Kirtland Air Force Base Bernalillo County, New Mexico

Storm Water Pollution Prevention Plan



EPA Region 6, NPDES Permit NMR050000, Multi-Sector General Permit Effective Date: 30 May 2021

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.

Responsible Official Certification

DAVID S. MILLER, Colonel, USAF Commander, 377th Air Base Wing

Date: 26 May 2021

In compliance with Section 6.3 and Appendix B of the Permit, installation personnel reviewed and updated the SWP3 as follows:

Date	Individual	Office	Remarks

Table of Contents

Abbreviation	s and Acronyms	v
Section 1	Introduction	1-1
Section 2	Storm Water Pollution Prevention Team	2-1
Section 3	Site Description	3-1
3.1	General Site Description	3-1
3.2	NPDES Permits	3-1
Section 4	Potential Pollutant Sources	4-1
4.1	Industrial Activities and Storm Water Pollutants	4-1
4.2	Significant Spills and Leaks	4-1
4.3	Non-storm Water Discharges	4-1
4.4	Salt Storage	
4.5	Sampling Data	
Section 5	Description of Control Measures	5-1
5.1	Non-numeric Technology-based Effluent Limits	5-1
5.2	Numeric Effluent Limitations Based on Effluent Guidelines	
5.3	Water Quality-based Effluent Limitations	5-8
Section 6	Schedules and Procedures	6-1
6.1	Control Measures	6-1
	6.1.1 Eliminating and Minimize Exposure	6-1
	6.1.2 Good Housekeeping	
	6.1.3 Preventative Maintenance	
	6.1.4 Spill Prevention and Response Procedures	6-1
	6.1.5 Erosion and Sediment Controls	6-2
	6.1.6 Management of Runoff	6-2
	6.1.7 Employee Training	6-2
	6.1.8 Record Keeping	
6.2	Inspections	6-2
	6.2.1 Routine Facility Inspections	
	6.2.2 Visual Assessment of Storm Water Discharges	
6.3	Monitoring	
	6.3.1 Indicator Monitoring	
	6.3.2 Benchmark Monitoring	
	6.3.3 Effluent Limitations Guideline Monitoring	
Section 7	Permit Eligibility Considerations	
7.1	Endangered Species Act Provisions	
7.2	National Historic Preservation Act Provisions	7-1
Section 8	Recordkeeping and Documentation	
8.1	SWP3 Implementation	
8.2	NOI Submittal	
8.3	SWP3 Implementation, Personnel, and Schedule	8-1
8.4	SWP3 Review, Modification, or Update	
8.5	Reporting	
	8.5.1 Annual Report	

Section 9	References	-1
8.6	Record Keeping	-2
	8.5.2 Numeric Effluent Limitations Exceedance Reporting	-2

Figures:

Figure 3-1. General Location Map	.3-	2
Figure 3-2. Pollution Prevention Overview Map	.3-	3

Tables:

Table 1-1: Kirtland Air Force Base Applicable Sectors	1-1
Table 2-1: Kirtland Air Force Base Pollution Prevention Team	2-1
Table 2-2: Pollution Prevention Team Responsibilities	2-2
Table 4-1: Outfall A Sampling Results	4-2
Table 4-2: Outfall B Sampling Results	4-2
Table 4-3: Outfall C Sampling Results	4-2
Table 4-4: Outfall D Sampling Results	4-3
Table 4-5: Outfall E Sampling Results	4-3
Table 5-1: Eliminating and Minimizing Exposure Best Management Practices	5-2
Table 5-2: Good Housekeeping Best Management Practices	5-3
Table 5-3: Preventive Maintenance Best Management Practices	5-4
Table 5-4: Spill Prevention and Response Best Management Practices	5-5
Table 5-5: Erosion and Sediment Control Best Management Practices	5-6
Table 5-6: Runoff Management Best Management Practices	5-6
Table 5-7: Employee Training Best Management Practices	5-7
Table 5-8: Non-storm Water Discharges Best Management Practices	5-7
Table 5-9: Dust Generation and Vehicle Tracking Best Management Practices	5-7
Table 5-10: Record Keeping and Reporting Best Management Practices	5-8

Appendices:

Appendix A: Notice of Intent		L
Appendix B: Facility Inspection	FormsB-1	L

Tabs:

Tab 1	Sector K – EOD Range	K-1
	K-1 Introduction	
	K-2 Pollution Prevention Team	K-1
	K-3 Site Description	K-1
	K-4 Summary of Potential Pollutants	K-3
	K-5 Description of Control Measures	K-5
	K-6 Schedules and Procedures	K-6
Tab 2	Sector L – C&D Debris Landfill	L-1

	L-1 Introduction	L - 1
	L-2 Pollution Prevention Team	L-1
	L-3 Site Description	L-1
	L-4 Summary of Potential Pollutants	L-2
	L-5 Description of Control Measures	L-5
	L-6 Schedules and Procedures	L-6
	L-7 Additional Documentation Requirements	L-7
Tab 3	Sector P1 – Bulk Fuels Storage Facility	P1-1
	P1-1 Introduction	
	P1-2 Pollution Prevention Team	P1-1
	P1-3 Site Description	P1-1
	P1-4 Summary of Potential Pollutants	P1-3
	P1-5 Description of Control Measures	P1-5
	P1-6 Schedules and Procedures	P1-6
Tab 4	Sector P2 – Vehicle Maintenance Facility	P2-1
	P2-1 Introduction	P2-1
	P2-2 Pollution Prevention Team	P2-1
	P2-3 Site Description	P2-1
	P2-4 Summary of Potential Pollutants	P2-3
	P2-5 Description of Control Measures	P2-5
	P2-6 Schedules and Procedures	P2-6
Tab 5	Sector P3 – Auto Hobby Shop	P3-1
	P3-1 Introduction	P3-1
	P3-2 Pollution Prevention Team	P3-1
	P3-3 Site Description	P3-1
	P3-4 Summary of Potential Pollutants	P3-1
	P3-5 Description of Control Measures	P3-5
	P3-6 Schedules and Procedures	P3-6
Tab 6	Sector P4 – Power Pro Operations	P4-1
	P4-1 Introduction	P4-1
	P4-2 Pollution Prevention Team	P4-1
	P4-3 Site Description	P4-1
	P4-4 Summary of Potential Pollutants	P4-1
	P4-5 Description of Control Measures	P4-6
	P4-6 Schedules and Procedures	P4-7
Tab 7	Sector S1 – 58th Special Operations Wing	S1-1
	S1-1 Introduction	.S1-1
	S1-2 Pollution Prevention Team	.S1-1
	S1-3 Site Description	.S1-1
	S1-4 Summary of Potential Pollutants	S1-2
	S1-5 Description of Control Measures	S1-9
	S1-6 Schedules and Procedures	S1-10
	S1-7 Additional Documentation RequirementsS	1-111
Tab 8	Sector S2 – U.S. Customs	S2-1
	S2-1 Introduction	.S2-1
	S2-2 Pollution Prevention Team	.S2-1

