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STORMWATER POLLUTION PREVENTION PLAN

TA-60 Asphalt Batch Plant

Los Alamos National Laboratory

A requirement of the
NPDES MULTI-SECTOR GENERAL PERMIT
NMR05G000 (LANS)
for Stormwater Discharges Associated with Industrial Activities

Prepared by:
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PREFACE

This Stormwater Pollution Prevention Plan (SWPPP) was developed in accordance with the provisions of the Clean Water Act (33 U.S.C. §§1251 et seq., as amended), and the Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (U.S. EPA, September 2008) issued by the U.S. Environmental Protection Agency (EPA) for the National Pollutant Discharge Elimination System (NPDES) and using the industry specific permit requirements for Subsection D - Sector D - Asphalt Paving and Roofing Materials and Lubricant Manufacturing. The applicable stormwater discharge permit is EPA General Permit Registration Number NMR05GB21 (Los Alamos National Security (LANS) (U.S. EPA, January 2009). Contents of the September 2008 Multi-sector General Permit can be viewed at http://cfpub.epa.gov/npdes/stormwater/msgp.cfm

The current permit expires September 2020.

This SWPPP applies to discharges of stormwater from the operational areas of the TA-60 Asphalt Batch Plant at Los Alamos National Laboratory (referred to as LANL or the "Laboratory"). The Laboratory is owned by the Department of Energy (DOE) and is operated by Los Alamos National Security, LLC (LANS). Throughout this document, the term "Facility" refers to the TA-60 Asphalt Batch Plant.

A copy of the LANS NOI and Delegation of Authority Letter is located in Appendix A of this SWPPP.

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SECTION 1: FACILITY DESCRIPTION AND CONTACT INFORMATION

1.1 Facility Contact Information/Responsible Parties

Facility Operator: Los Alamos National Security, LLC
Los Alamos National Laboratory
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ENV-CP (Environmental Compliance Programs)
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Other applicable facility data and contact information is provided in the facility NOI, which is located in Appendix A of this SWPPP. A copy of this SWPPP is maintained on-site in the Control Room trailer at the Asphalt Batch Plant.

1.2 Stormwater Pollution Prevention Teams

The Stormwater Pollution Prevention Team (PPT) is applicable to operations at the Technical Area (TA)-60 Asphalt Batch Plant (ABP) located on Eniwetok Drive/Sigma Mesa, in Los Alamos County, New Mexico at Los Alamos National Laboratory (LANL). The TA-60 ABP is part of Maintenance Site Services-Heavy Equipment Roads & Grounds (MSS-HERG), which has established a PPT whose members are responsible for assisting the facility manager in developing and revising the facility's SWPPP as well as maintaining control measures and taking corrective actions where required. All PPT members will have access to either a hard copy or an electronic version of this SWPPP. A list of PPT members (along with contact information) is provided in Appendix B of this SWPPP.

Designation of Pollution Prevention Teams

The Stormwater PPT for the TA-60-ABP consists of operations and management personnel from MSS-HERG (the ABP facility), MSGP stormwater personnel from ENV-CP, and a Deployed Environmental Professional. The ENV-CP representative is responsible for LANL's compliance under the National Pollutant Discharge Elimination System (NPDES) permit regulations. The team members are selected on the basis of their familiarity with the activities at the facility and the potential impacts of those activities on stormwater runoff.

The specific duties of individual team members of the PPT are listed below:

- *Pollution Prevention Team Leader.* The Pollution Prevention Team Leader is responsible for revising and updating the SWPPP as required under Section 8 of this SWPPP. The Team Leader or designated representative will also ensure that appropriate facility and other LANS personnel receive the training specified in Section 3.9 of this SWPPP.
- *Team Members:* Other members of the team are responsible for the implementation of this SWPPP and the required periodic inspections of the facility, as described in Section 5. In the event of a spill or release, a team member will ensure it is cleaned up and incorporate documentation of the spill and cleanup process into Appendix D of the SWPPP. Team members will also be selected to assist/represent the Team Leader in performing routine inspections.
- *ENV-CP Technical Advisor:* Supports the facility and provides guidance associated with implementation of the compliance requirements identified in the 2015 MSGP. The ENV-CP Technical Advisor also acts as the institutional point of contact for all interactions with the regulatory authority (EPA) and supervises personnel implementing monitoring requirements for the facility.
- *Environmental Inspector:* Responsible for conducting the routine facility inspections and entering corrective actions into the ENV-CP NPDES MSGP Corrective Action Report database. The Environmental Inspector is also responsible for tracking and updating the status of corrective actions that cannot be implemented immediately.
- *All members:* All PPT members are responsible for being familiar with and implementing this SWPPP and for compliance with the 2015 MSGP. PPT members are also responsible for attending meetings that will be scheduled as needed to discuss revisions of the SWPPP, inspection findings, status of corrective actions and any other topics pertinent to management of the SWPPP.

1.3 Activities at the Facility

The industrial activities at this site may be classified under **Sector D – Asphalt Paving and Roofing Material and Lubricant Manufacturing.** The facility is located within TA-60 of LANL at the eastern edge of Sigma Mesa. The facility primarily consists of an office trailer for the facility operator and a BDM Model TM2000 Asphalt Plant with associated oil tanks. A propane tank is also on site that has been empty since 2014 and is scheduled to be removed. Locations of the activities and the major structures at the facility are shown on the Site Map in Appendix C, Figure C-2.

The primary function of the facility is to produce asphalt for the Laboratory by using a "batch" process (as needed per project). The asphalt batch is then transferred to trucks for delivery to project sites. An overview of the plant's operational process is as follows:

- Aggregate material, used as feed stock for the asphalt production, is stockpiled on the west side of the property. There is at least one and sometimes more piles of material stored on the ground. The volume of stockpiled aggregate material on site at any given time is approximately 3,000 cubic yards.
- Front-end loaders transfer the aggregate material from stockpiles to a hopper/feeder unit and the material is then mechanically fed to the asphalt processing plant. The processing plant (a BDM Model TM2000 Asphalt Plant) includes a Hopper/Feeder Bin attached to a Conveyor Belt (Structure 60-233), and a Batch Tower with Drop and Dryer Unit (Structure 60-236).
- Asphalt emulsion oil and heated aggregate are mechanically mixed in the Batch Tower (Structure 236).
- Processed asphalt is transferred (dropped) from the Batch Tower into delivery trucks.
- Air emissions are controlled by Bag House (Structure 60-235). Air emissions from the facility (including NOx, SOx, particulate matter) are regulated and are currently in compliance with applicable air quality permits issued to LANL.

1.3 General Location Map

The general location map for the facility can be found as Figure C-1 in Appendix C. The map is a 2010 fly over that provides a general/regional location of the facility. Figure C-3 in Appendix C shows the Threatened and Endangered Habitat for the Mexican Spotted Owl.

1.4 Site Map

A site map provided in Appendix C, Figure C-2 illustrates the facility's property boundaries, structures and impervious surfaces, operation areas as well as information on drainage patterns, stormwater and erosion control structures, potential pollutant sources, and nearby receiving streams.

As required by the MSGP-2015, the following information specific to the facility is shown either on the site map or with additional information provided in this SWPPP:

- **Site acreage.** The site covers approximately 2.3 acres
- **Significant structures and impervious surfaces.** Less than 0.1 acre of the site contains impervious surfaces such as structures, roofs, paved areas, base-course structures and other surfaces. The major structures on the site include:
    - An office trailer (60-234) and two portable trailers for storage
    - Hopper/Feeder attached to Conveyor Belt (60-233)
    - Asphalt Batch Tower (with Drop) & Dryer Unit (60-236)
    - Above Ground Oil Storage Tanks - 15,000 gallon and 200 gallon (60-237)
    - Bag House (60-235)
    - ZEP truck spraying structure
    - 16,000 gallon Liquid Propane Tank that is empty
- **Directions of stormwater flow and site drainage.** Direction of flow is indicated with arrows. The facility has a gentle downward grade toward the south-southeast and site drainage and stormwater flow is in that direction. Stormwater flow across the facility is directed towards the stormwater retention pond located at the southeast corner of the facility boundary.
- **Locations of structural stormwater controls; Locations of stormwater conveyances.**
    - An engineered stormwater retention pond is located in the southeast corner of the site. A Parshall Flume that is part of the MSGP stormwater monitoring station E200.5 (also known as Monitored Outfall 60-ABP-1 ID # 043) for the facility is located on the east side of the pond and serves as the pond's outlet structure. In 2011 a fabric liner was installed in the bottom of the pond and then a layer of 3-4 inch river rock was added to reduce the sediment load in the stormwater collected in the pond. The pond outlet is the only outfall for the facility.
    - A one-foot high berm (made of base-course and earthen materials) is located along the east, west and south boundaries of the site and serves to redirect stormwater flow toward the retention pond.
    - Two rock check dams made of angular rock were installed in 2014 at the west end of the retention pond that receives stormwater runoff to help reduce the sediment load in the stormwater collected in the pond.
    - A stormwater ditch is located along a portion of the east boundary and also conveys drainage to the detention pond.
    - Concrete containment pads with 3 inch curbs surround the oil storage tanks (Structure 60-237), providing containment for potential oil leaks.

