upland" - the dry land area above and 'landward' of the ordinary high water mark.

"Upset" – Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond your reasonable control. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. See 40 CFR 122.41(n)(1).

"Water-Dependent Structures" – structures or facilities that are required to be located directly adjacent to a waterbody or wetland, such as a marina, pier, boat ramp, etc.

"Water Quality Standards" – defined in 40 CFR § 131.3, and are provisions of State or Federal law which consist of a designated use or uses for the waters of the United States, water quality criteria for such waters based upon such uses, and an antidegradation policy to protect high-quality waters. Water quality standards protect the public health or welfare, enhance the quality of water and serve the purposes of the Act.

"Waters of the United States" – defined at 40 CFR §122.2 as:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters, including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
    a. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
    b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    c. Which are used or could be used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs (1) through (4) of this definition;
6. The territorial sea; and
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1) through (6) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

In applying this definition, EPA will consider applicable Court cases and current guidance.

"Wetland" – those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. On-site evaluations are typically required to confirm the presence and boundaries of wetlands.

"Work day" – for the purposes of this permit, a work day is a calendar day on which construction activities will take place.

Acronyms

C&D – Construction & Development

CGP – Construction General Permit

CFR – Code of Federal Regulations

CWA – Clean Water Act

eNOI – Electronic Notice of Intent

EPA – United States Environmental Protection Agency

ESA – Endangered Species Act

FWS – United States Fish and Wildlife Service

MS4 – Municipal Separate Storm Sewer System

MSGP – Multi-Sector General Permit

NMFS – United States National Marine Fisheries Service

NOI – Notice of Intent

NOT – Notice of Termination

NPDES – National Pollutant Discharge Elimination System

NRC – National Response Center

NRCS – National Resources Conservation Service

POTW – Publicly Owned Treatment Works

SPCC – Spill Prevention Control and Countermeasure

SWPPP – Stormwater Pollution Prevention Plan

TMDL – Total Maximum Daily Load

USGS – United States Geological Survey

WQS – Water Quality Standard

Appendix B - Permit Areas Eligible for Coverage

Permit coverage for stormwater discharges from construction activity occurring within the following areas is provided by legally separate and distinctly numbered permits:

B.1 EPA Region 1: CT, MA, ME, NH, RI, VT

US EPA, Region 01
Office of Ecosystem Protection
NPDES Stormwater Program
5 Post Office Square
Boston, MA 02109-3912

The States of Connecticut, Maine, Rhode Island, and Vermont are the NPDES Permitting Authority for the majority of discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
CTR12000I	Indian country within the State of Connecticut
MAR120000	Commonwealth of Massachusetts (except Indian country)
MAR12000I	Indian country within the State of Massachusetts
NHR120000	State of New Hampshire
RIR12000I	Indian country within the State of Rhode Island
VTR12000F	Areas in the State of Vermont subject to construction by a Federal Operator

B.2 EPA Region 2: NJ, NY, PR, VI

For NJ, NY, and VI:
US EPA, Region 02
NPDES Stormwater Program
290 Broadway, 24th Floor
New York, NY 10007-1866

For PR:
US EPA, Region 02
Caribbean Environmental Protection Division
NPDES Stormwater Program
1492 Ponce de Leon Ave
Central Europa Building, Suite 417
San Juan, PR 00907-4127

The State of New York is the NPDES Permitting Authority for the majority of discharges within its state. The State of New Jersey and the Virgin Islands are the NPDES Permitting Authority for all discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
NYR12000I	Indian country within the State of New York
PRR120000	Commonwealth of Puerto Rico

B.3 EPA Region 3: DE, DC, MD, PA, VA, WV

US EPA, Region 03
NPDES Stormwater Program
1650 Arch St
Philadelphia, PA 19103

The State of Delaware is the NPDES Permitting Authority for the majority of discharges within its state. Maryland, Pennsylvania, Virginia, and West Virginia are the NPDES Permitting Authority for all discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
DCR120000	District of Columbia
DER12000F	Areas in the State of Delaware subject to construction by a Federal Operator

B.4 EPA Region 4: AL, FL, GA, KY, MS, NC, SC, TN

US EPA, Region 04
Water Protection Division
NPDES Stormwater Program
61 Forsyth St SW
Atlanta, GA 30303-3104

The States of Alabama, Florida, Mississippi, and North Carolina are the NPDES Permitting Authority for the majority of discharges within their respective States. EPA Region 4 is the NPDES Permitting Authority for all Indian country lands within any other Region 4 State except Catawba lands in South Carolina.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
ALR12000I	Indian country within the State of Alabama
FLR12000I	Indian country within the State of Florida
MSR12000I	Indian country within the State of Mississippi
NCR12000I	Indian country within the State of North Carolina
RE412000I	Indian country within any other Region 4 State (except Catawba lands in South Carolina)

B.5 EPA Region 5: IL, IN, MI, MN, OH, WI

US EPA, Region 05
NPDES & Technical Support
NPDES Stormwater Program
77 W Jackson Blvd
(WN-16J)
Chicago, IL 60604-3507

The States of Michigan, Minnesota, and Wisconsin are the NPDES Permitting Authority for the majority of discharges within their respective states. The States of Illinois, Indiana, and Ohio are the NPDES Permitting Authorities for all discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
MIR10000I	Indian country within the State of Michigan
MNR10000I	Indian country within the State of Minnesota
WIR10000I	Indian country within the State of Wisconsin, except the Sokaogon Chippewa (Mole Lake) Community

B.6 EPA Region 6: AR, LA, OK, TX, NM (except see Region 9 for Navajo lands, and see Region 8 for Ute Mountain Reservation lands)

US EPA, Region 06
NPDES Stormwater Program
1445 Ross Ave, Suite 1200
Dallas, TX 75202-2733

The States of Louisiana, Oklahoma, and Texas are the NPDES Permitting Authority for the majority of discharges within their respective state. The State of Arkansas is the NPDES Permitting Authority for all discharges within its respective state.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
LAR12000I	Indian country within the State of Louisiana
NMR120000	State of New Mexico, except Indian country
NMR12000I	Indian country within the State of New Mexico, except Navajo Reservation Lands that are covered under Arizona permit AZR10000I and Ute Mountain Reservation Lands that are covered under Colorado permit COR10000I.
OKR12000I	Indian country within the State of Oklahoma
OKR12000F	Discharges in the State of Oklahoma that are not under the authority of the Oklahoma Department of Environmental Quality, including activities associated with oil and gas exploration, drilling, operations, and pipelines (includes SIC Groups 13 and 46, and SIC codes 492 and 5171), and point source discharges associated with agricultural production, services, and silviculture (includes SIC Groups 01, 02, 07, 08, 09).
TXR12000F	Discharges in the State of Texas that are not under the authority of the Texas Commission on Environmental Quality (formerly TNRCC), including activities associated with the exploration, development, or production of oil or gas or geothermal resources, including transportation of crude oil or natural gas by pipeline.
TXR12000I	Indian country within the State of Texas

B.7 EPA Region 7: IA, KS, MO, NE (except see Region 8 for Pine Ridge Reservation Lands)

US EPA, Region 07
NPDES Stormwater Program
901 N 5th St
Kansas City, KS 66101

The States of Iowa, Kansas, and Nebraska are the NPDES Permitting Authority for the majority of discharges within their respective states. The State of Missouri is the NPDES Permitting Authority for all discharges within its state.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
IAR12000I	Indian country within the State of Iowa
KSR12000I	Indian country within the State of Kansas
NER12000I	Indian country within the State of Nebraska, except Pine Ridge Reservation lands (see Region 8)

B.8 EPA Region 8: CO, MT, ND, SD, WY, UT (except see Region 9 for Goshute Reservation and Navajo Reservation Lands), the Ute Mountain Reservation in NM, and the Pine Ridge Reservation in NE.

US EPA, Region 08
NPDES Stormwater Program
999 18th St, Suite 300
(EPR-EP)
Denver, CO 80202-2466

The States of Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming are the NPDES Permitting Authority for the majority of discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
COR12000F	Areas in the State of Colorado, except those located on Indian country, subject to construction activity by a Federal Operator
COR12000I	Indian country within the State of Colorado, as well as the portion of the Ute Mountain Reservation located in New Mexico
MTR12000I	Indian country within the State of Montana
NDR12000I	Indian country within the State of North Dakota, as well as that portion of the Standing Rock Reservation located in South Dakota (except for the portion of the lands within the former boundaries of the Lake Traverse Reservation which is covered under South Dakota permit SDR10000I listed below)
SDR12000I	Indian country within the State of South Dakota, as well as the portion of the Pine Ridge Reservation located in Nebraska and the portion of the lands within the former boundaries of the Lake Traverse Reservation located in North Dakota (except for the Standing Rock Reservation which is covered under North Dakota permit NDR10000I listed above)
UTR12000I	Indian country within the State of Utah, except Goshute and Navajo Reservation lands (see Region 9)
WYR12000I	Indian country within the State of Wyoming

B.9 EPA Region 9: CA, HI, NV, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Goshute Reservation in UT and NV, the Navajo Reservation in UT, NM, and AZ, the Duck Valley Reservation in ID, and the Fort McDermitt Reservation in OR.

US EPA, Region 09
NPDES Stormwater Program
75 Hawthorne St
San Francisco, CA 94105-3901

The States of Arizona, California and Nevada are the NPDES Permitting Authority for the majority of discharges within their respective states. The State of Hawaii is the NPDES Permitting Authority for all discharges within its state.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
ASR120000	Island of American Samoa
AZR12000I	Indian country within the State of Arizona, as well as Navajo Reservation lands in New Mexico and Utah
CAR12000I	Indian country within the State of California
GUR120000	Island of Guam
JAR120000	Johnston Atoll
MPR120000	Commonwealth of the Northern Mariana Islands
MWR120000	Midway Island and Wake Island
NVR12000I	Indian country within the State of Nevada, as well as the Duck Valley Reservation in Idaho, the Fort McDermitt Reservation in Oregon and the Goshute Reservation in Utah

B.10 EPA Region 10: AK, WA, ID (except see Region 9 for Duck Valley Reservation Lands), and OR (except see Region 9 for Fort McDermitt Reservation).

US EPA, Region 10
NPDES Stormwater Program
1200 6th Ave (OW-130)
Seattle, WA 98101-1128
Phone: (206) 553-6650

The States of Oregon and Washington are the NPDES Permitting Authority for the majority of discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
AKR12000I	Indian country within the State of Alaska
AKR12-000F	Areas in the the Denali National Park and Preserve subject to construction by a Federal Operator
IDR120000	State of Idaho, except Indian country
IDR12000I	Indian country within the State of Idaho, except Duck Valley Reservation lands (see Region 9)
ORR12000I	Indian country within the State of Oregon, except Fort McDermitt Reservation lands (see Region 9)
WAR12000F	Areas in the State of Washington, except those located on Indian country, subject to construction activity by a Federal Operator
WAR12000I	Indian country within the State of Washington

Appendix C - Small Construction Waivers and Instructions

These waivers are only available to stormwater discharges associated with small construction activities (i.e., 1-5 acres). As the operator of a small construction activity, you may be able to qualify for a waiver in lieu of needing to obtain coverage under this general permit based on: (A) a low rainfall erosivity factor, (B) a TMDL analysis, or (C) an equivalent analysis that determines allocations for small construction sites are not needed. Each operator, otherwise needing permit coverage, must notify EPA of its intention for a waiver. It is the responsibility of those individuals wishing to obtain a waiver from coverage under this general permit to submit a complete and accurate waiver certification as described below. Where the operator changes or another is added during the construction project, the new operator must also submit a waiver certification to be waived.

C.1 Rainfall Erosivity Waiver

Under this scenario the small construction project's rainfall erosivity factor calculation ("R" in the Revised Universal Soil Loss Equation) is less than 5 during the period of construction activity. The operator must certify to EPA that construction activity will occur only when the rainfall erosivity factor is less than 5. The period of construction activity begins at initial earth disturbance and ends with final stabilization. Where vegetation will be used for final stabilization, the date of installation of a stabilization practice that will provide interim non-vegetative stabilization can be used for the end of the construction period, provided the operator commits (as a condition of waiver eligibility) to periodically inspect and properly maintain the area until the criteria for final stabilization as defined in the construction general permit have been met. If use of this interim stabilization eligibility condition was relied on to qualify for the waiver, signature on the waiver with its certification statement constitutes acceptance of and commitment to complete the final stabilization process. The operator must submit a waiver certification to EPA prior to commencing construction activities.

> *Note: The rainfall erosivity factor "R" is determined in accordance with Chapter 2 of Agriculture Handbook Number 703, Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE), pages 21–64, dated January 1997; United States Department of Agriculture (USDA), Agricultural Research Service.*

EPA has developed an online rainfall erosivity calculator to help small construction sites determine potential eligibility for the rainfall erosivity waiver. You can access the calculator from EPA's website at:www.epa.gov/npdes/stormwater/lew. The R factor can easily be calculated by using the construction site latitude/longitude or address and estimated start and end dates of construction. This calculator may also be useful in determining the time periods during which construction activity could be waived from permit coverage. You may find that moving your construction activity by a few weeks or expediting site stabilization will allow you to qualify for the waiver. Use this online calculator or the Construction Rainfall Erosivity Waiver Fact Sheet (www.epa.gov/npdes/pubs/fact3-1.pdf) to assist in determining the R Factor for your small construction site.

If you are the operator of the construction activity and eligible for a waiver based on low erosivity potential, you can submit a rainfall erosivity waiver electronically via EPA's eNOI system (www.epa.gov/npdes/cgpenoi) or provide the following information on the waiver certification form in order to be waived from permitting requirements:

1. Name, address and telephone number of the construction site operator(s);
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;
3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The rainfall erosivity factor calculation that applies to the active construction phase at your project site; and
5. A statement, signed and dated by an authorized representative as provided in Appendix I, Subsection I.11, which certifies that the construction activity will take place during a period when the value of the rainfall erosivity factor is less than five.

You can access the waiver certification form from EPA's website at: (http://www.epa.gov/npdes/pubs/construction_waiver_form.pdf). Paper copies of the form must be sent to one of the addresses listed in Part C.4 of this section.

Note: If the R factor is 5 or greater, you cannot apply for the rainfall erosivity waiver, and must apply for NPDES permit coverage, unless you qualify for the Water Quality Waiver as described in section B below.

If your small construction project continues beyond the projected completion date given on the waiver certification, you must recalculate the rainfall erosivity factor for the new project duration. If the R factor is below five (5), you must update all applicable information on the waiver certification and retain a copy of the revised waiver as part of your records. The new waiver certification must be submitted prior to the projected completion date listed on the original waiver form to assure your exemption from permitting requirements is uninterrupted. If the new R factor is 5 or above, you must obtain NPDES permit coverage.

C.2 TMDL Waiver

This waiver is available if EPA has established or approved a TMDL that addresses the pollutant(s) of concern for the impaired water and has determined that controls on stormwater discharges from small construction activity are not needed to protect water quality. The pollutant(s) of concern include sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. Information on TMDLs that have been established or approved by EPA is available from EPA online at http://www.epa.gov/owow/tmdl/ and from state and tribal water quality agencies.

If you are the operator of the construction activity and eligible for a waiver based on compliance with an EPA-established or approved TMDL, you must provide the following information on the Waiver Certification form in order to be waived from permitting requirements:

1. Name, address and telephone number of the construction site operator(s);
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;

3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The name of the waterbody(s) that would be receiving stormwater discharges from your construction project;
5. The name and approval date of the TMDL;
6. A statement, signed and dated by an authorized representative as provided in Appendix I, Subsection I.11, that certifies that the construction activity will take place and that the stormwater discharges will occur, within the drainage area addressed by the TMDL.

C.3 Equivalent Analysis Waiver

This waiver is available for non-impaired waters only. The operator can develop an equivalent analysis that determines allocations for his/her small construction site for the pollutant(s) of concern or determines that such allocations are not needed to protect water quality. This waiver requires a small construction operator to develop an equivalent analysis based on existing in-stream concentrations, expected growth in pollutant concentrations from all sources, and a margin of safety.

If you are a construction operator who wants to use this waiver, you must develop your equivalent analysis and provide the following information to be waived from permitting requirements:

1. Name, address and telephone number of the construction site operator(s);
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;
3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The name of the waterbody(s) that would be receiving stormwater discharges from your construction project;
5. Your equivalent analysis;
6. A statement, signed and dated by an authorized representative as provided in Appendix I, Subsection I.11, that certifies that the construction activity will take place and that the stormwater discharges will occur, within the drainage area addressed by the equivalent analysis.

C.4 Waiver Deadlines and Submissions

1. Waiver certifications must be submitted prior to commencement of construction activities.
2. If you submit a TMDL or equivalent analysis waiver request, you are not waived until EPA approves your request. As such, you may not commence construction activities until receipt of approval from EPA.
3. Late Notifications: Operators are not prohibited from submitting waiver certifications after initiating clearing, grading, excavation activities, or other construction activities. The Agency reserves the right to take enforcement for any unpermitted discharges that occur between the time construction commenced and waiver authorization is granted.

Submittal of a waiver certification is an optional alternative to obtaining permit coverage for discharges of stormwater associated with small construction activity, provided you qualify for the waiver. Any discharge of stormwater associated with small construction activity not covered by either a permit or a waiver may be considered an unpermitted discharge under the Clean Water Act. As mentioned above, EPA reserves the right to take enforcement for any unpermitted discharges that occur between the time construction commenced and either discharge authorization is granted or a complete and accurate waiver certification is submitted. EPA may notify any operator covered by a waiver that they must apply for a permit. EPA may notify any operator who has been in non-compliance with a waiver that they may no longer use the waiver for future projects. Any member of the public may petition EPA to take action under this provision by submitting written notice along with supporting justification.

Complete and accurate Rainfall Erosivity waiver certifications not otherwise submitted electronically via EPA's eNOI system (www.epa.gov/npdes/cgpenoi) must be sent to one of the following addresses:

Regular U.S. Mail Delivery
EPA Stormwater Notice Processing Center
Mail Code 4203M
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Overnight/Express Mail Delivery
EPA Stormwater Notice Processing Center
Room 7420
U.S. EPA
1201Constitution Avenue, NW
Washington, DC 20004

Complete and accurate TMDL or equivalent analysis waiver requests must be sent to the applicable EPA Region office specified in Appendix B.

Appendix D - Endangered Species Act Requirements

The purpose of this guidance is to assist you in complying with the requirements in Part 1.1.e of the permit requiring you to demonstrate that you meet one of the criteria listed in this appendix with respect to the protection of any and all species that are federally-listed as endangered or threatened under the Endangered Species Act (ESA) or of habitat that is federally-designated as "critical habitat" under the ESA in order to be eligible for coverage under this permit.

This guidance provides you information on the following:

- **Section D.1:** ESA Eligibility Criteria
- **Section D.2:** Guidance for Determining Which ESA Criteria Applies

D.1 ESA Eligibility Criteria

You must certify in your NOI that you meet one of the eligibility criteria listed below in order to be eligible for coverage under this permit. You must also specify in the NOI the basis for your selection of the applicable eligibility criterion.

> Note: (1) Regardless of the criterion selected, you must provide documentation in your SWPPP that is sufficient to support your determination that you satisfy the requirements of the particular criterion. (2) While coordination between you and the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service (together, the "Services") is not necessarily required in all cases, EPA encourages you to coordinate with the Services and to do so early in the planning process prior to submitting your NOI.

Criterion A. No federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in your site's "action area" as defined in Appendix A of this permit.

Criterion B. The construction site's discharges and discharge-related activities were already addressed in another operator's valid certification of eligibility for your action area under eligibility Criterion A, C, D, E, or F and there is no reason to believe that federally-listed species or federally-designated critical habitat not considered in the prior certification may be present or located in the "action area". To certify your eligibility under this Criterion, there must be no lapse of NPDES permit coverage in the other operator's certification. By certifying eligibility under this Criterion, you agree to comply with any effluent limitations or conditions upon which the other operator's certification was based. You must include in your NOI the tracking number from the other operator's notification of authorization under this permit. If your certification is based on another operator's certification under Criterion C, you must provide EPA with the relevant supporting information required of existing dischargers in Criterion C in your NOI form.

Criterion C. Federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in or near your site's "action area," and your site's discharges and discharge-related activities are not likely to adversely affect listed threatened or endangered species or critical habitat. This determination may include consideration of any stormwater controls and/or management practices you will adopt to ensure that your discharges and discharge-related activities are not likely to adversely affect listed species and critical habitat. To make this certification, you must include the following in your NOI: 1) any federally listed species and/or designated habitat located in your "action area"; and 2) the distance between your site and the listed species or designated critical habitat (in miles). You must also include a copy of your site map with your NOI.

Criterion D. Coordination between you and the Services has been concluded. The coordination must have addressed the effects of your site's discharges and discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat, and must have resulted in a written concurrence from the relevant Service(s) that your site's discharges and discharge-related activities are not likely to adversely affect listed species or critical habitat. You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

Criterion E. Consultation between a Federal Agency and the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service under section 7 of the ESA has been concluded. The consultation must have addressed the effects of the construction site's discharges and discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat. The result of this consultation must be either:

i. a biological opinion that concludes that the action in question (taking into account the effects of your site's discharges and discharge-related activities) is not likely to jeopardize the continued existence of listed species, nor the destruction or adverse modification of critical habitat; or

ii. written concurrence from the applicable Service(s) with a finding that the site's discharges and discharge-related activities are not likely to adversely affect federally-listed species or federally-designated habitat.

You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

Criterion F. Your construction activities are authorized through the issuance of a permit under section 10 of the ESA, and this authorization addresses the effects of the site's discharges and discharge-related activities on federally-listed species and federally-designated critical habitat. You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

You must comply with any applicable terms, conditions, or other requirements developed in the process of meeting the eligibility criteria in this section to remain eligible for coverage under this permit. Documentation of these requirements must be kept as part of your SWPPP (see Part 7.2.14.1).

D.2 Guidance for Determining Which Criterion Applies

Part 1.1.5 of the permit requires that you meet one of the six criteria listed above in order to be eligible for coverage under the permit.

You must follow the procedures in Steps 1through 6 to determine the ESA criterion under which your site is eligible for permit coverage.

D.2.1 Step 1 - Determine if Your Discharges and Discharge-Related Activities Were Already Addressed in Another Operator's Valid Certification that Included Your Action Area.

- **If your discharges and discharge-related activities <u>were</u> already addressed in another operator's valid certification that included your action area** (e.g., a general contractor or developer may have completed and filed an NOI for the entire action area with the necessary ESA certifications (Criterion A, C, D, E, or F)), *you may select eligibility Criterion B on your Notice of Intent form*.

  By certifying eligibility under Criterion B, you must comply with any terms and conditions imposed under the eligibility requirements of Criterion A, C, D, E, or F to ensure that your discharges and discharge-related activities are protective of listed species and/or critical habitat.

  > Note: If you are unable to meet these eligibility requirements, then you may either establish eligibility under one of the other criterion, or you may consider applying to EPA for an individual permit.

  Under Criterion B, you must provide documentation in your SWPPP of any of these terms and conditions, as well as the other operator's basis for establishing eligibility. You must also provide a description of the basis for your selection of Criterion B on your NOI form, including the eligibility criterion (A, C, D, E, or F) that was certified to by the previous operator, and must provide the Tracking Number from the other operator's notification of authorization under this permit.

  If your certification is based on another operator's certification under criterion C, you must provide the documentation required in the NOI for criterion C, namely: 1) what federally listed species and/or designated habitat are located in your "action area"; and 2) what is the distance between your site and the listed species or designated critical habitat (in miles).

- **If discharges and discharge-related activities from your site <u>were not</u> addressed in another operator's valid certification that included your action area,** you must follow the applicable procedures in Steps 2 through 5 below.

D.2.2 Step 2 - Determine if Listed Threatened or Endangered Species or their Designated Critical Habitat(s) are Likely to Occur in your Site's Action Area

You must determine, to the best of your knowledge, whether species listed as either threatened or endangered, or their critical habitat(s) (see definitions of these terms in Appendix A), are located in your site's action area. To make this determination, you should first determine if listed species and/or critical habitat are expected to exist in your county or township. The local offices of the U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), and State or Tribal Heritage Centers often maintain lists of federally listed endangered or threatened species on their internet sites. For FWS

terrestrial and aquatic species information, you can use FWS' on-line mapping tool, the Information, Planning, and Consultation (IPAC) System, located at http://www.fws.gov/ipac/.

Note: To determine the field office that corresponds to your project site, visit http://www.fws.gov/endangered/regions/index.html and http://www.nmfs.noaa.gov/ (under the left tabe for "Regions").

In most cases, species and/or critical habitat lists allow you to determine if any such species or habitat exists in your county or township. You can also find critical habitat designations and associated requirements at 50 CFR Parts 17 and 226. http://www.access.gpo.gov.

- ***If there <u>are</u> listed species and/or critical habitat in your county or township***, you should contact your local FWS, NMFS, or State or Tribal Heritage Center to determine if the listed species are known to exist in your action area and if any critical habitat areas have been designated that overlap your action area.
    - If your local FWS, NMFS, or State or Tribal Heritage Center indicates that these species and/or critical habitat could exist in your action area, you must:
        - Do **one or more** of the following:
            - Conduct visual inspections. This method may be particularly suitable for construction sites that are smaller in size or located in non-natural settings such as highly urbanized areas or industrial parks where there is little or no natural habitat, or for construction activities that discharge directly into municipal stormwater collection systems.
            - Conduct a formal biological survey. In some cases, particularly for larger construction sites with extensive stormwater discharges, biological surveys may be an appropriate way to assess whether species are located in the action area and whether there are likely to be adverse effects to such species. Biological surveys are frequently performed by environmental consulting firms. A biological survey may in some cases be useful to conduct in conjunction with Steps Two, Three, or Four of these instructions.
            - If required, conduct an environmental assessment under the National Environmental Policy Act (NEPA). Some construction activities might require review under NEPA for specific reasons, such as federal funding or other federal involvement in the project. Note: Coverage under the CGP does not trigger such a review for individual projects/sites. EPA has complied with NEPA in the issuance of the CGP.

        and

- Follow the instructions in Steps 3 – 5 below, as applicable. Note that many but not all measures imposed to protect listed species under these steps will also protect critical habitat. Thus, meeting the eligibility requirements of this CGP may require measures to protect critical habitat that are separate from those to protect listed species.

- ***If there are <u>no</u> listed species in your county or township and <u>no</u> critical habitat areas in your action area,*** *you may check eligibility criterion A on your NOI form*. You must also provide a description of the basis for the criterion selected on your NOI form and provide documentation supporting the criterion selected in your SWPPP.

D.2.3 Step 3 - Determine if the Construction Activity's Discharges or Discharge-Related Activities Are Likely to Adversely Affect Listed Threatened or Endangered Species or Designated Critical Habitat

If in Step 2 you determine based on communication with your local FWS, NMFS, or State or Tribal Heritage Center, or other determination, that listed species and/or critical habitat could exist in your action area, you must next assess whether your discharges or discharge-related activities are likely to adversely affect listed threatened or endangered species or designated critical habitat.

Potential adverse effects from discharges and discharge-related activities include:

- *Hydrological*. Stormwater discharges may cause siltation, sedimentation or induce other changes in receiving waters such as temperature, salinity or pH. These effects will vary with the amount of stormwater discharged and the volume and condition of the receiving water. Where a stormwater discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely. Construction activity itself may also alter drainage patterns on a site where construction occurs that can impact listed species or critical habitat.

- *Habitat*. Excavation, site development, grading, and other surface disturbance activities from construction activities, including the installation or placement of stormwater controls, may adversely affect listed species or their habitat. Stormwater may drain or inundate listed species habitat.

- *Toxicity*. In some cases, pollutants in stormwater may have toxic effects on listed species.

The scope of effects to consider will vary with each site. If you are having difficulty determining whether your project is likely to adversely affect listed species or critical habitat, or one of the Services has already raised concerns to you, you should contact the appropriate office of the FWS, NMFS or Natural Heritage Center for assistance.

- ***If adverse effects to listed threatened or endangered species or their critical habitat <u>are not</u> likely****, then you may select eligibility criterion C on the NOI form*. You must provide the following specific information on your NOI form: 1) what federally listed species and/or designated habitat are located in your "action area"; and 2) what is the distance between your site and the listed species or

designated critical habitat (in miles). You must also provide a copy of your site map with your NOI.

- ***If adverse effects to listed threatened or endangered species or their critical habitat <u>are</u> likely,*** you must follow Step 4 below.

D.2.4 Step 4 - Determine if Measures Can Be Implemented to Avoid Adverse Effects

If you make a preliminary determination in Step 3 that adverse effects from your construction activity's discharges or discharge-related activities are likely to occur, you can still receive coverage under eligibility criterion C of the CGP if appropriate measures are undertaken to avoid or eliminate the likelihood of adverse effects prior to applying for CGP coverage.

These measures may involve relatively simple changes to construction activities such as re-routing a stormwater discharge to bypass an area where species are located, relocating stormwater controls, or by modifying the "footprint" of the construction activity. If you are unable to ascertain which measures to implement to avoid the likelihood of adverse effects, you must coordinate or enter into consultation with the FWS and/or NMFS, in which case you would not be eligible for coverage under eligibility criterion C, but may instead be eligible for coverage under eligibility criterion D, E, or F (described in more detail in Step 5).

- **If you are able to install and implement appropriate measures to avoid the likelihood of adverse effects,** *then you may check eligibility criterion C on the NOI form.* The measures you adopt to avoid or eliminate adverse affects must be implemented for the duration of the construction project and your coverage under the CGP. You must also provide a description of the basis for the criterion selected , and the following specific information on your NOI form: 1) what federally listed species and/or designated habitat are located in your "action area"; and 2) what is the distance between your site and the listed species or designated critical habitat (in miles).

- **If you cannot ascertain which measures to implement to avoid the likelihood of adverse effects,** you must follow the procedures in Step 5**.**

D.2.5 Step 5 - Determine if the Eligibility Requirements of Criterion D, E, or F Can Be Met

If in Step 4 you cannot ascertain which measures to implement to avoid the likelihood of adverse effects, you must contact the FWS and/or NMFS. You may still be eligible for CGP coverage if any likely adverse effects can be addressed through meeting criterion D, E, or F.

- **Criterion D:** You have coordinated with the Services and have addressed the effects of your site's discharges on federally-listed threatened or endangered species and federally-designated critical habitat, which resulted in a written concurrence from the relevant Service(s) that your site's discharges are not likely to adversely affect listed species or critical habitat.

  If you have met the requirements of criterion D, *you may select eligibility criterion D on the NOI form.* You must provide a description of the basis for the criterion selected on your NOI form and must include copies of the correspondence between you and the applicable Service in your SWPPP.

- **Criterion E:** Formal or informal ESA section 7 consultation is performed with the FWS and/or NMFS and that consultation addresses the effects of your discharges and discharge-related activities on federally-listed and threatened species and designated critical habitat. In order to be eligible for coverage under this permit, consultation must result in a "no jeopardy opinion" or a written concurrence by the Service(s) on a finding that your stormwater discharge(s) and stormwater discharge-related activities are not likely to adversely affect listed species or critical habitat (For more information on consultation, see 50 CFR §402). If you receive a "jeopardy opinion," you may continue to work with the FWS and/or NMFS and your permitting authority to modify your project so that it will not jeopardize listed species or designated critical habitat.

  Note that most consultations are accomplished through informal consultation. When conducting informal ESA section 7 consultation as a non-federal representative, you must follow the procedures found in 50 CFR Part 402 of the ESA regulations. You must notify FWS and/or NMFS of your intention and agreement to conduct consultation as a non-federal representative.

  Consultation may occur in the context of another federal action at the construction site (e.g., where ESA section 7 consultation was performed for issuance of a wetlands dredge and fill permit for the project or where a NEPA review is performed for the project that incorporates a section 7 consultation). Any terms and conditions developed through consultations to protect listed species and critical habitat must be incorporated into the SWPPP. As noted above, operators may, if they wish, initiate consultation with the Services at Step Four.

  Whether ESA section 7 consultation must be performed with either the FWS, NMFS or both Services depends on the listed species that may be affected by the operator's activity. In general, NMFS has jurisdiction over marine, estuarine, and anadromous species. Operators should also be aware that while formal section 7 consultation provides protection from incidental takings liability, informal consultation does not.

  If you have met the requirements of criterion E, *you may select eligibility criterion E on the NOI form.* You must provide a description of the basis for the criterion selected on your NOI form and must include copies of the correspondence between yourself and the Services in your SWPPP.

- **Criterion F:** Your construction activities are authorized through the issuance of a permit under section 10 of the ESA, and that authorization addresses the effects of your discharge(s) and discharge-related activities on federally-listed species and designated critical habitat. You must follow FWS and/or NMFS procedures when applying for an ESA Section 10 permit (see 50 CFR §17.22(b)(1) for FWS and §222.22 for NMFS). Application instructions for section 10 permits for FWS and NMFS can be obtained by accessing the FWS and NMFS websites (http://www.fws.gov and http://www.nmfs.noaa.gov) or by contacting the appropriate FWS and NMFS regional office.

  If you have met the requirements of criterion F, *you may select eligibility criterion F on the NOI form.* You must provide a description of the basis for the criterion selected on your NOI form and must include copies of the correspondence between yourself and the Services in your SWPPP.

Appendix E – Historic Property Screening Process

Background

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects of Federal "undertakings", such as the issuance of this permit, on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. To address any issues relating to historic properties in connection with the issuance of this permit, EPA has developed the screening process in this appendix that enables construction operators to appropriately consider the potential impacts, if any, of their installation of stormwater controls on historic properties and to determine whether actions can be taken, if applicable, to mitigate any such impacts. Although the coverages of individual construction sites under this permit do not constitute separate Federal undertakings, the screening process in this appendix provides an appropriate site-specific means of addressing historic property issues in connection with EPA's issuance of the permit.

Key Terms

Historic property- prehistoric or historic districts, sites, buildings, structures, or objects that are included in or eligible for inclusion in the National Register of Historic Places, including artifacts, records, and remains that are related to and located within such properties

SHPO – The State Historic Preservation Officer for a particular state

THPO or Tribal representative – The Tribal Historic Preservation Officer for a particular Tribe or, if there is no THPO, the representative designated by such Tribe for NHPA purposes

Instructions for All Construction Operators

You are required to follow the screening process in this appendix to determine if your installation of stormwater controls on your site has the potential to cause effects to historic properties, and whether or not you need to contact your SHPO, THPO, or other tribal representative for further information. You may not submit your NOI until you have completed this screening process. The following four steps describe how applicants can meet the historic property requirements under this permit:

Step 1 *Are you installing any stormwater controls that require subsurface earth disturbance?*

The first step of the screening process is to determine if you will install stormwater controls that cause subsurface earth disturbance. The installation of the following types of stormwater controls require subsurface earth disturbance:

- Dikes
- Berms
- Catch Basins
- Ponds
- Ditches
- Trenches
- Culverts
- Channels
- Perimeter Drains

- Swales

Note: This list is not intended to be exhaustive. Other stormwater controls that are not on this list may involve earth-disturbing activities and must also be examined for the potential to affect historic properties.

Note: You are only required to consider earth-disturbing activities related to the installation of stormwater controls in the NHPA screening process. You are not reqired to conside other earth-disturbing activities a the site. If you are installing one of the above stormwater controls or another type of control that requires subsurface earth disturbance, your project has the potential to have an effect on historic properties. If this is the case, then you must proceed to Step 2.