		Site Description	
	S2-4	Summary of Potential Pollutants	S2-1
		Description of Control Measures	
	S2-6	Schedules and Procedures	S2-5
	S2-7	Additional Documentation Requirements	S2-6
Tab 9		Sector S3 – 150th Air National Guard	. S3-1
	S3-1	Introduction	S3-1
	S3-2	Pollution Prevention Team	S3-1
	S3-3	Site Description	S3-1
	S3-4	Summary of Potential Pollutants	S3-1
	S3-5	Description of Control Measures	S3-5
	S3-7	Additional Documentation Requirements	S3-7
Tab 10	1	Sector S4 – USFS Air Tanker Facility	. S4-1
	S4-1	Introduction	S4-1
	S4-2	Pollution Prevention Team	S4-1
	S4-3	Site Description	S4-1
	S4-4	Summary of Potential Pollutants	S4-1
	S4-5	Description of Control Measures	S4-5
	S4-6	Schedules and Procedures	S4-6
Tab 11		Sector S5 - Transient Alert, Civil Air Patrol, and Aero Club	. S5-1
	S5-1	Introduction	S5-1
	S5-2	Pollution Prevention Team	S5-1
	S5-3	Site Description	S5-1
	S5-4	Summary of Potential Pollutants	S5-3
	S5-5	Description of Control Measures	S5-4
	S5-6	Schedules and Procedures	S5-5
	S5-7	Additional Documentation Requirements	S5-6

Abbreviations and Acronyms

150th ANG	150th Air National Guard
58th SOW	58th Special Operations Wing
AFI	Air Force Instruction
AGE	Aerospace Ground Equipment
AST	Aboveground Storage Tank
ATF	Air Tanker Facility
BFSF	Bulk Fuel Storage Facility
BMP	Best Management Practice
BMC	Base Maintenance Contract
C&D	Construction and Demolition
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CE	Civil Engineering
CFR	Code of Federal Regulations
CGP	Construction General Permit
CMP	Corrugated Metal Pipe
DOE	Department of Energy
DMR	Discharge Monitoring Report
ELG	Effluent Limitations Guidelines
EMS	Environmental Management System
EPA	Environmental Protection Agency
EOD	Explosive Ordnance Disposal
FTF	Fence-to-Fence Environmental Service Contract
HazMat	Hazardous Material
HWMP	Hazardous Waste Management Plan
IAP	Initial Accumulation Point
KAFB	Kirtland Air Force Base
MS4	Municipal Separate Storm Sewer System
SDS	Safety Data Sheets
MSGP	Multi-Sector General Permit
NEPA	National Environmental Policy Act
NMED	New Mexico Environmental Department
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
OB	Open Burn
OD	Open Detonation
OWS	Oil/Water Separator
POL	Petroleum, Oils, and Lubricants
PPM	Potential Pollutant Material
PPT	Pollution Prevention Team
RCRA	Resource Conservation and Recovery Act
REDHORSE	Rapid Engineer Deployable Heavy Operational Repair Squadron Engineers
RFI	RCRA Facility Investigation

SPCC	Spill Prevention Control and Countermeasure
SWMP	Storm Water Management Plan
SWP3	Storm Water Pollution Prevention Plan
TMDL	Total Maximum Daily Load
TSS	Total Suspended Solids
UEC	Unit Environmental Coordinators
U.S.	United States
USCBP	U.S. Customs and Border Protection
VOC	Volatile Organic Compounds
VMF	Vehicle Maintenance Facility

This Storm Water Pollution Prevention Plan (SWP3) has been prepared for Kirtland Air Force Base (KAFB) in Bernalillo County, New Mexico. This SWP3 addresses the pollution prevention requirements of the Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit (MSGP) NMR050000 for Industrial Activities, hereafter the Permit.

The three major focuses of this SWP3 are: (1) to identify sources of pollution potentially affecting the quality of storm water discharges associated with industrial activities, (2) to describe and ensure implementation of practices to minimize and control pollutants in storm water discharges from these industrial activities, and (3) to ensure compliance with the terms and conditions of the Permit.

Industrial activities at KAFB fall under four sectors (K, L, P, and S) as identified in Table 1-1; sectors not included in Table 1-1 are not applicable to KAFB. These four sectors are co-located at KAFB, and therefore, a single Notice of Intent (NOI) has been submitted to the EPA (Appendix A). The locations of these industrial activities are shown in Figure 3-1.

The information provided in the general sections of this SWP3 is applicable to all covered sectors at KAFB. Information applicable to specific sectors are included in the sector-specific sections. The SWP3 will be posted to the KAFB public website, and a copy will be retained on-site. However, due to restricted information applicable to some sectors, certain information will be withheld from the public versions and is only available on-site upon regulatory request.

This SWP3 addresses the MSGP related activities under the jurisdiction of KAFB. The co-located Department of Energy (DOE) operates independently under MSGP NMR053114. The City of Albuquerque Sunport operates the airfield and runway under MSGP NMR053023.

Sector Designation	KAFB Facility	Sector Tab
K: Hazardous waste treatment, storage, or disposal facilities	Explosives Ordnance Disposal Range	1
L: Landfills and land application sites	Active construction and demolition (C&D) debris landfill (LF-268)	2
P: Land transportation	Bulk Fuel Storage Facility	3
	Base Vehicle Maintenance Facilities	4
	Auto Hobby Shop	5
	Power Pro	6
S: Air transportation facilities	58th Special Operations Wing	7
	U.S. Customs and Border Protection	8
	150th Air National Guard	9
	U.S. Forest Service Air Tanker Facility	10
	Transient Alert, Aero Club, and Civil Air Patrol	11

Table 1-1: Kirtland Air Force Base Applicable Sectors

This page intentionally left blank

Section 2 Storm Water Pollution Prevention Team

The pollution prevention team (PPT) is responsible for the development and implementation of SWP3 elements, revising the SWP3 and monitoring control measures as site conditions change. The PPT members include KAFB staff members with broad knowledge of the facility operations covered under this SWP3. The members, as well as their job titles and responsibilities, are listed in Tables 2-1 and 2-2 below:

Name	Title	Telephone Number	Responsibilities
Installation Commander	Installation Commander	-	1
Melissa Clark	Environmental Management, Water Quality Program Manager (Interim)	505/853-1588	2 through 12
Pending	Environmental Management, Water Quality Program Manager (alternate)	505/846-XXXX	2 through 12
Sherry Williams	Environmental Management System (EMS) Manager	505/846-8781	3 through 5, 12
Melissa Clark	EMS Manager (alternate)	505/853-1588	3 through 5, 12
Scott Clark	Restoration Program Manager	505/846-9017	3 through 5, 12
Johnny Jacobs	Base Maintenance Contractor Ground Operations	505/846-5650	3 through 5, 12
Nick Sandoval	Fuels Storage Distribution Supervisor	505/846-1059 505/846-0944	3 through 5, 12
SSgt Keyanna Howard	Environmental Compliance Vehicle Maintenance	505/846-1082	3 through 5, 12
Eugene Bustos	Auto Hobby Shop Supervisor	505/846-1104	3 through 5, 12
Rickey Spence	Unit Environmental Coordinator (UEC), 58th SOW	505/846-9841	3 through 5, 12
Rick Zachek	Site Supervisor, U.S. Customs and Border Protection	505/260-6611	3 through 5, 12
Ernest Quintero/Capt Thomas Buckner	Unit Environmental Coordinator (UEC), 150th ANG	505/846-3206	3 through 5, 12
Rickie Beal	Air Tanker Base Manager, USFS	505/846-7408	3 through 5, 12
Michael Douglas	Project Manager Transient Alert	505/846-1072	3 through 5, 12
Sumner Wells	Power Pro Operations	505/853-8027	3 through 5, 12

Table 2-1: Kirtland Air Force Base Pollution Prevention Team

Number	Description
1	Signatory authority for SWP3 certification and Annual Reporting Form in accordance with the KAFB NPDES permit.
2	Ensure that compliance inspections and training are performed and Best Management Practices (BMPs) are implemented. Delegated signature authority for certifications of inspections, discharge reports, corrective action reports and Spill Response Form.
3	Ensure compliance with federal, state, local and Air Force regulations.
4	Oversee activities and programs of environmental concern.
5	Oversee the development of plans and procedures involving environmental issues.
6	Oversee compliance aspects of water quality program.
7	Coordinate revisions to the SWP3.
8	Obtain and maintain all necessary permits for proper control of industrial storm water discharges.
9	Maintain a central file of all documents pertaining to SWP3.
10	Oversee implementation of monitoring and initiate corrective action measures as necessary.
11	Ensure that all active and proposed installation construction activities comply with SWP3 requirements including (1) comply with regulatory requirements, (2) coordinate construction BMPs to minimize storm water contamination, (3) design guidelines for BMPs for storm water management as related to construction activities.
12	Coordinate implementation of SWP3, maintain records and training requirements, and ensure completion and certification of all inspections for the respective facility.

Table 2-2: Pollution Prevention Team Responsibilities

3.1 General Site Description

KAFB is located in central New Mexico, southeast of and adjacent to the City of Albuquerque. The base is roughly 51,500 acres and is entirely located within Bernalillo County at the approximate latitude of 35.0245°N and longitude of 106.3430°W. KAFB has over 20,000 employees on base, including nearly 4,400 military, 3,600 civil service, and 14,500 contractors. KAFB has over 100 mission partners, to include tenants, research laboratories, three Major Commands, Reserve and National Guard components.

Prior to 1928, the area of KAFB was undeveloped rangeland. In 1928, Albuquerque's first municipal airport was constructed. In the 1930s, the municipal airport was used for transient fueling and maintenance stops for the military. The Albuquerque Army Air Base was constructed in 1941 for bomber combat crew training, and in 1942, the airfield was renamed Kirtland Field. In 1947, Kirtland Field was re-designated KAFB. Over the years, ongoing training, research, and testing has, and continues, to occur at KAFB.

The topography and vegetation of KAFB varies from flat, paved, and densely developed areas to mountainous desert in the undeveloped areas. The primary regional surface hydrology feature on KAFB is Tijeras Arroyo, which ultimately discharges into the Rio Grande (Figure 3-1). Surface water across KAFB is conveyed largely by roadways, storm water structures, and ephemeral streams draining towards Tijeras Arroyo or into the interconnected City of Albuquerque storm drain system. In many cases sheet flow and runoff from across the base may pond, evaporate, or infiltrate prior to reaching a distinct surface water body. Storm drainage that enters the City of Albuquerque storm drain system ultimately discharges to the Rio Grande.

3.2 NPDES Permits

The industrial facilities identified for coverage under the Permit fall into Sectors K, L, P, and S (Figure 3-2). The detailed descriptions of these industrial activities and site maps are summarized in the sector-specific sections of this SWP3.

In addition to the MSGP, KAFB maintains a NPDES Construction General Permit (CGP) that regulates storm water management associated with ongoing construction projects. The CGP #NMR100000 expires 16 Feb 2022.

A NPDES Municipal Separate Storm Sewer System Permit (MS4 Permit) regulates potential storm water pollution associated with municipal activities. The MS4 Permit #NMR04A009 expired on 19 December 2019, however, it remains in effect under an administrative continuance.

The NPDES permit No. NM0031216 was issued to Kirtland AFB on 30 September 2019. This permit authorizes the episodic discharge of treated groundwater to the Tijeras Arroyo in the event that discharge locations at the golf course or injection wells are not available for discharge.

Figure 3-1. General Location Map



Figure 3-2. Pollution Prevention Overview Map



4.1 Industrial Activities and Storm Water Pollutants

The list of the industrial activities exposed to storm water and the list of potential storm water pollutants associated with each activity are included in the sector-specific sections, Tabs 1–11.

4.2 Significant Spills and Leaks

The specific areas where potential spills and leaks could occur are identified in the sectorspecific sections, Tabs 1–11. KAFB maintains documentation of spills that have occurred in the EASIER database through the Civil Engineering (CE) Division.

This SWP3, in conjunction with the Comprehensive Emergency Response Plan, Hazardous Material Emergency Planning and Response Plan, the Hazardous Waste Management Plan (HWMP) and the Spill Prevention Control and Countermeasure (SPCC) Plan are in place to prevent the discharge of hazardous substances, oils or illicit material to storm water. Releases and spills in excess of a reportable quantity are addressed according to the notification requirements of 40 Code of Federal Regulations (CFR) 110, 40 CFR 117, and 40 CFR 302. Plans are reviewed annually and maintained by CE.