- **Locations of receiving waters.** Receiving waters in the immediate vicinity of the facility are shown in Figure C-3, Appendix C. Impaired waters information is provided on the map and also in the paragraph below this section in the SWPPP.
- **Location of potential pollutant sources; Locations of activities that are exposed to precipitation and potential sources of pollutants.**
    - Processed asphalt is loaded/ transferred from the batch tower (Structure 60-236) into delivery trucks.
    - Liquid (asphalt emulsion oil and heating oil) is stored in two above ground storage tanks (Structure 60-237).
    - Oil loading/fueling operations take place at the oil storage tanks (60-237).
    - A 55-gallon solid waste drum for asphalt chunk storage and a 55-gallon drum of Asphalt Tack Oil are stored on a secondary containment basin located just east of the oil tanks.
    - Bare soil and dirt roads on the site are potential sources of sediment and erosion.
- **Location of significant spills or leaks.** This is discussed in Section 2.2 of this SWPPP.
- **Location of all stormwater monitoring points.** Stormwater is monitored at gage station E200.5 (Monitored Outfall 60-ABP-1 ID # 043).
- **Locations of stormwater inlets and outfalls, with a unique identification code for each outfall**. There is 1 outfall associated with this facility. It is identified as 60-ABP-1 and is shown in Appendix C-2.
- **Location of discharge/outfalls to municipal storm sewer systems**. The facility has no connections or outfalls to a sewer system or MS4.
- **Non-stormwater discharges.** No non-stormwater discharges have been identified for the facility. See also Non-Stormwater Discharge Certification in Appendix E.
- **Locations of the following activities where such activities are exposed to precipitation**:
    - **Fueling stations** – none at the facility. Asphalt emulsion oil, heating coil oil and propane is delivered via trucks.
    - **Vehicle and equipment maintenance and/or cleaning areas** – none at the facility.
    - **Loading/Unloading areas.** Asphalt is dropped from the batch tower (Structure 60-236) into trucks parked directly below the tower. Aggregate is loaded into the hopper/feeder unit (Structure 60-233) by a front end loader.
    - **Locations used for the treatment, storage, and disposal of wastes.** A 55 gallon drum is used for storage of tar slag – located on the south side of the oil storage tanks.
    - **Liquid storage tanks.** There are 3 liquid storage tanks: 16,000 gallon propane tank that is empty; 15,000 gallon and 200 gallon tanks for asphalt emulsion oil.
    - **Processing and storage areas.** Processing takes place within the BDM Asphalt Plant and two storage transportainers are located on the east side of the site. Aggregate storage is outdoors in multiple piles.
    - **Immediate access roads.** Sigma Mesa road (an extension of Eniwetok Road) is used by trucks and other vehicles accessing the site. Asphalt is picked up at the site by trucks and then transported to off-site locations.
    - **Transfer areas for substances in bulk.** See processing and storage areas above.
    - **Machinery.** Asphalt Plant – BDM TM2000 Model.
- **Locations and sources of run-on to site.** Sigma Mesa road is a paved road and run-on from this location is possible. This location on Sigma Mesa is considered to have a low erosion potential and low potential impact to receiving waters.

Impaired Receiving Waters

Certain stream reaches within Mortandad Canyon have been identified as impaired waters by the NMED (NMED 2007). The pollutants causing the impairment were listed as Gross Alpha, Selenium, and Aluminum; and the potential sources were identified as impervious surface and parking lot runoff, inappropriate legacy waste disposal, industrial point source discharge, natural sources, post development, erosion,and sedimentation, and watershed runoff following forest fires, (NMED 2007). The

TA-60 ABP operations do not involve the pollutants of concern. EPA has not approved or established TMDLs.

Outfalls

Outfall 60- APB-1 ID # 043: Outlet of Parshall flume of monitoring station E200.5 (Monitored Outfall 60-ABP-1 ID# 043) located at the east end of the retention pond. Stormwater throughout the site flows primarily southeast to the retention pond and due south from the east drainage ditch. Any overflow from the pond is directed out of the flume to the east and then flows southeast towards Mortandad Canyon. No storm water is discharged to Tier 2, 2.5, or 3 waters.

Significantly Identical Outfalls

There is only one outfall for this facility as listed above (Outfall 60-ABP-1 ID # 043). Monitoring requirements are discussed in Section 4 of this SWPPP.

SECTION 2: POTENTIAL POLLUTANT SOURCES

2.1 Industrial Activity and Associated Pollutants

The following activities at the TA-60 ABP are potential pollutant sources to stormwater discharges; these sources and their potential pollutants are described below.

- Material loading and unloading operations
- Outdoor storage of material
- Waste handling and storage activities
- Earth/soil moving

Material loading/unloading operations: Material loading and unloading routinely occurs at the oil storage tanks (Structure 60-237), the liquid propane tank (empty), the hopper/feeder unit (Structure 60-233), the ZEP tank, and the batch tower (Structure 60-236).

- Asphalt emulsion oil and heating oil are delivered to the two oil storage tanks (15,000 gallon and 200 gallon) by tanker trucks and the oil product is pumped directly into the tanks. Oil in the 15,000 gallon tank is consumed during asphalt batch processing and the tank is refilled as needed throughout the year.
- The heating oil in the 200 gallon tank is non-destructively used. Potential sources of exposure from this operation include spills from the tanker truck, leaks from hose or valve connections, overfilling/overflow of product, and draining of hose lines after refilling; the potential pollutants of concern are asphalt emulsion oil and heating coil oil.
- Liquid propane is no longer delivered to the above-ground tank by tanker trucks. In 2013 a natural gas line was run down to the Asphalt Batch Plant and in 2014 process heating at the site began using natural gas. The liquid propane tank is also scheduled to be removed in the near future.
- Front-end loaders are used to load and unload aggregate material from stockpiles to the batch plant's hopper/feeder unit (Structure 60-233). The pollutant of concern from this operation is the generation of dust during the unloading activities at the hopper/feeder bin. Overflow or spillage of the aggregate material is not considered a pollutant source since the material is generally picked up and re-fed into the process; the gravel material is not a significant source of sediment or pollutants. Another potential pollutant of concern from this equipment is hydraulic fluids and diesel fuel should the equipment leak.
- Loading of asphalt takes place at the batch tower drop location (Structure 60-236) where processed asphalt is dropped into trucks for delivery to a job site. Sources of pollutants from

operation are the overflow or spillage of processed asphalt including waste aggregate, tar slag and asphalt chunks; the material is semi-solid in form and after cooling becomes solid with no tendency to percolate. These wastes are scooped up with a front-end loader and temporarily stored in a drum until they are removed for off-site disposal at the county landfill. The Standard Operating Procedure (SOP) for this process and an MSDS for *Asphalt Release-Freeze Free* is included in Appendix J.

Outdoor storage of material: Outdoor storage of materials includes two oil storage tanks, a 55-gallon drum storing tack-oil, and one propane tank (empty).

- Asphalt oil is stored in the15,000 gallon tank (Structure 60-237) and heating coil oil is stored in an attached 200 gallon tank. The oil tanks are co-located in a concrete spill containment basin providing secondary containment. Potential sources of exposure from this location include spills and leaks from the oil tanks and associated piping that may leak into or overflow the containment basin; which could also potentially contaminate stormwater runoff in the area. The potential pollutants of concern are asphalt emulsion oil and heating coil oil.
- One 55-gallon drum of tack oil, an asphalt adhesive product, is stored just east of the large oil tanks (Structure 60-237) on an elevated pallet. The potential source of exposure from this activity includes a spill or breach of the container that may leak into the containment basin. The potential pollutant is oil.
- Liquid propane is no longer stored in the 16,000 gallon tank that is located on a concrete pad on the east end of the site.