If you are not installing one of the above stormwater controls or another type of control that requires subsurface earth disturbance, then you may indicate this on your NOI, and no further screening is necessary. During the 14-day waiting period after submitting your NOI, the SHPO, THPO, or other tribal representative may request that EPA hold up authorization based on concerns about potential adverse impacts to historic properties. EPA will evaluate any such request and notify you if any additional measures to address adverse impacts to historic properties are necessary.

Step 2 *Have prior professional cultural resource surveys or other evaluations determined that historic properties do not exist, or have prior disturbances precluded the existence of historic properties?*

If you are installing a stormwater control that requires subsurface earth disturbance, you must next determine if it has already been determined that no historic properties exist on your site based on prior professional cultural resource surveys or other evaluations, or that the existence of historic properties has been precluded because of prior earth disturbances.

If prior to your project it has already been determined that no historic properties exist at your site based on available information, including information that may be provided by your applicable SHPO, THPO, or other tribal representative, then you may indicate this on your NOI, and no further screening steps are necessary. Similarly, if earth disturbances that have occurred prior to your project have eliminated the possibility that historic properties exist on your site, you may indicate this on your NOI, and no further screening steps are necessary. After submitting your NOI, and during the 14-day waiting period, the SHPO, THPO, or other tribal representative may request that EPA hold up authorization based on concerns about potential adverse impacts to historic properties. EPA will evaluate any such request and notify you if any additional measures to address adverse impacts to historic properties are necessary.

If neither of these circumstances exists for your project, you must proceed to Step 3.

Step 3 *If you are installing any stormwater controls that require subsurface earth disturbance, you must determine if these activities will have an effect on historic properties.*

If your answer to the questions in Steps 1 and 2 is "no", *then you must assess whether your earth-disturbing activities related to the installation of stormwater controls will have an effect on historic properties. This assessment may be based on historical sources, knowledge of the area, an assessment of the types of earth-disturbing activities you are engaging in, considerations of*

any controls and/or management practices you will adopt to ensure that your stormwater control-related earth-disturbing activities will not have an effect on historic properties, and any other relevant factors. If you determine based on this assessment that earth disturbances related to the installation of yous stormwater controls will not cause effects to historic properties, you may indicate this on your NOI, and document the basis for your determinatioin in your SWPPP and no further screening steps are necessary. In this case you must also attach a copy of your site map to your NOI. After submitting your NOI, and during the 14-day waiting period, the SHPO, THPO, or other tribal representative may request that EPA hold up authorization based on concerns about potential adverse impacts to historic properties. EPA will evaluate any such request and notify you if any additional measures to address adverse impacts to historic properties are necessary.

If none of the circumstances in Steps 1-3 exist for your project, you must proceed to Step 4.

Step 4: *If you are installing any stormwater controls that require subsurface earth disturbance and you have not satisfied the conditions in Steps 1-3, you must contact and consult with the appropriate historic preservation authorities.*

Where you are installing stormwater controls that require subsurface earth disturbance, and you cannot determine in Step 3 that these activities will not have effects on historic properties, then you must contact the relevant SHPO, THPO, or other tribal representative to request their views as to the likelihood that historic properties are potentially present on your site and may be impacted by the installation of these controls.

> *Note: Addresses for SHPOs and THPOs may be found on the Advisory Council on Historic Preservation's website (www.achp.gov/programs.html). In instances where a Tribe does not have a THPO you should contact the appropriate Tribal government office designated by the Tribe for this purpose when responding to this permit eligibility condition.*

You must submit the following minimum information in order to properly initiate your request for information:

1. Project name (*i.e.*, the name or title most commonly associated with your project);
2. A narrative description of the project;
3. Name, address, phone and fax number, and email address (if available) of the operator;
4. Most recent U.S. Geological Survey (USGS) map section (7.5 minute quadrangle) showing actual project location and boundaries clearly indicated; and
5. Sections of SWPPP site map (see Part 7.2.6) that show locations where stormwater controls that will cause subsurface earth disturbance will be installed (see Step 1).

Without submitting this minimum information, you will not have been considered to have properly initiated your request. You will need to provide the SHPO, THPO, or other tribal representative a minimum of15 calendar days after they receive these materials to respond to your request for information about your project. You are advised to get a receipt from the post office or other carrier confirming the date on which your letter was received.

If you do not receive a response within15 calendar days after receipt by the SHPO, THPO, or other tribal representative of your request, then you may indicate this on your NOI, and no further screening steps are necessary. Or, if the applicable SHPO, THPO, or other tribal representative responds to your request with an indication that no historic properties will be affected by the installation of stormwater controls at your site, then you may indicate this on your NOI, and no further screening steps are necessary. After submitting your NOI, and during the 14-day waiting period, the SHPO, THPO, or other tribal representative may request that EPA hold up authorization based on concerns about potential adverse impacts to historic properties. EPA will evaluate any such request and notify you if any additional measures to address adverse impacts to historic properties are necessary.

If within 15 calendar days of receipt of your request the applicable SHPO, THPO, or other tribal representative responds with a request for additional information or for further consultation regarding appropriate measures for treatment or mitigation of effects on historic properties caused by the installation of stormwater controls on your site, you must comply with this request and proceed to Step 5.

Step 5: *Consultation with your applicable SHPO, THPO, or other tribal representative*.

If, following your discussions with the appropriate historic preservation authorities in Step 4, the applicable SHPO, THPO, or other tribal represenative requests additional information or further consultation, you must respond with such information or to consult to determine impacts to historic properties that may be caused by the installation of stormwater controls on your site and appropriate measures for treatment or mitigation of such impacts. If as a result of your discussions with the applicable SHPO, THPO, or tribal representative, you enter into, and comply with, a written agreement regarding treatment and/or mitigation of impacts on your site, then you may indicate this on your NOI, and no further screening steps are necessary.

If, however, agreement on an appropriate treatment or mitigation plan cannot be reached between you and the SHPO, THPO, or other tribal representative within 30 days of your response to the SHPO, THPO, or other tribal representative's request for additional information or further consultation, you may submit your NOI, but you must indicate that you have not negotiated measures to avoid or mitigate such effects. You must also include in your SWPPP the following documentation:

1. Copies of any written correspondence between you and the SHPO, THPO, or other tribal representative; and
2. A description of any significant remaining disagreements as to mitigation measures between you and the SHPO, THPO, or other tribal representative.

After submitting your NOI, and during the 14-day waiting period, the SHPO, THPO, ACHP or other tribal representative may request that EPA place a hold on authorization based upon concerns regarding potential adverse effects to historic properties. EPA, in coordination with the ACHP, will evaluate any such request and notify you if any additional measures to address adverse effects to historic properties are necessary.

Appendix F - List of Tier 3, Tier 2, and Tier 2.5 Waters

EPA's CGP has special requirements for discharges to waters designated by a state or tribe as Tier 2/2.5 or Tier 3 for antidegradation purposes under 40 CFR 131.12(a). See Parts 1.2.3 and 3.3.

The list below is provided as a resource for operators who must determine whether they discharge to a Tier 2/2.5 or Tier 3 water. Only Tier 2/2.5 or Tier 3 waters specifically identified by a water quality standard authority (e.g., a state, territory, or tribe) are identified in the table below. Many authorities evaluate the existing and protected quality of the receiving water on a pollutant-by-pollutant basis and determine whether water quality is better than the applicable criteria that would be affected by a new discharge or an increase in an existing discharge of the pollutant. In instances where water quality is better, the authority may choose to allow lower water quality, where lower water quality is determined to be necessary to support important social and economic development. Permittees are not required to identify those waters which are evaluated on an individual basis.

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority	
MAR120000	**Commonwealth of Massachusetts, except Indian Country lands**	
	Tier 2 and Tier 2.5 waters are identified and listed in 314 CMR 4.06 Basin Classification. (314 CMR 4 can be found at DEP's web page at http://www.mass.gov/dep/service/regulations/314cmr04.pdf)	
	Tier 2	Tier 2 waters are listed on a parameter-by-parameter basis.
	Tier 2.5	Tier 2.5 waters are listed as "outstanding resource waters" on the website: http://www.mass.gov/dep/water/laws/tblfig.pdf
NHR120000	**State of New Hampshire**	
	Tier 2/2.5	There is no list of Tier 2/Tier 2.5 waters. New dischargers should contact Ken Edwardson at Kenneth.Edwardson@des.nh.gov.
	Tier 3	Env-Ws 1708.05(a) Surface waters of national forests and surface waters designated as "natural" under RSA 483:7-a, I shall be considered outstanding resource waters (ORW). "Natural waters" are listed at http://www.gencourt.state.nh.us/rsa/html/L/483/483-15.htm. Surface waters of national forests are not included in an official list. For further questions, new dischargers should contact Thelma Murphy (EPA Region 1's stormwater coordinator) at murphy.thelma@epa.gov.
PRR120000	**Commonwealth of Puerto Rico**	
	Tier 3	Tier III waters are those which are classified as either Class SA or Class SE. Class SA waters are defined as "Coastal waters and estuarine waters of high quality and/or exceptional ecological or recreational value whose existing characteristics shall not be altered, except by natural causes, in order to preserve the existing natural phenomena." Class SA waters include bioluminiscent lagoons and bays such as La Parguera and Monsio José on the Southern Coast, Bahía de Mosquito in Vieques, and any other coastal or estuarine waters of exceptional quality of high ecological value or recreational which may be designated by Puerto Rico, through Resolution, as requiring this classification for protection of the waters. Class SE waters are defined

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority	
		as "Surface waters and wetlands of exceptional ecological value, whose existing characteristics should not be altered in order to preserve the existing natural phenomena." Class SE waters include Laguna Tortuguero, Laguna Cartagena and any other surface water bodies of exceptional ecological value as may be designated by Puerto Rico through Resolution.
DCR120000	**District of Columbia**	
	Tier 2/2.5	Rock Creek and its tributaries and Battery Kemble Creek and its tributaries are considered Special Waters of the District of Columbia (SWDC) under its antidegradation program.
MNR12000I	**Fond du Lac Band of MN Chippewa**	
	Tier 3	Six lakes are presently identified as Tier 3: (1) Dead Fish, (2) Jaskari, (3) Miller (Mud), (4) Perch, (5) Rice Portage, (6) Wild Rice.
	Grand Portage Band of MN Chippewa	
	Tier 2/2.5	All waters, not already classified as Tier 3, are high quality Tier 2 waters. (see Grand Portage Reservation Water Quality Standards, Section VI & VII, Pages 14-16).
	Tier 3	"The portion of Lake Superior north of latitude 47 degrees, 57 minutes, 13 seconds, east of Hat Point, south of the Minnesota-Ontario boundary, and west of the Minnesota-Michigan boundary." (see Section VII, Page 16).
WIR12000I	**Lac du Flambeau Band of the Lake Superior Chippewa**	
	Tier 2	All named waters, including wetlands, not specified under an antidegradation classification.
	Tier 2.5	Bills Lake, Birch Lake, Bobidosh Lake, Bog Lake (SE SE Sec. 31, T40NR6E), Bolton Lake, Broken Bow Lake, Chewalah Lake, Clear Lake (Sec. 2, T39NR4E), Corn Great, Great, Corn Lake, Little "Least/Lesser", Crawling Stone Lake, Big, Crawling Stone Lake, Little, Crescent Lake, Crooked Lake, Big, David Lake, Ellerson Lake, Middle, Ellerson Lake, West, Elsie Lake "Boundary Lake", Fat Lake, Fence Lake, Gresham Creek, Green Lake (NW NW Sec. 19, T41R6E), Grey Lake, Gunlock Lake, Haskell Lake, Headflyer Lake (Sec. 19, T41NR5E), Highway Lake (NW NW Sec. 19, T41NR5E), Horsehead Lake (SE SW Sec. 9, T40NR5E), Hutton's Creek, Ike Walton Lake, Lily Lake (SE SW Sec. 35, T40NR5E), Little Ten Lake, Lodge Lake "L. Rice" (NW NW Sec. 8, T41NR6E), Lucy Lake, Mindys Lake (Sec. 8, T40NR5E), Minette Lake, Mitten Lake, Monk's Lake (Sec. 13, T40NR5E), Moving Cloud Lake, Mud Creek, Muskesin Lake, Patterson Lake, Placid Twin Lake (North), Placid Twin Lake (South), Plummer Lake, Poupart Lake, Prairie Lake (NE SW Sec. 13, T40NR4E), Raven Lake, Ross Allen Lake, Sand Lake, Little, Scott Lake (Sec. 22, T40N, R4E), Shishebogama Lake, Signal Lake, Snort Lake (Sec. 5, T41N, R6E), Spring Lake "Jerms", Squirrel Lake, Statenaker Lake "Hollow", Stearns Lake "Hourglass", Sugarbush "Hidden Lake" (NW NW Sec. 17, T41NR5E), Sugarbush Creek, Sugarbush Lake, Little, Sugarbush Lake, Lower, Sugarbush Lake, Middle, Sugarbush Lake, Upper, Sunfish Lake, Tippecanoe Lake, Tomahawk River, To-To Tom Lake, Toulish Lake, Trout River, Warrior Lake, White Sand Lake, Whitefish Lake

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority	
		"Cattail Lake" (Sec. 34, T40N5R), Wishow Lake, Wyandock Lake
	Tier 3	Bear River (1st bridge to Reservation boundary), Big Springs (Sec. 25, T40NR4E), Black Lake, Cranberry Lake, Doud Lake, Eagle Lake, Gene Lake, Johnson Springs, Little Trout Lake, Lost Lake (Sect. 1, T41NR4E), Mishonagon Creek, Munnomin (Jesse, Duck) Lake, Negani (Hegani) Lake, Reservation Line Lake, Spring Creek, Tank Lake, Thomas Lake, Wild Rice Lake, Zee Lake
NMR120000	**State of New Mexico**	
	Tier 3	(1) Rio Santa Barbara, including the west, middle and east forks from their headwaters downstream to the boundary of the Pecos Wilderness; and (2) the waters within the United States forest service Valle Vidal special management unit including: (a) Rio Costilla, including Comanche, La Cueva, Fernandez, Chuckwagon, Little Costilla, Holman, Gold, Grassy, LaBelle and Vidal creeks, from their headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit; (b) Middle Ponil creek, including the waters of Greenwood Canyon, from their headwaters downstream to the boundary of the Elliott S. Barker wildlife management area; (c) Shuree lakes; (d) North Ponil creek, including McCrystal and Seally Canyon creeks, from their headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit; and (e) Leandro creek from its headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit. (3) the named perennial surface waters of the state, identified in Subparagraph (a) below, located within United States department of agriculture forest service wilderness. Wilderness are those lands designated by the United States congress as wilderness pursuant to the Wilderness Act. Wilderness areas included in this designation are the Aldo Leopold wilderness, Apache Kid wilderness, Blue Range wilderness, Chama River Canyon wilderness, Cruces Basin wilderness, Dome wilderness, Gila wilderness, Latir Peak wilderness, Pecos wilderness, San Pedro Parks wilderness, Wheeler Peak wilderness, and White Mountain wilderness. (a) The following waters are designated in the Rio Grande basin: (i) in the Aldo Leopold wilderness: Byers Run, Circle Seven creek, Flower canyon, Holden Prong, Indian canyon, Las Animas creek, Mud Spring canyon, North Fork Palomas creek, North Seco creek, Pretty canyon, Sids Prong, South Animas canyon, Victorio Park canyon, Water canyon; (ii) in the Apache Kid wilderness Indian creek and Smith canyon; (iii) in the Chama River Canyon wilderness: Chavez canyon, Ojitos canyon, Rio Chama; (iv) in the Cruces Basin wilderness: Beaver creek, Cruces creek, Diablo creek, Escondido creek, Lobo creek, Osha creek; (v) in the Dome wilderness: Capulin creek, Medio creek, Sanchez

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority	
		canyon/creek; (vi) in the Latir Peak wilderness: Bull creek, Bull Creek lake, Heart lake, Lagunitas Fork, Lake Fork creek, Rito del Medio, Rito Primero, West Latir creek; (vii) in the Pecos wilderness: Agua Sarca, Hidden lake, Horseshoe lake (Alamitos), Jose Vigil lake, Nambe lake, Nat lake IV, No Fish lake, North Fork Rio Quemado, Rinconada, Rio Capulin, Rio de las Trampas (Trampas creek), Rio de Truchas, Rio Frijoles, Rio Medio, Rio Molino, Rio Nambe, Rio San Leonardo, Rito con Agua, Rito Gallina, Rito Jaroso, Rito Quemado, San Leonardo lake, Santa Fe lake, Santa Fe river, Serpent lake, South Fork Rio Quemado, Trampas lake (East), Trampas lake (West); (viii) in the San Pedro Parks wilderness: Agua Sarca, Cañon Madera, Cave creek, Cecilia Canyon creek, Clear creek (North SPP), Clear creek (South SPP), Corralitos creek, Dove creek, Jose Miguel creek, La Jara creek, Oso creek, Rio Capulin, Rio de las Vacas, Rio Gallina, Rio Puerco de Chama, Rito Anastacio East, Rito Anastacio West, Rito de las Palomas, Rito de las Perchas, Rito de los Pinos, Rito de los Utes, Rito Leche, Rito Redondo, Rito Resumidero, San Gregorio lake; (ix) in the Wheeler Peak wilderness: Black Copper canyon, East Fork Red river, Elk lake, Horseshoe lake, Lost lake, Sawmill creek, South Fork lake, South Fork Rio Hondo, Williams lake. (b) The following waters are designated in the Pecos River basin: (i) in the Pecos wilderness: Albright creek, Bear creek, Beatty creek, Beaver creek, Carpenter creek, Cascade canyon, Cave creek, El Porvenir creek, Hollinger creek, Holy Ghost creek, Horsethief creek, Jack's creek, Jarosa canyon/creek, Johnson lake, Lake Katherine, Lost Bear lake, Noisy brook, Panchuela creek, Pecos Baldy lake, Pecos river, Rio Mora, Rio Valdez, Rito Azul, Rito de los Chimayosos, Rito de los Esteros, Rito del Oso, Rito del Padre, Rito las Trampas, Rito Maestas, Rito Oscuro, Rito Perro, Rito Sebadilloses, South Fork Bear creek, South Fork Rito Azul, Spirit lake, Stewart lake, Truchas lake (North), Truchas lake (South), Winsor creek; (ii) in the White Mountain wilderness: Argentina creek, Aspen creek, Bonito creek, Little Bonito creek, Mills canyon/creek, Rodamaker creek, South Fork Rio Bonito, Turkey canyon/creek. (c) The following waters are designated in the Gila River basin: (i) in the Aldo Leopold wilderness: Aspen canyon, Black Canyon creek, Bonner canyon, Burnt canyon, Diamond creek, Falls canyon, Fisherman canyon, Running Water canyon, South Diamond creek; (ii) in the Gila wilderness: Apache creek, Black Canyon creek, Brush canyon, Canyon creek, Chicken Coop canyon, Clear creek, Cooper canyon, Cow creek, Cub creek, Diamond creek, East Fork Gila river, Gila river, Gilita creek, Indian creek, Iron creek, Langstroth canyon, Lilley canyon, Little creek, Little Turkey creek, Lookout canyon, McKenna creek, Middle Fork Gila river, Miller Spring canyon, Mogollon creek, Panther canyon, Prior creek, Rain creek, Raw Meat creek, Rocky canyon, Sacaton creek, Sapillo creek, Sheep Corral canyon, Skeleton canyon, Squaw creek, Sycamore canyon, Trail canyon, Trail creek, Trout creek, Turkey creek, Turkey Feather creek, Turnbo canyon,

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority	
		West Fork Gila river, West Fork Mogollon creek, White creek, Willow creek, Woodrow canyon. (d) The following waters are designated in the Canadian River basin: in the Pecos wilderness Daily creek, Johns canyon, Middle Fork Lake of Rio de la Casa, Middle Fork Rio de la Casa, North Fork Lake of Rio de la Casa, Rito de Gascon, Rito San Jose, Sapello river, South Fork Rio de la Casa, Sparks creek (Manuelitas creek). (e) The following waters are designated in the San Francisco River basin: (i) in the Blue Range wilderness: Pueblo creek; (ii) in the Gila wilderness: Big Dry creek, Lipsey canyon, Little Dry creek, Little Whitewater creek, South Fork Whitewater creek, Spider creek, Spruce creek, Whitewater creek. (f) The following waters are designated in the Mimbres Closed basin: in the Aldo Leopold wilderness Corral canyon, Mimbres river, North Fork Mimbres river, South Fork Mimbres river. (g) The following waters are designated in the Tularosa Closed basin: in the White Mountain wilderness Indian creek, Nogal Arroyo, Three Rivers. (h) The wetlands designated are identified on the maps and list of wetlands within United States forest service wilderness areas designated as outstanding national resource waters published at the New Mexico state library and available on the department's website.

Appendix G – Buffer Guidance.

The purpose of this guidance is to assist you in complying with the requirements in Part 2.1.2.1 of the permit regarding the establishment of natural buffers or equivalent sediment controls. This guidance is organized as follows:

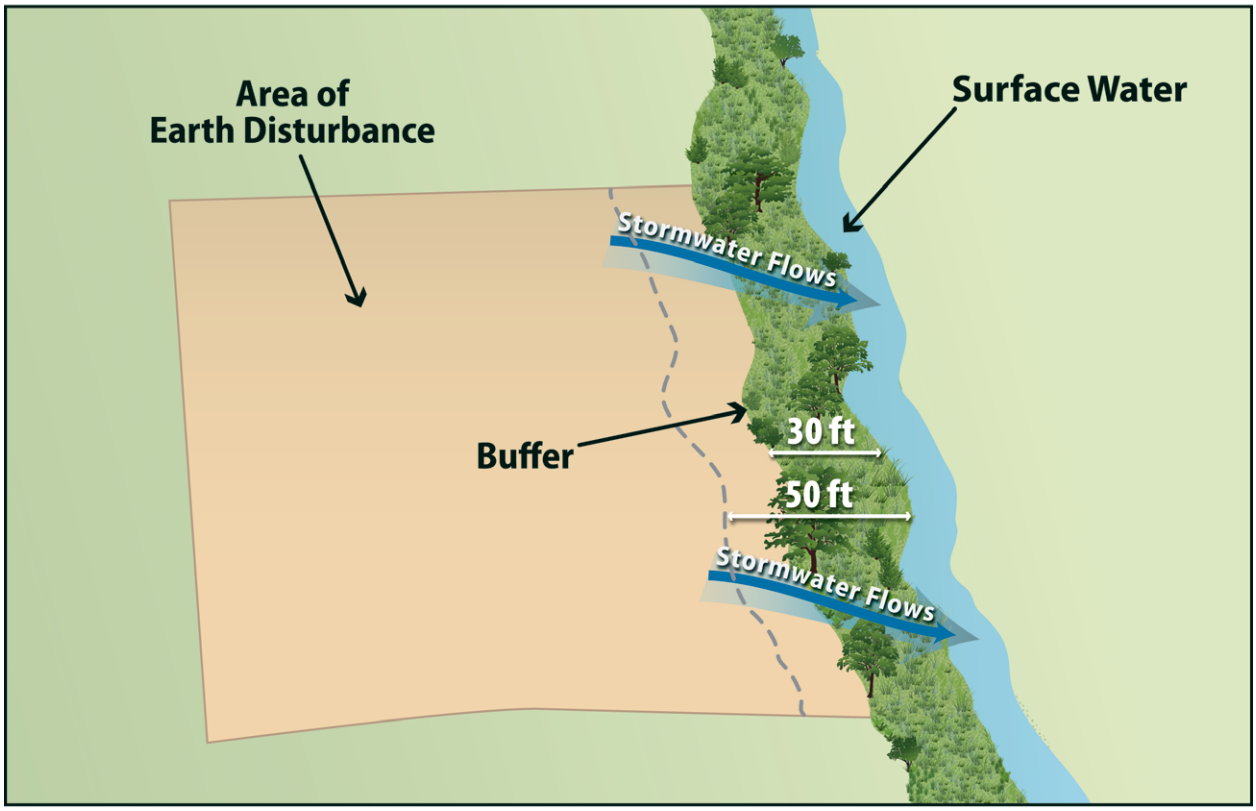
G.1 Sites That Are Required to Comply with Part 2.1.2.1

The purpose of this part is to help you determine if the requirements in Part 2.1.2.1 apply to your site.

G.1.1 Step 1 - Determine if Your Site is Within 50 Feet of a Surface Water

Part 2.1.2.1 applies to you only if your earth-disturbing activities will occur within 50 feet of a surface water that receives stormwater discharges from your site. Figure G – 1 illustrates when a site would be required to comply with the requirements in Part 2.1.2.1 due to their proximity to a surface water. If the surface water is not located within 50 feet of the earth-disturbing activities, Part 2.1.2.1 does not apply.

Figure G - 1. Example of earth-disturbing activities within 50 feet of a surface water.



If you determine that your earth-disturbing activities will occur within 50 feet of a surface water that receives stormwater discharges from your site, the requirements in Part 2.1.2.1 apply, except for certain circumstances that are described in Step 2.

Note that where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, or if a portion of area within 50 feet of the surface water is owned by another party and is not under your control, the buffer requirements in Part 2.1.2.1 still apply, but with some allowances.

Clarity about how to implement the compliance alternatives for these situations is provided in G.2.1.2 and G.2.2.2 below.

Note that EPA does not consider designed stormwater control features *(e.g., stormwater conveyance channels, storm drain inlets, stormwater basins)* that direct storm water to surface waters more than 50 feet from the disturbance to constitute surface waters for the purposes of determining if the buffer requirements apply.

G.1.2 Step 2 - Determine if Any Exceptions to the Requirements in Part 2.1.2.1 Apply

The following exceptions apply to the requirements in Part 2.1.2.1:

- If there is no discharge of stormwater to surface waters through the area between the disturbed portions of the site and any surface waters located within 50 feet of your site, you are not required to comply with the requirements in this Part. This includes situations where you have implemented controls measures, such as a berm or other barrier, that will prevent such discharges.
- Where no natural buffer exists due to preexisting development disturbances *(e.g., structures, impervious surfaces)* that occurred prior to the initiation of planning for the current development of the site, you are not required to comply with the requirements in this Part.

  Where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, you <u>are</u> required to comply with the requirements in this Part. For the purposes of calculating the sediment load reduction for either compliance alternative 2 or 3 below, you are not expected to compensate for the reduction in buffer function that would have resulted from the area covered by these preexisting disturbances. Clarity about how to implement the compliance alternatives for these situations is provided in G.2.1.2 and G.2.2.2 below.

  If during your project, you will disturb any portion of these preexisting disturbances, the area removed will be deducted from the area treated as natural buffer.
- For "linear construction projects" (see Appendix A), you are not required to comply with this requirement if site constraints *(e.g., limited right-of-way)* prevent you from complying with the requirements of the alternatives in Part 2.1.2.1a, provided that, to the extent practicable, you limit disturbances within 50 feet of the surface water and/or you provide supplemental erosion and sediment controls to treat stormwater discharges from earth disturbances within 50 feet of the surface water. You must also document in your SWPPP your rationale for why it is infeasible for you to comply with the requirements in Part 2.1.2.1a, and describe any buffer width retained and/or supplemental erosion and sediment controls installed.
- For "small residential lot" construction *(i.e., a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre),* you have the option of complying with the requirements in Part G.2.3 of this appendix.
- The following disturbances within 50 feet of a surface water are exempt from the requirements in this Part:

  - Construction approved under a CWA Section 404 permit; or

- Construction of a water-dependent structure or water access areas *(e.g., pier, boat ramp, trail)*.

Note that you must document in your SWPPP if any disturbances related to any of the above exceptions occurs within the buffer area on your site.

G.2 COMPLIANCE ALTERNATIVES GUIDANCE

If in Part G.1 of this guidance you determine that the buffer requirements apply to your site, you have three compliance alternatives from which you can choose:

1. Provide and maintain a 50-foot buffer undisturbed natural buffer (Part 2.1.2.1a.i);[1] or
2. Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls, which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer (Part 2.1.2.1a.ii);[1] or
3. If it is infeasible to provide and maintain an undisturbed natural buffer of any size, you must implement erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer (Part 2.1.2.1a.iii).[1]

The compliance alternative selected above must be maintained throughout the duration of permit coverage.

The following provides detailed guidance for how you can comply with each of the compliance alternatives. Part G.2.1 below provides guidance on how to provide and maintain natural buffers consistent with the alternatives 1 and 2, above. Part G.2.2 below provides guidance on how to comply with the requirement to provide a 50-foot buffer equivalent through erosion and sediment controls consistent with alternatives 2 and 3, above.

G.2.1 Guidance for Providing and Maintaining Natural Buffers

The following guidance is intended to assist you in complying with the requirements to provide and maintain a natural buffer during construction. This part of the guidance applies to you if you choose either alternative 1 (50-foot buffer) or alternative 2 (a buffer of < 50 feet supplemented by additional erosion and sediment controls that achieve the equivalent sediment load reduction as the 50-foot buffer), or if you are providing a buffer in compliance with one of the small residential lot compliance alternatives in Part G.2.3 below.

[1] *For the compliance alternatives in 1 and 2, you are not required to enhance the quality of the vegetation that already exists in the buffer, or provide vegetation if none exists (e.g., arid and semi-arid areas). You only need to retain and protect from disturbance the natural buffer that existed prior to the commencement of construction. Any preexisting structures or impervious surfaces are allowed in the natural buffer provided you retain and protect from disturbance the natural buffer area outside the preexisting disturbance. Similarly, for alternatives 2 and 3, you are required to implement and maintain sediment controls that achieve the sediment load reduction equivalent to the undisturbed natural buffer that existed on the site prior to the commencement of construction. In determining equivalent sediment load reductions, you may consider naturally non-vegetated areas and prior disturbances. See Part G.2.2 of this Appendix for a discussion of how to determine equivalent reductions.*

G.2.1.1 *Buffer Width Measurement*

Where you are retaining a buffer of any size, the buffer should be measured perpendicularly from any of the following points, whichever is further landward from the water:

1. The ordinary high water mark of the water body, defined as the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and/or the presence of litter and debris; or
2. The edge of the stream or river bank, bluff, or cliff, whichever is applicable.

Refer to Figure G – 2 and Figure G - 3. You may find that specifically measuring these points is challenging if the flow path of the surface water changes frequently, thereby causing the measurement line for the buffer to fluctuate continuously along the path of the waterbody. Where this is the case, EPA suggests that rather than measuring each change or deviation along the water's edge, it may be easier to select regular intervals from which to conduct your measurement. For instance, you may elect to conduct your buffer measurement every 5 to 10 feet along the length of the water.

Additionally, note that if earth-disturbing activities will take place on both sides of a surface water that flows through your site, to the extent that you are establishing a buffer around this water, it must be established on both sides. For example, if you choose alternative 1 above, and your project calls for disturbances on both sides of a small stream, you would need to retain the full 50 feet of buffer on both sides of the water. However, if your construction activities will only occur on one side of the stream, you would only need to retain the 50-foot buffer on the side of the stream where the earth-disturbance will occur.

Figure G - 2. This image shows buffer measurement from the ordinary high water mark of the water body, as indicated by a clear natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, and/or the presence of litter/debris.

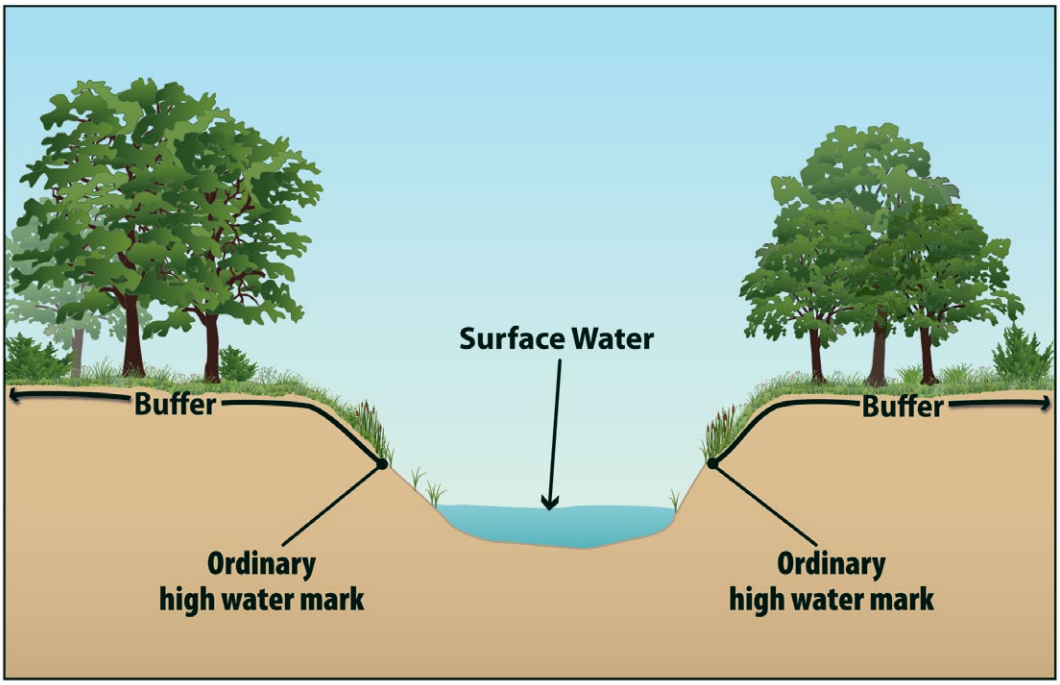
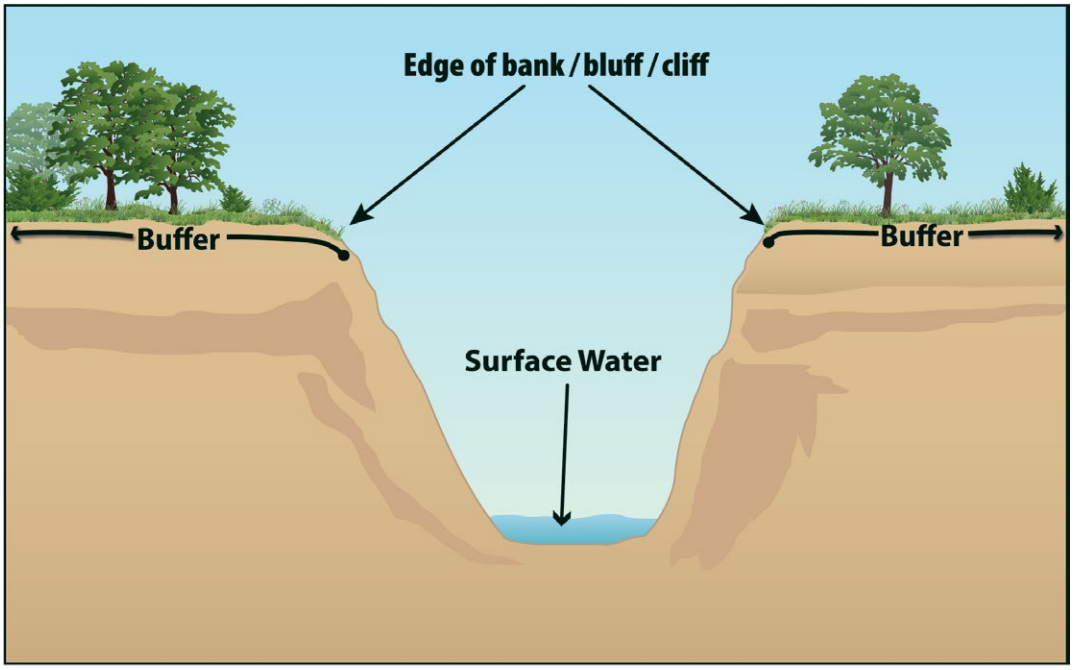


Figure G - 3. This image shows buffer measurement from the edge of the bank, bluff, or cliff, whichever is applicable.