4.3 Non-storm Water Discharges

Non-storm water discharges are generally not authorized under this Permit. Exceptions include authorized, non-storm water discharges listed in Section 1.2.2 of the Permit and other non-storm water discharge authorized under a separate NPDES Permit.

KAFB conducted a cross connection survey in 1994. All illicit non-storm water discharges identified by the cross connection survey were eliminated. To further evaluate possible illicit non-storm water discharges, the Water Quality Program conducts ongoing monitoring under the MS4 Permit and Wastewater Discharge Permit.

Several facilities at KAFB contain holding tanks, OWSs or wash racks that drain to the sanitary sewer system regulated by the Wastewater Discharge Permit. The Base Maintenance Contract (BMC), Septic Tank Management Plan and the Oil/Water Separator (OWS) Guidance regulate inspection and maintenance of these units.

KAFB is subject to the National Environmental Policy Act (NEPA), which requires comprehensive assessments of all environmental impacts for proposed projects. Work orders and project proposals are reviewed by the Water Quality Program Manager for potential illicit non-storm water discharges. Environmental personnel and utilities personnel also attend building design reviews to verify no unauthorized discharges or cross connections exist.

Unauthorized discharge investigations will be performed by the PPT. When non-storm water discharges or illicit connections are discovered, a corrective action report will be developed and implemented. Nonstructural corrective actions will be implemented with 48 hours and the SWP3 amended to reflect the implementation of the BMP. In accordance with Part 2.1.2.3.b.iii, structural modifications will be made as soon as possible. If the structural repair is a corrective

action, repairs must be made within 14 days or, if that is infeasible, within 45 days. If the completion of the stormwater control repairs/replacement will exceed the 45 day timeframe, the minimum additional time necessary may be taken to complete the maintenance provided that the EPA Regional office is notified of your intention to exceed 45 days and the rational for the modified maintenance timeframe is documented in the SWP3.

4.4 Salt Storage

Ice Melt is used in addition to sand and gravel on roads and sidewalks when necessary. No chemical deicer is used except on aircraft. The road and sidewalk deicers are stored inside Building 20717 and are not exposed to rain events. Due to the permitted no exposure criteria, these requirements are not addressed in this SWP3.

4.5 Sampling Data

Sampling conducted in the previous permit term included sector specific sampling for the EOD Range (Sector K) and the C&D Landfill (Sector L). Sample parameters reflect the requirements of the previous permit term, and may not be representative of the current sample suite. Sampling data are summarized below. Due to the arid climate, sampling occurs only during the wet season of July through October. The nature of rainfall events in this climate can result in few qualifying events and limited sampling results.

Table 4-1: Outfall A Sampling Results

Deremeter		Collectio	on Dates		Linita
Parameter					Units
No samples collected for this Outfall during the previous permit term					

Table 4-2: Outfall B Sampling Results

Parameter	Collection Dates	Unite
rarameter	8/1/2016	Units
Ammonia	0.038	mg/L
COD	<0.24	mg/L

Table 4-3: Outfall C Sampling Results

Demonster	Collection	Units	
Parameter	8/3/2016	9/13/2016	
Ammonia	0.098	0.025	mg/L
COD	23	3.3	mg/L

Parameter		Collection Dates				
i afailletei	7/29/2018	10/24/2018	7/26/2019	8/12/2019	Units	
Arsenic		<0.10			mg/L	
Cadmium		< 0.0010			mg/L	
Iron	23		14.5	18.7	mg/L	
Lead		<0.015			mg/L	
Selenium		<0.10			mg/L	
Silver		<0.010			mg/L	
Total Suspended Solids	530	180	320	3580	mg/L	

Table 4-5: Outfall E Sampling Results

Devenue at av			Collectio	on Dates			Units
Parameter	10/10/2016	8/29/2017	7/27/2018	8/7/2019	8/12/2019	10/18/2019	Units
Ammonia	0.27	0.18	0.5	0.42	0.15	0.42	mg/L
Arsenic	11	0.5	0.1	0.00372	0.00484	0.00282	mg/L
Cadmium	0.67	0.55	0.001	0.000088	0.000237	0.000256	mg/L
Chemical Oxygen Demand (COD)	200	20	28	12	9	90	mg/L
Cyanide	0.01	0.004			0.15	0.002	mg/L
Iron	36000	31000					mg/L
Lead	28	22	0.015	0.000874	0.00644	0.00431	mg/L
Magnesium	18000	14000		3.27			mg/L
Mercury	0.028	0.035	0.0002	0.0001	0.0001	0.0001	mg/L
Selenium	1	1		0.00948	0.0025	0.00114	mg/L
Silver	0.17	0.19		0.00274	0.000154	0	mg/L

mg/L Milligrams per Liter

-- No sample taken

This page intentionally left blank

Section 5 Description of Control Measures

5.1 Non-numeric Technology-based Effluent Limits

Storm water pollution from permitted facilities will be minimized by implementing BMPs. The BMPs include processes, procedures, schedules of activities, prohibitions on practices, and other measures undertaken to prevent or reduce pollutant runoff during storm events. The BMPs at KAFB fall into the following general categories of activities:

- Eliminating and Minimize exposure
- Good housekeeping
- Preventative Maintenance
- Spill prevention and response
- Erosion and sediment control
- Runoff Management
- Employee Training
- Non-storm water discharges
- Dust generation and vehicle tracking
- Record keeping and reporting.

The specific BMPs for each of these categories are summarized in Tables 5-1 through 5-10. The BMPs described below are in general use by KAFB based on recommendations provided by the EPA. Site specific BMPs are outlined in the sector-specific sections, Tabs 1–10.

Table 5-1: Eliminating and Mi	nimizing Exposure E	Best Management Practices
-------------------------------	---------------------	---------------------------

	BMP	Description
1	Locate industrial activities and materials inside	To the extent practicable locate industrial activities and materials inside, or protect them with storm-resistant coverings to prevent exposure to rain, snow, snowmelt, and runoff.
2	Strategically place outdoor storage materials to minimize storm water pollution	When indoor storage is not practicable, store materials, equipment, and conduct activities in a location where the grading, berming, or curbing of the site prevents storm water contamination and runoff when feasible.
3	Indoor facilities for bulk material storage and equipment maintenance	Limit bulk material storage and equipment maintenance operations to controlled environments, thus greatly reducing risks of contact with storm water. All interior operations are managed through appropriate spill prevention and control.
4	Minimize exposure to potential leaks and spills	 Follow the SPCC Plan to ensure that: Potential spills and leaks are contained or able to be contained or diverted before discharge, Spills and/or leaks are cleaned up promptly using dry methods to prevent the discharge of pollutants, Leaky/vehicles and equipment are stored indoors, or if stored outdoors, drip pans and absorbents are used when feasible, and Spill/overflow protection equipment is used.
5	Drain fluids	Drain fluids from equipment and vehicles that will be decommissioned or will remain unused for extended periods.
6	Vehicle/Equipment Washing	 Ensure that when practicable, vehicle and equipment washing is conducted at designated washing facilities, or wash racks. This will aim to accomplish the following: Runoff, run-on, and overspray is captured and does not cause storm water pollution, and Ensure that all wash water, with the exception of discharges from pavement wash water and routine building wash down described in Part 1.2.2.1 of the Permit, drains to a sanitary sewer, sump, or other proper collection system (i.e., not the storm water drainage system).