Waste handling and storage: As described above, waste generated from the truck-loading operations at the batch tower, which includes solid or semi-solid aggregate, tar slag and asphalt chunks, is scooped up with a front-end loader and placed in a 55-gallon drum marked "non-hazardous". The waste drum is stored just east of the oil tank (Structure 60-237) on a secondary containment basin. The potential source of exposure from this operation includes a breach of the drum that may release solid or semi solid waste material into the containment basin. The potential pollutant is waste aggregate, tar slag and asphalt chunks. The waste materials are properly characterized and disposed of off-site in accordance with procedure P409, *Waste Management*. No wastes are disposed on the grounds.

Asphalt oil and heating oil

- Asphalt emulsion oil is stored in a 15,000 gallon above ground storage tank (Structure 60-237). The asphalt oil is heated and used in the production of the asphalt.
- A second oil storage tank, which is a 200 gallon tank (also Structure 60-237), is attached to the emulsion oil tank and stores heating oil that is used non-destructively for heating.
- The two oil storage tanks are co-located in a concrete spill containment basin, which is estimated at 350 square feet with a 3 inch curb, providing secondary containment for the tank contents. There is a 2-inch drainpipe with a locked valve to provide controlled drainage of the contents.
- Asphalt oil and heating oil are delivered to the facility by an off- site contractor via tanker trucks and pumped directly into the storage tanks.

Waste clean-up and storage

- The process of dropping or transferring material into delivery trucks may result in overflow or spillage of tar slag and asphalt chunks. These waste materials (slag) is scooped up with a front-end loader and temporarily stored in a 55 gallon drum for later disposal.
- The waste drum is stored on a secondary containment basin, which is located just east of the oil tanks.

Liquid Propane is no longer stored at the site and used for process heating

- In 2013 a natural gas line was run down to the Asphalt Batch Plant and in 2014 process heating at the site began using natural gas. The liquid propane tank is also scheduled to be removed in the near future.

Truck beds are sprayed with ZEP

- Prior to loading asphalt, truck beds are coated with ZEP, which is a non-hazardous, bio-degradable product that minimizes the sticking of asphalt to truck beds. The material is applied by a hand held spraying device to minimize potential release to the environment.

Other operations on site include a trailer used as the control center/office (Structure 60-234) and two portable trailers for storage. There are no buried tanks, piping or transfer stations at the facility.

Solid Waste Management Units (SWMUs)

There is one SWMU located within the TA-60 ABP facility boundary, 60-002. This area was previously used to store about 50 piles of broken cured-asphalt chunks until the material could be recycled. Since the materials have been removed from the site, and the site has since been graded for ABP operations, there is little potential for pollutants to be released from this SWMU into surface water runoff. Inorganic constituents including Aluminum, Arsenic, Barium, Cadmium, Calcium, Chromium, Cobalt, Iron, Magnesium, Nickel, Selenium, Vanadium, Magnesium, Lead, Iron, Copper, and Beryllium are present in the subsurface at depths ranging from 1.5 to 15 feet. Organic constituents including Acetone, Diesel Range Organics, Fluoranthene, Fluorene, Pyrene and Hexanone[2-] are present in the subsurface at depths ranging from 1.5 to 17 feet.

2.2 Spills and Leaks

Areas on site where potential spills/leaks could occur:

Location	Outfalls (See Site Map)
15,000 gallon & 200 gallon oil storage tanks (Structure 60-237)	043
16,000 gallon liquid propane tank (Empty)	043
Drum of tack oil (located east of Structure 60-237)	043

Descriptions of Past Spills/Leaks

There have been two documented spills or leaks of toxic or hazardous pollutants at this facility in recent years:

March 2007 - An estimated 165 gallons of asphalt emulsion oil (in the form of tar) leaked from the 15,000 gallon oil tank. The leaked material was contained in a bucket that was placed inside the concrete secondary containment unit to catch the leaking oil. There was no release to the soil or stormwater drainage area.

October 2011 – Approximately 15 gallons of heating transfer oil leaked from the 15,000 gallon oil tank. The spill was contained in the secondary containment unit and there was no release to the soil or stormwater drainage area.

Significant spills or leaks occurring at the facility are documented and tracked by facility personnel and ENV-CP. For purposes of this SWPPP the spill tracking form located in Appendix D will be used. Records of spills are also entered into the ENV-CP MSGP CAR database. The information recorded includes the type of material spilled, quantity of spilled material, corrective action taken, and the location and date of the spill event. This information is maintained for a period of three years from the date the permit expires or the date the permittee's authorization is terminated. The April 2010, ENV-DO-QP 101.1, *Environmental Reporting Requirements For Releases Or Events* document will be applied when reporting spills at this facility.

2.3 Non-Stormwater Discharges Documentation

Appendix E presents the *Non-stormwater discharge assessment and certification form*, applicable to the facility. The form certifies that all stormwater outfalls have been evaluated for the presence of non-stormwater discharges and that all unauthorized discharges have been eliminated. This form will be updated whenever a change in possible non stormwater discharges is determined during a monthly inspection of the facility.

There are no sources of non-stormwater discharges at the facility as no potable water system, fire hydrants, or sewer systems are in place. No irrigation, vehicle washing or other wash-down operations are conducted at the facility. The area at and surrounding the facility is covered by asphalt and/or gravel. Dust suppression is not needed or performed at this facility.

2.4 Salt Storage

No salt storage or piles containing salt are present at the facility.

2.5 Sampling Data Summary

Samples are collected at an automated monitoring station (E200.5) located on the southeast corner of the facility at the stormwater retention pond. Sampling results from stormwater monitoring (under the current permit) are maintained in Appendix F of this SWPPP. Sampling data for the previous permit term (MSGP 2000) is not available since the facility began operations at its new location in 2006 and monitoring station E200.5 was not installed until after that time. However, sampling results from the facility's previous location are provided in Appendix F-1.

As a Sector D facility, the asphalt batch plant is subject to effluent limit guidelines for total suspended solids (TSS), pH, and oil and grease. In September 2011 sampling data results showed TSS levels above the effluent limit guidelines. Immediate corrective actions were taken to line the retention pond with a filter fabric and rock covering to provide a barrier between the clay fines and stormwater within the pond. In 2013 the average concentration of the four most recent monitoring values for Total Suspended Solids (TSS) at monitoring outfall 60-ABP-1 ID # 043 did not exceed the benchmark value. Therefore benchmark for TSS at monitoring outfall 60-ABP-1 ID # 043 will be discontinued per Part 6.2.1.2 of the MSGP.

SECTION 3: STORMWATER CONTROL MEASURES

Control measures at the facility are designed to minimize the potential for spills, releases, exposure of materials, or any other events that could adversely affect the quality of water and sediment that may be transported out of the area by stormwater runoff.

Standard operating procedures and maintenance procedures at the facility are designed to stabilize exposed areas and contain runoff using structural and/or non structural control measures to minimize onsite erosion, sedimentation, and the resulting discharge of pollutants.

3.1 Minimize Exposure

Material loading/unloading operations: The loading and unloading operations at the oil storage tanks (Structure 60-237), the liquid propane tank (empty), the hopper/feeder unit (Structure 60-233), and the batch tower (Structure 60-236) are the most likely areas where potential pollutants may be released and exposed to runoff. BMPs used at these locations include the following:

- Spills from heavy equipment resulting in diesel or hydraulic fluid leaks are addressed in accordance with the *Spill Prevention Control and Countermeasures Plan for the Asphalt Batch Plant.* The plan specifies that the Principal Operator at the Facility is the designated person responsible for spill prevention, reporting and maintenance of the spill control equipment at the Facility. All spills require response and several facility operations personnel are trained annually to the plan. Any spills that have the potential to enter a water course require immediate response and must be reported immediately to the Security and Emergency Operations (SEO), Emergency Response Group (SEO-1). SEO and SEO-1 will determine to what level LANL's SEO-EM plan will be activated. In addition, appropriate cleanup procedures will be followed and the appropriate individuals or organizations responsible for the completion of appropriated spill reports will be notified.
- Bulk delivery of oil or propane (replaced with natural gas) is supervised by the Facility Site Superintendant or other designated personnel trained in hazardous materials handling.
- Prior to a fuel transfer, supervising personnel verify that the correct product is being delivered to the correct tank and that the volume of material to be transferred does not exceed the available space in the receiving container.
- Lines, hoses, and valve settings are inspected for leaks before and during transfers; dry disconnects or leak pans are used on hoses and connections when practical;
- Any spills or releases during oil loading/unloading operations are immediately responded to in accordance with the SPCC Plan and ENV-DO-QP 101.1, *Environmental Reporting Requirements for Releases or Events.*
- Containment structures are in-place for the above ground oil storage tanks.
- Spill control equipment is available in the Control Room trailer.
- Overflow of asphalt material (tar slag and asphalt chunks) during loading of delivery trucks is minimized by careful supervision during loading operations. Overflow material is cleaned up as it occurs on site and is scooped up by a front-end loader and transferred to a 55 gallon drum, which is labeled as non-hazardous waste and kept on a secondary containment basin. Once the drum becomes full, the overflow material is taken to the county landfill for disposal. The Standard Operating Procedure (SOP) for this process is located in Appendix J.
- Loading and unloading areas are kept clean and maintained to minimize collection of dust, debris, and potential pollutants.
- Fluids from unused heavy equipment, vehicles, and other equipment stored onsite for longer than 6 months will be drained.