G.2.1.2 *Limits to Disturbance Within the Buffer*

You are considered to be in compliance with this requirement if you retain and protect from construction activities the natural buffer that existed prior to the commencement of construction. If the buffer area contains no vegetation prior to the commencement of construction (e.g., sand or rocky surface), you are not required to plant any additional vegetation. As noted above, any preexisting structures or impervious surfaces are allowed in the buffer provided you retain and protect from disturbance the vegetation in the buffer outside the preexisting disturbance.

To ensure that the water quality protection benefits of the buffer are retained during construction, you are prohibited from conducting any earth-disturbing activities within the buffer during permit coverage. In furtherance of this requirement, prior to commencing earth-disturbing activities on your site, you must delineate, and clearly mark off, with flags, tape, or a similar marking device, the buffer area on your site. The purpose of this requirement is to make the buffer area clearly visible to the people working on your site so that unintended disturbances are avoided.

While you are not required to enhance the quality of the vegetation that already exists within the buffer, you are encouraged to do so where such improvements will enhance the water quality protection benefits of the buffer. (Note that any disturbances within the buffer related to buffer enhancement are permitted and do not constitute construction disturbances.) For instance, you may want to consider targeted plantings where limited vegetation exists, or replacement of existing vegetation where invasive or noxious plant species (see http://plants.usda.gov/java/noxiousDriver) have taken over. In the case of invasive or noxious species, you may want to remove and replace them with a diversity of native trees, shrubs, and herbaceous plants that are well-adapted to the climatic, soil, and hydrologic conditions on the site. You are also encouraged to limit the removal of naturally deposited leaf litter, woody debris, and other biomass, as this material contributes to the ability of the buffer to retain water and filter pollutants.

If a portion of the buffer area adjacent to the surface water is owned by another party and is not under your control, you are only required to retain and protect from construction activities the portion of the buffer area that is under your control. For example, if you elect alternative 1 above (provide and maintain a 50-foot buffer), but 10 feet of land immediately adjacent to the surface water is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you must only retain and protect from construction activities the 40-foot buffer area that occurs on the property on which your construction activities are taking place. EPA would consider you to be in compliance with this requirement regardless of the activities that are taking place in the 10-foot area that is owned by a different party than the land on which your construction activities are taking place that you have no control over.

G.2.1.3 *Discharges to the Buffer*

You must ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site's erosion and sediment controls (*for example, you must comply with the Part 2.1.2.2 requirement to establish sediment controls around the downslope perimeter of your site disturbances*), and if necessary to prevent erosion caused by stormwater flows within the buffer, you must use velocity dissipation devices. The purpose of this requirement is to decrease the rate of stormwater flow and

encourage infiltration so that the pollutant filtering functions of the buffer will be achieved. To comply with this requirement, construction operators typically will use devices that physically dissipate stormwater flows so that the discharge entering the buffer is spread out and slowed down.

G.2.1.4 *SWPPP Documentation*

You are required to document in your SWPPP the natural buffer width that is retained. For example, if you are complying with alternative 1, you must specify in your SWPPP that you are providing a 50-foot buffer. Or, if you will be complying with alternative 2, you must document the reduced width of the buffer you will be retaining (and you must also comply with the requirements in Part 2.1.2.1c to describe the erosion and sediment controls you will use to achieve an equivalent sediment reduction, as described in Part G.2.2 below). Note that you must also show any buffers on your site plan in your SWPPP consistent with Part 7.2.6.3. Additionally, if any disturbances related to the exceptions in Part 2.1.2.1e occur within the buffer area, you must document this in the SWPPP.

G.2.2 Guidance for Providing the Equivalent Sediment Reduction as the 50-foot Buffer

If you are selecting Alternative 2 (provide and maintain a buffer that is less than 50 feet that is supplemented by additional erosion and sediment controls that, together, achieve the equivalent sediment load reduction as the 50-foot buffer) or Alternative 3 (implement erosion and sediment controls that achieve the equivalent sediment load reduction as the 50-foot buffer), the following guidance is intended to assist you in demonstrating that you will achieve the equivalent sediment reduction as the 50-foot buffer.

G.2.2.1 *Determine Whether it is Feasible to Provide a Reduced Buffer*

EPA recognizes that there will be a number of situations in which it will be infeasible to provide and maintain a buffer of any width. While some of these situations may exempt you from the buffer requirement entirely (see G.1.2), if you do not qualify for one of these exemptions, there still may be conditions or circumstances at your site that make it infeasible to provide a natural buffer. For example, there may be sites where a significant portion of the property on which the earth-disturbing activities will occur is located within the buffer area, thereby precluding the retention of natural buffer areas. EPA believes there are likely to be other examples of situations that make it infeasible to provide any buffer area.

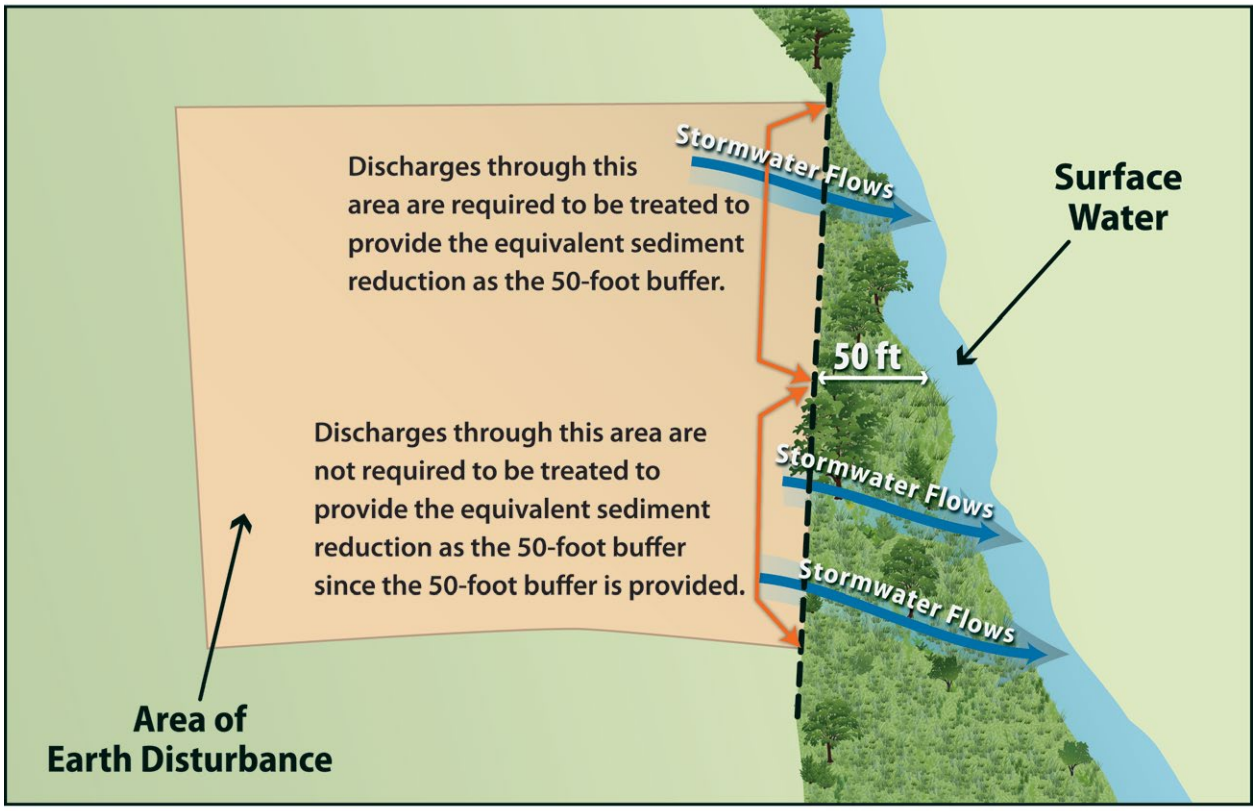
Therefore, in choosing between the 2 different compliance alternatives (Alternative 2 or 3), you should only elect to comply with Alternative 2 if it is feasible for you to retain any natural buffer on your site. (Note: For any buffer width retained, you are required to comply with the requirements in Part G.2.1, above, concerning the retention of vegetation and restricting earth disturbances.) Similarly, if you determine that it is infeasible to provide a natural buffer of any size during construction, you should elect to comply with Alternative 3. After making this determination, you should proceed to Part G.2.2.2 to determine how to provide controls that, together with any buffer areas that is being retained, if applicable, will achieve an equivalent sediment load reduction as the 50-foot buffer.

G.2.2.2 *Design Controls That Provide Equivalent Sediment Reduction as 50-foot Buffer*

You must next determine what additional controls must be implemented on your site that, alone or in combination with any retained natural buffer, achieve a reduction in sediment equivalent to that achieved by a 50-foot buffer.

Note that if only a portion of the natural buffer is less than 50 feet, you are only required to implement erosion and sediment controls that achieve the sediment load reduction equivalent to the 50-foot buffer for discharges through that area. You would not be required to provide treatment of stormwater discharges that flow through 50 feet or more of natural buffer. See Figure G - 4.

Figure G - 4 Example of how to comply with the requirement to provide the equivalent sediment reduction when only a portion of your earth-disturbances discharge to a buffer of less than 50-feet.



To comply with this requirement, you are required to do the following:

Step1 - Estimate the sediment reduction expected from your site if you had retained a 50-foot natural buffer;

Step 2 - Design controls that alone or in combination with any width of buffer retained achieve the equivalent sediment removal efficiency as that expected from the 50-foot buffer; and

Step 3 - Document in your SWPPP how your controls will achieve the equivalent sediment removal efficiency of the 50-foot buffer.

Guidelines to help you work through these requirements are provided below.

a. <u>Step 1 - Estimate the Sediment Reduction from the 50-foot Buffer</u>

In order to design controls that match the sediment removal efficiency of a 50-foot buffer, you first need to know what this efficiency is for your site. The sediment removal efficiencies of natural buffers vary according to a number of site-specific factors, including precipitation, soil type, land cover, slope length, width, steepness, and the types of sediment controls used to reduce the discharge of sediment prior to the buffer. EPA has simplified this calculation by developing buffer performance tables covering a range of vegetation and soil types for the areas covered by the CGP. See Attachment 1, Tables G - 8 through G - 15. Note: buffer performance values in Tables G - 8 through G - 15 represent the percent of sediment captured through the use of perimeter controls (e.g., silt fences) and 50-foot buffers at disturbed sites of fixed proportions and slopes.[2]

Using Tables G - 8 through G - 15 (see Attachment 1), you can determine the sediment removal efficiency of a 50-foot buffer for your geographic area by matching the vegetative cover type that best describes your buffer area and the type of soils that predominate at your site. For example, if your site is located in Massachusetts (Table G - 9), and your buffer vegetation corresponds most closely with that of tall fescue grass, and the soil type at your site is best typified as sand, your site's sediment removal efficiency would be 81 percent.

In this step, you should choose the vegetation type in the tables that most closely matches the vegetation that would exist naturally in the buffer area on your site regardless of the condition of the buffer. However, because you are not required to plant any additional vegetation in the buffer area, in determining what controls are necessary to meet this sediment removal equivalency in Step 2 below, you will be able to take credit for this area as a fully vegetated "natural buffer."

Similarly, if a portion of the buffer area adjacent to the surface water is owned by another party and is not under your control, you can treat the area of land not

[2] EPA used the following when developing the buffer performance tables:

- The sediment removal efficiencies are based on the U.S. Department of Agriculture's RUSLE2 ("Revised Universal Soil Loss Equation 2") model for slope profiles using a 100-foot long denuded slopes.
- Sediment removal was defined as the annual sediment delivered at the downstream end of the 50-foot natural buffer (tons/yr/acre) divided by the annual yield from denuded area (tons/yr/acre).
- As perimeter controls are also required by the CGP, sediment removal is in part a function of the reduction due to a perimeter control (i.e., silt fence) located between the disturbed portion of the site and the upstream edge of the natural buffer and flow traveling through a 50-foot buffer of undisturbed natural vegetation.
- It was assumed that construction sites have a relatively uniform slope without topographic features that accelerate the concentration for erosive flows.
- It was assumed that vegetation has been removed from the disturbed portion of the site and a combination of cuts and fills have resulted in a smooth soil surface with limited retention of near-surface root mass

To represent the influence of soil, EPA analyzed 11 general soil texture classifications in its evaluation of buffer performance. To represent different types of buffer vegetation, EPA evaluated 4 or more common vegetative types for each state/territory covered under the permit. For each vegetation type evaluated, EPA considered only permanent, non-grazed and non-harvested vegetation, on the assumption that a natural buffer adjacent to the surface water will typically be undisturbed. EPA also evaluated slope steepness and found that sediment removal efficiencies present in Tables G -8 through G - 15 are achievable for slopes that are less than nine percent.

under control as having the equivalent vegetative cover and soil type that predominates on the portion of the property on which your construction activities are occurring.

> *For example, if your earth-disturbances occur within 50 feet of a surface water, but the 10 feet of land immediately adjacent to the surface water is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you can treat the 10 foot area adjacent to the stream as having the equivalent soil and vegetation type as predominates in the 40 foot area under your control. You would then make the same assumption in Step 2 for purposes of determining the equivalent sediment removal.*

Alternatively, you may do your own calculation of the effectiveness of the 50-foot buffer based upon your site-specific conditions, and may use this number as your sediment removal equivalency standard to meet instead of using Tables G - 8 through G - 15. This calculation must be documented in your SWPPP.

b. <u>Step 2 - Design Controls That Match the Sediment Removal Efficiency of the 50-foot Buffer</u>

Once you have determined the estimated sediment removal efficiency of a 50-foot buffer for your site in Step 1, you will be required to select stormwater controls that will provide an equivalent sediment load reductions. These controls can include the installation of a single designed control, such as a sediment pond, additional perimeter controls, or other type of device. Alternatively, you may elect to install a combination of stormwater controls and to retain some amount of a buffer. Whichever control(s) you select, you must demonstrate in your SWPPP that the controls will provide at a minimum the same sediment removal capabilities as the 50-foot buffer (Step 1). You are allowed to take credit for the removal efficiencies of your required perimeter controls in your calculation of equivalency, because these were included in calculating the buffer removal efficiencies in tables G - 8 through G - 15. (Note: You are reminded that the controls must be kept in effective operating condition until you have completed final stabilization on the disturbed portions of the site discharging to the surface water.)

To make the determination that your controls and/or buffer area achieve an equivalent sediment load reduction as the 50-foot buffer, you will need to use a model or other type of calculator. As mentioned above, there are a variety of models available that can be used to support your calculation, including USDA's RUSLE-series programs and the WEPP erosion model, SEDCAD, SEDIMOT, or other models. A couple of examples are provided in Attachment 3 to help illustrate how this determination could be made.

If you are retaining a buffer of less than 50 feet, you may take credit for the removal that will occur from the reduced buffer and only need to provide additional controls to make up the difference between the removal efficiency of a 50 foot buffer and the removal efficiency of the narrower buffer. For example, if you are retaining a 30 foot buffer, you can account for the sediment removal provided by the 30-foot buffer retained, and you will only need to design controls to make up for the additional removal provided by the 20-foot of buffer that is not being provided. To do this, you would plug the width of the buffer that is

retained into RUSLE or another model, along with other stormwater controls that will together achieve a sediment reduction equivalent to a natural 50-foot buffer.

As described in Step 1 above, you can take credit for the area you have retained as a "natural buffer" as being fully vegetated, regardless of the condition of the buffer area.

> *For example, if your earth-disturbances occur 30 feet from a surface water, but the 10 feet of land immediately adjacent to the surface water is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you can treat the 10-foot area as a natural buffer, regardless of the activities that are taking place in the area. Therefore, you can assume (for purposes of your equivalency calculation) that your site is providing the sediment removal equivalent of a 30-foot buffer, and you will only need to design controls to make up for the additional removal provided by the 20-foot of buffer that is not being provided.*

c. <u>Step 3 - Document How Site-Specific Controls Will Achieve the Sediment Removal Efficiency of the 50-foot Buffer</u>

In Steps 1 and 2, you determined both the expected sediment removal efficiency of a 50-foot buffer at your site, and you used this number as a performance standard to design controls to be installed at your site, which alone or in combination with any retained natural buffer, achieves the expected sediment removal efficiency of a 50-foot buffer at your site. The final step is to document in your SWPPP the information you relied on to calculate the equivalent sediment reduction as an undisturbed natural buffer.

EPA will consider your documentation to be sufficient if it generally meets the following:

- For Step 1, refer to the table in Attachment 1 that you used to derive your estimated 50-foot buffer sediment removal efficiency performance. Include information about the buffer vegetation and soil type that predominate at your site, which you used to select the sediment load reduction value in Tables G - 8 through G - 15. Or, if you conducted a site-specific calculation for sediment removal efficiency, provide the specific removal efficiency, and the information you relied on to make your site-specific calculation.
- For Step 2: (1) Specify the model you used to estimate sediment load reductions from your site; and (2) the results of calculations showing how your controls will meet or exceed the sediment removal efficiency from Step 1.

If you choose Alternative 3, you must also include in your SWPPP a description of why it is infeasible for you to provide and maintain an undisturbed natural buffer of any size.

G.2.3 Small Residential Lot Compliance Alternatives

In this part of Appendix G, EPA provides additional compliance alternatives for operators of small residential lots. In accordance with Part 2.1.2.1e.iv, operators of small residential lots who do not provide a 50-foot buffer are not required to make the demonstration outlined in Part G.2.2.2. Instead, qualifying operators can comply with the buffer requirement by choosing to implement a set of traditional sediment and erosion controls from the menu of practices provided in Part G.2.3.2.

A **small residential lot** is a lot or grouping of lots being developed for residential purposes that will disturb less than 1 acre of land, but that is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre.

EPA has developed two different alternatives for compliance. The following steps describe how a small residential lot operator would achieve compliance with these 2 alternatives.

G.2.3.1 *Step 1 – Determine if You are Eligible for the Small Residential Lot Compliance Alternatives*

In order to be eligible for the small residential lot compliance alternatives, the following conditions must be met:

a. The lot or grouping of lots meets the definition of "small residential lot"; and

b. The operator must comply with all other requirements in Part 2.1.2.1, including:

i. Ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site's erosion and sediment controls, and use velocity dissipation devices if necessary to prevent erosion caused by stormwater within the buffer;

ii. Document in the SWPPP the natural buffer width retained on the property, and show the buffer boundary on your site plan; and

iii. Delineate, and clearly mark off, with flags, tape, or other similar marking device, all natural buffer areas.

G.2.3.2 *Step 2 – Implement the Requirements of the Small Residential Lot Compliance Alternative Selected*

You must next choose from one of two small residential lot compliance alternatives and implement the stormwater control practices associated with that alternative.

Note: The compliance alternatives provided below are not mandatory. Operators of small residential lots can alternatively choose to comply with the any of the options that are available to other sites in Part 2.1.2.1a, described in Parts G.2.1 and G.2.2 in this appendix.

a. <u>Small Residential Lot Compliance Alternative 1</u>

Alternative 1 is a straightforward tiered- technology approach that specifies the controls that a small residential lot must implement based on the buffer width retained. To achieve compliance with Alternative 1, you must implement the

controls specified in Table G – 1 based on the buffer width to be retained. See footnote 3, below, for a description of the controls you must implement.

For example, if you are an operator of a small residential lot that will be retaining a 35-foot buffer and you choose Small Residential Lot Compliance Alternative 1, you must implement double perimeter controls between earth disturbances and the surface water.

In addition to implementing the applicable control, you must also document in your SWPPP how you will comply with Alternative 1.

Table G - 1. Alternative 1 Requirements[3]

Retain 50-foot Buffer	Retain <50 and >30 foot Buffer	Retain ≤ 30 foot Buffer
No Additional Requirements	Double Perimeter Controls	Double Perimeter Controls and 7-Day Site Stabilization

b. <u>Small Residential Lot Compliance Alternative 2</u>

Alternative 2 specifies the controls that a builder of a small lot must implement based on both the buffer width retained and their risk of sediment discharge. By incorporating the sediment risk, this approach may result in the implementation of controls that are more appropriate for the site's specific conditions.

Step 1 – Determine Your Site's Sediment Risk Level

To meet the requirements of Alternative 2, you must first determine your site's sediment discharge "risk level" based on the site's slope, location, and soil type. To help you to determine your site's sediment risk level, EPA has developed five different tables for different slope conditions. You must select the table that most closely corresponds to your site's average slope.

For example, if your site's average slope is 7 percent, you would use Table G – 4 to determine your site's sediment risk.

After you determine which table applies to your site, you must then use the table to determine the "risk level" (e.g., "low", "moderate", or "high") that corresponds to your site's location and predominant soil type.[4]

For example, based on Table G - 3, a site located in New Hampshire with a 4 percent average slope and with predominately sandy clay loam soils would fall into the "moderate" risk level.

[3] **Description of Additional Controls Applicable to Small Residential Lot Compliance Alternatives 1 and 2:**

- **No Additional Requirements:** If you implement a buffer of 50 feet or greater, then you are not subject to any additional requirements. Note that you are required to install perimeter controls between the disturbed portions of your site and the buffer in accordance with Part 2.1.2.2.
- **Double Perimeter Control:** In addition to the reduced buffer width retained on your site, you must provide a double row of perimeter controls between the disturbed portion of your site and the surface water spaced a minimum of 5 feet apart.
- **Double Perimeter Control and 7-Day Site Stabilization:** In addition to the reduced buffer width retained on your site and the perimeter control implemented in accordance with Part 2.1.2.2, you must provide a double row of perimeter controls between the disturbed portion of your site and the surface water spaced a minimum of 5 feet apart, and you are required to complete the stabilization activities specified in Parts 2.2.1.2a and/or 2.2.1.2b within 7 calendar days of the temporary or permanent cessation of earth-disturbing activities.

[4] One source for determining your site's predominant soil type is the USDA's Web Soil Survey located at http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

Table G - 2. Risk Levels for Sites with Average Slopes of ≤ 3 Percent

Soil Type / Location	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	Moderate	Moderate	Moderate	Moderate	High
Puerto Rico	Moderate	Moderate	Moderate	Moderate	High
Virgin Islands	Low	Moderate	Low	Moderate	Moderate
American Samoa	Moderate	Moderate	Moderate	Moderate	High
Massachusetts and New Hampshire	Low	Moderate	Low	Low	Moderate
Idaho	Low	Low	Low	Low	Low
New Mexico	Low	Low	Low	Low	Low
Washington D.C.	Low	Moderate	Low	Low	Moderate

Table G - 3. Risk Levels for Sites with Average Slopes of > 3 Percent and ≤ 6 Percent

Soil Type / Location	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	Moderate	Moderate	Moderate	Moderate	High
Puerto Rico	Moderate	Moderate	Moderate	Moderate	High
Virgin Islands	Moderate	Moderate	Moderate	Moderate	High
American Samoa	High	High	Moderate	High	High
Massachusetts and New Hampshire	Moderate	Moderate	Low	Moderate	High
Idaho	Low	Low	Low	Low	Low
New Mexico	Low	Low	Low	Low	Moderate
Washington D.C.	Moderate	Moderate	Moderate	Moderate	High

Table G - 4. Risk Levels for Sites with Average Slopes of > 6 Percent and ≤ 9 Percent

Soil Type / Location	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	Moderate	High	Moderate	High	High
Puerto Rico	Moderate	High	Moderate	Moderate	High
Virgin Islands	Moderate	Moderate	Moderate	Moderate	High
American Samoa	High	High	High	High	High
Massachusetts and New Hampshire	Moderate	Moderate	Moderate	Moderate	High
Idaho	Low	Low	Low	Low	Low
New Mexico	Low	Low	Low	Low	Moderate
Washington D.C.	Moderate	Moderate	Moderate	Moderate	High

Table G - 5. Risk Levels for Sites with Average Slopes of > 9 Percent and ≤ 15 Percent

Soil Type / Location	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	High	High	High	High	High
Puerto Rico	High	High	High	High	High
Virgin Islands	Moderate	High	Moderate	High	High
American Samoa	High	High	High	High	High
Massachusetts and New Hampshire	Moderate	Moderate	Moderate	Moderate	High
Idaho	Low	Low	Low	Low	Low
New Mexico	Low	Moderate	Low	Moderate	Moderate
Washington D.C.	Moderate	High	Moderate	Moderate	High

Table G - 6. Risk Levels for Sites with Average Slopes of > 15 Percent

Soil Type / Location	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	High	High	High	High	High
Puerto Rico	High	High	High	High	High
Virgin Islands	High	High	High	High	High
American Samoa	High	High	High	High	High
Massachusetts and New Hampshire	High	High	Moderate	High	High
Idaho	Low	Low	Low	Low	Moderate
New Mexico	Moderate	Moderate	Moderate	Moderate	High
Washington D.C.	High	High	Moderate	High	High

Step 2 – Determine Which Additional Controls Apply

Once you determine your site's "risk level", you must next determine the additional controls you need to implement on your site, based on the width of buffer you plan to retain. Table G - 7 specifies the requirements that apply based on the "risk level" and buffer width retained. See footnote 3, above, for a description of the additional controls that are required.

> *For example, if you are the operator of a small residential lot that falls into the "moderate" risk level, and you decide to retain a 20-foot buffer, using Table G-7 you would determine that you need to implement double perimeter controls to achieve compliance with Part 2.1.2.1.*

You must also document in your SWPPP your compliance with Alternative 2.

Table G - 7. Alternative 2 Requirements[2]

Risk Level Based on Estimated Soil Erosion	Retain ≥ 50' Buffer	Retain <50' and >30' Buffer	Retain ≤30' and >10' Buffer	Retain ≤ 10' Buffer
Low Risk	No Additional Requirements	No Additional Requirements	Double Perimeter Control	Double Perimeter Control
Moderate Risk	No Additional Requirements	Double Perimeter Control	Double Perimeter Control	Double Perimeter Control and 7-Day Site Stabilization
High Risk	No Additional Requirements	Double Perimeter Control	Double Perimeter Control and 7-Day Site Stabilization	Double Perimeter Control and 7-Day Site Stabilization

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ATTACHMENT 1

Sediment Removal Efficiency Tables[5]

EPA recognizes that very high removal efficiencies, even where theoretically achievable by a 50-foot buffer, may be very difficult to achieve in practice using alternative controls. Therefore in the tables below, EPA has limited the removal efficiencies to a maximum of 90%. Efficiencies that were calculated at greater than 90% are shown as 90%, and this is the minimum percent removal that must be achieved by alternative controls.

Table G - 8. Estimated 50-foot Buffer Performance in Idaho*

	Estimated % Sediment Removal				
Type of Buffer Vegetation**	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Tall Fescue Grass	42	52	44	48	85
Medium-density Weeds	28	30	28	26	60
Low-density Warm-season Native Bunchgrass (i.e., Grama Grass)	25	26	24	24	55
Northern Mixed Prairie Grass	28	30	28	26	50
Northern Range Cold Desert Shrubs	28	28	24	26	50

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 9. Estimated 50-foot Buffer Performance in Massachusetts and New Hampshire*

	Estimated % Sediment Removal				
Type of Buffer Vegetation**	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Warm-season Grass (i.e., Switchgrass, Lemongrass)	79	90	90	90	90
Cool-season Dense Grass (Kentucky Bluegrass, Smooth Bromegrass, Timothy)	78	90	90	90	90
Tall Fescue Grass	76	90	81	89	90
Medium-density Weeds	66	76	60	72	66

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

[5] The buffer performances were calculated based on a denuded slope upgradient of a 50-foot buffer and a perimeter controls, as perimeter controls are a standard requirement (see Part 2.1.2.2).

Table G - 10. Estimated 50-foot Buffer Performance in New Mexico*

	Estimated % Sediment Removal				
Type of Buffer Vegetation **	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Tall Fescue grass	71	85	80	86	90
Medium-density Weeds	56	73	55	66	78
Low-density Warm-season Native Bunchgrass (i.e., Grama Grass)	53	70	51	62	67
Southern Mixed Prairie Grass	53	71	52	63	50
Southern Range Cold Desert Shrubs	56	73	55	65	53

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 11. Estimated 50-foot Buffer Performance in Washington, DC*

	Estimated % Sediment Removal				
Type of Buffer Vegetation **	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Warm-season Grass (i.e., Switchgrass, Lemongrass)	82	90	90	90	90
Cool-season Dense Grass (Kentucky Bluegrass, Smooth Bromegrass, Timothy)	81	90	90	90	90
Tall Fescue Grass	79	90	83	89	90
Medium-density Weeds	71	79	66	75	74

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 12. Estimated 50-foot Buffer Performance in American Samoa*

	Estimated % Sediment Removal				
Type of Buffer Vegetation **	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Bahiagrass (Permanent cover)	82	90	90	90	83
Warm-season Grass (i.e., Switchgrass, Lemongrass)	82	90	90	90	85
Dense Grass	82	90	90	90	83
Tall Fescue Grass	82	89	82	89	79
Medium-density Weeds	70	73	62	75	59

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 13. Estimated 50-foot Buffer Performance in Guam*

	Estimated % Sediment Removal				
Type of Buffer Vegetation **	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Bahiagrass (Permanent cover)	80	90	90	90	89
Warm-season Grass (i.e., Switchgrass, Lemongrass)	80	90	90	90	90
Dense Grass	79	90	90	90	89
Tall Fescue Grass	76	90	80	88	87
Medium-density Weeds	63	73	53	68	61

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 14. Estimated 50-foot Buffer Performance in Puerto Rico*

	Estimated % Sediment Removal				
Type of Buffer Vegetation**	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Bahiagrass (Permanent cover)	83	90	90	90	90
Warm-season Grass (i.e., Switchgrass, Lemongrass)	83	90	90	90	90
Dense Grass	83	90	90	90	90
Tall Fescue Grass	82	90	84	90	89
Medium-density Weeds	72	78	65	76	64

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 15. Estimated 50-foot Buffer Performance in Virgin Islands*

Type of Buffer Vegetation**	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Bahiagrass (Permanent cover)	85	90	90	90	90
Warm-season Grass (i.e., Switchgrass, Lemongrass)	86	90	90	90	90
Dense Grass	85	90	90	90	90
Tall Fescue Grass	85	90	88	90	89
Medium-density Weeds	75	77	71	78	63

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

ATTACHMENT 2

Using the Sediment Removal Efficiency Tables – Questions and Answers

- *What if my specific buffer vegetation is not represented in Tables G - 8 through G - 15?* Tables G - 8 through G - 15 provide a wide range of factors affecting buffer performance; however, there may be instances where the specific buffer vegetation type on your site is not listed. If you do not see a description of the type of vegetation present at your site, you should choose the vegetation type that most closely matches the vegetation type on your site. You can contact your local Cooperative Extension Service Office (www.csrees.usda.gov/Extension) for assistance in determining the vegetation type in Tables G - 8 through G - 15 that most closely matches your site-specific vegetation.
- *What if there is high variability in local soils?* EPA recognizes that there may be a number of different soil type(s) on any given construction site. General soil information can be obtained from USDA soil survey reports (http://websoilsurvey.nrcs.usda.gov) or from individual site assessments performed by a certified soil expert. Tables G - 8 through G - 15 present eleven generic soil texture classes, grouping individual textures where EPA has determined that performance is similar. If your site contains different soil texture classes, you should use the soil type that best approximates the predominant soil type at your site.
- *What if my site slope is greater than 9 percent after final grade is reached?* As indicated in the buffer performance tables, the estimated sediment removal efficiencies are associated with disturbed slopes of up to 9 percent grade. Where your graded site has an average slope of greater than 9 percent, you should calculate a site-specific buffer performance.
- *How do I calculate my own estimates for sediment reduction at my specific site?* If you determine that it is necessary to calculate your own sediment removal efficiency using site-specific conditions (e.g., slopes at your site are greater than 9 percent), you can do so by choosing from a range of available mathematical models that are available to facilitate this calculation, including USDA's RUSLE-series programs and the WEPP erosion model, SEDCAD, SEDIMOT, or other equivalent models.
- *What is my estimated buffer performance if my site location is not represented by Tables G - 8 through G - 15?* If your site is located in an area not represented by Tables G - 8 through G - 15, you should use the table that most closely approximates conditions at your site. You may also choose to conduct a site-specific calculation of the buffer performance.
- *What if only a portion of my site drains to the buffer area?* If only a portion of your site drains to a surface water, where that water is within 50 feet of your construction activities, you are only required to meet the equivalency requirement for the stormwater flows corresponding to those portions of the site. See Example 2 below for an example of how this is expected to work.

ATTACHMENT 3

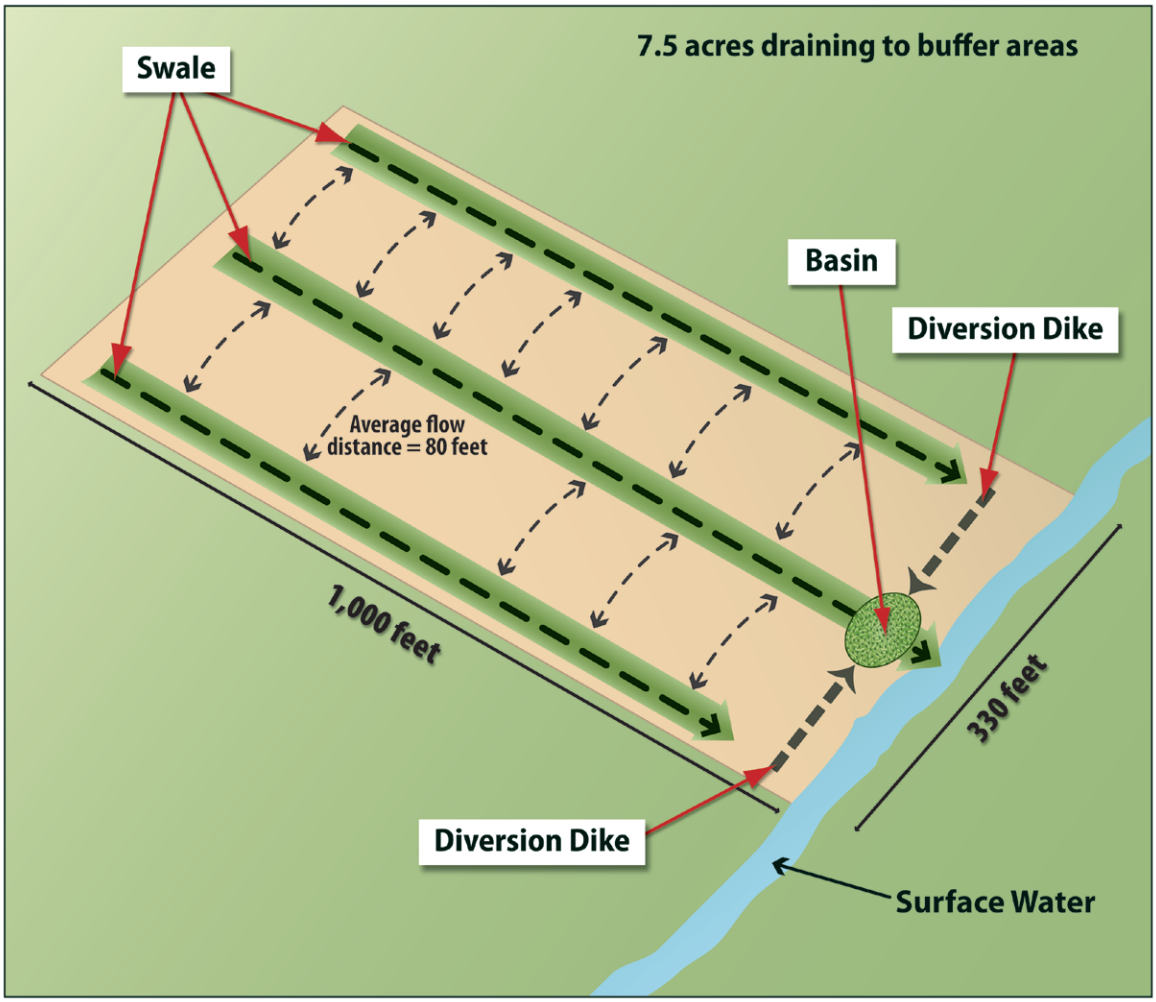
Examples of How to Use the Sediment Removal Efficiency Tables

Example 1. Comparatively Wet Location (7.5 acre site located in Massachusetts)

The operator of a 7.5-acre construction site in Massachusetts has determined that it is infeasible to establish a buffer of any size on their site, and is now required to select and install controls that will achieve an equivalent sediment load reduction as that estimated in G - 9 for their site conditions. The first step is to identify what percentage of eroded sediment is estimated to be retained from a 50-foot buffer. For this example, it is assumed that the site has a relatively uniform gentle slope (3 percent), so Table G - 9 can be used to estimate the 50-foot buffer sediment load reduction. If the site's buffer vegetation is best typified by cool-season dense grass and the underlying soil is of a type best described as loamy sand, the 50-foot buffer is projected to capture 90 percent of eroded sediment from the construction site.