	BMP	Description
1	Maintenance bay floor cleaning	Maintain clean, dry floors using brooms, shovels, vacuum cleaners or cleaning machines to prevent discharge of potential pollutant materials (including dust) through bay doors to exterior of building.
2	Material storage	Maintain material and chemical storage areas in a clean and orderly manner.
3	Label outdoor storage containers	Clearly label all outdoor storage containers with contents (e.g. "used oil" or "JP-8 for recycle").
4	Dust control	Utilize site inspections to identify dust sources and appropriate dust control techniques to minimize dust exposure when practicable.
5	Dumpster lids	Keep all dumpsters under cover or fit with a lid that must remain closed when not in use.
6	General housekeeping	Maintain outdoor work spaces and activity areas clean and orderly to ensure that waste, garbage, and floatable debris is not discharged into storm water.
7	Use of absorbent materials for cleaning up liquid spills and leaks	Use absorbent materials (dry sweep) for activities with liquid materials onsite. Absorbent materials can be used in conjunction with curbing to provide cleanup of small spills within a containment area.
8	Centralized parts cleaning stations	Contain the use of solvents and other cleaning compounds to designated areas to promote safer handling and to minimize risks of spills. Waste solvent is removed from the base by a private contractor.
9	Recycle/reuse program	Develop ways to recycle, reclaim, and/or reuse materials to reduce the volume of materials brought into the facility and reduce the volume of waste.
10	Used battery recycling	Recycle used batteries to promote recycling of materials and reduction of waste.
11	Solvents reuse/control	Use an onsite solvent recovery unit to recycle dirty solvent for reuse. Dirty solvent can be used for presoaking dirty parts before cleaning parts in fresh solvent.
12	Designated locations for tanker trucks/materials delivery vehicles where spills can be contained	Use covered loading and unloading areas, such as building overhangs at loading docks, to reduce exposure of materials, vehicles, and equipment to storm water. Minimize storm water run-on by grading pavement away from the facility.
13	Security at critical points where spill can be contained	Implement security measures to help prevent an accidental or intentional release of materials to storm water runoff. Improve security by training personnel about the specifics of the SWP3. Routine patrol, lighting, and access control are in place at specified facilities.
14	Inventory of potential pollutant materials (PPM)	Conduct an inventory of all PPMs stored and/or used at the facility and track through EESOH-MIS.

Table 5-2: Good Housekeeping Best Management Practices

	BMP	Description
15	Safety data sheets (SDSs) for all PPMs identified in inventory	Maintain files of SDSs for all PPMs currently stored and/or used at the facility in EESOH-MIS.
16	Formal plan to substitute toxic solvents and chemicals with nontoxic	Eliminate or reduce the number or amount of HazMat and waste by substituting non-HazMat through the Green Procurement Program or recycling materials.
17	Implement controls to ensure that solid materials are not discharged	Implement controls to ensure no solid materials, including floatable debris, are discharged.
18	Routine waste collection and appropriate disposal	Conduct routine solid waste and hazardous waste collection through established operation and disposal procedures.
19	Establish management plans and procedures for operation	Maintain existing management plans and regularly review procedures for accuracy and potential improvement.
20	Repair or replace malfunctioning equipment	Maintain equipment in operational condition, submit equipment for repair, or replace defective equipment. Inspection procedures for operational equipment are in place.

Table 5-2: Good Housekeeping Best Management Practices

Table 5-3: Preventive Maintenance Best Management Practices

BMP		Description
1	General	Implement preventive maintenance program for inspection and maintenance of storm water management devices, including sediment traps, OWSs, and erosion control features. Regularly inspect, test, maintain and repair all industrial equipment and systems to avoid situations that may result in leaks, spills, and other releases of pollutants.
2	Inspections and testing of tanks for structural integrity	Conduct routine inspections and nondestructive pressure and vacuum testing for aboveground storage tanks (ASTs) to locate potential defects, leaks or damage to storage vessels.
3	Routine maintenance of septic tanks and OWSs	Routinely inspect, clean, and maintain septic tanks and OWSs for effective operation. Clogging and overflow represents a potential discharge of pollutants into the storm water.
4	Evaluate and monitor nonstructural BMPs	Utilize the annual reporting and record keeping requirements of this SWP3 and other available resources to evaluate and monitor nonstructural control measures.
5	Baghouse maintenance	This facility has no baghouses; therefore requirements relating to these items are not applicable.
6	Catch basin cleaning	Clean catch basins when the depth of debris reaches two- thirds $(2/3)$ of the sump depth, and keep the debris surface at least 6 inches below the outlet pipe.

Table 5-4: Spill Prevention and	Response Best Management Practices
I	1 0

BMP		Description
1	Label containers	Plainly label containers (e.g. "Used Oil", "Spent Solvents," "Fertilizers and Pesticides") that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur.
2	Implement Spill Prevention and Response Plans	Implement the management plans and monitor compliance. This includes requirements for material storage and handling procedures, tank/drum inspections, spill response training, spill kit maintenance, and spill notifications.
3	Berms or site grading at fueling areas	Construct or maintain (as appropriate) berms or site grading to contain spills within fueling areas and prevent storm water run-on. Contain spills and implement control measures.
4	Provide secondary containment around ASTs	Construct diking or curbing to contain spills and leaks to the storage area or install double-walled tanks. Secondary containment will comply with the requirements of 40 CFR 112.
5	Fuel spills cleaned other than by hosing/washing	Avoid hosing and washing fuel spills because wash water may transport fuel, oil, and grease into the storm sewer. Use absorbent materials for cleaning up spills.
6	Visible spill control awareness signs at fueling areas	Post signs and labels in key locations to promote awareness of BMPs at fueling stations and to serve as reminders to personnel of overall responsibilities.
7	Wash rack and Oil/grease collection traps	Install wash racks, OWSs and oil and grease traps to eliminate oil entering the sanitary sewer. Routinely inspect, clean, and maintain these devices.
8	Emergency spill control stations and supplies (spill kits)	Install and clearly identify with signs designated emergency spill control stations that include safety equipment, cleanup equipment, and contact information.
9	Spill overflow prevention equipment	Install equipment to prevent fuel overflows during storage tank filling, which are a major source of spills. Overfill prevention equipment automatically shuts off flow, restricts flow, or sounds an alarm when the tank is almost full.
10	Drip pans/pads used to minimize spills	Use drip pans or pads to catch and contain small volumes of leaks, drips, and spills that occur from an activity.
11	Clearly mark all storm drains	As a general facility wide BMP, clearly mark all storm drains to prevent non-storm water discharges to the storm water conveyance system (e.g., decals).
12	Track spills and reporting	Track all spills of reportable quantities through the EASIER database per AFI 32-7001.