Outdoor storage of materials: BMPs used to control pollutants from these sources include the following:

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- The two oil storage tanks (Structure 60-237) are co-located in a concrete secondary containment unit. The concrete containment unit has a 3-inch curb that has a sufficient volume to contain the 200 gallon tank's contents with ample freeboard for storm flow. The full volume of the 15,000 gallon tank cannot be contained by the basin; however, it was not deemed necessary to provide

full containment for this tank since the product will solidify on the surface with little to no soil penetration.

- The drum of tack oil is stored in a secondary containment basin. Rain/snow protection covers are provided when necessary and containers are kept closed when not in use.
- Secondary containment will be provided for any hazardous materials stored on site in the future.
- Material or products that are stored in bags, boxes, or other perishable containers will be stored inside or under cover to prevent exposure.
- Whenever practical, materials and activities at the facility are protected to prevent exposure to rain, snow, snowmelt, or runoff.

Waste handling and storage activities: BMPs used to control pollutants from these sources include the following.

- P409, *Waste Management,* specifies methods for handling waste containers to minimize leaks and exposure to stormwater. Inspections are conducted to ensure that procedures are properly followed and that no potential contaminants are present in exposed areas
- A waste storage drum (used for tar slag, and asphalt chunks) is stored on a secondary containment basin (along with the tack oil drum). The drum is kept closed when not in use. Waste is disposed in accordance with LANL waste management guidelines.

Earth/soil moving activities: Construction or other activities at the site that disturb more than 1-acre of land will be separately addressed in accordance with the NPDES Construction General Permit (CGP).

3.2 Good Housekeeping

Routine operations at the facility are geared toward keeping the site clean, avoiding spills, and immediately attending to any spilled material according to LANL response guidelines.

Good housekeeping practices used at the facility to prevent stormwater contamination include the following.

- A schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers.
- Operational areas are maintained in a clean and orderly state.
- Containers holding raw material, product or wastes are kept closed when not in use and hazardous material containers are not stored in areas that are exposed to precipitation or run-on
- Containers and materials are properly labeled.
- Stormwater containment structures are kept clean of debris and trash; the drainage ditch and berm around the site are kept clear of debris and trash.
- Access to the facility is controlled by a gate, which is located less than a quarter mile west of the plant on Sigma Mesa Road. The facility is locked when unattended. A sign-in/out procedure is not required at the facility. However, visitors must notify the Facility Operator (upon arrival to the plant) that they are on site to perform specified work or inspections.
- Spills or leaks are cleaned as soon as possible.
- Impervious areas (e.g. paved areas, access roads) where particulate matter, dust, or debris may accumulate are kept cleaned and maintained.
- Activities that damage or destroy existing vegetation are kept to a minimum.
- Employees are trained about these and other good housekeeping practices and their impact on stormwater discharge.
- Non-hazardous waste (e.g. trash) generated at the site is collected in a dumpster, which is picked up for disposal when it becomes full.
- No vehicle maintenance or vehicle washing is performed on site.

3.3 Maintenance

The Facility Site Superintendant must regularly inspect, test, and repair all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater that is discharged to receiving waters. The facility must maintain all control measures that are used to achieve the effluent limits required by this permit in effective operating condition. Nonstructural control measures must also be diligently maintained (e.g., spill response supplies available, personnel appropriately trained). If control measures are in need of routine maintenance, it must be conducted immediately in order to minimize pollutant discharges. If a control measure is found to need repair or replacement, all reasonable steps to prevent or minimize the discharge of pollutants must immediately occur until the final repair or replacement is implemented including cleaning up any contaminated surfaces so that the material will not be discharged during subsequent storm events. Final repairs/replacement of stormwater controls should be completed as soon as feasible but must be no later than the timeframe established in Part 4.3 of the 2015 MSGP for corrective actions, I.e., within 14 days or, if that is infeasible, within 45 days. If the completion of stormwater control repairs/replacement will exceed the 45 day timeframe, the site will take the minimum additional time necessary to complete the maintenance, provided that the EPA Regional Office is notified of the intention to exceed 45 days, and documentation of the rational is contained in this SWPPP. Note: "All reasonable steps" means that the permittee has undertaken initial actions to assess and address the condition causing the corrective action, including for example, cleaning up any exposed material that may be discharged in a storm event (e.g., through sweeping, vacuuming) or making arrangement (i.e., scheduling) for a new best management practice to be installed at a later date. Temporary BMPs will be installed to serve as backup controls while a control measure is offline. Catch basins need to be cleaned out when the depth of debris reaches two thirds of the sump depth and the depth of the debris needs to be kept at least six inches below the lowest outlet pipe. If a control measure was never installed, was installed incorrectly or not in accordance with Part 2 and/or 8 of the 2015 MSGP, or is not being properly operated or maintained site personnel must conduct corrective action as specified in Part 4 of the 2015 MSGP. Documentation of Maintenance and Repairs of Control Measures (BMPs) is entered in to the ENV-CP MSGP Corrective Action Reporting (CAR) database.

3.4 Spill Prevention and Response

Operational controls are implemented to minimize the possibility of any accidents resulting in spills or releases. Regulatory environmental reporting requirements are described in LANL's Environmental Protection Division Procedure ENV-DO-QP-101.1, Environmental Reporting Requirements for Releases or Events and Spill Investigations procedure ENV-CP-QP-007. Spill prevention practices at the facility include good housekeeping, the use of secondary containment, proper labeling of containers or positioning of containers so that labeling is clearly visible, and proper handling and storage of material in drums and other containers. All dumpster lids need to be kept closed when not in use. For dumpsters and roll off bins that do not have lids and could leak must ensure that discharges have a control (e.g. secondary containment). Part 1.1.3 of the 2015 MSGP does not authorize dry weather discharges from dumpsters or roll off bins. Facility personnel are trained to, and must implement requirements identified in the *Spill Prevention Control and Countermeasures Plan for the Asphalt Batch Plant.* Facility personnel are also required to take self-study training course #30441, *Spill Prevention, Control, & Countermeasures.* A spill kit is available in the principle operation trailer. If any additional plans or requirements are developed which will affect response to spills of materials at the facility, this plan will be modified to reflect the new plans or requirements.

In general, the approach to spill clean-up is to first contain the spill by securing the spill source and deploying spill containment materials. In many cases, the secondary containment will contain the spill. The operator involved in the spill or in the vicinity responds to small spills. For incidental releases, absorbents are used to pick-up free liquids and the contaminated absorbents are properly disposed. Standard procedures for spill containment and clean up include the use of spill control kits, sorbent

pillows, socks, sheets, granules and microbial products such as Micro-blaze. Clean-up residues are managed as appropriate and as determined by the facility's waste management coordinator. Larger spills require that a spill coordinator be contacted to respond to the spill, securing the spill area and contacting ENV-CP. The facility or associated representatives must immediately take all reasonable steps to prevent or minimize the discharge of pollutants until the final repair or replacement is implemented, including cleaning up any contaminated surfaces so that the material will not be discharged during subsequent storm events.