The second step is to determine what sediment controls can be selected and installed in combination with the perimeter controls already required to be implemented at the site (see Part 2.1.2.2), which will achieve the 90 percent sediment removal efficiency from Table G - 9. For this example, using the RUSLE2 profile model, it was determined that installing a pair of shallow-sloped diversion ditches to convey runoff to a well-designed and maintained sediment basin provides 99 percent sediment removal. Because the estimated sediment reduction is greater than the required 90 percent that a 50-foot buffer provides, the operator will have met the buffer requirements. See Figure G - 5. The operator could also choose a different set of controls, as long as they achieve at least a 90 percent sediment removal efficiency.

Figure G - 5. Example 1 – Equivalent Sediment Load Reductions at a 7.5 ac Site in MA.



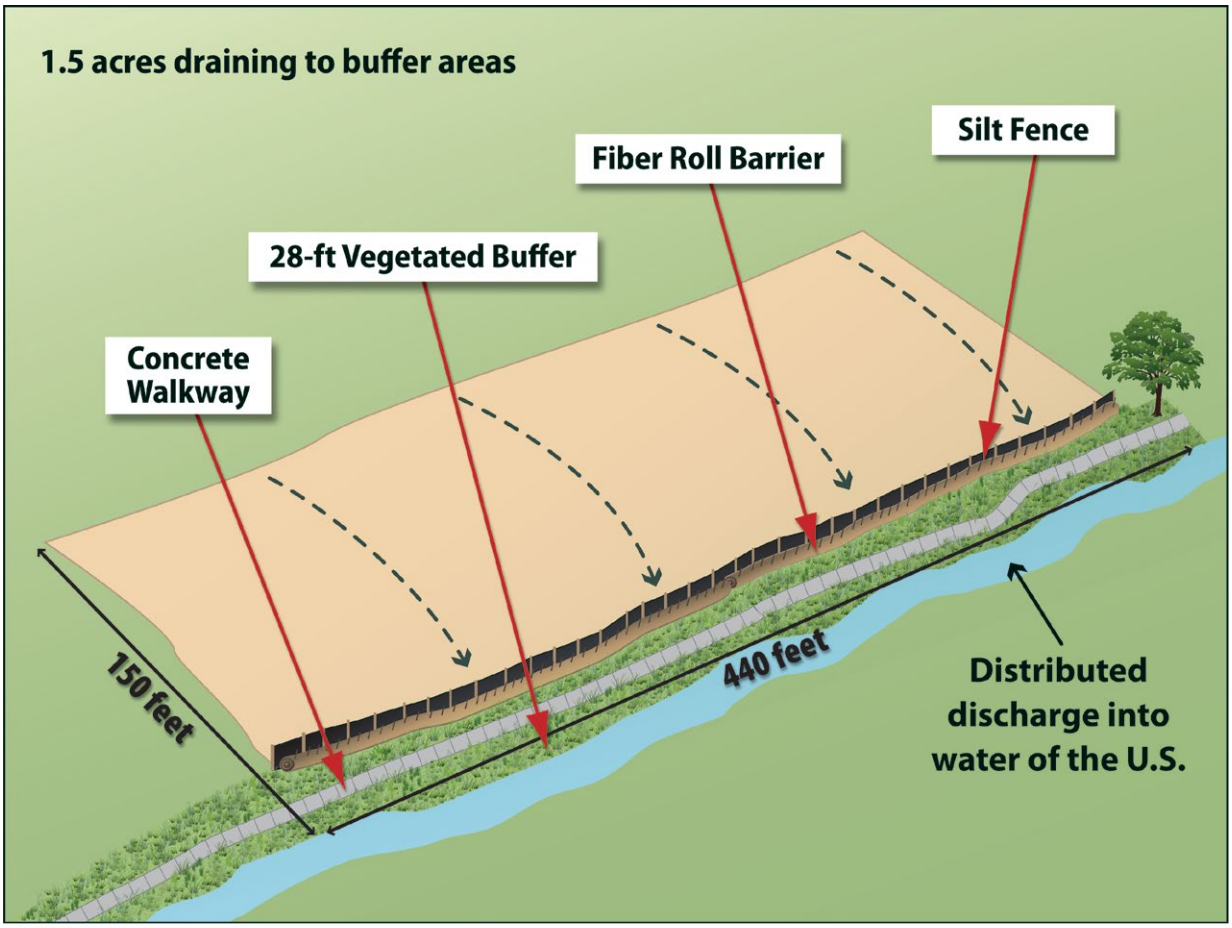
Example 2. Arid Location With Pre-existing Disturbances in the Natural Buffer (6.5 acre site located in New Mexico)

An operator of a site in New Mexico determines that it is not practicable to provide a 50-foot buffer, but a 28-foot buffer can be provided. Because the operator will provide a buffer that is less than 50 feet, the operator must determine which controls, in combination with the 28-foot buffer, achieve a sediment load reduction equivalent to the 50-foot buffer. In this example, the project will disturb 6.5 acres of land, but only 1.5 acres of the total disturbed area drains to the buffer area. Within the 28-foot buffer area is a preexisting concrete walkway. Similar to Example 1, the equivalence analysis starts with Step 1 (Part G.2.2.2) with a review of the New Mexico buffer performance (Table G - 10). The operator determines that the predominate vegetation type in the buffer area is prairie grass and the soil type is similar to silt, and that the site is of a uniform, shallow slope (e.g., 3 percent grade). Although the operator will take credit for the disturbance caused by the concrete walkway as a natural buffer in Step 2, here the operator can treat the entire buffer area as being naturally vegetated with prairie grass. Based on this information, the operator refers to Table G - 10 to estimate that the 50-foot buffer would retain 50 percent of eroded soil.

The second step is to determine, based on the 50 percent sediment removal efficiency found in Table G - 10, what sediment controls in combination with the 28-foot buffer area, can be

implemented to reduce sediment loads by 50 percent or more. The operator does not have to account the reduction in buffer function caused by the preexisting walkway, and can take credit for the entire 28-foot buffer being fully vegetated in the analysis. For this example, using the RUSLE2 profile model, the operator determined that installing a fiber roll barrier between the silt fence (already required by Part 2.1.2.2) and the 28-foot buffer will achieve an estimated 84 percent sediment removal efficiency. See Figure G - 6. Note that this operator is subject to the requirement in Part 2.1.2.1b.i to ensure that discharges through the silt fence, fiber roll barrier, and 28-foot buffer do not cause erosion within the buffer. The estimated sediment reduction is greater than the required 50 percent; therefore the operator will have met the buffer alternative requirement.

Figure G - 6. Example 2 – Equivalent Sediment Load Reductions at a 6.5 ac Site in NM.



Appendix H – 2-Year, 24-Hour Storm Frequencies

Part 2.1.3.2 of the permit indicates that if you install a sediment basin, one of the design requirements is to provide storage for either (1) the calculated volume of runoff from a 2-year, 24-hour storm, or (2) 3,600 cubic feet per acre drained. This appendix is intended to provide a guide to permittees to determine the volume of precipitation associated with their local 2-year, 24-hour storm event.

The permittee should start out by determining their local 2-year, 24-hour storm volume. The rainfall frequency atlases, technical papers, and the Precipitation Frequency Data Server (PFDS) developed by the National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS) serve as national standards for rainfall intensity at specified frequencies and durations in the United States. Operators of construction projects subject to the numeric effluent limits can use these standards to determine their local 2-year, 24-hour storm. Table H-1 identifies methods for determining precipitation frequency based on permit area. EPA notes that permittees may also use alternative peer-reviewed data sources not listed in Table H - 1 to determine the 2-year, 24-hour storm for their site.

Table H -1 – Method to Determine Precipitation Frequency Based on Permit Area

PERMIT AREA	METHOD TO DETERMINE PRECIPITATION FREQUENCY
District of Columbia	PFDS; NOAA Atlas 14, Vol. 2
Idaho	NOAA Atlas 2, Vol. 5; Technical Paper 40
Massachusetts	Technical Paper 40
New Hampshire	Technical Paper 40
New Mexico	PFDS; Technical Paper 40
Selected Pacific Islands	PFDS; Technical Paper 40
Puerto Rico and the U.S Virgin Islands	PFDS; Technical Paper 40
Other	PFDS; Technical Paper 40; NOAA Atlas 2 or 14

How to Determine Your Local 2-year, 24-hour Storm Size

Projects located in the **District of Columbia, New Mexico, Puerto Rico, U.S. Virgin Islands, or Pacific Island**s can use the PFDS at http://hdsc.nws.noaa.gov/hdsc/pfds/index.html or use NOAA's Atlas 14 Volumes 2, 3, and 5, respectively at http://www.nws.noaa.gov/oh/hdsc/currentpf.htm to determine their precipitation frequency.

The PFDS is an easy to use, point-and-click interface to official U.S. precipitation frequency estimates and intensities. The opening PFDS screen is a clickable map of the United States. Upon clicking on a state, a state-specific interface appears. From this page the user selects the following:

- A location: Either via clicking on the map or manually entering a longitude/latitude coordinate;
- Type of output: Depth-Duration Frequency (DDF) or Intensity-Duration-Frequency (IDF)
- Units: millimeters or inches; and
- Type of estimate: Point or areal.

Additionally, PFDS also serves as a tool for providing references and other information for other current precipitation frequency standards that are not yet updated.

Projects located in the **District of Columbia, Puerto Rico, U.S. Virgin Islands, or Pacific Islands** can use NOAA's Atlas 14 Volumes 2, 3, and 5, respectively at http://www.nws.noaa.gov/oh/hdsc/currentpf.htm or access the PFDS at http://hdsc.nws.noaa.gov/hdsc/pfds/index.html to determine their precipitation frequency.

Projects located in **Massachusetts and New Hampshire**, or other areas not covered by the PFDS or NOAA Atlases will need to use TP-40 to identify the precipitation frequency. TP-40 provides a map of the continental U.S. for the 2-year, 24-hour rainfall. TP40 can be accessed at http://www.nws.noaa.gov/oh/hdsc/PF_documents/TechnicalPaper_No40.pdf. (See also attached map of TP-40)

Projects located in **Idaho** can use the NOAA Atlas 2, Vol. 5 to determine their precipitation frequency. NOTE: Precipitation Frequencies on the NOAA Atlas 2, Vol. 5 are in tenths of an inch and will have to be converted to inches to determine precipitation frequency. NOAA Atlas 2, Vol. 5 can be accessed at http://www.nws.noaa.gov/oh/hdsc/PF_documents/Atlas2_Volume5.pdf. (See also attached map of NOAA Atlas 2, Vol. 5)

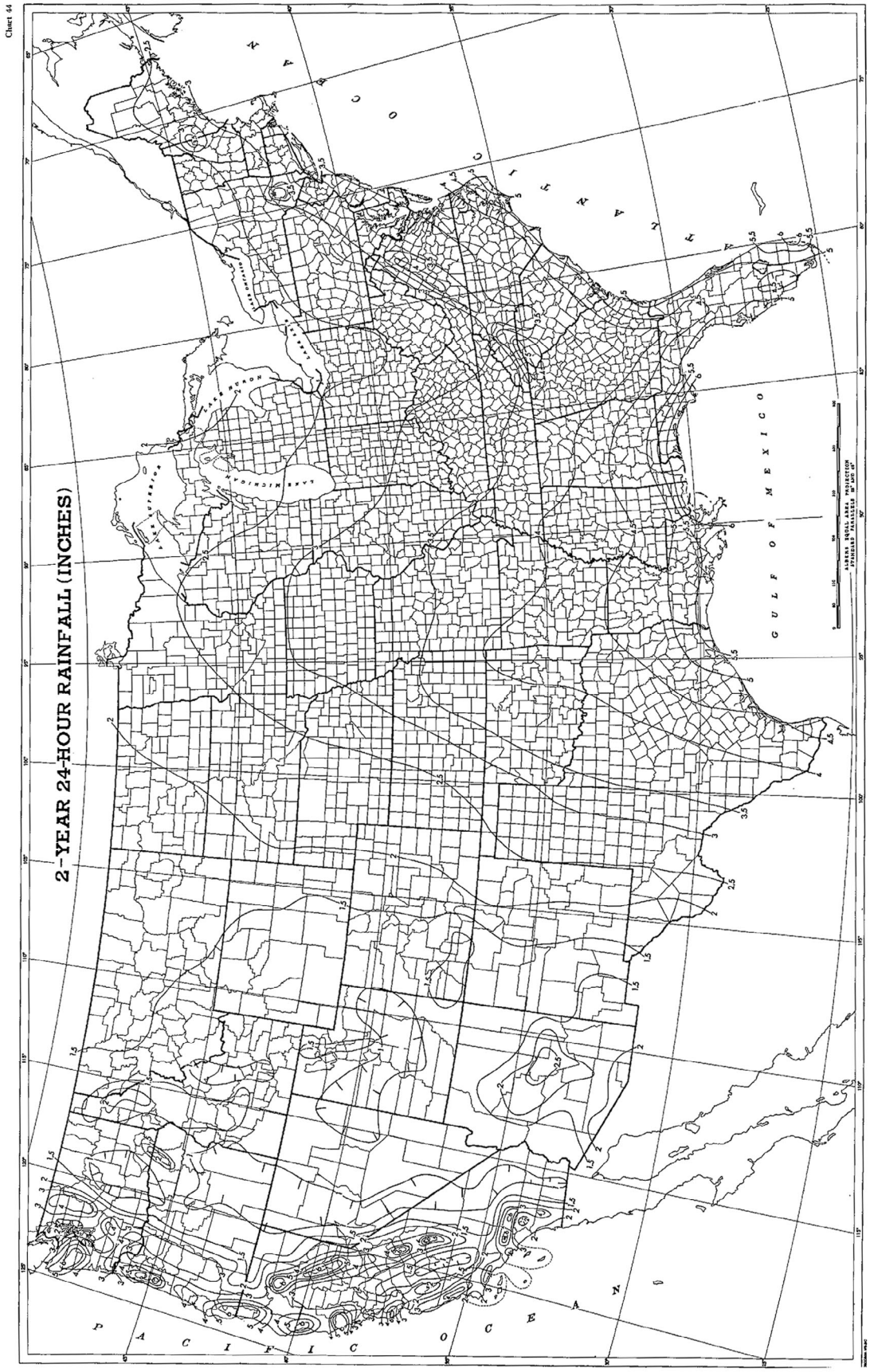
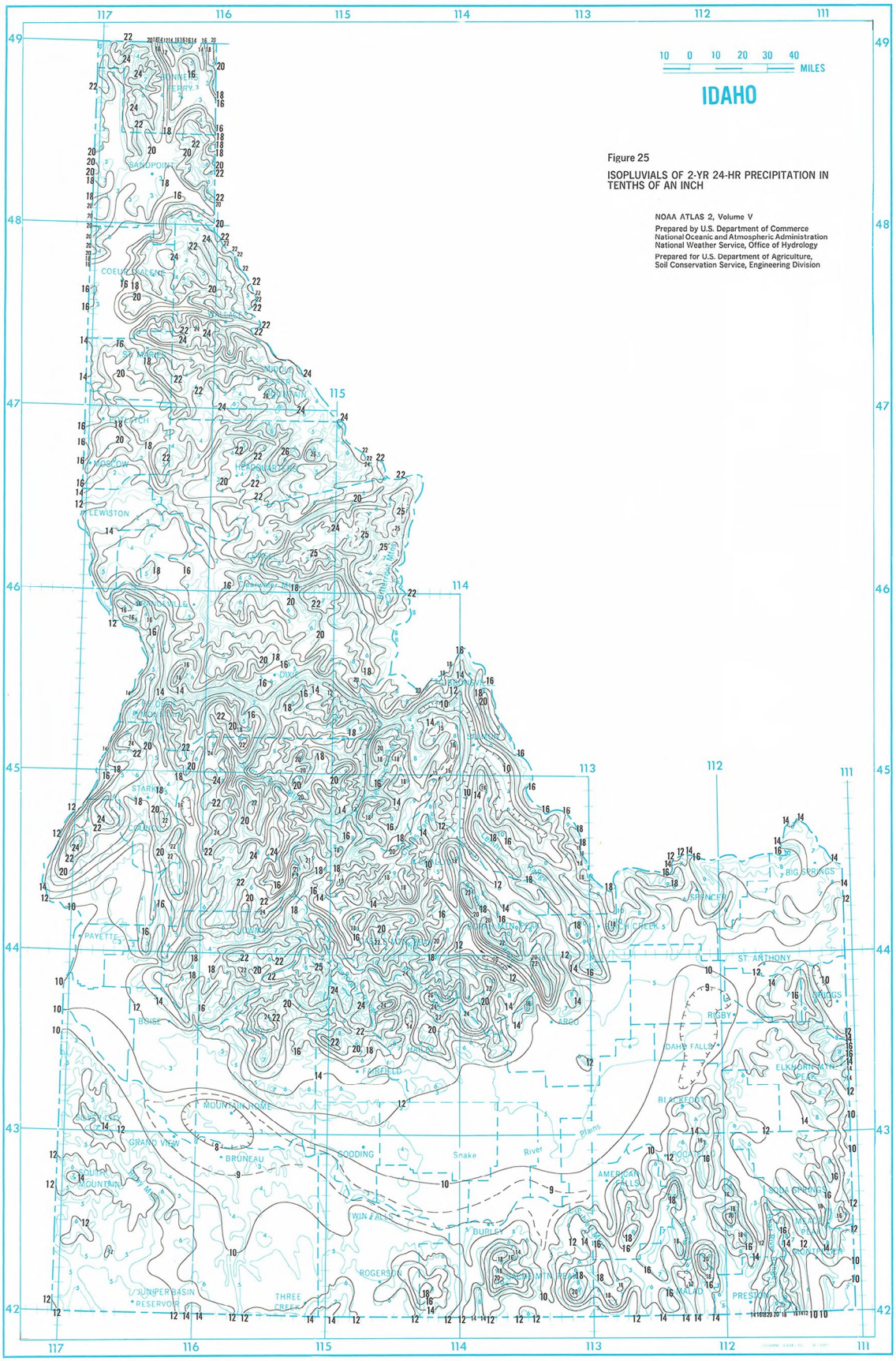


Chart 44
2-YEAR 24-HOUR RAINFALL (INCHES)
GULF OF MEXICO
PACIFIC OCEAN


10 0 10 20 30 40
MILES
IDAHO
Figure 25
ISOPLUVIALS OF 2-YR 24-HR PRECIPITATION IN TENTHS OF AN INCH
NOAA ATLAS 2, Volume V
Prepared by U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Department of Agriculture,
Soil Conservation Service, Engineering Division
Snake River Plains

Appendix I - Standard Permit Conditions

Standard permit conditions in Appendix I are consistent with the general permit provisions required under 40 CFR 122.41.

I.1 Duty To Comply.

You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

I.1.1 You must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards, even if the permit has not yet been modified to incorporate the requirement.

I.1.2 Penalties for Violations of Permit Conditions: The Director will adjust the civil and administrative penalties listed below in accordance with the Civil Monetary Penalty Inflation Adjustment Rule (61 FR 252, December 31, 1996, pp. 69359-69366, as corrected in 62 FR 54, March 20, 1997, pp.13514-13517) as mandated by the Debt Collection Improvement Act of 1996 for inflation on a periodic basis. This rule allows EPA's penalties to keep pace with inflation. The Agency is required to review its penalties at least once every 4 years thereafter and to adjust them as necessary for inflation according to a specified formula. The civil and administrative penalties following were adjusted for inflation starting in 1996.

I.1.2.1 *Criminal Penalties.*

a. *Negligent Violations*. The CWA provides that any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to criminal penalties of not less than $2,500 nor more than $25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation or by imprisonment of not more than two years, or both.

b. *Knowing Violations.* The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both.

c. *Knowing Endangerment.* The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he or she is placing another person in imminent danger of death or serious bodily injury shall upon conviction be subject to a fine of not more than $250,000 or by imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in Section 309(c)(3)(B)(iii) of the Act, shall, upon

conviction of violating the imminent danger provision be subject to a fine of not more than $1,000,000 and can fined up to $2,000,000 for second or subsequent convictions.

d. *False Statement.* The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

I.1.2.2 *Civil Penalties.* The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently $37,500 per day for each violation).

I.1.2.3 *Administrative Penalties.* The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows

a. *Class I Penalty.* Not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently $16,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $37,500).

b. *Class II Penalty.* Not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently $11,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $177,500).

I.2 Duty to Reapply.

If you wish to continue an activity regulated by this permit after the expiration date of this permit, you must apply for and obtain authorization as required by the new permit once EPA issues it.

I.3 Need to Halt or Reduce Activity Not a Defense.

It shall not be a defense for you in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

I.4 Duty to Mitigate.

You must take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

I.5 Proper Operation and Maintenance.

You must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by you to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by you only when the operation is necessary to achieve compliance with the conditions of this permit.

I.6 Permit Actions.

This permit may be modified, revoked and reissued, or terminated for cause. Your filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

I.7 Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privileges.

I.8 Duty to Provide Information.

You must furnish to EPA or an authorized representative (including an authorized contractor acting as a representative of EPA), within a reasonable time, any information that EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. You must also furnish to EPA or an authorized representative upon request, copies of records required to be kept by this permit.

I.9 Inspection and Entry.

You must allow EPA or an authorized representative (including an authorized contractor acting as a representative of EPA), upon presentation of credentials and other documents as may be required by law, to:

I.9.1 Enter upon your premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

I.9.2 Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

I.9.3 Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

I.9.4 Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

I.10 Monitoring and Records.

I.10.1 Samples and measurements taken for the purpose of monitoring must be representative of the volume and nature of the monitored activity.

I.10.2 You must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date the permit expires or the date the permittee's authorization is terminated. This period may be extended by request of EPA at any time.

I.10.3 Records of monitoring information must include:

I.10.3.1 The date, exact place, and time of sampling or measurements;

I.10.3.2 The individual(s) who performed the sampling or measurements;

I.10.3.3 The date(s) analyses were performed

I.10.3.4 The individual(s) who performed the analyses;

I.10.3.5 The analytical techniques or methods used; and

I.10.3.6 The results of such analyses.

I.10.4 Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in the permit.

I.10.5 The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

I.11 Signatory Requirements.

I.11.1 All applications, including NOIs, must be signed as follows:

I.11.1.1 For a corporation: By a responsible corporate officer. For the purpose of this subsection, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

I.11.1.2 For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

I.11.1.3 For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive

officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

I.11.2 Your SWPPP, including changes to your SWPPP, inspection reports, and any other compliance documentation required under this permit, must be signed by a person described in Appendix I, Subsection I.11.1 above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

I.11.2.1 The authorization is made in writing by a person described in Appendix I, Subsection I.11.1;

I.11.2.2 The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

I.11.2.3 The signed and dated written authorization is included in the SWPPP. A copy must be submitted to EPA, if requested.

I.11.3 Changes to Authorization. If an authorization under Part 1.7 is no longer accurate because a different operator has responsibility for the overall operation of the construction site, a new NOI satisfying the requirements of Part 1.7 must be submitted to EPA. See Table 1 in Part 1.7.2 of the permit. However, if the only change that is occurring is a change in contact information or a change in the facility's address, the operator need only make a modification to the existing NOI submitted for authorization.

I.11.4 Any person signing documents in accordance with Appendix I, Subsections I.11.1 or I.11.2 above must include the following certification:

> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

I.11.5 For persons signing documents electronically, in addition to meeting other applicable requirements in Appenidx I, Subsection I.11, such signatures must meet the same signature, authentication, and identity-proofing standards set forth at 40 CFR § 3.2000(b) for electronic reports (including robust second-factor authentication).

I.11.6 The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

I.12 Reporting Requirements.

I.12.1 Planned changes. You must give notice to EPA as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

I.12.1.1 The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

I.12.1.2 The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1).

I.12.2 Anticipated noncompliance. You must give advance notice to EPA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

I.12.3 Transfers. This permit is not transferable to any person except after notice to EPA. Where a facility wants to change the name of the permittee, the original permittee (the first owner or operators) must submit a Notice of Termination pursuant to Part 8. The new owner or operator must submit a Notice of Intent in accordance with Part 1.7 and Table 1. See also requirements in Appendix I, Subsections I.11.1 and I.11.2.

I.12.4 Monitoring reports. Monitoring results must be reported at the intervals specified elsewhere in this permit.

I.12.4.1 Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by EPA for reporting results of monitoring of sludge use or disposal practices.

I.12.4.2 If you monitor any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by EPA.

I.12.5 Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date.

I.12.6 Twenty-four hour reporting. In addition to reports required elsewhere in this permit:

I.12.6.1 You must report any noncompliance which may endanger health or the environment. Any information must be provided orally within 24 hours from the time you become aware of the circumstances. A written submission must also be provided within five days of the time you become aware of the circumstances. The written submission must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

I.12.6.2 The following shall be included as information which must be reported within 24 hours under this paragraph.

a. Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR 122.41(m)(3)(ii))

b. Any upset which exceeds any effluent limitation in the permit

c. Violation of a maximum daily discharge limit for any numeric effluent limitation. (See 40 CFR 122.44(g).)

I.12.6.3 EPA may waive the written report on a case-by-case basis for reports under Appendix I, Subsection I.12.6.2 if the oral report has been received within 24 hours.

I.12.7 Other noncompliance. You must report all instances of noncompliance not reported under Appendix I, Subsections I.12.4, I.12.5, and I.12.6, at the time monitoring reports are submitted. The reports must contain the information listed in Appendix I, Subsection I.12.6.

I.12.8 Other information. Where you become aware that you failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Permitting Authority, you must promptly submit such facts or information.

I.13 Bypass.

I.13.1 Definitions.

I.13.1.1 Bypass means the intentional diversion of waste streams from any portion of a treatment facility See 40 CFR 122.41(m)(1)(i).

I.13.1.2 Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. See 40 CFR 122.41(m)(1)(ii).

I.13.2 Bypass not exceeding limitations. You may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Appendix I, Subsections I.13.3 and I.13.4. See 40 CFR 122.41(m)(2).

I.13.3 Notice.

I.13.3.1 Anticipated bypass. If you know in advance of the need for a bypass, you must submit prior notice, if possible at least ten days before the date of the bypass. See 40 CFR 122.41(m)(3)(i).

I.13.3.2 Unanticipated bypass. You must submit notice of an unanticipated bypass as required in Appendix I, Subsection I.12.6 (24-hour notice). See 40 CFR 122.41(m)(3)(ii).

I.13.4 Prohibition of bypass. See 40 CFR 122.41(m)(4).

I.13.4.1 Bypass is prohibited, and EPA may take enforcement action against you for bypass, unless:

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c. You submitted notices as required under Appendix I, Subsection I.13.3.

I.13.4.2 EPA may approve an anticipated bypass, after considering its adverse effects, if EPA determines that it will meet the three conditions listed above in Appendix I, Subsection I.13.4.1.

I.14 Upset.

I.14.1 Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond your reasonable control. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. See 40 CFR 122.41(n)(1).

I.14.2 Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Appendix I, Subsection I.14.3 are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. See 40 CFR 122.41(n)(2).

I.14.3 Conditions necessary for a demonstration of upset. See 40 CFR 122.41(n)(3). A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

I.14.3.1 An upset occurred and that you can identify the cause(s) of the upset;

I.14.3.2 The permitted facility was at the time being properly operated; and

I.14.3.3 You submitted notice of the upset as required in Appendix I, Subsection I.12.6.2.b (24 hour notice).

I.14.3.4 You complied with any remedial measures required under Appendix I, Subsection I.4.

I.14.4 Burden of proof. In any enforcement proceeding, you, as the one seeking to establish the occurrence of an upset, have the burden of proof. See 40 CFR 122.41(n)(4).

I.15 Retention of Records.

Copies of the SWPPP and all documentation required by this permit, including records of all data used to complete the NOI to be covered by this permit, must be retained for at least three years from the date that permit coverage expires or is terminated. This period may be extended by request of EPA at any time.

I.16 Reopener Clause.

I.16.1 Procedures for modification or revocation. Permit modification or revocation will be conducted according to 40 CFR §122.62, §122.63, §122.64 and §124.5.

I.16.2 Water quality protection. If there is evidence indicating that the stormwater discharges authorized by this permit cause, have the reasonable potential to cause or contribute to an excursion above any applicable water quality standard, you may be required to obtain an individual permit in accordance with Part 1.7.5 of this permit, or the permit may be modified to include different limitations and/or requirements.

I.16.3 Timing of permit modification. EPA may elect to modify the permit prior to its expiration (rather than waiting for the new permit cycle) to comply with any new statutory or regulatory requirements, such as for effluent limitation guidelines that may be promulgated in the course of the current permit cycle.

I.17 Severability.

Invalidation of a portion of this permit does not necessarily render the whole permit invalid. EPA's intent is that the permit is to remain in effect to the extent possible; in the event that any part of this permit is invalidated, EPA will advise the regulated community as to the effect of such invalidation.

Appendix J - Notice of Intent (NOI) Form and Instructions

Part 1.7.1 requires you to use the electronic NOI system, or "eNOI" system, to prepare and submit your NOI. However, if you are given approval by the EPA Regional Office to use a paper NOI form, and you elect to use it, you must complete and submit the following form.

NPDES FORM 3510-9	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 NOTICE OF INTENT (NOI) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER AN NPDES GENERAL PERMIT	Form Approved. OMB No. 2040-0004

Submission of this Notice of Intent (NOI) constitutes notice that the operator identified in Section II of this form requests authorization to discharge pursuant to the NPDES Construction General Permit (CGP) permit number identified in Section I of this form. Submission of this NOI also constitutes notice that the operator identified in Section II of this form meets the eligibility requirements of Parts 1.1 and 1.2 of the CGP for the project identified in Section III of this form. Permit coverage is required prior to commencement of construction activity until you are eligible to terminate coverage as detailed in Part 8 of the CGP. To obtain authorization, you must submit a complete and accurate NOI form. Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage. Refer to the instructions at the end of this form.

I. Approval to Use Paper NOI Form

Have you been given approval from the Regional Office to use this paper NOI form*? ☐ YES ☐ NO

If yes, provide the reason you need to use this paper form, the name of the EPA Regional Office staff person who approved your use of this form, and the date of approval:

Reason for using paper form: _____

Name of EPA staff person: _____

Date approval obtained: _____

*** Note: You are required to obtain approval from the applicable Regional Office prior to using this paper NOI form.**

II. Permit Information

Tracking Number (EPA Use Only):

Permit Number: (see Appendix B of the CGP for the list of eligible permit numbers)

III. Operator Information

Name:

Phone: - - Ext. Fax (optional): - -

E-mail:

IRS Employer Identification Number (EIN): –

Point of Contact:

First Name, Middle Initial, Last Name:

Mailing Address:

Street:

City: State: Zip Code: -

NOI Preparer (Complete if NOI was prepared by someone other than the certifier):

Prepared by:

First Name, Middle Initial, Last Name:

Organization:

Phone: - - Ext. Fax (optional): - -

E-mail:

IV. Project/Site Information

Project/Site Name:

Project/Site Address:

Street/Location:

City: State: Zip Code: -

County or similar government subdivision:

For the project/site for you are seeking permit coverage, provide the following information:

Latitude/Longitude (Use one of three possible formats, and specify method):

Latitude 1. ___ ___° ___ ___' ___ ___" N (degrees, minutes, seconds)
2. ___ ___° ___ ___. ___ ___' N (degrees, minutes, decimal)
3. ___ ___. ___ ___ ___ ___° N (degrees decimal)

Longitude 1. ___ ___ ___° ___ ___' ___ ___" W (degrees, minutes, seconds)
2. ___ ___ ___° ___ ___. ___ ___' W (degrees, minutes, decimal)
3. ___ ___ ___. ___ ___ ___ ___° W (degrees decimal)

Latitude/Longitude Data Source: ☐ U.S.G.S. topographic map ☐ EPA web site ☐ GPS ☐ Other: _____

If you used a U.S.G.S. topographic map, what was the scale? _____

Horizontal Reference Datum: ☐ NAD 27 ☐ NAD 83 or WGS 84 ☐ Unknown

Is your project/site located in Indian Country lands, or located on a property of religious or cultural significance to an Indian tribe? ☐ YES ☐ NO

If yes, provide the name of the Indian tribe associated with the area of Indian country (including name of Indian reservation, if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property: _____

Are you requesting coverage under this NOI as a "federal operator" as defined in Appendix A? ☐ YES ☐ NO

Estimated Project Start Date: / / Estimated Project Completion Date: / /

Estimated Area to be Disturbed (to the nearest quarter acre): .

Have earth-disturbing activities commenced on your project/site? ☐ YES ☐ NO

If yes, is your project an "emergency-related project? ☐ YES ☐ NO

Have stormwater discharges from your project/site been covered previously under an NPDES permit? ☐ YES ☐ NO

If yes, provide the Tracking Number if you had coverage under EPA's CGP or the NPDES permit number if you had coverage under an EPA individual permit:

V. Discharge Information

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? ☐ YES ☐ NO

Are there any surface waters within 50 feet of your project's earth disturbances? ☐ YES ☐ NO

Receiving Waters and Wetlands Information: (Attach a separate list if necessary)

Provide the name(s) of the first surface water that received stormwater directly from your site and/or from the MS4:	**Provide the names of any impaired waters to which you discharge and the pollutant(s) for which they are impaired**		**Provide the names of any waters to which you discharge for which there is an EPA approved or established TMDL, the name of the TMDL, and the pollutant(s) for which there is a TMDL**		
	Surface water name:	**Pollutant(s) causing the impairment:**	**Surface water name:**	**TMDL name:**	**Pollutant(s) for which there is a TMDL:**

Impaired Waters

Describe the methods you used to complete the above table:

Are any of the surface waters to which you discharge designated by the state or tribal authority under its antidegradation policy as a Tier 2 (or Tier 2.5) water (water quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water) or as a Tier 3 water (Outstanding Natural Resource Water)? (See Appendix F).