Table 5-5: Erosion and Sediment Control Best Management Practices

	BMP	Description
1	Structural erosion and sediment transport control	Implement structural practices to divert storm water flows away from exposed areas, convey runoff, prevent sediments from moving offsite, and reduce the erosive forces of storm water runoff. Methods include sediment traps, sediment basins, and storm drain inlet and outlet protection.
2	Use flow velocity dissipation devices	Place flow velocity dissipation devices at discharge locations and along the length of any outfall channel if the flows would otherwise create erosive conditions.
3	Nonstructural erosion and sediment transport control	Where possible, preserve natural vegetation for storm water control. Revegetate or stabilize disturbed areas as soon as practicable to minimize erosion potential, protect water quality and provide aesthetic benefits. Natural vegetation provides infiltration, removes sediments and other pollutants, and reduces the flow and velocity of storm water.

Table 5-6: Runoff Management Best Management Practices

	BMP	Description
1	Control of run-on	Minimize storm water run-on to disturbed areas or contaminated areas by diverting storm water.
2	Protection of fueling areas from precipitation/runoff	Design fueling procedures to minimize fuel spills and leaks from coming into contact with storm water. Consider covering fueling areas and paving the fuel areas with concrete instead of asphalt (asphalt soaks up fuel and can become a source of storm water contamination).
3	Storm water reduction practices	Reduce the volume of storm water through run-on and runoff controls such as dikes, curbing, and porous pavement.
4	Diking and curbing	Construct dikes and curbing to act as barriers in an area of concern, thus preventing storm water run-on to the facility, and minimizing storm water runoff from the facility by containing runoff or directing runoff to treatment structures such as grassed swales.
5	Designate deicing areas	Designate dedicated areas for deicing and implement runoff controls such as runoff collection/recovery or use of vacuum/collection trucks to prevent deicing fluids from mingling with storm water.

	BMP	Description
1	Training PPT	 Conduct annual training of PPT members to achieve at a minimum, clear understanding of individual responsibilities with respect to the SWP3 implementation. This may include the following responsibilities for particular individuals: Design, installation, maintenance, and/or repair of controls;
		 Storage and handling of chemicals and materials that could become storm water contaminants;
		 Monitoring and inspection procedures and documentation requirements; and
		Corrective action procedures and documentation.
2	Conduct general environmental awareness training	Conduct general awareness training for installation personnel focusing on the EMS, environmental impacts and responsibilities using the TEACH platform.
3	Conduct EMS Cross Functional Team (CFT) meetings	Conduct CFT meetings to discuss environmental programs/compliance and elevate significant issues to senior leadership through the Installation Environment, Safety, and Occupational Health Council.
4	Signs/labels to create awareness of SWP3	Post signs and labels in relevant facilities to promote awareness of the SWP3 and BMPs and to serve as reminders to personnel of overall responsibilities.

Table 5-7: Employee Training Best Management Practices

Table 5-8: Non-storm Water Discharges Best Management Practices

	BMP	Description
1	Evaluate non-storm water discharges	Evaluate for non-storm water discharges. If non-storm water discharges requiring NPDES permit coverage other than those specifically authorized in the Permit will be discharged, such discharges must be covered under another NPDES permit.
2	Issue guidance on non-storm water discharges	Issue installation policy on allowed non-storm water discharges specified by the Permit.
3	Monitor non-storm water discharges for planned events	Review available documentation including 332s, 813s, and building design reviews to prevent illicit discharges.

Table 5-9: Dust Generation and Vehicle Tracking Best Management Practices

BMP		Description
1	Street sweeping	Conduct routine street sweeping on established routes and schedules per the Base Maintenance Contract.
2	Dust tracking	Monitor for dust generation and vehicle tracking onto paved roads from Permitted facilities. Develop control measure as appropriate to control dust and other tracking.

3	Conduct site-inspections	Follow permit requirements for the CGP, MS4 and other
		permits to minimize pollutant generation.

Table 5-10: Record Keeping and Reporting Best Management Practices

BMP		Description
1	Inventory of PPMs	Conduct an inventory of all PPMs stored and/or used at the facility and track through EESOH-MIS.
2	SDSs for all PPMs identified in inventory	Maintain files of SDSs for all PPMs currently stored and/or used at the facility in ESSOH-MIS.
3	Formal plan to substitute toxic solvents and chemicals with nontoxic	Eliminate or reduce the number or amount of HazMat and waste by substituting non-HazMat through the Green Procurement Program or recycling materials.
4	Conduct visual inspections of permitted facilities	Document quarterly visual inspections by recording time and date of inspection, inspector's name, and any deficiencies.
5	Monitor compliance through routine reporting	Track shop level compliance checklist through the installation inspection program in MICT and document deficiencies.

5.2 Numeric Effluent Limitations Based on Effluent Guidelines

Numeric effluent limitations based on effluent guidelines discussed in Part 2.1.3 of the Permit is not applicable to Sector P. Sectors K and L sites are exempt from the effluent limits due to the nature of the wastes received at each site. Sector S sites do not qualify for effluent limits due to the number of annual military aircraft departures. The rationale for each of these Sectors is explained in detail in the site-specific sections, Tabs 1–10.

5.3 Water Quality-based Effluent Limitations

Storm water discharges at KAFB are in compliance with Water Quality Standards as required in Section 2.2.1 of the Permit. The primary receiving water of KAFB is the Tijeras Arroyo, as discussed in Section 3.1. The Tijeras Arroyo is not classified as an impaired water, and discharges to the Tijeras Arroyo meet the Water Quality Standards established in 20.6.4.900 NMAC.