Incidents are reported to the Operations Center or Facility Duty Officer in accordance with LANL Procedure No. P322-3, *Manual for Communicating, Investigating, and Reporting Abnormal Events.* The Security and Emergency Operations (SEO), Emergency Response Group (SEO-1) has been appointed by the Laboratory Director as the organization responsible for emergency management at the Laboratory. The SEO and SEO-1 group will be notified if a spill cannot be easily controlled with the materials on hand, threatens to escape the facility or enter the environment, needs additional resources, involves an unidentified hazard, involves injuries to personnel, requires fire protection, is beyond the training and skill levels of operational or facility personnel regarding the use of spill control equipment, or personnel are not confident in their ability to carry out spill response activities. The SEO and SEO-1 group can be reached at **667-6211** during regular business hours as well as after hours. If a fire or explosion occurs, or if the potential for such exists, the situation must be reported by dialing 911 from a non-cellular phone or by activating a fire pull box. 911 should also be dialed in the event of an employee injury. In the event of a spill, the Emergency Management Office will notify the individuals or organizations responsible for the completion of spill reports or the fulfillment of regulatory reporting requirements.

At LANL, the completion of a spill report may be required in the event of a spill. This determination will be made by the Emergency Ops Office or ENV-CP in accordance with Laboratory and U.S. Department of Energy (DOE) policies, and federal and state regulatory reporting requirements. In addition to fulfilling reporting requirements, spill reports assist user Groups and Laboratory management in assessing the cause of a spill and in executing corrective action.

Two types of spill reporting are required at the Laboratory: internal spill record keeping and external agency notification. Copies of internal spill reports will be kept on file with ENV-CP, the responsible organization, and also in the Spill Records section of the SWPPP. External agency notification (as determined by ENV-CP personnel) may consist of verbal or written notification to the National Response Center, EPA Region VI, or the New Mexico Environment Department.

Copies of internal spill reports are maintained by ENV-CP. All spills occurring within the MSGP facility shall be entered in the ENV-CP Corrective Actions Reporting database and documented in the spill log in Appendix D.

3.5 Erosion and Sediment Controls

Structural controls that have been implemented at the facility are shown on the Site Map in Appendix C (Figure C-2) and include the following:

Stormwater retention pond: A stormwater detention pond, located at the southeast corner of the site, collects and manages stormwater run-off from the facility and provides an opportunity for sediments to settle out in the basin and not be transported off-site. Runoff from across the facility is directed toward the pond, and the water is held in the pond until it is released through the controlled outlet structure, evaporates, or infiltrates into the surrounding soil. In 2011 a fabric liner was installed on the bottom of the pond with 3-4 inch river rock layed on top of the liner to further reduce the sediment load in the water collected in the pond.

A Parshall Flume is located at the east side of the detention pond, which is part of the MSGP stormwater monitoring station E200.5 (Monitored Outfall 60-ABP-1 ID # 043), and serves as the pond's outlet

structure. This structure is used for sampling runoff from the pond and also controls runoff releases from the pond to provide better erosion control at the discharge location. Riprap located at the flume discharge location further slows down and disperses stormwater overflow from the pond.

Riprap: Riprap material has been placed at the east and west entrances of the stormwater retention pond, reducing erosion potential in these areas and minimizing sediment transport into the pond.

Site grading: The facility grounds have been graded to produce a gentle downward grade toward the south-southeast so that site drainage and stormwater flow is directed towards the stormwater retention pond. Most of the site is stabilized with gravel.

Berms: The site is bounded by base-course and earthen berms, which are installed along the west, south, and east facility boundaries. The berms serve to redirect storm flow and site drainage toward the retention pond, minimizing the sediment transport and runoff from the site. The berms also prevent run-on to the site from adjacent lots that are not part of the facility.

Check Dams: Two rock check dams made of angular rock were installed in 2014 at the west end of the retention pond that receives stormwater runoff to help reduce the sediment load in the stormwater collected in the pond.

Stormwater Conveyance Ditch: An earthen ditch is located along a portion of the site's east boundary to convey storm flow and site drainage to the stormwater retention pond. This ditch works in combination with the base-course berm (also along the eastern boundary) to prevent run-on from the adjacent east lot.

Secondary containment basin: The above-ground oil storage tanks (Structure 60-237) are located in a concrete basin with a 3-inch curb providing containment for potential oil leaks. The concrete basin is equipped with a 2-inch drainpipe and valve to allow drainage of the basin's contents. The valve is kept locked to prevent accidental or unauthorized drainage. While run-on and site drainage into the basin is minimized, precipitation and snowmelt may still accumulate in the basin. Stormwater accumulations are usually small and allowed to evaporate. However, it may occasionally be necessary to drain the basin to ensure sufficient storage capacity in the event of a tank leak or spill. This procedure requires visual inspection of the accumulated material and notification, approvals, and testing by ENV-CP. These structural controls have been selected, designed, and installed to work in-combination to reduce the potential for sediment transport and to manage stormwater runoff and run-on; thereby reducing the potential for pollutants in stormwater discharges.

Procedure number 41-20-001, *Asphalt Plant Operation* includes the regular inspection and maintenance of the facility's equipment, operational systems, and grounds. A copy is included in Appendix J. Facility personnel at the TA-60 ABP conduct informal walk-around inspections daily to check the facility equipment and facility grounds. During these informal inspections, facility personnel will take note of maintenance needs and appropriate corrective action will be initiated. These routine activities help minimize the chance for failures, shutdowns, or other abnormal conditions that could result in leaks, spills or other releases.

The following items are checked daily during the monthly inspections:

- Ensure that facility grounds are in an orderly condition
- Ensure that stormwater structures are free of debris, floating material or other obstructions
- Identify maintenance needs for equipment or stormwater BMPs
- Identify signs of new erosion
- Identify signs of leaks, spills, or other releases

- If a problem is found that cannot be immediately remedied, the inspection and the response are documented per facility procedures.

The facility's equipment, tanks, transfer piping and associated valves are all located above ground and easily available for inspection during the during the monthly inspections. Integrity tests and in-service inspections are not required to be performed on the TA-60 ABP oil tanks because they are "Flow-through process tanks" and are exempt per NMED Petroleum Storage Tank (PST) Regulations (Section 20.5.1.7 Definitions); however, observations of the tanks and berms for evidence of leaks or failure conditions are performed during the monthly SWPPP inspections.

3.6 Management of Runoff

The facility has a gentle downward grade toward the south-southeast and site drainage and stormwater flow is in that direction. Stormwater flow across the facility is directed towards the stormwater retention pond located at the southeast corner of the facility boundary.

The Site Operations personnel and the PPT Team Leader will monitor BMPs to determine that they are being maintained to function as intended, especially during run off events. Problems found associated with runoff will be corrected as soon as possible.

3.7 Salt Storage Piles or Piles Containing Salt

No salt storage or piles containing salt are present at the facility.

3.8 MSGP Sector-Specific Non-Numeric Effluent Limits

There are no sector-specific non-numeric effluent limits for Sector D.

3.9 Employee Training

The primary object of the training program is to ensure employees who work in areas where industrial material or activities are exposed to stormwater or who are responsible for implementing activities necessary to meet the conditions of this permit, including all members of the stormwater pollution prevention team understand the requirements of the 2015 MSGP and their specific responsibilities with respect to those requirements.

Personnel who are responsible for the design, installation, maintenance, and/or repair of controls (including pollution prevention measures), who are responsible for the storage and handling of chemicals and materials that could become contaminants in stormwater discharges, who are responsible for conducting and documenting monitoring and inspections, and who are also responsible for implementing and documenting corrective actions at the Asphalt Batch Plant as well as Stormwater PPT members receive annual stormwater pollution prevention training. If formalized, this training is recorded in LANL's U-Train database.

The training incorporates at a minimum, the following topics:

- An overview of what is in the SWPPP;
- Spill response procedures, good housekeeping, maintenance requirements, and material management practices;
- The location of all 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 (only applies to persons responsible for conducting inspections).

Training activities are documented in accordance with the LANL Training Standard LS113-09.0 and records are maintained in LANL's official training database, UTRAIN. SWPPP training records are maintained in Appendix H of this SWPPP.

3.10 Non-Stormwater Discharges

See section 2.3

3.11 Waste, Garbage and Floatable Debris

See section 3.2

3.12 Dust Generation and Vehicle Tracking of Industrial Materials

The area at and surrounding the facility is covered by asphalt and/or gravel. Care should be taken to replenish the gravel layer as it gets thin from heavy equipment traffic. Dust suppression is not needed or performed at this facility.

SECTION 4: SCHEDULES AND PROCEDURES FOR MONITORING

Monitoring requirements for this facility are applicable to: Sector D - Asphalt Paving and Roofing Materials and Lubricant Manufacturing.