☐ YES ☐ NO

If yes, name(s) of receiving water(s) and its designation (Tier 2, Tier 2.5 or Tier 3): _____

VI. Chemical Treatment Information

Will you use polymers, flocculants, or other treatment chemicals at your construction site? ☐ YES ☐ NO

If yes, will you use cationic treatment chemicals at your construction site*? ☐ YES ☐ NO

If yes, have you been authorized to use cationic treatment chemicals by your applicable EPA Regional Office in advance of filing your NOI*? ☐ YES ☐ NO

If you have been authorized to use cationic treatment chemicals by your applicable EPA Regional Office, attach a copy of your authorization letter and include documentation of the appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

Please indicate the treatment chemicals that you will use: _____

* Note: You are ineligible for coverage under this permit unless you notify your applicable EPA Regional Office in advance and the EPA office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

VII. Stormwater Pollution Prevention Plan (SWPPP) Information

Has the SWPPP been prepared in advance of filing this NOI? ☐ YES ☐ NO

SWPPP Contact Information:

First Name, Middle Initial Last Name:

Organization Name:

Phone: - - Ext. Fax (optional): - -

E-mail:

VIII. Endangered Species Protection

Using the instructions in Appendix D of the CGP, under which criterion listed in Appendix D are you eligible for coverage under this permit (only check 1 box)?

☐ A ☐ B ☐ C ☐ D ☐ E ☐ F

Provide a brief summary of the basis for criterion selection listed in Appendix D (e.g., communication with U.S. Fish and Wildlife Service or National Marine Fisheries Service, specific study): _____

If you select criterion B, provide the Tracking Number from the other operator's notification of authorization under this permit:

If you select criterion C, you must attach a copy of your site map (see Part 7.2.6 of the permit), and you must answer the following questions:

What federally-listed species or federally-designated critical habitat are located in your "action area": _____

What is the distance between your site and the listed species or critical habitat (miles): _____

If you select criterion D, E, or F, attach copies of any letters or other communications between you and the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

IX. Historic Preservation

Are you installing any stormwater controls as described in Appendix E that require subsurface earth disturbance? (Appendix E, Step 1) ☐ YES ☐ NO

If yes, have prior surveys or evaluations conducted on the site have already determined historic properties do not exist, or that prior disturbances have precluded the existence of historic properties? (Appendix E, Step 2) ☐ YES ☐ NO

If no, have you determined that your installation of subsurface earth-disturbing stormwater controls will have no effect on historic properties? (Appendix E, Step 3) ☐ YES ☐ NO

If no, did the SHPO, THPO, or other tribal representative (whichever applies) respond to you within the 15 calendar days to indicate whether the subsurface earth disturbances caused by the installation of stormwater controls affect historic properties? (Appendix E, Step 4) ☐ YES ☐ NO

If yes, describe the nature of their response:

☐ Written indication that adverse effects to historic properties from the installation of stormwater controls can be mitigated by agreed upon actions

☐ No agreement has been reached regarding measures to mitigate effects to historic properties from the installation of stormwater controls

☐ Other:

_____

_____

X. Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name: _____

Title: _____

Signature: _____ Date: ___ / ___ / ____

Email: _____

Instructions for Completing EPA Form 3510-9

Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under an NPDES General Permit

NPDES Form Date (2/16) This Form Replaces Form 3510-9 (11/08) Form Approved OMB No. 2040-0004

Who Must File an NOI Form

Under the provisions of the Clean Water Act, as amended (33 U.S.C. 1251 et. seq.; the Act), federal law prohibits stormwater discharges from certain construction activities to waters of the U.S. unless that discharge is covered under a National Pollutant Discharge Elimination System (NPDES) permit. Operator of construction sites where one or more acres are disturbed, smaller sites that are part of a larger common plan of development or sale where there is a cumulative disturbance of at least one acre, or any other site specifically designated by the Director, must submit an NOI to obtain coverage under an NPDES general permit. Each person, firm, public organization, or any other entity that meets either of the following criteria must file this form: (1) they have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or (2) they have day-to-day operational control of those activities at the project necessary to ensure compliance with the permit conditions. If you have questions about whether you need a NPDES stormwater permit, or if you need information to determine whether EPA or your state agency is the permitting authority, refer to www.epa.gov/npdes/stormwater/cgp or telephone EPA's NOI Processing Center at (866) 352-7755.

Completing the Form

Obtain and read a copy of the 2012 Construction General Permit, viewable at www.epa.gov/npdes/stormwater/cgp. To complete this form, type or print uppercase letters, in the appropriate areas only. Please place each character between the marks (abbreviate if necessary to stay within the number of characters allowed for each item). Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions on this form, refer to www.epa.gov/npdes/stormwater/cgp or telephone EPA's NOI Processing Center at (866) 352-7755. Please submit the original document with signature in ink - do not send a photocopied signature.

Section I. Approval to Use Paper NOI Form

You must indicate whether you have been given approval by the EPA Regional Office to use a paper NOI. Note that you are not authorized to use this paper NOI form unless the Regional Office has approved its use. Verbal approval from the Regional Office is sufficient. Where you have obtained approval to use this form, indicate the reason you need to use this form, the name of the EPA Regional Office staff person who provided approval for use of this form, and the date that approval was provided. See www.epa.gov/npdes/stormwater/contacts for a list of EPA Regional Office contacts.

Section II. Permit Number

Provide the number of the permit under which you are applying for coverage (see Appendix B of the general permit for the list of eligible permit numbers).

Section III. Operator Information

Provide the legal name of the person, firm, public organization, or any other entity that operates the project described in this application. Refer to Appendix A of the permit for the definition of "operator". Provide the employer identification number (EIN from the Internal Revenue Service; IRS), also commonly referred to as your taxpayer ID. If the applicant does not have an EIN enter "NA" in the space provided. Also provide a point of contact, the operator's mailing address, telephone number, fax number (optional) and e-mail address (to be notified via e-mail of NOI approval when available). Correspondence for the NOI will be sent to this address.

If the NOI was prepared by someone other than the certifier (for example, if the NOI was prepared by the facility SWPPP contact or a consultant for the certifier's signature), include the full name, organization, phone number and email address of the NOI preparer.

Section IV. Project/Site Information

Enter the official or legal name and complete street address, including city, state, zip code, and county or similar government subdivision of the project or site. If the project or site lacks a street address, indicate the general location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for permit coverage to be granted.

Provide the latitude and longitude of your facility either in degrees, minutes, seconds; degrees, minutes, decimal; or degrees decimal format. The latitude and longitude of your facility can be determined in several different ways, including through the use of global positioning system (GPS) receivers, U.S. Geological Survey (U.S.G.S.) topographic or quadrangle maps, and EPA's web-based siting tools, among others. Refer to www.epa.gov/npdes/stormwater/cgp for further guidance on the use of these methodologies. For consistency, EPA requests that measurements be taken from the approximate center of the construction site. Applicants must specify which method they used to determine latitude and longitude. If a U.S.G.S. topographic map is used, applicants are required to specify the scale of the map used. If known, enter the horizontal reference datum for your latitude and longitude. The horizontal reference datum used on USGS topographic maps is shown on the bottom left corner of USGS topographic maps; it is also available for GPS receivers. If you use EPA's web siting tool, or if you are unsure of the horizontal reference datum for your site, please check the "unknown" box.

Indicate whether the project is in Indian country lands or located on a property of religious or cultural significance to an Indian tribe, and if so, provide the name of the Indian tribe associated with the area of Indian country (including name of Indian reservation, if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property.

Indicate whether you are seeking coverage under this permit as a "federal operator" as defined in Appendix A.

Enter the estimated construction start and completion dates using four digits for the year (i.e., 10/06/2012). Indicate to the nearest quarter acre the estimated area to be disturbed.

Indicate whether earth-disturbing activities have already commenced on your project/site. If earth-disturbing activities have commenced on your site because stormwater discharges from the site have been previously covered under a NPDES permit, you must provide the CGP Tracking Number or the NPDES permit number if coverage was under an individual permit.

Section V. Discharge Information

Indicate whether discharges from the site will enter into a municipal separate storm sewer system (MS4), as defined in Appendix A.

Also, indicate whether any surface waters (as defined in Appendix A) exist either on or within 50 feet from your site. Note that if "yes", you are required to comply with the requirement in Part 2.1.2.1 of the permit to provide natural buffers or equivalent sediment controls.

You must specify the names of any surface waters that receive stormwater directly from your site and/or from the MS4 to which you discharge. You must also specify the names of any surface waters that you discharge to that are listed as "impaired" as defined in Appendix A, including any waters for which there is an approved or established TMDL, and the pollutants for which the water is impaired or for which there is a TMDL. This information will be used to determine if the site discharges to an impaired waterbody, which triggers additional requirements in Part 3.2.2 of the permit. Applicants must specify which method they used to determine whether or not their site discharges to impaired waters. Also, if a TMDL has been approved or established, identify the title or reference of the TMDL document.

Indicate whether discharges from the site will enter into a surface water that is designated as a Tier 2, Tier 2.5, or Tier 3 water. A list of Tier 2, 2.5, and 3 waters is provided as Appendix F. If the answer is "yes", name all waters designated as Tier 2, Tier 2.5, or Tier 3 to which the site will discharge.

Section VI. Chemical Treatment Information

Indicate whether the site will use polymers, flocculants, or other treatment chemicals. Indicate whether the site will employ cationic treatment chemicals. If the answer is "yes" to either question, indicate which chemical(s) you will use. Note that you are not eligible for coverage under this permit to use cationic treatment chemicals unless you notify your applicable EPA Regional Office in advance and the EPA office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards. If you have been authorized to use cationic treatment chemicals by your applicable EPA Regional Office, attach a copy of your authorization letter and include documentation of the appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards. Examples of cationic treatment chemicals include, but are not limited to, cationic polyacrylamide (C-PAM), PolyDADMAC (POLYDIALLYLDIMETHYLAMMONIUM CHLORIDE), and chitosan.

Section VII. Stormwater Pollution Prevention Plan (SWPPP) Information

All sites eligible for coverage under this permit are required to prepare a SWPPP in advance of filing the NOI, in accordance with Part 7. Indicate whether the SWPPP has been prepared in advance of filing the NOI.

Indicate the street, city, state, and zip code where the SWPPP can be found. Indicate the contact information (name, organization, phone, fax (optional), and email) for the person who developed the SWPPP for this project.

Section VIII. Endangered Species Information

Using the instructions in Appendix D, indicate under which criterion (i.e., A, B, C, D, E, or F) of the permit the applicant is eligible with regard to protection of federally listed endangered and threatened species and designated critical habitat. A description of the basis for the criterion selected must also be provided.

If criterion B is selected, provide the Tracking Number for the other operator who had previously certified their eligibility under criterion A, C, D, E, or F. The Tracking Number was assigned when the operator received coverage under this permit, and is included in the notice of authorization.

If criterion C is selected, you must attach copies of your site map. See Part 7.2.6 of the permit for information about what is required to be in your site map. You must also specify the federally-listed species or federally-designated critical habitat that are located in the "action area" of the project, and provide the distance between the construction site and any listed endangered species or their critical habitat.

If criterion D, E, or F is selected, attach copies of any communications between you and the U.S. Fish and Wildlife Service and National Marine Fisheries Service.

Section IX. Historic Preservation

Use the instructions in Appendix E to complete the questions on the NOI form regarding historic preservation.

Section X. Certification Information

All applications, including NOIs, must be signed as follows:

For a corporation: By a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means:

(i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this Part, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA). Include the name and title of the person signing the form and the date of signing. An unsigned or undated NOI form will not be considered eligible for permit coverage.

Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under an NPDES General Permit

NPDES Form Date (2/16) This Form Replaces Form 3510-9 (11/08) Form Approved OMB No. 2040-0004

Modifying Your NOI

If after submitting your NOI you need to correct or update any fields on this NOI form, you may do so by submitting a paper modification form, which you can obtain at the following link: http://www.epa.gov/npdes/pubs/cgp_modify.pdf

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 3.7 hours. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch 2136, U.S. Environmental Protection, Agency, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460. Include the OMB control number on any correspondence. Do not send the completed form to this address.

Submitting Your Form

Submit your NOI form by mail to one of the following addresses:

For Regular U.S. Mail Delivery:
Stormwater Notice Processing Center
Mail Code 4203M
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

For Overnight/Express Mail Delivery:
Stormwater Notice Processing Center
EPA East Building - Room 7420
U.S. EPA
1201 Constitution Avenue, NW
Washington, DC 20004

Visit this website for instructions on how to submit electronically:
www.epa.gov/npdes/stormwater/cgpenoi

Appendix K - Notice of Termination (NOT) Form and Instructions

Part 8.3 requires you to use the electronic NOI system, or "eNOI" system, to prepare and submit your NOT. However, where your EPA Regional Office specifically authorizes you to use a paper NOT form, you are required to complete and submit the following form.

NPDES FORM 3510-13	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 NOTICE OF TERMINATION (NOT) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER AN NPDES GENERAL PERMIT	Form Approved. OMB No. 2040-0004

Submission of this Notice of Termination constitutes notice that the operator identified in Section II of this form is no longer authorized discharge pursuant to the NPDES Construction General Permit (CGP) from the site identified in Section III of this form. All necessary information must be included on this form. Refer to the instructions at the end of this form.

I. Approval to Use Paper NOT Form

Have you been given approval from the Regional Office to use this paper NOT form*? ☐ YES ☐ NO

*** Note: You must have been given approval by the Regional Office prior to using this paper NOT form.**

II. Permit Information

NPDES Stormwater General Permit Tracking Number:

Reason for Termination (Check only one):

- ☐ You have completed earth-disturbing activities at your site, and you have met all other requirements in Part 8.2.1.
- ☐ Another operator has assumed control over all areas of the site and that operator has submitted an NOI and obtained coverage under the CGP.
- ☐ You have obtained coverage under an individual permit or another general NPDES permit addressing stormwater discharges from the construction site.

III. Operator Information

Name:

IRS Employer Identification Number (EIN): –

Mailing Address:

Street:

City: State: Zip Code: -

Phone: - - Ext. Fax (optional): - -

E-mail:

IV. Project/Site Information

Project/Site Name:

Project/Site Address:

Street/Location:

City: State: Zip Code: -

County or similar government subdivision:

V. Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name:

Title:

Signature: _____ Date: / /

Email:

Notice of Termination (NOT) of Coverage Under an NPDES General Permit for Stormwater Discharges Associated with Construction Activity

NPDES Form Date (2/16) This Form Replaces Form 3510-13 (12/08) Form Approved OMB No. 2040-0004

Who May File an NOT Form

Permittees who are presently covered under the EPA-issued 2012 Construction General Permit (CGP) for Stormwater Discharges Associated with Construction Activity may submit an NOT form when: (1) earth-disturbing activities at the site are completed and the conditions in Parts 8.2.1.1 thru 8.2.1.5 are met; or (2) the permittee has transferred all areas under its control to another operator, and that operator has submitted and obtained coverage under this permit; or (3) the permittee has obtained coverage under a different NPDES permit for the same discharges.

Completing the Form

Type or print, using uppercase letters, in the appropriate areas only. Please place each character between the marks. Abbreviate if necessary to stay within the number of characters allowed for each item. Use only one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions about this form, refer to www.epa.gov/npdes/stormwater/cgp or telephone EPA's NOI Processing Center at (866) 352-7755. Please submit original document with signature in ink - do not send a photocopied signature.

Section I. Approval to Use Paper NOT Form

You must indicate whether you have been given approval by the EPA Regional Office to use a paper NOT. Note that you are not authorized to use this paper NOT form unless the Regional Office has approved its use.

Section II. Permit Number

Enter the existing NPDES Stormwater General Permit Tracking Number assigned to the project by EPA's Stormwater Notice Processing Center. If you do not know the permit tracking number, refer to http://www.epa.gov/npdes/stormwater/cgp or contact EPA's NOI Processing Center at (866) 352-7755.

Indicate your reason for submitting this Notice of Termination by checking the appropriate box. Check only one:

You have completed earth-disturbing activities at your site and, if applicable, construction support activities covered by this permit (see Part 1.6.3) and you have met all other requirements in Part 8.2.1.

Another operator has assumed control over all areas of the site and that operator has submitted an NOI and obtained coverage under the CGP.

You have obtained coverage under an individual permit or another general NPDES permit addressing stormwater discharges from the construction site.

Section III. Operator Information

Provide the legal name of the person, firm, public organization, or any other entity that operates the project described in this application and is covered by the permit tracking number identified in Section I. Refer to Appendix A of the permit for the definition of "operator". Provide the employer identification number (EIN from the Internal Revenue Service; IRS). If the applicant does not have an EIN enter "NA" in the space provided. Enter the complete mailing address, telephone number, and email address of the operator. Optional: enter the fax number of the operator.

Section IV. Project/Site Information

Enter the official or legal name and complete street address, including city, state, zip code, and county or similar government subdivision of the project or site. If the project or site lacks a street address, indicate the general location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for termination of permit coverage to be valid.

Section V. Certification Information

All applications, including NOIs, must be signed as follows:

For a corporation: By a responsible corporate officer. For the purpose of this Part, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this Part, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

Include the name, title, and email address of the person signing the form and the date of signing. An unsigned or undated NOT form will not be considered valid termination of permit coverage.

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 0.5 hours per notice, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, 2136, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460. Include the OMB number on any correspondence. Do not send the completed form to this address.

Notice of Termination (NOT) of Coverage Under an NPDES General Permit for Stormwater Discharges Associated with Construction Activity

NPDES Form Date (2/16) This Form Replaces Form 3510-13 (12/08) Form Approved OMB No. 2040-0004

Submitting Your Form:
Submit your NOI form by mail to one of the following addresses:

For Regular U.S. Mail Delivery:
Stormwater Notice Processing Center
Mail Code 4203M
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

For Overnight/Express Mail Delivery:
Stormwater Notice Processing Center
EPA East Building - Room 7420
U.S. EPA
1201 Constitution Avenue, NW
Washington, DC 20004

Visit this website for instructions on how to submit electronically:
www.epa.gov/npdes/stormwater/cgpenoi

APPENDIX B

NOTICE OF INTENT AND EPA AUTHORIZATION EMAIL

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Appendix J - Notice of Intent (NOI) Form and Instructions

Part 1.4.1 requires you to use the electronic NOI system, or "eNOI" system, to prepare and submit your NOI. However, if you are given approval by the EPA Regional Office to use a paper NOI form, and you elect to use it, you must complete and submit the following form.

NPDES FORM 3510-9	EPA	UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460 NOTICE OF INTENT (NOI) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER AN NPDES GENERAL PERMIT	Form Approved. OMB No. 2040-0004

Submission of this Notice of Intent (NOI) constitutes notice that the operator identified in Section II of this form requests authorization to discharge pursuant to the NPDES Construction General Permit (CGP) permit number identified in Section I of this form. Submission of this NOI also constitutes notice that the operator identified in Section II of this form meets the eligibility requirements of Parts 1.1 and 1.2 of the CGP for the project identified in Section III of this form. Permit coverage is required prior to commencement of construction activity until you are eligible to terminate coverage as detailed in Part 8 of the CGP. To obtain authorization, you must submit a complete and accurate NOI form. Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage. Refer to the instructions at the end of this form.

I. Approval to Use Paper NOI Form

Have you been given approval from the Regional Office to use this paper NOI form*? ☐ YES ☐ NO

If yes, provide the reason you need to use this paper form, the name of the EPA Regional Office staff person who approved your use of this form, and the date of approval:

Reason for using paper form:

Name of EPA staff person:

Date approval obtained: / /

*** Note: You are required to obtain approval from the applicable Regional Office prior to using this paper NOI form.**

II. Permit Information

Tracking Number (EPA Use Only):

Permit Number: NMR120000 (see Appendix B of the CGP for the list of eligible permit numbers)

III. Operator Information

Name: Zapata Incorporated

Phone: 704-358-8240 Ext. Fax (optional): 704-358-8342

E-mail: smorrissette@zapatainc.com

IRS Employer Identification Number (EIN): 56-1816365

Point of Contact:

First Name, Middle Initial, Last Name: Steve E Morrissette

Mailing Address:

Street: 6302 Fairview Road, Suite 600

City: Charlotte State: NC Zip Code: 28210-

NOI Preparer (Complete if NOI was prepared by someone other than the certifier):

Prepared by:

First Name, Middle Initial, Last Name: Richard S Smith

Organization: Zapata Incorporated

Phone: 704-378-4934 Ext. Fax (optional): 704-358-8342

E-mail: ssmith@zapatainc.com

IV. Project/Site Information

Project/Site Name: Parcel 21 - SWMU 1

Project/Site Address:

Street/Location: Fort Wingate Depot Activity

City: 7 Miles East of Gallup State: NM Zip Code: 87316-

County or similar government subdivision: McKinley County

For the project/site for you are seeking permit coverage, provide the following information:

Latitude/Longitude (Use one of three possible formats, and specify method):

Latitude 1. 35° 30' 32" N (degrees, minutes, seconds)
2. ___ ___° ___ ___. ___ ___' N (degrees, minutes, decimal)
3. ___ ___. ___ ___ ___ ___° N (degrees decimal)

Longitude 1. 108° 35' 12" W (degrees, minutes, seconds)
2. ___ ___ ___° ___ ___. ___ ___' W (degrees, minutes, decimal)
3. ___ ___ ___. ___ ___ ___ ___° W (degrees decimal)

Latitude/Longitude Data Source: ☐ U.S.G.S. topographic map ☐ EPA web site ☐ GPS ☒ Other: Online Mapping Service - Goggle Maps

If you used a U.S.G.S. topographic map, what was the scale? _____

Horizontal Reference Datum: ☐ NAD 27 ☐ NAD 83 or WGS 84 ☒ Unknown

Is your project/site located in Indian Country lands, or located on a property of religious or cultural significance to an Indian tribe? ☐ YES ☒ NO

If yes, provide the name of the Indian tribe associated with the area of Indian country (including name of Indian reservation, if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property: _____

Are you requesting coverage under this NOI as a "federal operator" as defined in Appendix A? ☒ YES ☐ NO

Estimated Project Start Date: 05/22/2015 Estimated Project Completion Date: 09/15/2015

Estimated Area to be Disturbed (to the nearest quarter acre): 4.00

Have earth-disturbing activities commenced on your project/site? ☐ YES ☒ NO

If yes, is your project an "emergency-related project? ☐ YES ☐ NO

Have stormwater discharges from your project/site been covered previously under an NPDES permit? ☐ YES ☒ NO

If yes, provide the Tracking Number if you had coverage under EPA's CGP or the NPDES permit number if you had coverage under an EPA individual permit:

V. Discharge Information

Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)? ☐ YES ☒ NO

Are there any surface waters within 50 feet of your project's earth disturbances? ☐ YES ☒ NO

Receiving Waters and Wetlands Information: (Attach a separate list if necessary)

Provide the name(s) of the first surface water that received stormwater directly from your site and/or from the MS4:	Provide the names of any impaired waters to which you discharge and the pollutant(s) for which they are impaired		Provide the names of any waters to which you discharge for which there is an EPA approved or established TMDL, the name of the TMDL, and the pollutant(s) for which there is a TMDL		
	Surface water name:	Pollutant(s) causing the impairment:	Surface water name:	TMDL name:	Pollutant(s) for which there is a TMDL:
Rio Puerco	None	None	None	None	None

Impaired Waters

Describe the methods you used to complete the above table:

Are any of the surface waters to which you discharge designated by the state or tribal authority under its antidegradation policy as a Tier 2 (or Tier 2.5) water (water quality exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water) or as a Tier 3 water (Outstanding Natural Resource Water)? (See Appendix F).

☐ YES ☒ NO

If yes, name(s) of receiving water(s) and its designation (Tier 2, Tier 2.5 or Tier 3):

VI. Chemical Treatment Information

Will you use polymers, flocculants, or other treatment chemicals at your construction site? ☐ YES ☒ NO

If yes, will you use cationic treatment chemicals at your construction site*? ☐ YES ☒ NO

If yes, have you been authorized to use cationic treatment chemicals by your applicable EPA Regional Office in advance of filing your NOI*? ☐ YES ☐ NO

If you have been authorized to use cationic treatment chemicals by your applicable EPA Regional Office, attach a copy of your authorization letter and include documentation of the appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

Please indicate the treatment chemicals that you will use:

* Note: You are ineligible for coverage under this permit unless you notify your applicable EPA Regional Office in advance and the EPA office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

VII. Stormwater Pollution Prevention Plan (SWPPP) Information

Has the SWPPP been prepared in advance of filing this NOI? ☒ YES ☐ NO

SWPPP Contact Information:

First Name, Middle Initial Last Name: Steve E Morrissette

Organization Name: Zapata Incorporated

Phone: 402-871-2891 Ext. Fax (optional): 704-385-8342

E-mail: smorrissette@zapatainc.com

VIII. Endangered Species Protection

Using the instructions in Appendix D of the CGP, under which criterion listed in Appendix D are you eligible for coverage under this permit (only check 1 box)?

☒ A ☐ B ☐ C ☐ D ☐ E ☐ F

Provide a brief summary of the basis for criterion selection listed in Appendix D (e.g., communication with U.S. Fish and Wildlife Service or National Marine Fisheries Service, specific study):

NMDGF Biota Info System identified 5 state threatened species in McKinley Co, which are not protected under Fed. Endangered Species Act. A 2013 adjacent biological survey & our 2014 visual inspection did not identify critical habitat in vicinity of project site

If you select criterion B, provide the Tracking Number from the other operator's notification of authorization under this permit:

If you select criterion C, you must attach a copy of your site map (see Part 7.2.6 of the permit), and you must answer the following questions:

What federally-listed species or federally-designated critical habitat are located in your "action area":

What is the distance between your site and the listed species or critical habitat (miles):

If you select criterion D, E, or F, attach copies of any letters or other communications between you and the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

IX. Historic Preservation

Are you installing any stormwater controls as described in Appendix E that require subsurface earth disturbance? (Appendix E, Step 1) ☒ YES ☐ NO

If yes, have prior surveys or evaluations conducted on the site have already determined historic properties do not exist, or that prior disturbances have precluded the existence of historic properties? (Appendix E, Step 2) ☒ YES ☐ NO

If no, have you determined that your installation of subsurface earth-disturbing stormwater controls will have no effect on historic properties? (Appendix E, Step 3) ☐ YES ☐ NO

If no, did the SHPO, THPO, or other tribal representative (whichever applies) respond to you within the 15 calendar days to indicate whether the subsurface earth disturbances caused by the installation of stormwater controls affect historic properties? (Appendix E, Step 4) ☐ YES ☐ NO

If yes, describe the nature of their response:

- ☐ Written indication that adverse effects to historic properties from the installation of stormwater controls can be mitigated by agreed upon actions
- ☐ No agreement has been reached regarding measures to mitigate effects to historic properties from the installation of stormwater controls
- ☐ Other:

X. Certification Information

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

First Name, Middle Initial, Last Name:

Title:

Signature: _____ Date: / /

Email:

Instructions for Completing EPA Form 3510-9

Notice of Intent (NOI) for Storm Water Discharges Associated with Construction Activity Under an NPDES General Permit

NPDES Form Date (2/16) This Form Replaces Form 3510-9 (11/08) Form Approved OMB No. 2040-0004

Who Must File an NOI Form

Under the provisions of the Clean Water Act, as amended (33 U.S.C. 1251 et. seq.; the Act), federal law prohibits stormwater discharges from certain construction activities to waters of the U.S. unless that discharge is covered under a National Pollutant Discharge Elimination System (NPDES) permit. Operator of construction sites where one or more acres are disturbed, smaller sites that are part of a larger common plan of development or sale where there is a cumulative disturbance of at least one acre, or any other site specifically designated by the Director, must submit an NOI to obtain coverage under an NPDES general permit. Each person, firm, public organization, or any other entity that meets either of the following criteria must file this form: (1) they have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or (2) they have day-to-day operational control of those activities at the project necessary to ensure compliance with the permit conditions. If you have questions about whether you need a NPDES stormwater permit, or if you need information to determine whether EPA or your state agency is the permitting authority, refer to www.epa.gov/npdes/stormwater/cgp or telephone EPA's NOI Processing Center at (866) 352-7755.

Completing the Form

Obtain and read a copy of the 2012 Construction General Permit, viewable at www.epa.gov/npdes/stormwater/cgp. To complete this form, type or print uppercase letters, in the appropriate areas only. Please place each character between the marks (abbreviate if necessary to stay within the number of characters allowed for each item). Use one space for breaks between words, but not for punctuation marks unless they are needed to clarify your response. If you have any questions on this form, refer to www.epa.gov/npdes/stormwater/cgp or telephone EPA's NOI Processing Center at (866) 352-7755. Please submit the original document with signature in ink - do not send a photocopied signature.

Section I. Approval to Use Paper NOI Form

You must indicate whether you have been given approval by the EPA Regional Office to use a paper NOI. Note that you are not authorized to use this paper NOI form unless the Regional Office has approved its use. Verbal approval from the Regional Office is sufficient. Where you have obtained approval to use this form, indicate the reason you need to use this form, the name of the EPA Regional Office staff person who provided approval for use of this form, and the date that approval was provided. See www.epa.gov/npdes/stormwater/contacts for a list of EPA Regional Office contacts.

Section II. Permit Number

Provide the number of the permit under which you are applying for coverage (see Appendix B of the general permit for the list of eligible permit numbers).

Section III. Operator Information

Provide the legal name of the person, firm, public organization, or any other entity that operates the project described in this application. Refer to Appendix A of the permit for the definition of "operator". Provide the employer identification number (EIN from the Internal Revenue Service; IRS), also commonly referred to as your taxpayer ID. If the applicant does not have an EIN enter "NA" in the space provided. Also provide a point of contact, the operator's mailing address, telephone number, fax number (optional) and e-mail address (to be notified via e-mail of NOI approval when available). Correspondence for the NOI will be sent to this address.

If the NOI was prepared by someone other than the certifier (for example, if the NOI was prepared by the facility SWPPP contact or a consultant for the certifier's signature), include the full name, organization, phone number and email address of the NOI preparer.

Section IV. Project/Site Information

Enter the official or legal name and complete street address, including city, state, zip code, and county or similar government subdivision of the project or site. If the project or site lacks a street address, indicate the general location of the site (e.g., Intersection of State Highways 61 and 34). Complete site information must be provided for permit coverage to be granted.

Provide the latitude and longitude of your facility either in degrees, minutes, seconds; degrees, minutes, decimal; or degrees decimal format. The latitude and longitude of your facility can be determined in several different ways, including through the use of global positioning system (GPS) receivers, U.S. Geological Survey (U.S.G.S.) topographic or quadrangle maps, and EPA's web-based siting tools, among others. Refer to www.epa.gov/npdes/stormwater/cgp for further guidance on the use of these methodologies. For consistency, EPA requests that measurements be taken from the approximate center of the construction site. Applicants must specify which method they used to determine latitude and longitude. If a U.S.G.S. topographic map is used, applicants are required to specify the scale of the map used. If known, enter the horizontal reference datum for your latitude and longitude. The horizontal reference datum used on USGS topographic maps is shown on the bottom left corner of USGS topographic maps; it is also available for GPS receivers. If you use EPA's web siting tool, or if you are unsure of the horizontal reference datum for your site, please check the "unknown" box.

Indicate whether the project is in Indian country lands or located on a property of religious or cultural significance to an Indian tribe, and if so, provide the name of the Indian tribe associated with the area of Indian country (including name of Indian reservation, if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property.

Indicate whether you are seeking coverage under this permit as a "federal operator" as defined in Appendix A.

Enter the estimated construction start and completion dates using four digits for the year (i.e., 10/06/2012). Indicate to the nearest quarter acre the estimated area to be disturbed.

Indicate whether earth-disturbing activities have already commenced on your project/site. If earth-disturbing activities have commenced on your site because stormwater discharges from the site have been previously covered under a NPDES permit, you must provide the CGP Tracking Number or the NPDES permit number if coverage was under an individual permit.

Section V. Discharge Information

Indicate whether discharges from the site will enter into a municipal separate storm sewer system (MS4), as defined in Appendix A.

Also, indicate whether any surface waters (as defined in Appendix A) exist either on or within 50 feet from your site. Note that if "yes", you are required to comply with the requirement in Part 2.1.2.1 of the permit to provide natural buffers or equivalent sediment controls.

You must specify the names of any surface waters that receive stormwater directly from your site and/or from the MS4 to which you discharge. You must also specify the names of any surface waters that you discharge to that are listed as "impaired" as defined in Appendix A, including any waters for which there is an approved or established TMDL, and the pollutants for which the water is impaired or for which there is a TMDL. This information will be used to determine if the site discharges to an impaired waterbody, which triggers additional requirements in Part 3.2.2 of the permit. Applicants must specify which method they used to determine whether or not their site discharges to impaired waters. Also, if a TMDL has been approved or established, identify the title or reference of the TMDL document.

Indicate whether discharges from the site will enter into a surface water that is designated as a Tier 2, Tier 2.5, or Tier 3 water. A list of Tier 2, 2.5, and 3 waters is provided as Appendix F. If the answer is "yes", name all waters designated as Tier 2, Tier 2.5, or Tier 3 to which the site will discharge.

Section VI. Chemical Treatment Information

Indicate whether the site will use polymers, flocculants, or other treatment chemicals. Indicate whether the site will employ cationic treatment chemicals. If the answer is "yes" to either question, indicate which chemical(s) you will use. Note that you are not eligible for coverage under this permit to use cationic treatment chemicals unless you notify your applicable EPA Regional Office in advance and the EPA office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards. If you have been authorized to use cationic treatment chemicals by your applicable EPA Regional Office, attach a copy of your authorization letter and include documentation of the appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards. Examples of cationic treatment chemicals include, but are not limited to, cationic polyacrylamide (C-PAM), PolyDADMAC (POLYDIALLYLDIMETHYLAMMONIUM CHLORIDE), and chitosan.

Section VII. Stormwater Pollution Prevention Plan (SWPPP) Information

All sites eligible for coverage under this permit are required to prepare a SWPPP in advance of filing the NOI, in accordance with Part 7. Indicate whether the SWPPP has been prepared in advance of filing the NOI.

Indicate the street, city, state, and zip code where the SWPPP can be found. Indicate the contact information (name, organization, phone, fax (optional), and email) for the person who developed the SWPPP for this project.

Section VIII. Endangered Species Information

Using the instructions in Appendix D, indicate under which criterion (i.e., A, B, C, D, E, or F) of the permit the applicant is eligible with regard to protection of federally listed endangered and threatened species and designated critical habitat. A description of the basis for the criterion selected must also be provided.

If criterion B is selected, provide the Tracking Number for the other operator who had previously certified their eligibility under criterion A, C, D, E, or F. The Tracking Number was assigned when the operator received coverage under this permit, and is included in the notice of authorization.

If criterion C is selected, you must attach copies of your site map. See Part 7.2.6 of the permit for information about what is required to be in your site map. You must also specify the federally-listed species or federally-designated critical habitat that are located in the "action area" of the project, and provide the distance between the construction site and any listed endangered species or their critical habitat.

If criterion D, E, or F is selected, attach copies of any communications between you and the U.S. Fish and Wildlife Service and National Marine Fisheries Service.

Section IX. Historic Preservation

Use the instructions in Appendix E to complete the questions on the NOI form regarding historic preservation.

Section X. Certification Information

All applications, including NOIs, must be signed as follows:

For a corporation: By a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means:

(i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this Part, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA). Include the name and title of the person signing the form and the date of signing. An unsigned or

undated NOI form will not be considered eligible for permit coverage.

Modifying Your NOI

If after submitting your NOI you need to correct or update any fields on this NOI form, you may do so by submitting a paper modification form, which you can obtain at the following link: http://www.epa.gov/npdes/pubs/cgp_modify.pdf

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 3.7 hours. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Chief, Information Policy Branch 2136, U.S. Environmental Protection, Agency, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460. Include the OMB control number on any correspondence. Do not send the completed form to this address.