6.1 Control Measures

The following section describes the control measures required by the Permit. References to the Base Maintenance Contract, Fence-to-Fence (FTF) Environmental Service Contract and management plans are made throughout this section through incorporation by reference.

6.1.1 Eliminating and Minimize Exposure

Industrial activities and materials are located indoors whenever possible with notable examples including maintenance bays, aircraft hangars, and warehouses. Controls are utilized for outdoor activities and material storage to minimize their exposure to rainfall and runoff as whenever practicable. The SPCC Plan also provides guidance to minimize exposure to potential leaks and spills.

6.1.2 Good Housekeeping

KAFB complies with good housekeeping requirements in part through the installation BMC, Solid Waste Management, and FTF contract. Schedules are detailed in the respective contracts. The BMC encompasses routine maintenance, street sweeping and inspection/testing for KAFB and tenant organizations. Municipal waste is collected weekly and disposed at the City of Albuquerque's Cerro-Colorado Landfill. The Integrated Solid Waste Management Plan identifies procedures for managing municipal waste and diversion/recovering of recyclable material. Hazardous waste is regulated and disposed of according to procedures identified in the HWMP. Used fats, grease an oils are recycled through contracted service. Operators inspect and maintain tanks according to procedures established by the SPCC Plan. Environmental testing and sampling requirements are covered through the FTF contract. Routine inspections and compliance assessments are completed by the KAFB, Environmental Management office.

6.1.3 Preventative Maintenance

The BMC provides for the inspection, maintenance and repair of storm water conveyances, structural control measures, catch basins, and Septic Tanks/OWSs. Detailed schedules and procedures are provided in the BMC. Tank integrity testing, as well as inspections and maintenance, are conducted through procedures established by the SPCC Plan.

6.1.4 Spill Prevention and Response Procedures

Several installation plans regulate spill response; however, the primary mechanism for spill prevention and response under the Permit is the SPCC Plan. The SPCC Plan includes:

- Procedures for preventing and responding to spills and leaks, including notifications
- Control measures for material handling and storage
- Procedures for preventing spills that could contaminate storm water
- Specific cleanup equipment, procedures and spill logs for used in the event of a spill

6.1.5 Erosion and Sediment Controls

Polymers or other chemical treatments are not used for erosion and sediment control, therefore the documentation requirements relating to their use and application is not applicable. Extensive xeriscaping projects have been completed at KAFB to minimize erosion. Additionally, final stabilization for construction sites is monitored under the CGP. As required by the MS4 Permit, KAFB will assess sediment controls and implement mitigation measures, as needed, to reduce targets sediment pollutants in storm water discharge.

6.1.6 Management of Runoff

Runoff is managed at KAFB primarily through the use of berming or trenching around fueling areas, designated wash areas, and designated deicing areas. Fueling areas such as the ones at the BFSF are bermed. Procedures for the proper release of storm water impounded within these areas are included in the SPCC Plan. Aircraft deicing, when necessary, occurs over oil water separators or trenched areas where the contact with runoff can be minimized. Vehicle and equipment washing occur over oil water separators that discharge to the sewer system.

6.1.7 Employee Training

All employees receive initial Environmental Awareness training through the EMS. This training addresses several elements including good housekeeping, spill prevention and response, and materials management.

Individuals working in regulated sectors are trained in the relevant aspects of the SWP3 unique to the facility. Training for individuals will include the requirements of Permit Section 2.1.2.8 as appropriate. The training program will be modified as needed to address changes to the SWP3.

Training will be documented and reported annually through the TEACH platform. The schedule and specific topics for training will be developed by the PPT and reviewed by the Water Quality Program Manager. Relevant training shall be combined with other requirements where appropriate to minimize operational disruption and improve training efficiency.

6.1.8 Record Keeping

The Water Quality Program Manager will primarily oversee recordkeeping requirements as outlined in Section 8. Data shall be maintained through the available IT systems employed by KAFB and will be made available upon request. The FTF contract will assist in recordkeeping functions and data management. All documents pertinent to the MSGP shall be retained in the electronic eDASH file management system.

6.2 Inspections

Inspections required by the Permit include routine facility inspections and visual assessment of storm water discharges.

6.2.1 Routine Facility Inspections

Quarterly inspections of the permitted facilities will be conducted by the PPT at areas where industrial materials or activities are exposed to storm water, areas that are potential pollutant sources, areas where spills or leaks have occurred within 3 years, discharge points or accessible locations downstream, and control measures used to comply with the effluent limits.

The inspection will look for evidence of industrial materials, residue or trash that may have or could come into contact with storm water; leaks or spills; off-site tracking of waste materials, pollutants or sediment; tracking of materials from areas of no exposure to exposed areas; erosion of soils, non-authorized non-stormwater discharges, and control measures needing replacement, maintenance or repair. Items shall include the elements in Part 3.1.2 of the Permit. Site-specific inspection forms are included in Appendix B.

At least one inspection annually shall occur during a storm water discharge. Control measures implemented to comply with effluent limits and discharge points will be observed to ensure they are functioning correctly during the discharge event.

6.2.2 Visual Assessment of Storm Water Discharges

Storm water samples will be collected quarterly from each outfall for visual assessment. Assessment procedures and criteria are identified in Part 3.2.2 of the Permit and shall be conducted within the first 30 minutes of a discharge event. Water quality characteristics assessed shall include color, odor, clarity (diminished), floating solids, settled solids, suspended solids, foam, oil sheen and other obvious indicators of storm water pollution. Documentation requirements are identified in Part 3.2.3 of the Permit. Exceptions for visual assessments are identified in Part 3.2.3 of the Permit. Corrective action as described in Part 5 of the Permit will be initiated if the facility inspection or visual assessment indicates storm water pollution.

6.3 Monitoring

Monitoring applicable to KAFB includes benchmark and effluent limitations. Outfall locations are shown in Figure 3-1. In general, storm water monitoring will involve the following:

- Collection of one visual assessment from each outfall during each quarterly monitoring period per the conditions in Part 3.2 of the Permit. If it is not possible to collect a sample, the sample must be collected as soon as practicable and a written explanation must be documented and kept with the SWP3. Due to the arid climate at KAFB, quarterly monitoring periods are Q1: July 1 July 31, Q2: August 1 August 31, Q3; September 1 September 30, and Q4: October 1 October 31.
- Documentation of the characteristics in Part 3.2.2.4 of the Permit shall be collected for each sample and retained with the SWP3 documentation.
- Submit collected samples for laboratory analyses as outlined in the sector-specific sections. The Discharge Monitoring Report (DMR) will be maintained and submitted to the EPA Regional Office utilizing the electronic DMR system (NeT-DMR) for each quarter.
- Maintain the automated storm water sampling units according to manufacturer's specifications to ensure proper operation and collection of storm water samples.