4.1 Stormwater Monitoring

Analytical monitoring comprised of quarterly benchmark and impaired waters monitoring is performed on stormwater discharges from the site. Monitoring events occur during storm events that result in as actual discharge from the site and that follow the preceding measurable storm event by at least 72 hours (3 days). From runoff from snowmelt, the monitoring is performed at a time when a measurable discharge from the site occurs.

Monitoring at substantially identical outfalls is conducted according to test procedures approved under 40 CFR Part 136. Runoff samples are collected by taking a minimum of one grab sample from a discharge, collected within the first 30 minutes of a measurable storm event. If it is not possible to collect the sample within the first 30 minutes of a measurable storm event, the sample is collected as soon as practicable after the first 30 minutes and documentation is kept with the SWPPP explaining why it was not possible to take samples within the first 30 minutes. Any corrective actions required as a result of a quarterly visual assessment must be performed consistent with Part 4 of the 2015 MSGP.

Samples are retrieved in accordance with Inspecting Storm Water Runoff Samplers and Retrieving Samples for MSGP, ENV-RCRA-QP-047. Storm water samples are processed in accordance with Processing MSGP Storm Water Samples, ENV-CP-QP-048. All storm water monitoring is conducted in accordance with the Quality Assurance Project Plan for the Storm Water Multi-Sector General Permit for Industrial Activities.

4.2 Monitoring Schedule

Monitoring will begin in October 2015. Benchmark monitoring continues on a quarterly basis at least once in each of the following 2-month intervals:

- April 1 – May 31;
- June 1 – July 31;
- August 1 – September 30; and
- October 1 – November 30.

Impaired waters monitoring is performed on an annual basis with a sample collected in the period between April 1 and November 30.

LANL is located in a high elevation, semi-arid climate where the majority of rainfall occurs during a period between July and September. Freezing conditions that would prevent runoff from occurring for extended periods may also occur during the winter months. For these conditions if benchmark monitoring cannot be performed on the quarterly schedule above, monitoring events will be distributed during seasons when precipitation occurs, or when snowmelt results in a measurable discharge from the site. If adverse weather conditions prevent the collection of samples according to the relevant monitoring schedule, a substitute sample will be collected during the next qualifying storm event or as soon as practical.

4.3 Substantially Identical Outfalls

There is only one outfall location for this facility as listed below:

Outfall ID	Outfall Location	Activities/Potential Pollutants	Runoff Coefficient	Control Measures
60-ABP-1 ID # 043	Southeast facility boundary, discharge point of monitoring station flume. (Discharge to: Mortandad Canyon)	Any pollutants discharged from detention pond; asphalt emulsion oil, heating oil, propane, tar, asphalt aggregate residues.	0.65	Retention pond with weir and rock check dams. Crushed rock at discharge point of monitoring station flume, vegetative buffer.

Outfall 60-ABP-1 ID # 043: Outlet of Parshall flume of monitoring station E200.5 (Monitored Outfall 60-ABP-1) located at east end of the retention pond. Stormwater throughout the site flows primarily southeast to the retention pond and due south from the east drainage ditch. Any overflow from the pond is directed east and out of the flume and then flows southeast towards Mortandad Canyon.

4.4 Summary of Monitoring Requirements (Mortandad Canyon)

Monitoring Type	Location	Parameters		Numeric Limitations	Schedule
Benchmark	Refer to SW/PPP Map	Total Suspended Solids	100 mg/L	None	Quarterly

Impaired Waters	Refer to SWPPP Map	Aluminum	1324 mg/L	None	Annual
		Gross Alpha, adjusted	15 pCi/L		
		Copper	7 mg/L		
		Thallium, dissolved	N/A		
		PCB in Water Column	0.014 mg/L		

Procedures:

- ENV-CP-QP-045, *Installing, Setting up, and Operating ISCO Samplers for the MSGP:* http://int.lanl.gov/training/env-courses/55962/env-cp-qp-045.pdf
- ENV-CP-QP-048, *Processing MSGP Stormwater Samples:* http://int.lanl.gov/training/env-courses/56595/env-cp-qp-048.pdf
- ENV-RCRA-QP-047, *Inspecting Stormwater Runoff Samplers and Retrieving Samples for the MSGP:* http://int.lanl.gov/training/env-courses/56594/env-rcra-qp-047.pdf
- ENV-CP-QAPP-MSGP, *Quality Assurance Project Plan for the Stormwater MSGP:* http://int.lanl.gov/training/env-courses/43337/env-cp-qapp-msgp.pdf

4.5 Summary of Monitoring Requirements

Pollutants under impaired waters monitoring, effluent limitations guidelines, quarterly benchmark monitoring constituents are identified in the most recent version of the Quality Assurance Project Plan for the Storm Water MSGP for industrial Activities Program. All analyses and/or field parameters are identified in the most recent version of the *MSGP Field Implementation Plan*. These plans were written and are updated by ENV-CP. Specific monitoring information contained in the SAP includes the following:

- Analytical constituent(s) per outfall,
- Frequency of analysis (annual or quarterly),
- Matrix type (snow melt or rainfall)
- Sample type (grab)
- Preservation,
- Container type,
- Unfiltered,
- Holding times,
- Detection limits,
- Volume, and
- Analytical method.

Numeric control values for comparison with analytical results are provided by ENV-CP stormwater compliance personnel. The results of these comparisons are documented in the MSGP Annual Reports.

4.6 Monitoring Results

If the average of 4 monitoring values for any parameter exceeds benchmark, or if prior to completion of 4 quarterly samples, an exceedance of the 4 quarter average is mathematically certain, the Pollution prevention Team and ENV-CP personnel will:

- Review the selection, design, installation, and implementation of control measures to determine if modifications are necessary to meet natural background of benchmark effluent limits,
- Implement the necessary modifications, and
- Continue quarterly monitoring until 4 additional quarters of monitoring have been completed for which the average does not exceed the benchmark.

If the average of the 4 monitoring values for any parameter does not exceed the benchmark, or natural background levels, monitoring for that particular parameter will no longer be performed.

4.7 Recordkeeping

For each monitoring event, except snowmelt monitoring, the following information is recorded and maintained through field data sheets, LANL database systems, and Discharge Monitoring Records:

- The date, exact place, and time of sampling or measurements;
- The date and duration (in hours) of the rainfall event;
- Rainfall total (in inches) for that rainfall event;
- Time (in days) since the previous measureable storm event;
- The individual (s) who performed the sampling or measurements;
- The date (s) analyses were performed;
- The individual (s) who performed the analyses;
- The analytical techniques or methods used; and
- The results of such analyses.

For snowmelt monitoring, all information except rainfall event durations, totals, and time since previous event is included. Additionally, all records of monitoring information, including all calibration and maintenance records are maintained for a minimum period of at least three years from the date the permit expires.

SECTION 5: INSPECTIONS AND CORRECTIVE ACTIONS

5.1 Routine Facility Inspection Procedures

Routine inspections are conducted and documented monthly. The inspections are performed by a qualified member of the Stormwater PPT (typically a Deployed Environmental Professional or ENV-CP Compliance Project Lead).

One routine inspection is conducted during an active stormwater discharge, if possible. Routine inspections evaluate the following, at a minimum:

- Areas where industrial material or activities are exposed to stormwater;
- Areas where potential pollutant sources are identified;

- Discharge points; and
- Examine and look for leaks or spills, offsite tracking, trash residue, or other industrial materials that may have or could come in contact with stormwater.

There are no additional Technology-Based Effluent Limits listed for Sector-D in Section 8 of the 2015 MSGP. All areas identified in Section 2 of this SWPPP as potential pollutant sources are inspected in addition to the Control Measures listed in Section 3.

The Stormwater PPT member performing the inspection documents the inspection and notes potential stormwater pollution problems that were encountered on the routine facility inspection form. Any required corrective actions identified during the inspection are addressed in accordance with ENV-CP-QP-022, *MSGP Stormwater Corrective Actions*. All identified corrective actions found as a result of routine facility inspections must comply with Part 4 of the 2015 MSGP. Corrective actions are recorded and documented in the ENV-CP MSGP CAR database.

Facility personnel or the Deployed Environmental Professional may also perform daily, weekly, or other periodic facility surveys in between monthly routine inspections to further ensure compliance with the SWPPP.

When any of the following conditions occur or are detected during an inspection, monitoring or other means, the Pollution Prevention Team must review and revise the SWPPP, as appropriate.