Submitting Your Form

Submit your NOI form by mail to one of the following addresses:

For Regular U.S. Mail Delivery:
Stormwater Notice Processing Center
Mail Code 4203M
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

For Overnight/Express Mail Delivery:
Stormwater Notice Processing Center
EPA East Building - Room 7420
U.S. EPA
1201 Constitution Avenue, NW
Washington, DC 20004

Visit this website for instructions on how to submit electronically:
www.epa.gov/npdes/stormwater/cgpenoi

APPENDIX C

SWPPP AMENDMENT LOG

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SWPPP AMENDMENT LOG

Project Name: _____

SWPPP Contact: _____

Amendment No.	Description of Amendment	Date of Amendment	Amendment Prepared by: [Name(s) & Title]

APPENDIX D

RESUME OF SITE MANAGER

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Charles (Chuck) W. Wentzel, Site Manager and UXO Quality Control Supervisor (UXOQCS)

Years Experience: 42 (includes 1972-1995 with US Navy)
17 (corporate experience includes 1997-2003 with other firms)

Years with ZAPATA: 11 (6/16/2003)

Education: US Navy Explosive Ordnance School, 1977
Specialized Training in Radiological Protection and Construction Safety
24 Hour Health & Safety Training for Hazardous Waste Emergency Response, 1983
Controlled Hazardous Substance Course, 1992
HAZWOPER 40 Hour, 1997
Cabrera Services Radiation Worker Training, 2001, 2002
8 Hour Trenching/Shoring Class, 2003
OSHA 10Hour Construction Safety Course, 2005
8-Hour Hazardous Waste Operations & Emergency Response Supervisor, Annually
8-Hour Hazardous Waste Operations & Emergency Response Refresher,2008

Registrations/Certifications: Huntsville Corps of Engineers UXO Certification (Certification # 0223)

Position Qualifications:

- Over 40 years of UXO/EOD and MMR action experience
- Exceeds required qualifications set forth in DDESBTP-18 for UXOQCS
- Executes all aspects of munitions response actions and range clearance activities
- Expertise in methods of remediation and full knowledge of Army regulations for MEC/UXO/CWM operations ensuring effective project management and execution
- Fully conversant with ZAPATA's Quality and Safety Program as well as EM 385-1-1 and ER 385-1-95
- Experience on numerous HTRW projects for USACE as well as extensive MMR experience and expertise
- Has served as UXOQCS on more than 14 ZAPATA MMRP projects since 2003

Project and Past Experience:

UXOQCS, MEC Investigation, Removal Action, and Construction Support, Schofield Barracks, HI, $18.3M, FFP and T&M (6/2004-Present). Responsible for overseeing the quality of collecting and processing 1,750,000lbs of MD and 190,000lbs of RRD and targets, detonation of 6,721 UXO items, and the recovery, identification, and response to 74 RCWM items. Ensured that field work was executed IAW WP and project QA/QC Plan. Performed QC inspections of completed grids to make sure all performance criteria were met prior to turning over the grid for Government QA inspection. All grids passed Government QA inspection. Mr. Wentzel served as UXOQCS from December 2004 - January 2006.

UXOQCS, RI/FS, Susitna Gunnery Range, $1.8M, PBC (8/2008-Present). Oversaw field activities, including delineation of areas of investigation, brush clearing, instrument-assisted reconnaissance, mag-dig and DGM field activities, and intrusive anomaly investigation in compliance with the WP, UFP QAPP, and data quality objectives. Audited field procedures, documented findings, and implemented corrective measures to maintain strict adherence to rigorous performance standards. Mr. Wentzel has served as UXOQCS since November 2008 with field work completed in August 2011.

UXOQCS, UXO Removal, Infantry Squad Battle Course and Convoy Live Fire Range, Fort Bliss, TX, $1.7M, PBC (6/2008-6/2009). Served as UXOQCS overseeing field activities, inspected items to determine the explosive hazard and disposition, and super-vised demilitarization of MEC. Mr. Wentzel served as UXOQCS from September 2008 – November 2008.

UXOQCS/SO, Operational Range Assessment Program, Cuddeback Air to Ground Gunnery Range, CA, $85K, FFP (4/2008-10/2008). Served in dual role and provided the MEC safety support to our proposed Team Member, Black & Veatch for MEC avoidance during soil sampling, site inspection activities, and excavation during UXO investigation. Also provide QC inspections and oversight to ensure all performance criteria were met prior to turning over site to Government QA inspection. Mr. Wentzel served as UXOQCS/SO from April 2008 - September 2008.

UXOQCS, Remedial Investigation/Feasibility Study (RI/FS), Former Camp Gruber Military Reservation, OK, $1.165M, PBC (6/2007-Present). Oversaw and monitored range reconnaissance activities across 55 miles of transects. Developed munitions response QC plan. Verified the quality of data collected along transects documenting the types and densities of surface and subsurface MEC, MD, and cultural debris. The reconnaissance showed no evidence of munitions-related features or forensic evidence of munitions, which resulted in large footprints eliminated from further characterization. Mr. Wenztel served as UXOQCS from December 2007 - April 2008.

UXOQCS, Site Investigation, MEC Removal, and RI/FS, Amelia Earhart Park, Dade County, FL, $3.9M, FFP (9/2004-Present). Provided oversight for the excavation and removal of hazardous soil and potential MEC/MD. Ensured soil and construction debris were properly loaded and hauled to a licensed HW disposal facility. A total of 1,750yd^3 of soil contaminated with arsenic was removed as well as 37 MPPEH items that were inspected, certified, and demilitarized. X-ray fluorescence was used in site delineation and confirmation activities. Ensured that field work was complaint with WP, QC Plan, DIDs, and local, state, and federal regulations. Mr. Wentzel served as UXOQCS from August 2007 - September 2007.

UXO Tech III, UXO Removal, Fort Belvoir, VA, $177K, PBC (1/2007-11/2008). Served as Team Leader supervising field activities, inspecting items to determine the explosive hazard and disposition, and supervising demilitarization of MEC. Mr. Wentzel served as UXO Tech III from January 2007 - July 2007.

UXOQCS, MEC Range Reconnaissance Activities, USAESCH, Multiple Locations, $585K (2004-2006). Provided oversight for field logistics for range reconnaissance team(s) for surveys at 13 range complexes in 6 states. The purpose of these surveys was to provide the Government with an accurate density rate of subsurface anomalies, the type and tonnage of MPPEH, vegetation, soil type, and surface contacts for their independent cost analysis.

SUXOS, UXO Survey and Disposal at the Kanaio Impact Range, Wil Chee Planning and USACE Hawaii District, Ulupalakua, Island of Maui, HI, $293K (2003). Safely escorted a biologist and archaeologist surveying a 500 acre grid through lava fields where munitions were identified, marked, and removed from within the grid area via a UXO sweep team.

- "…ZAPATA exceeded performance goals on some of the most difficult terrain in HI. The …team's high work standard and expertise during the logistical/implementation phase, were significant factors in exceeding the overall project objectives "William Rogers, Project Manager, HIARFM-ENV, Installation Restoration Program

UXO Quality Control Specialist, Susitna Gunnery Range FUDS RI/FS, AK, $1.8M (2010-2011). As a UXOQCS, Chuck is monitoring field activities, including delineation of areas of investigation, brush clearing, instrument-assisted reconnaissance, and mag-dig for compliance with the Work Plan and data quality objectives. He audits field procedures, documents findings, and implements corrective measures, as necessary.

UXO Technician III. UXO Removal at HGL MEC Services, Ft. Belvoir, Virginia. Served as Team Leader supervising field activities, inspected items to determine the explosive hazard and disposition, and supervised demilitarization of munitions and explosives of concern.
(Zapata Incorporated, November 2008)

UXO Technician III. UXO Removal at Infantry Squad Battle Course and Convoy Live Fire, Ft Bliss, TX. Served as Team Leader supervising field activities, inspected items to determine the explosive hazard and disposition, and supervised demilitarization of munitions and explosives of concern.
(Zapata Incorporated, September 2008 – October 2008)

UXO Technician III. Geophysical Anomaly Intrusive Investigation/UXO Removal. Orange County Solid Waste Facility, Orlando, FL. Served as Team Leader supervising field activities, inspected items to determine the explosive hazard and disposition, and supervised demilitarization of munitions and explosives of concern.
(Zapata Incorporated, August 2008 – September 2008)

UXO Technician III/Construction Support. Fort Carson, CO. Served as Team Leader supervising field activities, inspected items to determine the explosive hazard and disposition, and supervised demilitarization of munitions and explosives of concern.
(Zapata Incorporated, June 2008)

UXO Site Supervisor (SUXOS). Small Wonders Child Learning Center, Milledgeville, GA. Mr. Wentzel performed an evaluation for the presence of Munitions and Explosives of Concern (MEC).
(Zapata Incorporated, June 2008)

6100 Fairview Garage Emergency Assessment. Mr. Wentzel obtained required equipment and assisted cleaning connection plates for inspection.
(Zapata Incorporated, May 2008)

UXO Safety Officer (UXOSO). Former Cuddeback Air to Ground Gunnery Range (AGGR), Cuddeback, CA. Mr. Wentzel provided MEC support for soil sampling site inspection for future UXO investigation.
(Zapata Incorporated, April 2008)

UXO Site Supervisor (SUXOS). RI/FS at Camp Gruber, Muskogee, OK. Mr. Wentzel coordinated field logistics for Range Reconnaissance team(s) conducting MEC recon. The purpose of the reconnaissance was to provide the Government with an accurate density rate of subsurface anomalies, the type and tonnage of MPPEH, vegetation, soil type, and surface contacts.
(Zapata Incorporated, January 2008 – April 2008)

UXO Site Supervisor (SUXOS). SW/PFC Operational Range Assessment Program (ORAP). Western Region and Non-DoD Used Non-Operational Defense Sites (NDNODS) Inventory. Project included the following ranges:

- Fort Drum New York,
- Camp Robinson Arkansas,
- Fort Chaffee Arkansas CTARNG Armory Hartford Connecticut,
- Camp Rell Connecticut,
- Stone Ranch Connecticut,
- Camp Fogarty Rhode Island,
- Fort Nathaniel Greene Rhode Island,
- Camp Curtis Guild Rhode Island,
- Fort Polk Louisiana,
- Camp Minden Louisiana,
- Camp Beauregard Louisiana
- Camp Slidell Louisiana,
- Fort AP Hill Virginia Springer New Mexico
- Tucumcari New Mexico,
- Carlsbad New Mexico

(Zapata Incorporated, August 2007 – January 2009)

UXO Site Supervisor (SUXOS)/Construction Supervisor. Former Amelia Earhart Airfield, Opa Locka, FL. Mr. Wentzel oversaw excavation and removal of potentially hazardous soil and MEC debris. The soil and debris were loaded directly into semi-tractor trailer trucks and hauled to a hazardous-waste disposal facility. A total of 1,160 yd3 of soil was removed from the site, all was MPPEH certified, de-milled and turned into scrap at the disposal facility.
(Zapata Incorporated g, August 2007)

UXO Site Supervisor (SUXOS). Former Lowry Bombing and Gunnery Range (FLBGR), Aurora, CO. Mr. Wentzel performed an evaluation for the presence of Munitions and Explosives of Concern (MEC) on an approximately 130 acre parcel of land and oversaw the intrusive investigation of more than 1,900 anomalies.
(Zapata Incorporated, April 2007 – May 2007)

UXO Site Supervisor (SUXOS). Engineering Proving Ground, Fort Belvoir, VA. Mr. Wentzel conducted instrument-assisted visual range reconnaissance over 90 miles of 5 foot wide transects identifying MEC and HTW contamination and intrusive investigation of more than 900 anomalies.
(Zapata Incorporated, January 2007 – March 2007)

Heavy Equipment Operator. Sites 1, 2 and 3; Former Lake City Naval Air Station, Lake City, Florida. US Army Corps of Engineers, Savannah District. In this ongoing project, Mr. Wentzel serves as the heavy equipment operator at a former naval air station located in Lake City, Florida on behalf of the US Army Corps of Engineers, Savannah District. The site formerly had an underground storage tank (UST) farm with eight 50,000-gallon reinforced concrete tanks approximately 30 to 35 feet in diameter and 8 feet high. These tanks were situated in three separate areas and each of the eight tanks contained leaded gasoline. Fieldwork activities performed for the project site excavating approximately 1,000 yds^3 of contaminated soil.

UXO Site Supervisor (SUXOS). Range Reconnaissance. Various Sites. USAESCH. Mr. Wentzel coordinated field logistics for Range Reconnaissance team(s) conducting MEC recons. The purpose of these reconnaissance's was to provide the Government with an accurate density rate of subsurface anomalies, the type and tonnage of MPPEH, vegetation, soil type, and surface contacts for their independent cost analysis. The following active ranges have been completed to date; Fort Hood, Texas Brookhaven, Scout, Lone Star; QTR, Fort AP Hill, Virginia Shoot house, Schofield Barracks, Hawaii CACTF, QTR2. Ft. Riley, Kansas DMPTR, Screening Range, CACTF, Ft McCoy Wisconsin, IPBC, SDR, Fort Benning, Georgia IPBC, Fort Stewart, Georgia DMPTR, Fort Bragg, North Carolina DMPRC AVN.
(Zapata Incorporated, December 2004 – January 2006)

Project Manager. Sims Metal Site, Richmond, CA. Mr. Wentzel performed the initial site survey of the scrap metal yard, prepared safety plan including operational procedures and training plan for non-exploded ordnance (USO) trained personnel, which included general UXO/ordnance safety precautions, industrial safety, ordnance recognition, and emergency response. Through the course of this project, approximately 7,000 tons of scrap was sorted/screened with the removal of multiple inert armor piercing projectiles from said scrap.
(Zapata Incorporated, March 2004 – April 2004)

UXO Site Supervisor (SUXOS). Wellfleet, MA. Mr. Wentzel oversaw ordnance removal and disposal.
(Zapata Incorporated, February 2004 – March 2004)

UXO Technician III. Kanaio, Hawaii. Mr. Wentzel escorted a biologist and archaeologist as they surveyed a 500 acre grid through lava fields during which time ordnance was identified, marked and removed from within the grid area via UXO sweep team. He also oversaw the marking, identification, and stacking of ordnance for demo the last week of the project while continuing to escort a biologist and archaeologist.
(Zapata Incorporated, July 2003 – November 2003)

UXO Safety Officer/Technician III. Schofield Barracks, Oahu, Hawaii. Mr. Wentzel performed range clearance as a Technician III and was in charge of demolition of ordinance as Safety Officer.
(Zapata Incorporated, June 2003 – July 2003)

Construction Manager/SUXOS. Corrective Measure Implementation (CMI). White Phosphorus Practice Grenade Material Removal. Fort Bragg, North Carolina. ($240,000). Mr. Wentzel was responsible to implement and perform a Corrective Measure Implementation (CMI) to support planned construction of a Separate Battalion Barracks Complex at Fort Bragg, North Carolina. Mr. Wentzel oversaw the excavation, removal, and subsequent containerized waste disposal of white phosphorus, broken glass, glass practice grenades, and bottle residue remaining in an area. The waste was made up of components of glass practice grenades containing white phosphorus. The excavation site was located between the end of a large parking lot and the top of a storm water detention basin. Due to these space limitations and total excavation depth to 19 feet below grade, it was determined that an "open pit" type excavation was not feasible. Thus, sheet piling was used as shoring and trench excavation protection during the excavation phase of the CMI. Mr. Wentzel managed the installation and removal the shoring, which reached a design depth of 40 feet below grade. Removal of the suspected contaminated soil commenced after 14 feet of overburden was removed. The contaminated soil was sifted through a sifter screen to segregate remnants of frangible white phosphorus glass grenades, glass residue, or metallic scrap from the soil. Confirmatory soil samples were collected from the walls and bottom of the excavation pit after all suspected white phosphorus contaminated soil was removed. The project was completed successfully with all remnants of white phosphorus grenades and impacted soil safely removed and site restored. (Zapata Incorporated, 2003 – 2004)

UXO Technician III. Lake City Ammunition Plant, Blue Springs, MO. Mr. Wentzel escorted surveyors for grid installation and escorted Cabara personnel who were attempting to locate depleted uranium. (Advent Corp., February 2003)

UXO Technician III. Savana, IL. Mr. Wentzel performed escort services for the obtaining of soil samples in Savana, Illinois. (Advent Corp., June 2, 2003 – June 4, 2003)

UXO Technician III. Chemical Storage Facility, Richmond, KY. Mr. Wentzel performed down holing for taking direct push soil samples at the Chemical Storage Facility in Richmond, Kentucky.
(Advent Corp., February 2003)

UXO Site Supervisor (SUXOS)/Technician III. Naval Test Site, Aurora, CO. Through the use of old GPS coordinates, Mr. Wentzel managed the site, reflagging and checking contacts for location of possible missed ordnance. Operating a backhoe, holes were dug and dirt screened for possible radiation at the naval Test Site in Aurora, Colorado.
(USA Environmental, Inc., October 7, 2002 - October 25, 2002)

UXO Safety Officer (UXOSO). Naval Weapons Station, Charleston, SC. Mr. Wentzel maintained site safety measures through the course ordnance removal while cleaning a swamp line and approximately four acres while operating a trackhoe and front end loader. Dirt was sifted to remove ordnance via a mechanical sifter.
(Advent, July 7, 2002 - August 23, 2002)

UXO Safety Officer (UXOSO). Lake City Ammunition Plant, Blue Springs, MO. Mr. Wentzel maintained site safety measures through the course of sifting three dumpsters operating a trackhoe inside a building to screen and empty inner mogels clearing dirt of 20mm, M-53 & M-56 series and M-101 depleted uranium ordnance. Using water-jet technology, ordnance was cut into rounds to remove explosives and red phosphorous.
(R.E.S.T. Corp., May 19, 2002 - May 28, 2002)

APPENDIX E

NMDGF GUIDELINES AND RECOMMENDATIONS FOR BURROWING OWL SURVEYS AND MITIGATION

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GUIDELINES AND RECOMMENDATIONS
FOR BURROWING OWL
SURVEYS AND MITIGATION

NEW MEXICO DEPARTMENT OF GAME AND FISH

JULY 2007

(Note: Most of the following recommendations were developed by the New Mexico Burrowing Owl Working Group (2005), The California Burrowing Owl Consortium (1993), and The California Department of Fish and Game (1995))

The burrowing owl (*Athene cunicularia*) is considered a species of concern by the U.S. Fish and Wildlife Service and is protected by both the Migratory Bird Treaty Act and by New Mexico statute 17-2-14 (NMSA 1978). These guidelines are provided to assist in conducting burrowing owl surveys and mitigation during the preparation of environmental assessment reports and environmental impact statements. The guidelines also aid in the decision making process implemented when there is potential for any type of project to adversely affect burrowing owls or any of the resources that support them.

Project proponents should: 1) identify burrowing owl habitats and burrows; 2) choose and implement an appropriate survey method to confirm the presence of owls; and 3) determine and implement appropriate mitigation.

Step 1. Identify Burrowing Owl Habitat and Burrows

Seventy-five percent of New Mexico's ecological zones, as described by Dick-Peddie (1993), support or have the potential to support burrowing owls (Arrowood et al. 2001). These zones include: Chihuahuan desert scrub, closed basin scrub, desert grassland, Great Basin desert scrub, juniper savanna, lava beds, plains-mesa grassland, plains-mesa sand scrub, sand dunes, urban, and farmland (Arrowood et al. 2001). More specifically, burrowing owls generally are associated with dry, open, short-grass, treeless plains (Haug et al. 1993). Burrowing owls are also known to use areas that include shrubs such as creosote bush (*Larrea tridentata*), mesquite (*Prosopis* spp.), four-wing saltbush (*Atriplex canescens*), and rabbit-brush (*Chrysothanmus nauseous*) (Martin 1973, Botelho and Arrowood 1996). Burrowing owls also inhabit human-modified landscapes, such as golf courses and parking lots.

Burrowing owls rarely dig their own burrows and, therefore, depend in part upon the presence of burrowing animals. In New Mexico, burrowing owls are associated with Gunnison's prairie dogs (*Cynomys gunnisoni*), black-tailed prairie dogs (*C. ludovicianus*), American badgers (*Taxidea taxus*), ground squirrels (*Spermophilus* spp.), rock squirrels (*S. variegatus*), foxes (*Vulpes* spp.), and coyotes (*Canis latrans*). Burrowing owls and prairie dogs are included as species of greatest conservation need in the western great plain shortgrass prairie vegetation type (Comprehensive Wildlife Conservation Strategy for New Mexico 2006). Burrowing owls can also utilize human-made structures, such as, storm drains, berms, roadsides, irrigation canals, and artificial burrows specifically constructed for the owls.

Occupancy of suitable burrowing owl sites can be verified by observing at least one burrowing owl, or owl molted feathers, cast pellets, prey remains, eggshell fragments, or excrement at or near a burrow entrance (The California Burrowing Owl Consortium 1993).

Step 2. Choose and Implement an Appropriate Survey Method to Confirm Owl Presence

The most suitable time to survey for burrowing owls in New Mexico is during the nest initiation and incubation phases (Table 1). Most burrowing owls are migratory in the state, although some over-winter in New Mexico, particularly males in southern New Mexico (Arrowood et al. 2001, Johnson et al. 1997). Migratory owls typically arrive on the breeding grounds by March and remain there until October.

Table 1. General breeding chronology of the burrowing owl in New Mexico.

Location	Pair Bonding/Nest Initiation	Egg Laying and Incubation	Chicks Fledge above Ground	Independence
New Mexico	March to April	Late April to early June	Early-Mid June	Mid-Late July

Surveys should not be conducted in certain weather conditions when owls are more likely to be in their burrows and not visible, such as temperatures above 30°C (86°F) and winds exceeding 20 km/hr (approx. 12 mph). Surveys also should be restricted to the early morning and evening hours, because above ground activity is often higher during these times (Conway and Simon 2003).

A single survey on a proposed project site is adequate to determine the presence or absence of active burrows. If owls are not observed, all active burrows should be inspected for indications of use by the presence of owl pellets, droppings, or feathers. If active burrows are found follow-up survey, utilizing the methods described below, should be scheduled to confirm the presence or absence and numbers of owls on a project site.

Burrowing owl surveys can be accomplished effectively by either walking or driving transects. Either the entire length of the transect or point count stations along the transect can be surveyed, and surveys can be conducted with or without broadcasting audio burrowing owl alarm (*quick-quick-quick*) and/or male territory (*coo-coo*) calls. Studies have shown that broadcasting calls increases detection probability of burrowing owls (Haug and Didiuk 1993, Conway and Simon 2003) and that trained surveyors can detect owls up to 300 m (Conway and Simon 2003). These methods might need to be modified depending upon the terrain and equipment being used, which, respectively, affect the distance owls and the broadcasted vocalizations can be heard.

If burrowing owl habitat is found at the project site, a 150-m buffer zone around the project should also be assessed for potential burrowing owl habitat. At the project site, use one of the following survey methods as recommended by the New Mexico Burrowing Owl Working Group (NMBOWG).

METHOD 1: Walking Surveys

Without Audio Calls

Transects should be established in suitable owl habitat. A single, straight line should be walked for the entire length of the transect (for specific protocol and comparison of line transect methodology see Emlen 1971 and 1977). Observers should record all owls observed along either side of the line. If a more thorough estimate of abundance in a specific area is desired, an observer should walk multiple parallel lines (or many observers walk parallel lines concurrently) that are approximately 50 m apart. All owls observed along either side of the transect line should be recorded. Data recorded should include: date and time of survey, weather conditions, dominant vegetation, burrow aspect, survey location (including GPS coordinates), number of owls observed, sex and age classes of owls (if determinable), and presence of prairie dogs and other burrowing animals.

With Audio Calls

Observers should proceed along a transect line, stopping at points approximately every 200 m to broadcast owl vocalizations and listen for responses. Distance between points will depend upon terrain and broadcast system , which, respectively, affect the distance owls and the broadcasted vocalizations can be heard. If the broadcast system and owl response calls, can be heard up to 200 m. then the observer should stop every 200 m. The distance between observation points can be shortened if necessary. If a more thorough estimate of abundance is desired, the observer should walk multiple parallel lines (or many observers walk parallel lines concurrently) to cover a greater proportion of the area. The lines should be spaced according to the same distance of audio coverage. At each observation point, the observer should scan for any owls with binoculars for the first two minutes, after which a territorial and/or alarm calls should be played for one minute. Finally, there should be two additional minutes of scanning after broadcasting. Scanning and broadcasting should be done in a 360° arc. All owls detected during this five-minute observation period should be recorded. Data recorded should include: date and time of survey, weather conditions, dominant vegetation, burrow aspect, survey location (including GPS coordinates), number of owls observed, sex and age classes of owls (if determinable), and presence of prairie dogs and other burrowing animals.

METHOD 2: Roadside Point-count Surveys

Without Audio Calls
Routes should be established along roads in the project site. Observers should stop the vehicle and pull off the side of the road at 0.5-mile (0.8 km) intervals (if project site is large enough). If visibility is impaired at a point, observers should continue until the next immediate suitable surveying spot is reached. All surveyors should exit the vehicle at each point and scan with binoculars in a 360° arc for a total of five minutes. All owls detected during this five-minute observation period should be recorded. Data recorded should include: date and time of survey, weather conditions, dominant vegetation, burrow aspect, survey location (including GPS coordinates), number of owls observed, sex and age classes of owls (if determinable), and presence of prairie dogs and other burrowing animals.

With Audio Calls
Routes should be established along roads in the project site. Observers should stop the vehicle and pull off the side of the road at 0.5-mile (0.8km) intervals (if project site is large enough). If visibility is impaired at a point, observers should continue until the next immediate suitable surveying spot is reached. Observers should exit the vehicle at each point and scan for the first two minutes. Afterwards, owl calls (territorial and/or alarm) should be played for one minute, followed by two additional minutes of scanning. Scanning should be done with binoculars in a 360° arc. All owls detected during this five-minute observation should be recorded. Data recorded should include: date and time of survey, weather conditions, dominant vegetation, burrow aspect, survey location (including GPS coordinates), number of owls observed, sex and age classes of owls (if determinable), and presence of prairie dogs and other burrowing animals.

Step 3. Determine and Implement Appropriate Mitigation

The objectives of these mitigation guidelines are to minimize the negative impacts to burrowing owls at a project site and preserve habitat that will support burrowing owl populations into the future. The mitigation process begins with the survey protocol to document the presence of burrowing owl habitat, and to determine if burrowing owls use the project site and the surrounding buffer zone. Occupied burrows should be determined based on survey information. If more than 30 days elapse between the initial survey and construction activities, project sites and buffer zones with suitable habitat should be resurveyed to ensure no burrowing owls have occupied these areas in the interim period. Resurveying the project site should be conducted no more than 30 days prior to initial project initiation. If ground disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site should be resurveyed.
If burrowing owls are present on a project site, the following mitigation measures should be followed to minimize negative impacts to burrowing owls, nest burrows and burrowing owl habitat.

According to the California Burrowing Owl Consortium there are three definitions of negative impacts:

- Disturbance or harassment within 50 m of occupied burrows.
- Destruction of burrows and burrow entrances. Burrows include structures such as culverts, concrete slabs and debris piles that provide shelter to burrowing owls.
- Destruction and/or degradation of foraging habitat adjacent to occupied burrows (within 100 m).

If burrowing owls are found at a project site, measures to avoid or mitigate negative impacts should follow one of three general approaches. These approaches are listed below:

1. Design and implement project activities to spatially avoid negative impacts and disturbance to burrowing owls and their habitat.

    - No disturbance should occur within 50 m of occupied burrows during the non-breeding season (September through February) or within 75 m during the breeding season (March through August). Avoidance also requires that a minimum of 6.5 acres of foraging habitat be maintained in undisturbed habitat condition for each pair or unpaired burrowing owl.
    - No disturbance or destruction of any prairie dogs or other burrowing animals or their burrows, should occur within the owl avoidance areas.

2. Design and implement project activities to seasonally avoid negative impacts and disturbances to burrowing owls.

    - Occupied burrows should not be disturbed during the nesting period, from March 1st through August 1st.
    - No disturbance or destruction of any prairie dogs or other burrowing animals or their burrows, should occur within the owl avoidance areas.
    - When destruction of burrows is unavoidable, burrow destruction or ground disturbing activities should only occur during the season when migratory owls have left the breeding site. The unoccupied season can be expected to begin in September or October and end in February or March. However, burrowing owl occupancy always must be confirmed by survey data, regardless of season. Immediately prior to burrow destruction a video probe should be used to confirm that the burrow is unoccupied.
    - For any occupied burrows that are destroyed outside of the nesting season, any remaining, undestroyed, burrows should be enhanced (enlarged or cleared of debris) or new burrows should be created (by installing artificial burrows) at a ratio of 2:1 on the protected lands site. A minimum of 6.5 acres of foraging habitat should be maintained in an undisturbed habitat condition for each pair or unpaired resident bird.
    - To ensure compliance with the federal Migratory Bird Treaty Act and state laws and regulations, the U.S. Fish and Wildlife Service and New Mexico Department of Game and Fish must be contacted to confirm that any construction activities resulting in destruction of burrows will not result in a taking of burrowing owls and, thus, violation of federal and state law.

3. Relocate burrowing owls that will be negatively impacted by project activities to protected areas of potential burrowing owl habitat.

    - If owls must be moved away from the disturbance area, passive relocation techniques should be used rather than trapping. At least one or more weeks will be necessary to accomplish this and to allow the owls to acclimate to alternate burrows. Passive relocation can be accomplished by use of one-way doors. Owls should be excluded from burrows in the immediate negatively impacted zone and within a 50-m buffer zone by installing one-way doors in burrow entrances. One-way doors should be left in place for approximately 48 hours to ensure that owls have left burrows before excavation. Prior to burrow destruction a video probe should be used to confirm that the burrow is unoccupied. If a video probe is not available burrows should be excavated with hand tools to ensure that the burrows are unoccupied. Two natural or artificial burrows should be provided for each burrow in the project area that will be rendered biologically unsuitable. Passive relocation should only be used during the non-breeding season,. This method should not be used once a pair of owls is at a burrow unless it is determined that the female does not exhibit a brood patch.
    - If removal or relocation is necessary, trapped burrowing owls should be released in a new location with suitable habitat in a soft release cage. Soft release involves placing owls in a cage with an artificial burrow and fed mice daily for three weeks. After three weeks one side of the cage is removed. More information on this technique is available from NMBOWG.
    - A minimum of 6.5 acres of foraging habitat should be maintained in an undisturbed habitat condition for each pair or unpaired resident bird. No disturbance or destruction of any prairie dogs or other burrowing animals or their burrows, should occur within the owl avoidance areas.
    - To ensure compliance with the federal Migratory Bird Treaty Act and state laws and regulations, the U.S. Fish and Wildlife Service (505-248-7882) and New Mexico Department of Game and Fish (505-476-8101) must be contacted and federal and state permits must be obtained for handling of owls.

Links

New Mexico Burrowing Owl Working Group
http://www.hawksaloft.org/BUOW/BUOW.htm

Use of Artificial Burrows by Burrowing Owls at the HAMMER Facility on the U.S. Dept. of Energy Hanford Site
http://www.pnl.gov/main/publications/external/technical_reports/PNNL-15414.pdf

How to Install Artificial Nesting Burrows for Burrowing Owls
http://www.usga.org/turf/articles/environment/general/Burrowing-Owl-Brochure.pdf

Artificial Burrowing Owl Burrow Design
http://www2.ucsc.edu/scpbrg/artifici.htm

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APPENDIX F

RECOMMENDED PROTOCOL FOR SURVEYING FOR GRAY VIREOS IN NEW MEXICO

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Appendix 2. Recommended Protocol for Surveying for Gray Vireos in New Mexico

Adapted From: DeLong, J. P. and Williams, S. O., III. 2006. Status Report and Biological Review of the Gray Vireo in New Mexico. New Mexico Department of Game and Fish, Santa Fe, New Mexico.

HABITATS TO SURVEY

The Gray Vireo (*Vireo vicinior*) uses three main types of habitats in New Mexico. In the northern part of the State and on the Colorado Plateau, the species uses piñon (*Pinus* spp.)-Utah juniper (*Juniperus osteosperma*) stands 5800–7200 ft in elevation. In the central and western parts of the State, Gray Vireos typically use oneseed juniper (*J. monosperma*) savannas 5500–7000 ft in elevation. In the southern and southeastern parts of the State, the species uses mixed juniper-oak (*Quercus* spp.) woodlands and desert riparian communities 4300–6600 ft in elevation. Any project site that falls into these habitat types and elevations should be surveyed for Gray Vireos prior to conducting project or management activities.

WHEN TO SURVEY

The species arrives on breeding areas in New Mexico in late April in the south and early May in the north. Surveys can begin early May in the south and central parts of the state, and by mid-May in the north. Surveys can be conducted through July, but the most reliable period is May and June. Some pairs can be hard to detect later in the breeding season because they have failed in their nesting attempts and abandoned their territories by July (DeLong and Cox 2005).

TIME OF DAY

Gray Vireos can sing all day, but, during the hottest parts of the breeding season, they can be considerably quieter after noon. Thus, the best time to survey for this species is between dawn and noon.

HOW MANY TIMES TO SURVEY

Ideally, one set of surveys should be conducted during May. If vireos are found, then the surveys can be considered complete. However, if no Gray Vireos are detected, then a second set of surveys should be conducted in mid- to late June[1]. This recommendation derives from our observation that, in dry years, Gray Vireos can delay nesting and be fairly difficult to detect. A second set of surveys increases the chances that a population would be detected if surveys were conducted during a time when vireos were not particularly vocal.

SURVEY METHODS

Tape-playback surveys should be conducted. Purely listening surveys can allow detection of Gray Vireos, but tape-playback surveys can locate as many as twice the number of territories.[2] In addition, although Gray Vireos are known for being vociferous, they can be quiet for considerable periods of time during the day. The quiet periods can be long enough for a passive listener to conclude the species is not present in a spot and move on. In addition, after the arrival and courtship portion of the breeding season, the birds can be less vocal and, therefore, harder to detect without the use of tape-playback methods. Therefore, when clearance-type surveys are required for pre-project activities, tape-playback methods should be used.

The standard song of the Gray Vireo should be played from points spaced 200–300 m apart, depending on habitat quality, topography, and locations of other Gray Vireos. The closest spacing of Gray Vireo territories (territory center to territory center) in New Mexico is about 200–300 m, suggesting that point-spacing of 200–300 m will allow detection of most territories. In addition, Gray Vireos can respond to the tape-playback calls from distances of 100 m or more, indicating that broadcast stations can effectively locate birds within about 150 m or so of the station.

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[1] The current recommendation is that at least two additional surveys be completed May – late June.

[2] The question of whether the use of tape-playback methods causes undo disturbance is currently unanswered. There are no studies to demonstrate a negative effect of tape-playback surveys on the Gray Vireo, and the currently available data suggest that sites surveyed without the use of tape-playback experience similar levels of nest success as sites surveyed with tape-playback methods.

Each survey stop should begin with a listening period of 1–2 min, followed by 20–30 sec of broadcast, another 1–2 min of listening, 20–30 sec of broadcast, and end with 1–2 min of listening. Longer listening times after broadcasting can be helpful at times. The direction of broadcasting should rotate 360 degrees during the survey.

DATA COLLECTION

The following information should be recorded for each Gray Vireo survey:

- Site name, county, and distance and direction from nearest town;
- Date;
- Start and stop time;
- Observer's full name;
- Weather (e.g., wind-speed, temperature, cloud cover, precipitation);
- Habitat type;
- Location of each point surveyed whether Gray Vireos were detected or not (Universal Transverse Mercator coordinates or latitude/longitude coordinates of each point should be determined with a Global Positioning System [GPS] unit if possible), along with county and approximate distance to the nearest town;
- Number of Gray Vireos heard or seen;
- Age and sex of individuals seen (e.g., 2 adults with 1 fledgling);
- Exact location of birds seen (preferably using a GPS receiver);
- If exact location cannot be obtained, the distance and direction of the bird from the survey point;
- Presence of Brown-headed Cowbirds (*Molothrus ater*) and cattle at each point; and
- Habitat of survey area, including observations of habitat manipulations (cutting, burning, or development) at each point.

APPENDIX G

SEDIMENT CONTROL PLAN

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Final

Sediment Control Plan
Interim Measures for
Parcel 21 – Solid Waste Management Unit 1

Fort Wingate Depot Activity
McKinley County, New Mexico

February 13, 2015

Contract No. W9128F-13-D-0025
Task Order No. DS01

Prepared for:

US Army Corps of Engineers

US Army Corps of Engineers
Tulsa District
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Tulsa, OK 74128

Prepared by:

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Acronym Page

ASTM	American Society of Testing & Materials
BMPs	Best Management Practices
CESWF	USACE Fort Worth District
CGP	Construction General Permit
EPA	U.S. Environmental Protection Agency
ft	Feet
FWDA	Fort Wingate Depot Activity
gals.	Gallons
hrs.	Hours
in.	Inches
lbs.	Pounds
NMED	New Mexico Environment Department
NOI	Notice of Intent
NRCS	Natural Resources Conservation Service
RUSLE	Revised Universal Soil Loss Equation
SCE	Stabilized Construction Entrance
SCP	Sediment Control Plan
SWMU	Solid Waste Management Unit
SWPPP	Stormwater Pollution Prevention Plan
TNT	2,4,6 Trinitrotoluene
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USLE	Universal Soil Loss Equation
ZAPATA	Zapata Incorporated

1.0 INTRODUCTION

This Sediment Control Plan (SCP), developed by Zapata Incorporated (ZAPATA) for the United States Army Corps of Engineers (USACE), Tulsa District under Contract No. W9128F-13-D-0025, supplements the Storm Water Pollution Prevention Plan (SWPPP) developed for the interim measures at the Fort Wingate Depot Activity (FWDA) Parcel 21 – Solid Waste Management Unit (SWMU) 1 (USACE 2014). This SCP provides information related to temporary and permanent sediment controls initiated for the excavation and site restoration activities. FWDA is located in McKinley County, New Mexico. Information regarding the project location is provided in the SWPPP.

The information contained in this SCP will demonstrate that the conditions and techniques utilized for sediment control during construction and demolition will inhibit discharge of contaminated or non-contaminated sediments as defined by the United States Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP). Specifically, this SCP addresses the requirements set forth in the New Mexico state-specific requirements found in Part 9.4.1.1 of the CGP.

The area seeded or planted will within 3 years provide established vegetation that covers 70 percent or more of the density of vegetation that was present prior to commencing earth-disturbing activities. Non-vegetative controls will be selected, designed, and installed that provide cover for at least 3 years without active maintenance.

A detailed description of planned activities can be found in the *Interim Measures Workplan (IMWP), Parcel 21 – SWMU 1*, dated November 2014 (ZAPATA 2014). Major activities planned to be conducted during this effort include the following:

- Pre-mobilization activities including finalization of site-specific planning documents, utility clearance, filing of stormwater Notice of Intent (NOI), and coordination with FWDA, New Mexico Environment Department (NMED), and the disposal facility;
- Pre-excavation grading to include haul road improvements, lay down area preparation, and protective measures ensuring protection of work area and compliance with SWPPP best management practices (BMPs);
- Potentially explosive soil (>10% 2,4,6 Trinitrotoluene (TNT)) homogenization within the Parcel 21 - SWMU 1 TNT Leaching Beds using heavy equipment;
- Explosives-contaminated soil excavation, stockpiling, and disposal from Parcel 21 - SWMU 1 using heavy equipment;
- Confirmation sampling;
- Backfill, compaction and final grading;
- Remove equipment and storage units;
- Reclamation seeding;

- Remove erosion and sediment control measures; and
- Post-implementation reporting.

2.0 SEDIMENT CONTROLS

Prior to excavation activities, sedimentation controls will be installed so as not to impact areas located down-gradient of the activity area (see **Figure G-1** for pre-construction flow paths). These are part of the BMPs that will be employed during this project. Sediment controls for this project will consist of:

- Silt fencing down-gradient from the construction/excavation areas;
- Straw waddles installed in a small drainage ditch west of the northern leaching bed;
- Stabilized construction entrances for vehicular entrance and exit; and
- A temporary culvert will be placed within a natural channel; surrounded with borrow material to provide a temporary access road to the northern leaching bed.

These sediment controls are illustrated on **Figure G-2**.

2.1 MAINTENANCE OF CONTROLS

All erosion and sediment control measures and other BMPs must be maintained in effective operating condition. If site inspections required by the SWPPP identify BMPs that are not operating effectively, maintenance must be performed as soon as possible and before the next storm event, whenever practicable, to maintain their continued effectiveness.

If existing BMPs need to be modified or if additional BMPs are necessary for any reason, implementation must be completed before the next storm event whenever practicable. If implementation before the next storm event is impractical, the situation must be documented and alternative BMPs must be implemented as soon as possible.

2.2 TYPES OF CONTROLS

The following sediment and erosion controls will be used on this project. The locations of the planned sediment controls are illustrated in **Figure G-2**.

2.2.1 Silt Fence

A silt fence consists of geotextile fabric supported by backing stretched between posts, with the lower edge securely embedded in soil downstream of disturbed areas. Silt fencing intercepts runoff in the form of sheet flow and provides filtration, sedimentation, and velocity reduction. Silt fences are used as perimeter control downstream of disturbed areas, and for non-concentrated sheet-flow conditions. On this project, silt fencing will be installed along the northeastern margin of both excavation areas (pre- and post- 1962 leaching beds), down-gradient of the excavation zones. Silt fencing will be more extensive along the northeastern boundary of the post-1962 leaching bed, which is not bounded by an adjacent road. Previous contractors have noted a high rate of UV degradation of silt fence at other FWDA project locations.

Therefore, maintenance requirements maybe more extensive for lower end silt fence products, if used. Therefore, higher grade materials will be planned for use; which will help ensure compliance with the GGP at all times. **Figures G-2 and G-4** show the location and installation instructions, respectively, for the silt fence.

2.2.2 Stabilized Construction Entrance/Exit

A stabilized construction entrance and exit (or track outs) will be used at both entrance and exit locations to the two TNT Leaching Beds to remove excess soil from vehicle tires as they enter and leave the paved surface. In addition, several stabilized construction entrances (SCE) either already exist (i.e., intersection of Arterial Road and Arterial Road No. 4) or will also be positioned along key intersections where trucks enter/exit paved surfaces between Parcel 21 and the FWDA borrow sources. **Figures 5 and 6** of the SWPPP identify locations of these SCE along the haul/access routes.

An SCE consists of a pad of crushed stone, recycled concrete, or other rock-like material on top of a geo-textile filter cloth. The SCE will have minimum dimensions of 50 feet long and 25 feet wide. The SCE will be graded with stone to a depth of 6 inches and compacted. Once compaction is completed, a geo-textile fabric with the following physical properties will be placed within the SCE:

- Grab Tensile strength – 220 pounds (lbs.) (American Society of Testing & Materials (ASTM) D1682)
- Elongation Failure – 60 % (ASTM D1682)
- Mullen Burst Strength – 430 lbs. (ASTM D3768)
- Puncture Strength - 125 lbs. (ASTMD751 modified)
- Equivalent Opening – Size 40-80 (US Standard Sieve – CW-02215)

After placement of the geotextile fabric, crushed stone, 2 to 4 inches in diameter, will be spread on the fabric even with the site grade. Construction details are illustrated in Figure 2-3. Additional stone will be placed in the SCE throughout the duration of the project as needed. Any pre-existing SCE will also be maintained.

Based on our site planning visit, a portion of the proposed temporary access road for the post-1962 (northern diamond-shaped) will cross an area that has the potential for channelized flow. This depression is a relatively flat channel and filled with vegetation. This channelized area may provide stormwater flow during periods of heavy precipitation; with overall flow to the northeast along the Post 1962 Leaching Bed's eastern berm; dissipating over a lower relief area just north of the leaching bed. To account for any runoff that could occur at this location, a culvert will be placed in the channel. Borrow material will be filled in around the culvert and to bring the elevation of the depression with the level of the temporary access road. After backfill operations are complete, the depression will be restored to its original condition and excavated material will be placed in the leaching beds. The culverts will be disposed of as C&D waste.

2.2.3 Constructed Stormwater Conveyance Channels

Site excavation activities will only occur within the former leaching beds and former settling tank area of SWMU 1. Surface water runoff for both the pre and post TNT leaching beds and settling tank area has an overall flow from south to north; with both leaching beds divided by Arterial Roan No. 4. Currently, construction of temporary Stormwater Conveyance Channels is not planned at this location. ZAPATA will monitor and continually evaluate this need and will install if soil conditions warrant.

Although we will not have any constructed stormwater conveyance systems, measures will be implemented to minimize possible sediment pollution in the existing stormwater conveyance (drainage ditch) west of the Post 1962 Leaching Bed (discussed in the following section).

2.2.4 Straw Waddles (Sediment Tubes)

Straw waddles (or sediment tubes) will be placed in the drainage ditch just downgradient of the culvert along Arterial Road No. 4 to help reduce the effects of soil erosion by energy dissipation and retaining sediment; which could occur in this normally dry stormwater conveyance during heavy precipitation events. Proper site preparation is essential prior to installation to ensure straw waddles are in complete contact with the underlying soil or surface. This will be accomplished by removing all rocks, clods, vegetation or other obstructions so the installed straw waddles have direct contact with the underlying surface. Straw waddles will be installed by laying them flat on the ground and constructing a small trench to a depth that is 20% of the waddle diameter. Straw waddles will be laid in the trench and compacted along the upstream straw waddle soil interface (straw waddles will not be completely buried during installation). Straw waddles should be installed so no gaps exist between the soil and bottom of the straw waddle. The ends of the adjacent straw waddles will be lapped a minimum of 6-inches to prevent flow and sediment from passing through the field joint. Straw waddles will be positioned in the ditch perpendicular to the water flow and extended up the sides slopes a minimum of 1-foot above anticipated flow depth. The straw waddles will be spaced according to the following chart:

Straw Waddle Spacing Chart	
Slope	**Maximum Straw Waddle Spacing**
Less than 2%	150-feet
2%	100-feet
3%	75-feet
4%	50-feet
5%	40-feet
6%	30-feet
Greater than 6%	25-feet

Based on our preliminary survey, we expect slopes within this stormwater conveyance to be less than 2%; thus straw waddles will be spaced 150 feet apart. The chart above will be referenced if site conditions change. **Figure G-2** indicates proposed locations for the straw waddles within this drainage feature.

Straw waddles will be installed using wooden stakes (2-inch x 2-inch or steel posts [standard "U" or "T" sections with a minimum weight of 1.25 pounds per foot] a minimum of 48-inches in length placed on 2-foot centers. The stakes will be intertwined with the outer mesh on the downstream side, and driven in the ground to a minimum depth of 24-inches; leaving less than 12-inches of stake above the exposed straw waddle. An acceptable alternative to the installation above is driving stakes on 2-foot centers on each side of the straw waddle and connecting them with natural fiber twine or steel wire to inhibit the non-weighted straw waddle from moving vertically. Straw waddles can also be secured by installing the stakes on 2-foot centers in a crossing manner, ensuring direct soil contact at all times. At the completion of the project and prior to final stabilization, all trenches, depressions and other ground disturbances caused by the removal of the straw waddles will be backfilled.

3.0 SEDIMENT MODELING

In support of sediment control decisions presented in the previous section, site conditions were modeled to determine applicable BMPs. This section presents the results of the modeling effort.

3.1 REVISED UNIVERSAL SOIL LOSS EQUATION MODEL

The Revised Universal Soil Loss Equation (RUSLE) Model, version 1.06c is a windows-based program that uses the Universal Soil Loss Equation (USLE) and information databases to estimate the quantity of erosion (sheet and rill) caused by water runoff. The original soil erosion model (USLE) was empirically derived from more than 10,000 plot-years of basic runoff and soil-loss data contributed from 49 locations in the United States. USLE was designated to provide a convenient tool for soil conservationists and can be used to any geographic region with modified factors. Additional research and information led to a revision of USLE which provides more accurate estimation of soil loss, i.e. the RUSLE (Renard., et al. 1997).

RUSLE is used by agencies around the world to assess and inventory erosion to assist public policy development. Government agencies use RUSLE as regulatory and conservation planning tools. Private consultants use RUSLE to select erosion control plans to ensure cost effective, environmental protection. RULSE is **land use independent** and can be used on cropland, disturbed forestland, rangeland, construction sites, mined land, reclaimed land, military training grounds, landfills, waste disposal sites, and other lands where rainfall and its associated overland flow cause soil erosion.

Many variables and interactions influence sheet and rill erosion. The USLE groups these variables into six major erosion factors, the product of which estimates the amount of soil loss.

The USLE uses the following equation and procedures to estimate soil erosion (Grigor and Davis, 1995):

$$A = R * K * LS * C * P$$

Where:

A: Computed spatial average soil loss and temporal average soil loss per unit of area. Usually, A is expressed in tons/acre/year (other units can also be used).

R: Rainfall-runoff erosivity factor.

K: Soil erodibility factor, i.e. the soil loss rate per erosion index unit for a specified soil as measured on a standard plot which is defined as a 72.6-ft (22.1 m) length of uniform 9% slope in continuous clean-tilled fallow.

L: Slope length factor, i.e. the ratio of soil loss from the field slope length to soil loss from a 72.6-ft length under identical conditions.

S: Slope steepness factor, i.e. the ratio of soil loss from the field slope gradient to soil loss from a 9% slope under otherwise identical conditions.

C: Cover-management factor, i.e. the ratio of soil loss from an area with specified cover and management to soil loss from an identical area in tilled continuous fallow.

P: Support practice factor, i.e. the ratio of soil loss with a support practice such as contouring, stripcropping, or terracing to soil loss with straight-row farming up and down the slope. The RUSLE program was developed to estimate the soil losses due to agricultural activities; however, the model can also be used to estimate the soil loss from construction activities.

3.2 MODEL INPUT VARIABLES

R Value – The R value relates rainfall to runoff erosivity. Studies have shown that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of the total storm kinetic energy times the maximum 30-minute intensity. R is the average annual sum of this kinetic energy 30-minute intensity for storm events during a rainfall record of at least 22 years. The R value used in the RUSLE model was 15, as obtained from an isoerodent map, RUSLE R – Factor Values for New Mexico, produced by the National Resource Conservation Service (NRCS) in New Mexico and published on the United States Department of Agriculture (USDA) website.

K Value – The K value represents the susceptibility of soil or surface material to erosion, transportability of the sediment, and the amount and rate of runoff, given a particular rainfall input, as measured under a standard condition. The K value used for the Parcel 21 site was estimated using the Soil Erodibility Nomograph, Natural Resources Conservation Service, Aquima and Haiwaiku Official Soil Series Descriptions (OSD) sheets. The estimate for the

scenario of approximately 0.441 was based on 65% silt and very fine sand, 27% clay, 1% organic matter, and slow to moderate permeability.

LS Value – The LS value represents the effect of topography on erosion. It combines the effects of hillslope-length factor, L, and the hillslope-gradient factor, S. Generally, as the hillslope gradient increases, the soil loss increases, and as the hillslope length increases, the total soil loss and soil loss per unit area increases due to the progressive accumulation of runoff in the downslope direction. The LS value can also vary according to Land Type. For the preconstruction and stabilization simulations, Rangeland was used. Disturbed Land was used for the Land Type for a more conservative simulation during the construction phase. For the construction simulation, the affected area as well as the slope length was lessened to account the excavation areas that would intercept the overland flow.

C Value – The cover-management factor incorporates the effects of vegetation, the management of the vegetation cover, and the erosion control practices on soil loss. The C value represents the effect of plants, soil covers, soil biomass (roots and other residue), and soil-disturbing activities in specific climatic zones. There is no permanent soil cover. Soil disturbing activities were estimated as tilled and left to fallow. For all phases, a C value of 1.0 was used as a conservative estimate.

P Value – The P value accounts for the control practices that reduce the erosion potential of runoff and its influence on drainage patterns, runoff concentration, runoff velocity, and hydraulic forces exerted by the runoff on soil. P is used in the RUSLE only for row cropped land. In all other land uses, the P value is always 1.00. For the latter two simulations, the values were lessened due to the silt fencing installation as well as contouring improvements after stabilization.

Fields – A total of three separate fields were used for the model input, identified as follows:

- **Field Number 1 (3.08 acres):** Post-1962 Square Shaped Leaching Bed (North)
- **Field Number 2 (0.80 acres):** Pre-1962 Triangle Shaped Leaching Bed (South)
- **Field Number 3 (0.07 acres):** Combined excavations in Former Settling Tank Area

3.3 LIMITATIONS TO MODEL

Since the RUSLE was developed for use in the eastern United States, the model works best where rainfall occurs regularly and is greater than 20 inches per year. It is most applicable to medium textured soils for cropland or at construction sites. Slope lengths should be between 50 and 300 feet.

The accuracy of using RUSLE generally results in ±25% for soil loss values greater than approximately 4 tons/acre/year and within ±50% for an average soil loss between 0.5 and 4 tons/acre/year. The uncertainty of the soil loss calculations increases rapidly for soil loss values less than 1 ton/acre/year, and can be as much as ±500% for soil losses of 0.1 tons/acre/year.

3.4 SOIL LOSS

Table G-1 below presents a summary of the output calculations from the RUSLE model. Land type was varied to allow for the effects of ground disturbance.

TABLE G-1: SEDIMENT MODEL CALCULATION RECORD

RUSLE Erosion Calculation Record
FWDA Parcel 21-SWMU 1

Simulation 1: Preconstruction Land Type: Range Land (6)

Field (Num)	Size (ac)	Rainfall R Value (factor)	Soil K Value (factor)	Slope (%)	Length (ft)	Length-Slope LS (factor)	Cover Mgmt C Value (factor)	Support Practices P Value (factor)	Soil Loss A (t/ac/yr)	Tons by Field (t/yr)
1	3.08	15	0.441	1%	400	0.154	1	1	1.02	3.14
2	0.802	15	0.441	0.3%	150	0.0634	1	1	0.42	0.42
3	0.07	15	0.441	0.7%	150	0.107	1	1	0.71	0.71

Simulation 2: During Construction Land Type: Disturbed Land (9)

Field (Num)	Size (ac)	Rainfall R Value (factor)	Soil K Value (factor)	Slope (%)	Length (ft)	Length-Slope LS (factor)	Cover Mgmt C Value (factor)	Support Practices P Value (factor)	Soil Loss A (t/ac/yr)	Tons by Field (t/yr)
1	3.08	15	0.441	1%	200	0.161	1	0.5	0.53	1.64
2	0.802	15	0.441	0.3%	150	0.065	1	0.5	0.21	0.21
3	0.07	15	0.441	0.7%	20	0.091	1	0.5	0.30	0.30

Simulation 3: After Stabilization Land Type: Range Land (6)

Field (Num)	Size (ac)	Rainfall R Value (factor)	Soil K Value (factor)	Slope (%)	Length (ft)	Length-Slope LS (factor)	Cover Mgmt C Value (factor)	Support Practices P Value (factor)	Soil Loss A (t/ac/yr)	Tons by Field (t/yr)
1	3.08	15	0.441	1%	400	0.154	1	0.5	0.51	1.57
2	0.802	15	0.441	0.3%	150	0.0634	1	0.5	0.21	0.21
3	0.07	15	0.441	0.7%	150	0.109	1	0.5	0.36	0.36

Preconstruction soil loss for the entire site: **4.26 t/yr**
Soil loss during construction for entire site: **2.16 t/yr**
Soil loss after stabilization: **2.14 t/yr**

3.5 RUSLE RESULTS AND CONCLUSIONS

The results indicate that there is a significant reduction in soil loss through the effect of silt fencing, even with the conservative use of Land Type during construction. Reseeding during stabilization further reduces soil loss.

4.0 REFERENCES

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Institute of Water Research, Michigan State University. 2001. *Web-Based GIS Application for Soil Erosion Prediction.* Proceedings of an International Symposium - Soil Erosion Research for the 21st Century. Honolulu, HI. Jan. 3-5, 2001. Available at http://www.iwr.msu.edu/rusle/papers/rusle.htm

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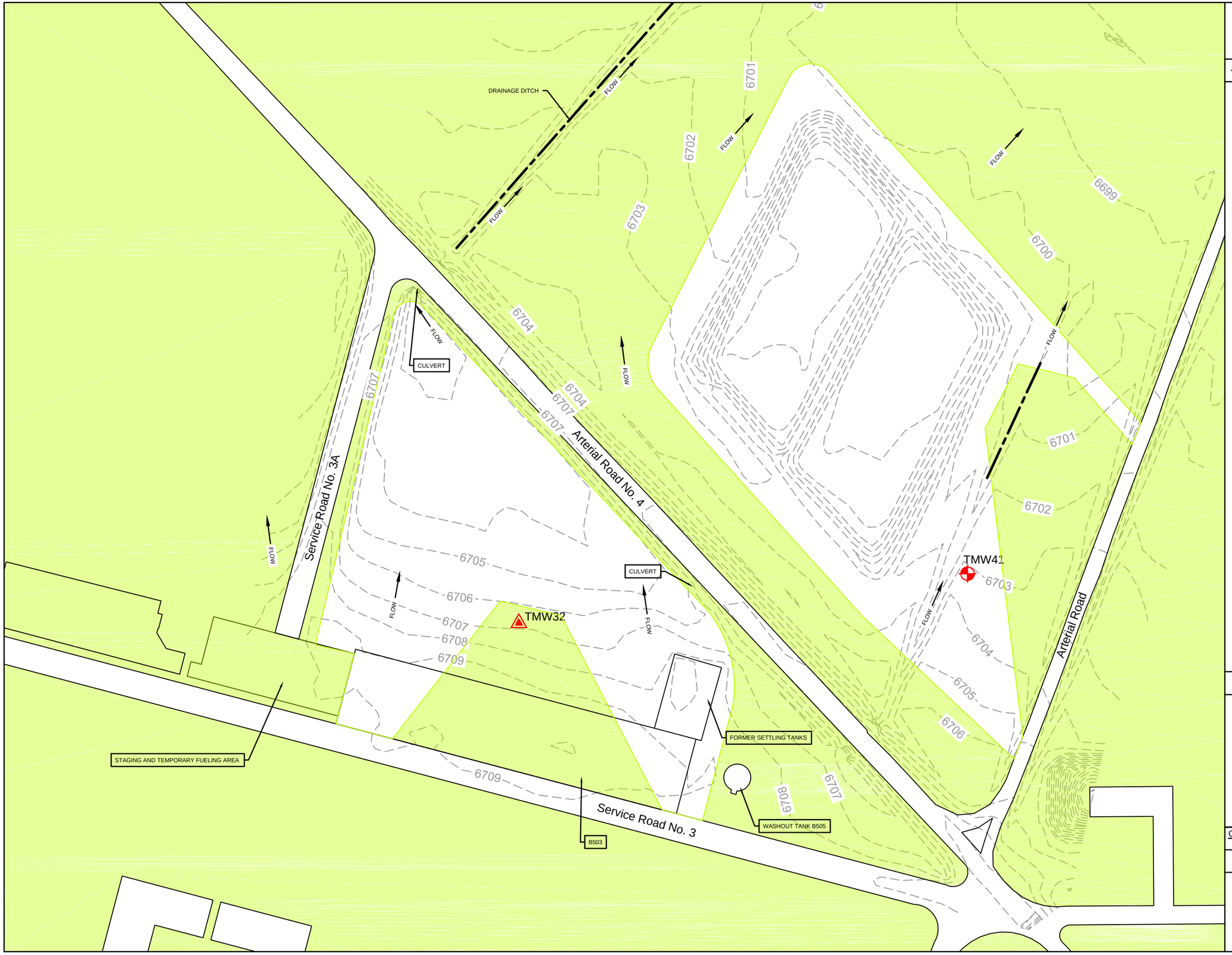
Baseline Topography
Parcel 21 - SWMU 1
Fort Wingate, NM

Project Number	Date	Figure
R20179	November 2014	G-1



KEY

- Alluvial Monitoring Well Proposed for Abandonment
- Bedrock Monitoring Well Proposed for Abandonment
- 6700 Existing Topographic Contour (1ft)
- 6700 Proposed Topographic Contour (1ft)
- Drainage Ditch
- Natural Buffer Boundary Consisting of Native Grasses and Scrub Brush
- Surface Water Flow Direction

GRAPHIC SCALE
1" = 100'

0 50' 100' 200'

Source(s)
ZAPATA, USACE

Projection
NAD 1983 State Plane New Mexico FIPS 3003 Feet
Note: Main Data Frame Rotated to True North

Note(s)
Engineering scale may only be accurate on a map size of 11 x 17

Magentic Declination date: 06/16/14
Magnetic Declination Shifting by 0° 7' W per year

Checked By	Engineering Scale	Drawn By
RSS	1" = 100'	JRM

US Army Corps of Engineers

Excavation Plan with BMPs
Parcel 21 - SWMU 1
Fort Wingate, NM

Project Number	Date	Figure
R20179	November 2014	G-2

STRAW WADDLE EVERY 150' ALONG ARROYO/DRAINAGE DITCH

DRAINAGE DITCH

FLOW

SF

6701

6702

6703

6704

6705

6706

6707

6708

6709

6699

6700

-10'

-1.0'

-3.5'

-7.5'

-3.0'

Arterial Road No. 4

Service Road No. 3A

Service Road No. 3

Arterial Road

TMW32

TMW41

TEMPORARY CULVERT UNDER ACCESS ROAD. FILL ROAD AS REQUIRED TO GIVE PROPER CLEARANCE OVER PIPE

ENTER/TRACKOUT

TEMPORARY ACCESS ROAD

EXIT/TRACKOUT

SILT FENCE OUTLET

FORMER SETTLING TANKS

WASHOUT TANK B505

B503

STAGING AND TEMPORARY FUELING AREA

EXISTING STABILIZED CONSTRUCTION ENTRANCE

KEY

- Alluvial Monitoring Well Proposed for Abandonment
- Bedrock Monitoring Well Proposed for Abandonment
- 6700 Existing Topographic Contour (1ft)
- 6700 Proposed Topographic Contour (1ft)
- Drainage Ditch
- Temporary Access Road
- Surface Water Flow Direction
- SF Silt Fence
- Straw Waddle
- -1.0' Excavation Depth

Notes:

1. Excavation Plan assumes a maximum excavation depth of 10' is required in certain areas.
2. In areas of potential concentrated flow a silt fence outlet shall be installed to reduce blowouts.
3. Areas excavated to a depth of ≥ 4' or greater will use a maximum slope of 1.5:1.

GRAPHIC SCALE
1" = 100'

0 50' 100' 200'

Source(s)
ZAPATA, USACE

Projection
NAD 1983 State Plane New Mexico FIPS 3003 Feet
Note: Main Data Frame Rotated to True North

Note(s)
Engineering scale may only be accurate on a map size of 11 x 17

Magentic Declination date: 06/16/14
Magnetic Declination Shifting by 0° 7' W per year

Checked By	Engineering Scale	Drawn By
RSS	1" = 100'	JRM

US Army Corps of Engineers

Backfill and Final Grading Plan
Parcel 21 - SWMU 1
Fort Wingate, NM

Project Number	Date	Figure
R20179	November 2014	G-3

DRAINAGE DITCH

EXCAVATED AREAS TO BE FILLED TO A HEIGHT OF 1' ABOVE EXISTING GRADE AND SLOPED FOR POSITIVE DRAINAGE. SIDE SLOPES NOT TO EXCEED 2:1 (TYPICAL OF 3 AREAS)

FORMER SETTLING TANKS

WASHOUT TANK B505

B503

TMW32

TMW41

Service Road No. 3A

Service Road No. 4

Arterial Road No. 4

Service Road No. 3

Arterial Road

FLOW

6699 6700 6701 6702 6703 6704 6705 6706 6707 6708 6709

KEY

- Alluvial Monitoring Well Proposed for Abandonment
- Bedrock Monitoring Well Proposed for Abandonment
- 6700 Existing Topographic Contour (1ft)
- 6700 Proposed Topographic Contour (1ft)
- Arroyo/Drainage Ditch
- Surface Water Flow Direction

GRAPHIC SCALE
1" = 100'
0 50' 100' 200'

Source(s)
ZAPATA, USACE

Projection
NAD 1983 State Plane New Mexico FIPS 3003 Feet
Note: Main Data Frame Rotated to True North

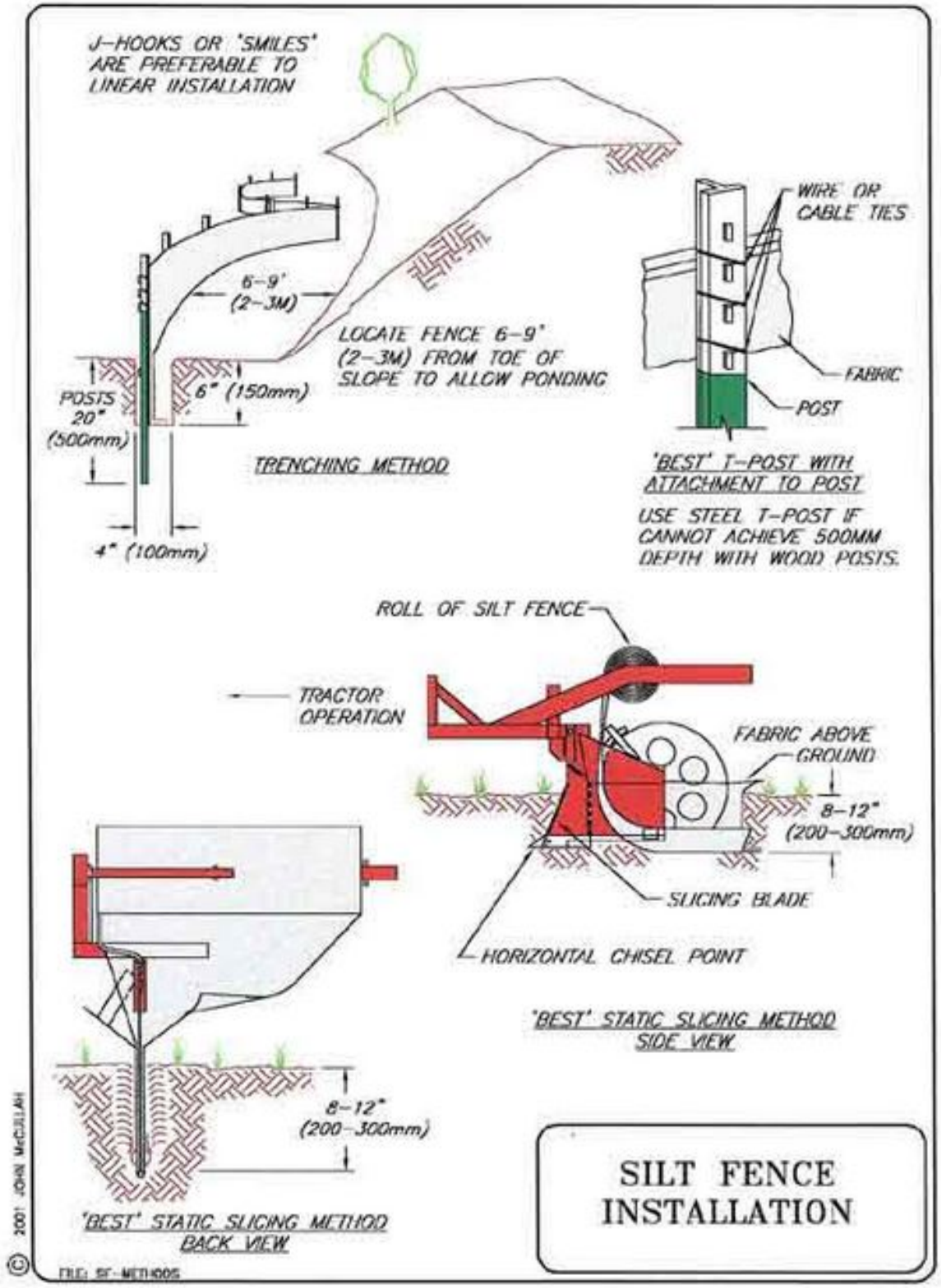
Note(s)
Engineering scale may only be accurate on a map size of 11 x 17

Magentic Declination date: 06/16/14
Magnetic Declination Shifting by 0° 7' W per year

Checked By	Engineering Scale	Drawn By
RSS	1" = 100'	JRM

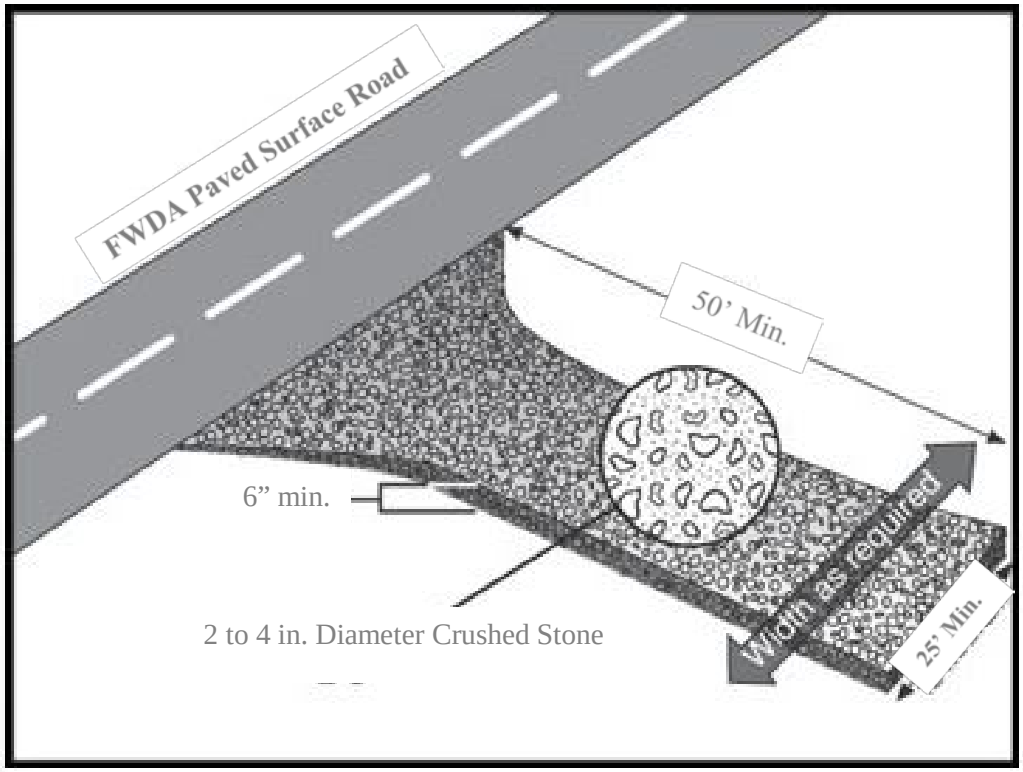
US Army Corps of Engineers

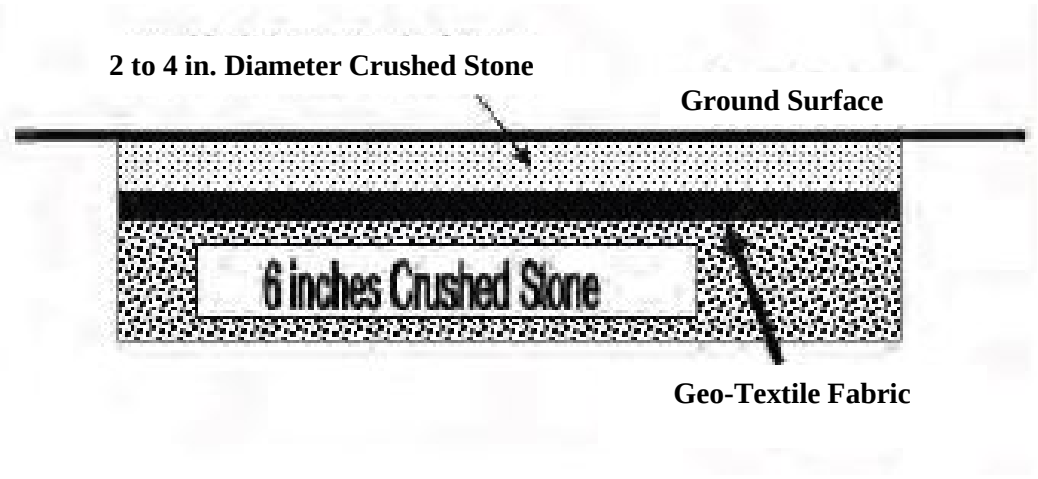
Figure G-4: Silt Fence Installation Details