- An unauthorized release or discharge (e.g., spill leak, or discharge of non-stormwater not authorized by the 2015 MSGP or another NPDES permit to a water of the U.S. occurs at your facility.
- Your control measures are not stringent enough for the discharge to meet applicable water quality standards or the non-numeric effluent limits in the 23015 MSGP.
- A required control measure was never installed, was installed incorrectly, or not in accordance with Parts 2 and/or 8 of the 2015 MSGP or is not being properly operated or maintained.
- Whenever a visual assessment shows evidence of stormwater pollution (e.g., color, odor, floating solids, settled solids, suspended solids, and foam).

5.2 Quarterly Visual Inspection Procedures

The quarterly visual assessments are conducted at outfall 60-ABP-1 ID# 043 by a qualified member of the Storm water PPT (Deployed Environmental Professional or ENV-CP). Visual assessments will:

- use a clean clear glass or plastic sample container in a well lite area;
- sample collected as soon as practicable after the first 30 minutes of a discharge if not possible to collect within the first 30 minutes following a storm event;
- snowmelt samples must be collected during a period of measurable discharge from the site;
- be conducted at least 72 hours since the last storm event;
- 72 hour storm interval does apply if you document that less than a 72 hour interval is representative for local storm events during the sampling period;
- document rationale if a visual assessment is unable to be collected in a quarter (no precipitation event or adverse conditions);
- perform an additional assessment during the next qualifying storm event if unable to perform in a particular quarter;
- Perform one quarterly assessment during snow melt discharge.

Collection of quarterly visual assessments occurs on the following schedule for each calendar year in accordance with ENV-RCRA QP-064, *MSGP Storm Water Visual Inspections*:

- April 1 – May 31
- June 1 – July 31
- August 1 – September 30
- October 1 – November 30

The visual assessment will inspect for the following water quality characteristics: color, odor, clarity, floating solids, settled solids, suspended solids foam, oil sheen, and other obvious indicators of stormwater pollution.

The Stormwater PPT member performing the visual assessment will document potential stormwater pollution problems that were observed during the assessment on the Quarterly Visual Assessment form.

The visual assessment will inspect for the following water quality characteristics: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution.

Any required corrective actions identified during the assessment will be addressed in accordance with Section 5.3 *Corrective Actions Process* of this plan. The results of the Quarterly Visual Assessments are filed in Appendix G of this plan.

5.3 Corrective Actions Process

Upon discovery of any of the following conditions, the condition must be documented within 24 hours of the discovery in the ENV-CP MSGP CAR database maintained by ENV-CP stormwater compliance team:

- an unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by this or another NPDES permit) occurs at the facility;
- a discharge that violates a numeric effluent limit;
- control measures that are not stringent enough for the discharge to meet applicable water quality standards;
- an inspection or evaluation of the facility determines that modifications to the control measures are necessary to meet the non-numeric effluent limits in this permit; or
- routine facility inspection or quarterly visual assessment identifies that control measures are not being properly operated, maintained, never installed, installed incorrectly, or not in accordance with Parts 2 and 8 of the 2015 MSGP.

Within 14 days of discovery of the identified condition, corrective action(s) to eliminate or further investigate the condition or documentation that no corrective action is needed will be documented by the Deployed Environmental Professional or other SWPPP PPT member in the ENV-CP MSGP CAR database. This is required to track the status of all issues and a report (the MSGP Annual Report) will be generated from the CAR database and submitted to EPA by ENV-CP. Copies of the Annual Report are kept in Appendix G of this SWPPP.

If it is determined that corrective actions are necessary, any modifications to control measures will be made before the next storm event if possible, or as soon as practicable following that storm event.

5.4 Conditions Requiring Review to Determine if Modifications Are Necessary

If any of the following conditions occur, a review of the selection, design, installation, and implementation of control measures will be performed to determine if modifications are necessary to meet the effluent limits in this permit:

- construction or a change in design, operation, or maintenance at the facility significantly changes the nature of pollutants discharged in stormwater from the facility, or significantly increases the quantity of pollutants discharged; or
- the average of 4 quarterly sampling results exceeds an applicable benchmark. If less than 4 benchmark samples have been taken, but the results are such that an exceedance of the 4 quarter average is mathematically certain (i.e., if the sum of quarterly sample results to date is more than 4 times the benchmark level) this is considered a benchmark exceedance, triggering this review.

If a review identifies any necessary modifications, they will be performed following the corrective action process identified in Section 5.3 above.

SECTION 6: DOCUMENTATION TO SUPPORT ELIGIBILITY CONSIDERATIONS UNDER OTHER FEDERAL LAWS

6.1 Documentation Regarding Endangered Species

The Los Alamos National Laboratory (LANL) Threatened and Endangered Species Habitat Management Plan (HMP) was prepared to provide for the protection of federally listed threatened and endangered species and their habitats at LANL. The HMP was designed to be a comprehensive landscape-scale management plan that balances the current operations and future development needs of LANL with the habitat requirements of threatened and endangered species. It also facilitates DOE compliance with the Endangered Species Act and related federal regulations. The HMP received concurrence from the U.S. Fish and Wildlife Service (USFWS) and was first implemented in 1999. All changes to the HMP, such as adding new species or changing requirements, are assessed in a new consultation with the USFWS before being implemented. The HMP provides guidance by species for different types of activities allowed without further review by the USFWS.

Currently, the only federally-listed species that have habitat or occur at LANL are the Southwestern Willow Flycatcher (Empidonax trailii extimus), Jemez Mountains Salamander (Plethodon neomexicanus), and Mexican Spotted Owl (Strix occidentalis lucida). Suitable habitats for these species, along with a protective buffer area surrounding the habitats, have been designated as Areas of Environmental Interests (AEIs). An AEI consists of a core area that contains important breeding or wintering habitat for a specific species and a buffer area around the core area. The buffer protects the core area from disturbances that would degrade the value of the core area to the species.

The HMP includes ecorisk analyses which account for any industrial facility's stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities. In addition, the Site-wide Environmental Impact Statement (SWEIS) biological assessment (BA) covered the continuation of Laboratory operations and included outfalls.

As determined by earlier evaluations, stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities from LANL MSGP locations are not likely to adversely affect any species that is federally-listed as endangered or threatened under Criterion D Section iii, the ESA, and

will not result in the adverse modification or destruction of habitat that is federally-designated as "critical habitat" under the ESA. New activities are evaluated to determine if they will have an impact to any species. If an activity can be completed within the guidelines of the HMP it can go forward as scheduled; however, if the activity can not comply with the guidelines, the HMP requires that a project-specific BA be prepared for the action and go through the consultation process with the USFWS.

6.2 Documentation Regarding Historic Properties

In August, 2015 and December 2008, the Cultural Resources Team (using GPS spatial data as well as conducting visual inspections), reviewed the Laboratory industrial sites (see list below) and their associated outfalls and monitoring stations subject to the 2015 Multi-Sector General Permit (Permit #NMR050000) for effects on historic properties. All of these sites were found to be undertakings of no effect and in compliance with Section 106 of the National Historic Preservation Act (i.e., Criterion B).

- TA-3-22 Power and Steam Plant
- TA-3-38 Metals Fabrication Shop
- TA-3-38 Wood Shop
- TA-3-39 and 102 Metal Shop
- TA-3-66 Sigma Complex
- TA-60 Asphalt Batch Plant
- TA-60-1 Heavy Equipment Yard
- TA-60 Material Recycle Facility
- TA-60 Roads and Grounds
- TA-60-2 Warehouse
- TA-54 Area L
- TA-54 Area G
- TA-54 Maintenance Facility West
- TA-54 RANT

6.3 Documentation Regarding NEPA Review

The Final Site-Wide Environmental Impact Statement for the Operation of Los Alamos National Laboratory (DOE/EIS-0380) was issued in May 2008, and a Record of Decision in September 2008. Stormwater issues and associated pollution prevention requirements and activities at LANL are analyzed in Chapters 4 and 5 of the 2008 Site-Wide EIS. These activities are integrated into environmental reviews on a project-specific level through both the LANL Excavation Permit process and the LANL Permits Requirements Identification (PR-ID) process which reside in the Integrated Review Tool (IRT). Stormwater issues are identified and pollution prevention activities are implemented during the design and construction phases of all LANL projects, and as part of facility operations, including routine maintenance. LANL staff monitors stormwater pollution prevention compliance at the MSGP sites in accordance with Section 4.0 *Monitoring* of this plan. Corrective actions are taken as necessary as described in Section 5.3 *Corrective Actions Process* of this plan.