Source: http://www.salixaec.com/images/SFInstall.jpg

Figure G-5: Stabilized Construction Entrance Installation Details





APPENDIX H

GRADING AND STABILIZATION ACTIVITIES LOG

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GRADING AND STABILIZATION ACTIVITIES LOG

Project Name: _____

SWPPP Contact: _____

Date Grading Activity Initiated	Description of Grading Activity	Description of Stabilization Measure and Location	Date Grading Activity Ceased [Indicate Temporary or Permanent]	Date When Stabilization Measures are Initiated

APPENDIX I

INSPECTION REPORTS

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STORMWATER CONSTRUCTION SITE INSPECTION REPORT

(To be completed at least every 14 calendar days and within 24 hours after 0.25 inches of rain)

General Information			
Project Name:	*Interim Measures for Parcel 21*		
NPDES Tracking No.:		**Location:**	*SWMU 1*
Date of Inspection:		**Start/End Time:**	
Inspector's Name(s):		**Inspector's Title(s):**	
Inspector's Contact Information:			
Inspector's Qualifications:			
Describe Present Phase of Construction:			
Type of Inspection:	☐ Regular (Every 14 Calendar Days) ☐ Post-Storm Event (Within 24 hrs of the End of 0.25-Iinches of Rain		

Weather Information

Has there been a storm even since the last inspection? ☐ Yes ☐ No
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs.) Approximate Amount of Precipitation (in.):

Weather at time of this inspection?
☐ Clear ☐ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds
☐ Other: Temperature Range:

Have any discharges occurred since the last inspection? ☐ Yes ☐ No
If yes, describe:

Are there any discharges at the time of inspection? ☐ Yes ☐ No
If yes, note the following information:

1) Exact time and location:
2) Description of the discharge (color, odor, foam, sheen, etc.):
3) Estimated quantity of discharge:
4) Containment and cleanup procedures:
5) Reason for discharge:
6) Effectiveness of controls:

Site Plan Review – Are the following required items available for regulatory review:

1)	SWPPP	☐ Yes ☐ No
2)	Copy of the General Permit	☐ Yes ☐ No
3)	NOI	☐ Yes ☐ No
4)	Co-permittee agreements or contractor certification statements	☐ Yes ☐ No
5)	Weekly Inspection Forms	☐ Yes ☐ No

Inspection Report Page 1 of 3

STORMWATER CONSTRUCTION SITE INSPECTION REPORT

Site-Specific BMPs				
BMP No.	**BMP Name**	**BMP Installed?**	**BMP Maintenance Required?**	**Corrective Action Needed & Date to be Completed***
1	Silt Fence	☐ Yes ☐ No	☐ Yes ☐ No	
2	Track Out Pad	☐ Yes ☐ No	☐ Yes ☐ No	
3		☐ Yes ☐ No	☐ Yes ☐ No	
4		☐ Yes ☐ No	☐ Yes ☐ No	
5		☐ Yes ☐ No	☐ Yes ☐ No	
6		☐ Yes ☐ No	☐ Yes ☐ No	

BMP No.	BMP Activity	Implemented?	Maintenance Required?	Corrective Action Needed & Date to be Completed*
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☐ Yes ☐ No ☐ Not Applicable	☐ Yes ☐ No	
2	Are cultural resource areas protected with barriers or similar BMPs?	☐ Yes ☐ No ☐ Not Applicable	☐ Yes ☐ No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☐ Yes ☐ No ☐ Not Applicable	☐ Yes ☐ No	
4	Is the construction exit preventing sediment from being tracked into the street?	☐ Yes ☐ No ☐ Not Applicable	☐ Yes ☐ No	
5	Is trash/litter from work areas collected and placed in covered dumpsters?	☐ Yes ☐ No ☐ Not Applicable	☐ Yes ☐ No	
6	Are materials that are potential stormwater contaminants stored inside or under cover?	☐ Yes ☐ No ☐ Not Applicable	☐ Yes ☐ No	
7	Are non-stormwater discharges (e.g., dust control) properly controlled?	☐ Yes ☐ No ☐ Not Applicable	☐ Yes ☐ No	
8	Is a notice posted near the entrance of the construction site? The sign must contain a copy of the NOI, name & # of contact person for scheduling SWPPP viewing time, and location of the SWPPP.	☐ Yes ☐ No ☐ Not Applicable	☐ Yes ☐ No	

- Suggest numbering the structural and non-structural BMPs identified in your SWPPP on the site map and list them above (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.
- Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.

*If you identified a Corrective Action during inspection, It must be determined if a Corrective Action Report is required.

Inspection Report Page 2 of 3

STORMWATER CONSTRUCTION SITE INSPECTION REPORT
(Page 3 of 3)

STORM WATER POLLUTION PREVENTION PLAN UPDATES AND GENERAL COMMENTS

Does the SWPPP need to be modified as a result of the inspection? ☐ Yes ☐ No
Has the SWPPP been modified since the last inspection? ☐ Yes ☐ No
If so, note the date(s): _____

General Comments:

INSPECTOR CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Print name and title:

Signature and Date:

APPENDIX J

CORRECTIVE ACTION REPORT

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Corrective Action Report Form

Purpose
This Corrective Action Report Form is designed to assist you in preparing corrective action reports for EPA's 2012 Construction General Permit (CGP). If you are covered under EPA's 2012 CGP, this form will enable you to create a corrective action report that complies with the minimum reporting requirements of Part 5.4 of the permit.

You are only required to fill out this form if one of the corrective action triggering conditions in Part 5.2.1 or 5.3 occurs on your site. Routine maintenance and repairs are generally not considered to be a corrective action triggering condition. Corrective actions are triggered only for specific, more serious conditions that are identified below in the "Overview of Corrective Action Requirements."

If you are covered under a state CGP, this form may be helpful in developing a report that can be used for that permit; however it will need to be modified to meet the specific requirements of the permit. If your permitting authority requires you to use a specific corrective action report form, you should not use this form.

Notes
While EPA has made every effort to ensure the accuracy of all instructions and guidance contained in the Corrective Action Report Form, the actual obligations of regulated construction activities are determined by the relevant provisions of the permit, not by the form. In the event of a conflict between the Corrective Action Report Form and any corresponding provision of the 2012 CGP, you must abide by the requirements in the permit. EPA welcomes comments on the Corrective Action Report Form at any time and will consider those comments in any future revision of this document. You may contact EPA for CGP-related inquiries at cgp@epa.gov.

Overview of Corrective Action Requirements
Construction operators covered under the 2012 CGP are required to conduct corrective actions and report on progress made in correcting the problem condition(s) in accordance with the following requirements:

Corrective Action Triggering Conditions (Parts 5.2.1 and 5.3)
Corrective action is required whenever any of the following conditions occur at your site:

- A required stormwater control was never installed, was installed incorrectly, or not in accordance with the requirements in Part 2 and/or 3;
- The stormwater controls (e.g., erosion and sediment controls or pollution prevention controls) that have been installed and maintained are not effective enough for the discharge to meet applicable water quality standards or applicable requirements in Part 3.1 of the permit;
- A Part 2.3.1 prohibited discharge has occurred or is occurring; or
- Any corrective actions required by EPA as a result of permit violations found during an inspection carried out under Part 4.2.

Deadlines for Completing Corrective Actions (Part 5.2.1)
You must complete corrective action (e.g., installing and making operational any new or modified control, correcting errors in installation, preventing, mitigating, or cleaning up spills or leaks making repairs) by no later than 7 calendar days from the time of discovery of the condition. If infeasible to complete the installation or repair within 7 calendar days, you must document why it is infeasible and document your schedule for completing the corrective action as soon as practicable.

Deadlines for Documenting Corrective Actions in a Report (Part 5.4)
You are required to complete a corrective action report for each of corrective action you take in accordance with the following deadlines.

- Within 24 hours of discovering the occurrence of a corrective action triggering condition, you must document the following:
  - The condition identified at your site;
  - The nature of the condition identified; and
  - The date and time of the condition identified and how it was identified

- Within 7 calendar days of discovering a triggering condition, you must document the following:
  - Any follow-up actions taken to review the design, installation, and maintenance of stormwater controls, including the dates such actions occurred;
  - A summary of stormwater controls modifications taken or to be taken, including a schedule of activities necessary to implement changes, and the date the modifications are completed or expected to be completed; and
  - Notice of whether SWPPP modifications are required as a result of the condition identified or corrective action.

Instructions for Using This Report Form
This Field Version of the Corrective Action Report Form is intended to be used in the field and filled out by hand. If you will be filling out the Corrective Action Report Form electronically (i.e., you will be typing in your findings), please use the Electronic Version of the Corrective Action Report Form available at www.epa.gov/npdes/stormwater/swppp. The Electronic Version includes text fields with instructions for what to enter.

The following tips for using this form will help you ensure that the minimum permit requirements are met:

- **Review the corrective action requirements.** Before you fill out this corrective action report form, read the CGP's Part 5 corrective action requirements. This will ensure that you have a working understanding of the permit's underlying corrective action requirements.

- **Complete a separate report for each condition that triggers corrective action.** For each triggering condition on your site, you will need to fill out a separate corrective action report form.

- **Complete all required text fields.** Fill out all text fields. Only by filling out all fields will the form be compliant with the requirements of the permit. (Note: Where you do not need the number of rows provided in the corrective action report form, you leave those rows blank. Or, if you need more space to document your findings, you may add an additional sheet.)

- **Sign and certify each corrective action report.** Each corrective action report form must be signed and certified by the permittee to be considered complete. Where your corrective actions are carried out by a contractor or subcontractor, it is recommended that you also have the form signed and certified by the inspector, in addition to the signature and certification required of the permitted operator. The form includes a signature block for both parties.

- **Include the corrective action report form with your SWPPP.** Once your form is complete, make sure to include a copy of the corrective action report form in your SWPPP in accordance with Part 7.2.12.4 of the CGP.

- **Retain copies of all corrective action reports with your records.** You must retain copies of your corrective action reports in your records in accordance with the requirements in Part 5.4.4 of the 2012 CGP. These reports must be retained for at least 3 years from the date your permit coverage expires or is terminated.

Section-by-Section Instructions
You will find specific instructions corresponding to each section of the report form on the reverse side of each page. These instructions were written in order to provide you with more details in terms of what EPA expects to be documented in these reports.

Section A – Initial Report (CGP Part 5.4.1) (Complete this section within 24 hours of discovering the condition that triggered corrective action)					
Name of Project		**CGP Tracking No.**		**Today's Date**	
Date Problem First Discovered		**Time Problem First Discovered**			
Name and Contact Information of Individual Completing this Form					

What site conditions triggered the requirement to conduct corrective action *(check the box that applies)*:

- ☐ A required stormwater control was never installed, was installed incorrectly, or not in accordance with the requirements in Part 2 and/or 3
- ☐ The stormwater controls that have been installed and maintained are not effective enough for the discharge to meet applicable water quality standards or applicable requirements in Part 3.1 of the permit
- ☐ A Part 2.3.1 prohibited discharge has occurred or is occurring
- ☐ EPA requires corrective action as a result of permit violations found during an EPA inspection carried out under Part 4.2

Provide a description of the problem:

Deadline for completing corrective action (*Enter date that is either: (1) no more than 7 calendar days after the date you discovered the problem, or (2) if it is infeasible to complete work within the first 7 days, enter the date that is as soon as practicable following the 7th day)*:

If your estimated date of completion falls after the 7-day deadline, explain (1) why you believe it is infeasible to complete work within 7 days, and (2) why the date you have established for making the new or modified stormwater control operational is the soonest practicable timeframe:

Section B – Corrective Action Progress (CGP Part 5.4.2)

(Complete this section no later than 7 calendar days after discovering the condition that triggered corrective action)

Section B.1 – Why the Problem Occurred

Cause(s) of Problem **(Add an additional sheet if necessary)**	**How This Was Determined and the Date You Determined the Cause**
1.	**1.**
2.	**2.**

Section B.2 – Stormwater Control Modifications to be Implemented to Correct the Problem

List of Stormwater Control Modification(s) Needed to Correct Problem **(Add an additional sheet if necessary)**	**Date of Completion**	**SWPPP Update Necessary?**	**Notes**
1.		☐Yes ☐No If yes, provide date SWPPP modified:	
2.		☐Yes ☐No If yes, provide date SWPPP modified:	

Instructions for Filling out the Initial Report (Section A)

You must complete Section A form within 24 hours of discovering the condition that triggered corrective action.

Name of Project
Enter the name for the project.

CGP Tracking No.
Enter the tracking number that was assigned to your NOI application for permit coverage.

Today's Date
Enter the date you completed this form.

Date/Time Problem First Discovered
Specify the date on which the triggering condition was first discovered. Also specify the time of the discovery.

Name/Contact Information
Provide the individual's name, title, and contact information as directed in the form.

Site Condition That Triggered Corrective Action
Under the CGP, corrective action is required when one of 3 triggering conditions occurs at your site. See CGP Parts 5.2.1 and 5.3. Check the box that corresponds to the condition that triggered this corrective action.

Description of the Site Condition
Provide a summary description of the condition you found that triggered corrective action under CGP Part 5.2.1 and the specific location where it was found. Be as specific as possible about the location; it is recommended that you refer to a precise point on your site map. If you have already provided this explanation in an inspection report, you can refer to that report.

Deadline for Completing Corrective Action
This deadline is fixed in CGP Part 5.2.1. For all projects, the deadline is either: (1) no more than 7 calendar days after the date you discovered the problem, or (2) if it is infeasible to complete work within the first 7 days, as soon as practicable following the 7th day. If your estimated date of completion falls after the 7-day deadline consistent with (2), above, explain (a) why you believe it is infeasible to complete work within 7 days, and (b) why the date you have established for making the new or modified stormwater control operational is the soonest practicable timeframe:

Instructions for Filling Out the Corrective Action Progress Table (Section B)

You must complete Section B form no later than 7 calendar days after discovering the corrective action condition.

Section B.1 – Why the Problem Occurred
After you have had the opportunity to examine the problem more closely, provide details as to what you believe to be the cause of the problem, and specify the follow-up actions you took (along with the dates of such actions) to diagnose the problem. This is consistent with CGP Part 5.4.2.1.

Section B.2 – Stormwater Control Modifications to be Implemented
Provide a list of modifications you plan to make to your stormwater controls to correct the problem and the date you completed such work. Keep in mind that your work must be completed within the timeline specified in Section A for the completion of corrective action work. Also, if a SWPPP modification is necessary consistent with Part 7.4.1.1 in order to reflect changes implemented at your site, indicate the date you modified your SWPPP. Keep in mind that SWPPP changes must be made within 7 days of discovering the problem that triggered this corrective action.

Space is provided for you to include additional notes or observations regarding the change that you implemented at your site to correct the problem.

Section C – Certification and Signature (CGP Part 5.4.3)

Section C.1 – Certification and Signature by Contractor or Subcontractor

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature of Contractor or Subcontractor: _____ **Date:**

Printed Name and Affiliation: _____

Section C.2 – Certification and Signature by Permittee

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature of Permittee or
"Duly Authorized Representative": _____ **Date:**

Printed Name and Affiliation: _____

Instructions for Signature and Certification (Section C)

Each corrective action report must be signed and certified to be considered complete.

Section C.1 – Contractor or Subcontractor Signature and Certification

Where a contractor or subcontractor is relied on to complete this report and the associated corrective action, you should require the individual(s) to sign and certify each report. Note that this does not relieve you of the requirement to sign and certify the report as well.

Section C.2 – Signature and Certification by Permittee

At a minimum, the corrective action report form must be signed by either (1) the person who signed the NOI, or (2) a duly authorized representative of that person. The following requirements apply to scenarios (1) and (2):

If the signatory will be the person who signed the NOI for permit coverage, as a reminder, that person must be one of the following types of individuals:

- *For a corporation*: A responsible corporate officer. For the purpose of this subsection, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- *For a partnership or sole proprietorship*: A general partner or the proprietor, respectively.
- *For a municipality, state, federal, or other public agency*: Either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

If the signatory will be a duly authorized representative, the following requirements must be met:

- The authorization is made in writing by the person who signed the NOI (see above);
- The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
- The signed and dated written authorization is included in the SWPPP. A copy must be submitted to EPA, if requested.

APPENDIX K

TRAINING AND RECORDKEEPING LOGS

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SWPPP Rainfall Records (January - June)										Year:	
January	Rainfall	**February**	Rainfall	**March**	Rainfall	**April**	Rainfall	**May**	Rainfall	**June**	Rainfall
1		**1**		**1**		**1**		**1**		**1**	
2		**2**		**2**		**2**		**2**		**2**	
3		**3**		**3**		**3**		**3**		**3**	
4		**4**		**4**		**4**		**4**		**4**	
5		**5**		**5**		**5**		**5**		**5**	
6		**6**		**6**		**6**		**6**		**6**	
7		**7**		**7**		**7**		**7**		**7**	
8		**8**		**8**		**8**		**8**		**8**	
9		**9**		**9**		**9**		**9**		**9**	
10		**10**		**10**		**10**		**10**		**10**	
11		**11**		**11**		**11**		**11**		**11**	
12		**12**		**12**		**12**		**12**		**12**	
13		**13**		**13**		**13**		**13**		**13**	
14		**14**		**14**		**14**		**14**		**14**	
15		**15**		**15**		**15**		**15**		**15**	
16		**16**		**16**		**16**		**16**		**16**	
17		**17**		**17**		**17**		**17**		**17**	
18		**18**		**18**		**18**		**18**		**18**	
19		**19**		**19**		**19**		**19**		**19**	
20		**20**		**20**		**20**		**20**		**20**	
21		**21**		**21**		**21**		**21**		**21**	
22		**22**		**22**		**22**		**22**		**22**	
23		**23**		**23**		**23**		**23**		**23**	
24		**24**		**24**		**24**		**24**		**24**	
25		**25**		**25**		**25**		**25**		**25**	
26		**26**		**26**		**26**		**26**		**26**	
27		**27**		**27**		**27**		**27**		**27**	
28		**28**		**28**		**28**		**28**		**28**	
29		**29**		**29**		**29**		**29**		**29**	
30				**30**		**30**		**30**		**30**	
31				**31**				**31**			

SWPPP Rainfall Records (July - December)										Year:	
July	Rainfall	**August**	Rainfall	**September**	Rainfall	**October**	Rainfall	**November**	Rainfall	**December**	Rainfall
1		**1**		**1**		**1**		**1**		**1**	
2		**2**		**2**		**2**		**2**		**2**	
3		**3**		**3**		**3**		**3**		**3**	
4		**4**		**4**		**4**		**4**		**4**	
5		**5**		**5**		**5**		**5**		**5**	
6		**6**		**6**		**6**		**6**		**6**	
7		**7**		**7**		**7**		**7**		**7**	
8		**8**		**8**		**8**		**8**		**8**	
9		**9**		**9**		**9**		**9**		**9**	
10		**10**		**10**		**10**		**10**		**10**	
11		**11**		**11**		**11**		**11**		**11**	
12		**12**		**12**		**12**		**12**		**12**	
13		**13**		**13**		**13**		**13**		**13**	
14		**14**		**14**		**14**		**14**		**14**	
15		**15**		**15**		**15**		**15**		**15**	
16		**16**		**16**		**16**		**16**		**16**	
17		**17**		**17**		**17**		**17**		**17**	
18		**18**		**18**		**18**		**18**		**18**	
19		**19**		**19**		**19**		**19**		**19**	
20		**20**		**20**		**20**		**20**		**20**	
21		**21**		**21**		**21**		**21**		**21**	
22		**22**		**22**		**22**		**22**		**22**	
23		**23**		**23**		**23**		**23**		**23**	
24		**24**		**24**		**24**		**24**		**24**	
25		**25**		**25**		**25**		**25**		**25**	
26		**26**		**26**		**26**		**26**		**26**	
27		**27**		**27**		**27**		**27**		**27**	
28		**28**		**28**		**28**		**28**		**28**	
29		**29**		**29**		**29**		**29**		**29**	
30		**30**		**30**		**30**		**30**		**30**	
31		**31**				**31**				**31**	

SWPPP Inspection Log

Name of Construction Site	**Location of Construction Site**		
Fort Wingate Depot Activity – Parcel 21	*Solid Waste Management Unit 1*		
Date of Inspection	**Inspector Name**	**Does Inspection Report require maintenance of installed BMPs?**	
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**

SWPPP Inspection Log (Continued)			
Date of Inspection	**Inspector Name**	**Does Inspection Report require maintenance of installed BMPs?**	
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**
		☐ **Yes**	☐ **No**

SWPPP Contractor & Sub-Contractor Log	
Name of Construction Site	**Location of Construction Site**
Fort Wingate Depot Activity – Parcel 21	*Solid Waste Management Unit 1*
Company/Individual Name	**Work Responsibilities**
1.)	
Start Date:	
Completion Date:	
2.)	
Start Date:	
Completion Date:	
3.)	
Start Date:	
Completion Date:	
4.)	
Start Date:	
Completion Date:	
5.)	
Start Date:	
Completion Date:	
6.)	
Start Date:	
Completion Date:	
7.)	
Start Date:	
Completion Date:	
8.)	
Start Date:	
Completion Date:	
9.)	
Start Date:	
Completion Date:	

SWPPP Modification Log

Name of Construction Site	**Location of Construction Site**
Fort Wingate Depot Activity – Parcel 21	*Solid Waste Management Unit 1*

Type of Modification		**Description of Modification**		**Location of Modification**
☐ **Major** ☐ **Minor**				
Start Date:				
Completion Date:				
Reason for Modifications:			**Approved/Implemented By:**	
Type of Modification		**Description of Modification**		**Location of Modification**
☐ **Major** ☐ **Minor**				
Start Date:				
Completion Date:				
Reason for Modifications:			**Approved/Implemented By:**	
Type of Modification		**Description of Modification**		**Location of Modification**
☐ **Major** ☐ **Minor**				
Start Date:				
Completion Date:				
Reason for Modifications:			**Approved/Implemented By:**	
Type of Modification		**Description of Modification**		**Location of Modification**
☐ **Major** ☐ **Minor**				
Start Date:				
Completion Date:				
Reason for Modifications:			**Approved/Implemented By:**	
Type of Modification		**Description of Modification**		**Location of Modification**
☐ **Major** ☐ **Minor**				
Start Date:				
Completion Date:				
Reason for Modifications:			**Approved/Implemented By:**	

Stormwater Pollution Prevention Training Log

Name of Construction Site	Location of Construction Site
Fort Wingate Depot Activity – Parcel 21	*Solid Waste Management Unit 1*

Instructor's Name(s):

Instructor's Title(s):

Course Location:

Date:

Course Length (hrs):

Stormwater Training Topic: (check as appropriate):

☐ Erosion Control BMPs ☐ Emergency Procedures ☐ Sediment Control BMPs ☐ Good Housekeeping BMPs

☐ Non-Stormwater BMPs ☐ Other:

Specific Training Objective:

Attendee Roster: (attach additional pages as necessary)

No.	Name of Attendee	Company

Print name and title:

Signature and Date:

APPENDIX L

SUBCONTRACTOR CERTIFICATION FORM

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SUBCONTRACTOR CERTIFICATION
STORMWATER POLLUTION PREVENTION PLAN
FORT WINGATE DEPOT ACTIVITY
PARCEL 21 – SWMU 1

Project Number: _____
Project Title: _____
Operator(s): _____

As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the BMPs and practices described in the SWPPP.

This certification is hereby signed in reference to the Fort Wingate Depot Activity Parcel 21 – SWMU 1:

Company: _____
Address: _____
Telephone No.: _____

Type of Construction Service to be Provided:

_____

_____

Signature _____
Title: _____
Date: _____

APPENDIX M

SPILL RESPONSE AND PREVENTION PROCEDURES

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SPILL RESPONSE PROCEDURES

In the event of a spill, the following procedures shall be followed:

Initial Actions

1. Assess the safety hazards and if necessary, contact McKinley County Fire Department.
2. Determine if any personnel have been injured. If so, seek medical attention for injured personnel.
3. Put on the appropriate personal protective equipment for oil spills, including:
    - Gloves
    - Eye goggles
    - Apron (if warranted)

If the Spill is Small (approximately 5 gallons or less)

1. Apply absorbent around and across the spill.
2. Remove the absorbent and the spill with broom and dustpan or shovel.
3. Place the spilled material and absorbent into an approved container.
4. Contact the individuals listed on the Primary Contacts List (see following page). The "Spill Incident Report" located in Appendix D must be completed for all spills.

If the Spill is Large (5 gallons or larger)

1. Apply absorbent around the released material.
2. Contact the following individuals from the Primary Contact List.
    - Pollution Prevention Team members
    - Installation On-Scene Coordinator (IOSC)
    - Any emergency contacts necessary such as fire and police
    - Emergency Spill Response Contractor (Bohunk)
3. Local and State Agencies as well as EPA Region 6 Office (if spill qualifies according to Section 1 of this Plan). Note: Contacting regulatory agencies should be the responsibility of the IOSC or members of the USACE Support Group.
4. When contacting Local and State Regulatory Agencies as well as the U.S. Environmental Protection Agency National Response Center, report the following using:
    A. Name of the facility and POCs for the facility (see Table A-1);
    B. Your name;
    C. Address of the facility;
    D. Date, time, location, and duration of the discharge;
    E. Cause and source of the discharge;
    F. Description of the discharge, including its chemical composition;
    G. Estimated volume of the discharge;
    H. Corrective actions and/or countermeasures taken including adequate description of equipment repairs and/or replacements;
    I. Maximum storage or handling capacities;
    J. Description of the facility, including maps, flow diagrams, and topographical maps;
    K. Additional measures taken (or contemplated) to minimize the possibility of recurrence, and
    L. Information administrator may reasonably require pertinent to the Plan or discharge.

DETAILED SPILL CLEANUP ACTION

Within a Diked Area	1. NOTIFY a Pollution Prevention Team member and convey the following information: • Location of spill, • Extent/quantity of spill, • Source/cause of spill, • Whether or not spill flow has been stopped, and • Action taken to contain the spill. 2. STOP THE SPILL SOURCE, if possible. 3. INSPECT ALL DRAIN VALVES to ensure they are closed and not leaking; activate any available spill control devices if a release is detected. 4. ESTABLISH FIRE PREVENTION measures around the vicinity of the spill.
At the Tank Fuel Area	1. STOP THE PUMPS. 2. SPREAD ABSORBENT MATERIALS to retard spread of fuel. If the spill occurs at the tanker truck unloading areas, spread absorbent materials to prevent the spilled products from reaching unpaved surfaces or area drains. 3. NOTIFY a Pollution Prevention Team member and convey the following information: • Location of spill, • Extent/ quantity of spill, • Source/ cause of spill, • Whether or not spill flow has been stopped, and • Action taken to contain the spill. 4. ESTABLISH FIRE PREVENTION measures around the vicinity of the spill.
From a Tank Truck Rupture While Parked	1. SPREAD ABSORBENT MATERIALS to retard the flow of the spill. 2. Provide temporary curbing to prevent the spilled materials from reaching any storm drain. 3. NOTIFY a Pollution Prevention Team member and convey the following information: • Location of spill, • Extent/ quantity of spill, • Source/ cause of spill, • Whether or not spill flow has been stopped, and • Action taken to contain the spill. 4. ESTABLISH FIRE PREVENTION measures around the vicinity of the spill.

PRIMARY CONTACTS IN THE EVENT OF A SPILL

The Installation On-Scene Coordinator (IOSC) will function as the facility emergency coordinator and be responsible for notifying regulatory agencies. The IOSC has been designated to be the FWDA Caretaker (40 CFR 264.55). If the IOSC cannot be contacted then a temporary alternate contact will be another member of the FWDA Caretaker staff. In addition, the USACE Support Group (USACE Program Manager, USACE Project Manager and the On-Site USACE Oversight Coordinator) will also be contacted and copied on any emails and correspondence. The "Spill Incident Report" located in Appendix D must be completed for all spills.

A. Fort Wingate Depot Activity

Mark Patterson, FWDA BEC	(330) 358-7312
Richard Cruz, FWDA Caretaker and IOSC	(505) 905-6190

B. USACE Support Group

Steve Smith, USACE Program Manager	(817) 886-1879
Mike Scoville, USACE On-Site Oversight Coordinator	(817) 866-1875
David Henry, USACE Project Manager	(505) 342-3139
Dennis "DJ" Myers, USACE OESS	(817) 609-5014

C. ZAPATA (Pollution Prevention Team)

Steve Morrissette, ZAPATA Project Manager	(402) 871-2891
Richard Smith, ZAPATA Project Engineer	(704) 378-4934
Chuck Wentzel, ZAPATA SUXSOS/Site Manager	(704) 905-9786
Nathan Reel, ZAPATA SSHO/Sample Technician	(704) 617-3218

D. ZAPATA Spill Response Contractor (Bohunk Excavating)

Kevin Shafer, Project Manager	(928) 220-0077

E. Local Medical, Police and Emergency (dispatch) (505) 722-2002

F. New Mexico Environmental Dept., Hazardous Waste Bureau

Dave Cobrain	(505) 476-6055

A discharge of oil into a waterway that results in a film or sheen upon the surface of the water must be reported immediately to:

EPA - National Response Center (800) 424-8802

The following information should be reported to the NRC:

- Name, address, and telephone number of the individual filing the report;
- Name, address, and telephone number of the facility;
- Date, time, and location of the incident;
- Type of material discharged and brief description of the circumstances causing the incident;
- Description and estimated quantity by weight or volume of the materials involved;

- An assessment of any contamination of land, water, or air due to the incident;
- Damages or injuries caused by the discharge;
- Actions taken to stop, remove, and mitigate the effects of the discharge;
- Whether an evacuation may be necessary; and
- Names of individuals or organizations that have been contacted.

GENERAL FUELING PROCEDURE

General:

1. Keep fire away and prevent persons from smoking.
2. Park vehicle as close as possible to the fill pipe or tank receiving the product.
3. Use the minimum length of hose possible to complete the connection between the vehicle and the tank or fill pipe.
4. Verify that the temporary spill containment structures have been installed, if required.
5. Verify that the emergency spill containment equipment (absorbent pads, Speedi-dry®, and protective clothing) is fully stocked at a nearby accessible location prior to beginning fueling operations.
6. The fuel truck should also be equipped with emergency spill response and containment equipment (e.g., absorbent pads, oil boom).
7. The driver and designated field team staff shall remain at the fill location at all times and shall not leave the vehicle unattended during the fueling operations.
8. Only labeled containers and portable tanks shall be used for storage and transportation of flammable liquids.

Prior to Transfer:

1. Visually check all fuel transfer hoses for leaks and wet spots. Only use hoses in good condition.
2. Verify that sufficient volume is available in the storage tank to receive the product to be pumped.
3. Determine tank capacity by level indicator, taped measurement, or tank gauge chart.
4. Secure the loading vehicle prior to transfer operations with physical barriers such as wheel chocks and interlocks to safeguard against accidental movement and rupture of transfer lines.
5. Make sure that the parking brakes of the tank truck are set.
6. Keep hose ends tightly capped while moving hoses into position.
7. Do not transfer fuel while exposed to precipitation.

During Transfer:

1. When transferring liquids, shut off motors or auxiliary or portable pumps when making and breaking hose connections.
2. Monitor all hoses and hose couplings for leaks. Prevent personnel or vehicular contact with hoses through the use of barricades or orange traffic cones.
3. Monitor the liquid level in the receiving tank during filling operations to prevent overflow.
4. Do not top off tank. Provide a minimum of 10 percent free space within the tank to prevent leakage due to thermal expansion. Close valve connections if an overfill condition occurs and withdraw sufficient liquid from the tank, if possible, to permit complete drainage of the vent pipe and hose fill.

GENERAL FUELING PROCEDURE (CONTINUED)

After Transfer:

1. Close all tank and loading valves before disconnecting.
2. Securely close all vehicle internal, external, and dome cover valves before disconnecting.
3. Make sure that all material transfer operations are complete before disconnecting any transfer lines.
4. Secure all hatches.
5. Remove any wheel chocks that have been used.
6. Prior to vehicle departure make sure that all connections, and fill lines are disconnected.
7. After the transfer lines are disconnected and prior to vehicle departure, inspect the outlets for evidence of leakage.
8. Make sure that the hoses or other connecting devices are drained, vented, or blown down to remove the remaining fuel before moving them away from their connections.
9. Use a drip pan, pail, and/or oil absorbent pads when breaking a hose connection.
10. Cap the end of the hose or other connecting devices before moving them to prevent uncontrolled fuel leakage.
11. Soak up any spilled or dripped oil from in or around the fill box and secure the fill box cover.
12. Notify appropriate facility personnel to ensure the proper collection and disposal of any sorbent material generated during fuel transfer operations.

APPENDIX N

NOI POSTING

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Parcel 21 – SWMU 1 Interim Measures Project

NPDES Permit No.:

For Additional Project Information Please Contact:

Steve Morrissette
ZAPATA INCORPORATED
402-871-2891

APPENDIX O

COMMENT RESPONSE TABLES

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Submittal: Army Draft, SWPPP, Parcel 21 – SWMU 1
Site: Fort Wingate, NM
Project: Parcel 21, Interim Measures
Contract #: W9128F-13-D-0025 DS01
Date: 03 February 2015

Comment Number	Page No./Line No.	Comment	Recommendation	Response
CESWF-PEC-TE, Houston Lee				
1	Appendix B	The NOI lists the disturbed acreage as 1.5 acres but the site maps appear to show a larger area to be disturbed	Correct the NOI with the accurate disturbed acreage	Agree: Using the latest CAD file, the NOI was updated with the estimated disturbed acreage (rounded to the nearest quarter) of 4 acres. Breakdown is as follows: Diamond Shaped Leaching Bed: 3.0817 Triangle Shaped Leaching Bed: 0.8022 Former Settling Tanks: 0.0379 Area North of Settling Tanks: 0.0367 **Total Disturbed area: 3.9585**
2	Pg. 2-1/line 2	The site information does not include estimated construction start and end dates for the entire project	Update section 2.1 to include estimated starting and ending dates.	Agree: Estimated start and end dates for the entire field effort were added to Section 2.1.
3	Pg. 2-1/line 2	The SWPPP does not list the total area to be disturbed in the body of the SWPPP	Revise the SWPPP to list the estimated disturbed area.	Clarification: Although the total area to be disturbed was broken down by excavation area in Section 2.6, the total area to be disturbed is now also listed in Section 2.1 since the comment referred back to this section.
CESWF-PEC-T – Scoville				
1	i/15	CESWF refers to USACE Fort Worth District		Agree: The acronym has been corrected to indicate Fort Worth District.