SECTION 7: SWPPP CERTIFICATION

TA-60 ASPHALT BATCH PLANT
STORMWATER POLLUTION PREVENTION PLANT
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."

Signature: _____ Digitally signed by Andrew Erickson, 141880
DN: cn=Andrew Erickson, 141880, o=Los Alamos National Laboratory, ou=Facility Operations Director Utility and Institutional Facilities, email=erickson@lanl.gov, c=US
Date: 2015.09.01 14:53:07 -06'00'

Date: _____

Andrew W. Erickson

Facility Operations Director
Utilities and Institutional Facilities, UIF

LA-UR-15-26792

SECTION 8: SWPPP MODIFICATION

The SWPPP will be modified by the PPT and reviewed by the ENV-CP Technical Advisor(s) whenever necessary to address any of the triggering conditions for corrective actions listed in Section 5.3 of this SWPPP to ensure that they do not reoccur; or to reflect changes implemented when a review following the triggering conditions listed in Section 5.3 of this SWPPP indicates that changes to control measures are necessary to meet the effluent limits described in this SWPPP. Changes to this SWPPP document must be made in accordance with the corrective action deadlines defined in Section 5.3 and must be signed and dated in accordance with the signatory requirements listed in Appendix B Subsection 11 (Signatory Requirements) of the 2015 MSGP. SWPPP updates are required within 14 calendar days of completing corrective actions. A record of amendments to the SWPPP will be tracked in the amendment log located in Appendix I of this SWPPP.

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APPENDIX A

Pollution Prevention Team Members

LA-UR-15-26792

POLLUTION PREVENTION TEAM MEMBERS

Pollution Prevention Team Leader

Name: **Leonard F. Sandoval**
Title: Deployed Environmental Professional / MSGP SWPPP Inspector
Office: 505-667-3557
Cell: 505-231-1235
Email: lesandov@lanl.gov
Duties: Provide technical guidance concerning SWPPP contents, adequacy, and implementation; provides guidance on BMPs, and assists with revising this SWPPP as needed; conducts routine inspections and ensures that identified corrective actions are implemented. Responsible for ensuring that the requirements of this SWPPP are met; overseeing the assigned duties of other PPT members; and communication of information to the group leader and LANL support organizations.

Site Operations

Name: **Larry Velasquez**
Title: TA-60 Roads and Grounds/ABP Site Superintendent
Office: 505-665-3656
Cell: 505-695-6949
Email: lvelasquez@lanl.gov
Duties: Responsible for review of on-going and proposed work at the TA-60 ABP to ensure compliance with this SWPPP; initiate and follow through with corrective measures to maintain BMPs; and documenting spill and cleanup procedures.

Name: **C. Leslie McReynolds**
Title: TA-60 Asphalt Batch Plant Operator
Office: 505-667-6111
Cell: 505-231-1124
Duties: Responsible for review of on-going and proposed work at the TA-60 ABP to ensure compliance with this SWPPP; initiate and follow through with corrective measures to maintain BMPs; and documenting spill and cleanup procedures.

ENV-RCRA (WQ Stormwater) Technical Advisor

Name: **Holly Wheeler**
Title: ENV-CP (Environmental Compliance Programs) MSGP SWPPP Compliance Technical Lead
Office: 505-667-1312
Email: hbenson@lanl.gov
Duties: Provide technical guidance on SWPPP contents, adequacy, and implementation; aides in performing and documenting the Comprehensive Site Inspection; provide guidance on BMPs; and assists with revising this SWPPP as needed.

APPENDIX B

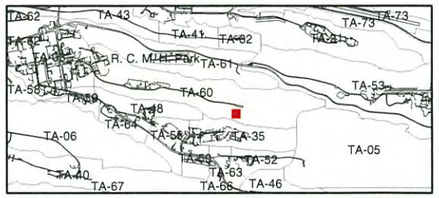
Maps

Figure B-1: General Location Map

Figure B-2: Site Map

Figure B-3: Site Map with Threatened and Endangered Habitat

ASPHALT BATCH PLANT OPERATIONAL SWPPP
2.3 acres, <4% impervious surface
TA-60



SANDIA CANYON impaired recieving water (noTMDL).
Does not discharge to Tier 2, 2.5 , or 3 waters.

SIGMA MESA ROAD

12

PRS 60-002

ZEP

60-243

60-233

Principal Operator Trailer (Spill Kit Location)

60-234

EARTHEN RAMP

60-236

60-235

60-237

LIQUID PROPANE TANK

TRUCK SCALE

15,000 gal. Asphalt Cement

115 gal. Heating Oil

Refueling Rack

7220'

LINED RETENTION POND

60-ABP 1
043

LA-UR-15-26792

7190'

7180'

7170'

MORTANDAD CANYON impaired receiving water (noTMDL)

POTENTIAL RELEASE SITES (PRS) SOURCE STATEMENT:
Los Alamos National Laboratory, Waste & Environmental Services Division, GIS/Geotechnical Services Group, EP2008-0224; 1:2,500 Scale Data; 30 May 2008.

Significant Structure

- TA-60-233 Hopper/Feeder unit
- TA-60-234 Control Center/Office
- TA-60-235 Bag House
- TA-60-236 Batch Tower
- TA-60-237 Asphalt Emulsion Oil Tank

LEGEND

- CONSTRUCTION MATERIAL PILE
- SPILL (YEAR)
- 07 MSGP SAMPLER E200.5
- 08 SLAG BARREL
- DRAINAGE PATTERN
- DIRECTION OF FLOW
- BASE COURSE BERM
- BOUNDARY
- PAVED ROADS
- DIRT ROADS
- FENCES
- CONTOUR LINES
- DITCH
- JERSEY BARRIER
- SECONDARY CONTAINMENT
- LOADING AREA
- PRS/SWMU
- CHECK DAM
- RIPRAP
- STORAGE TRAILER
- STRUCTURES
- DUMPSTER
- BASE COURSE
- PROCESSED ASPHALT AREA

50 25 0 50 Feet

UTILITIES AND INSTITUTIONAL FACILITIES

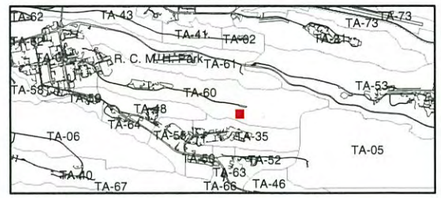
U12031

Classification: U Reviewer: H. Salazar Date: 25-Aug-2015

ASPHALT BATCH PLANT OPERATIONAL SWPPP

2.3 acres, <4% impervious surface

TA-60



SANDIA CANYON impaired recieving water (noTMDL).
Does not discharge to Tier 2, 2.5 , or 3 waters.

SIGMA MESA ROAD

12

PRS 60-002

ZEP

Principal Operator Trailer (Spill Kit Location)

60-234

EARTHEN RAMP

60-243

60-233

60-236

60-235

60-237

LIQUID PROPANE TANK

TRUCK SCALE

15,000 gal. Asphalt Cement

115 gal. Heating Oil

Refueling Rack

LINED RETENTION POND

60-ABP 1
ID# 043

7220'

7210'

7190'

7180'

7170'

LA-UR-15-26792

Significant Structure

TA-60-233 Hopper/Feeder unit
TA-60-234 Control Center/Office
TA-60-235 Bag House
TA-60-236 Batch Tower
TA-60-237 Asphalt Emulsion Oil Tank

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Los Alamos National Laboratory, Waste & Environmental Services Division,
GIS/Geotechnical Services Group, EP2008-0224; 1:2,500 Scale Data; 30 May 2008.

LEGEND

- CONSTRUCTION MATERIAL PILE
- SPILL (YEAR)
- 07 MSGP SAMPLER E200.5
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- FENCES
- CONTOUR LINES
- DITCH
- JERSEY BARRIER
- SECONDARY CONTAINMENT
- LOADING AREA
- PRS/SWMU
- CHECK DAM
- RIPRAP
- STORAGE TRAILER
- STRUCTURES
- DUMPSTER
- BASE COURSE
- PROCESSED ASPHALT AREA
- DEVELOPED BUFFER MEXICAN SPOTTED OWL HABITAT

50 25 0 50 Feet

UTILITIES AND INSTITUTIONAL FACILITIES

U12031

Classification: U Reviewer: H. Salazar Date: 25-Aug-2015