6.3.1 Indicator Monitoring

The current permit requires certain subsectors to implement indicator monitoring. This monitoring is intended to provide the facility and the EPA with a baseline and understanding of industrial stormwater discharge quality and potential water quality problems. These parameters are not subject to specific numeric thresholds or baselines but are intended to be report only. No additional action is intended to be taken as a result of sampling data for

indicator parameters. Although there is no threshold for this monitoring it is a requirement of the permit and failure to conduct this monitoring will result in a permit violation.

The State of New Mexico requires PFAS monitoring once during the first year of MSGP coverage or when the facility discharges if no discharge occurs during the first year. Section 9.6.2.1 contains all the details of sampling procedures such as using a EPA Method 537.1 and the DoD Quality Systems Manual Method 5.3 as guidance. The PFAS Screening Level for NM is $0.070 \ \mu g/L$ for all 18 PFAS analytes summed; however it is not a standard of quality and purity for the surface waters of NM but allows detection and further evaluation of the existence of PFAS in stormwater discharges to determine if more attention is warranted. All sectors will be monitored for PFAS within the first year or with the first discharge.

Indicator monitoring for PAHs is not required at KAFB since coal-tar sealcoat is not authorized for use on base.

Additional Sector specific indicator monitoring is required for the following Sectors:

- Sector K No indicator monitoring required.
- Sector L Indicator monitoring required for chemical oxygen demand, total suspended solids, and pH on a quarterly basis for each permit year.
- Sector P Indicator monitoring required for chemical oxygen demand, total suspended solids, and pH on a quarterly basis each permit year and polycyclic aromatic hydrocarbons on a semi-annual basis for the first and fourth year of the permit.
- Sector S Indicator monitoring required for polycyclic aromatic hydrocarbons on a semi-annual basis for the first and fourth year of the permit.

6.3.2 Benchmark Monitoring

Benchmark monitoring data are used to determine the overall effectiveness of storm water control measures and to assist in knowing when additional corrective action(s) may be necessary. The benchmark concentrations are not effluent limitations; therefore, a benchmark exceedance is not a permit violation. However, if corrective action is required as a result of a benchmark exceedance, failure to conduct required corrective action is a permit violation.

Benchmark monitoring is required for the first four quarterly samples of permit coverage. Benchmark thresholds are provided in Part 4.2.2.2 of the Permit. Hardness dependent values were selected based on a hardness sample reporting 136 mg/L collected by the Department of Energy from the Rio Grande in 2015. The hardness dependent benchmark values used are from the 100 mg/L class. Sector-specific benchmark monitoring parameters and numeric control values are included in the respective sector-specific sections of the Permit.

After the collection of four quarterly samples, if the average for any parameter value does not exceed the benchmark, the monitoring requirement will be considered fulfilled for the next two years of the permit term. If the average for any parameter value exceeds the benchmark, the selection, design, installation, and implementation of control measures will be reviewed to determine if modifications are necessary. Corrective actions per Part 5.2 of the Permit will be implemented and benchmark monitoring will be required to be conducted until results indicate that the annual average is no longer exceeded. Additional benchmark monitoring is required to be conducted in year 4 of the permit. If the annual average for a parameter does not exceed the

benchmark threshold, benchmark monitoring can be discontinued for that parameter for the remainder of permit coverage.

6.3.3 Effluent Limitations Guideline Monitoring

Numeric effluent limitations discussed in Part 4.2.3 of the Permit are not applicable to Sectors K, L, P, or S. Sector K and L sites at KAFB are exempt from the effluent limits due to the nature of the wastes received at each site. Sector P does not have any Sector specific effluent limitations regardless of industrial activity. Finally, Sector S sites do not qualify for effluent limitations as AFI 32-1001 does not authorize the use of urea containing deicer fluid. KAFB has transitioned to a green product alternative that complies with military Technical Order requirements. The rationale for each of these sectors is explained in more detail in the site-specific sections.

7.1 Endangered Species Act Provisions

Per the Permit, the SWP3 must address storm water discharges and impacts to federally-listed threatened or endangered species and/or critical habitat. The U.S. Fish and Wildlife Service's list of endangered and threatened species for Bernalillo County, New Mexico identifies six species only one of which has been observed at KAFB.

Mexican Spotted Owl: this species may migrate through KAFB at certain times of the year; however, these species are not known to utilize KAFB for extended periods of time and no documented critical habitat areas exist within the base boundaries.

Rio Grande Silvery Minnow, New Mexico Meadow Jumping Mouse, Southwestern Willow Flycatcher, Sprague's Pipit, and Yellow-billed Cuckoo: these species are not known to occur on KAFB nor are there any documented critical habitat areas within the base boundaries.

The KAFB NEPA process and Integrated Natural Resources Management Plan evaluate the potential impacts base activities may have on federally endangered or threatened species and critical habitats. Of the 53,000 acres under jurisdiction, 2,795 acres are "Improved" lands generally on the northern portion of the installation. No federally-listed endangered or threatened species or critical habitats have been identified in these areas.

Based on this information and the ongoing Natural Resources Management Program, KAFB meets the Endangered Species Act Eligibility Provisions of the Permit under <u>Criterion A: no</u> endangered or threatened species or critical habitat are likely to occur in the "action area" as <u>defined by the Permit</u>.

7.2 National Historic Preservation Act Provisions

Under Section 106 of the National Historic Preservation Act of 1966, as amended, KAFB must assess any potential effects on historic properties (36 CFR 800). Section 110 required KAFB to complete an inventory of historic properties located within its jurisdiction (36 CFR 60, 63, 78, 79, and 800). KAFB has identified over 600 archaeological resources, including 200 significant historic facilities. If an action associated with the Permit inadvertently discovers a historic resource, KAFB will consult the New Mexico State Historic Preservation Office to determine the best mitigation practices necessary.

The KAFB NEPA process evaluates construction projects, structural BMPs, and municipal-type activities for potential impacts to historic properties. Appropriate measures are documented through the NEPA process to ensure protection of historic resources. Any ground disturbing activity requires work clearance (AF 103) prior to commencement. The Integrated Cultural Resources Management Plan identifies additional protective measures for historic resources.

Based on this information, no planned installation of structural controls, and the ongoing Cultural Resources Management Program, KAFB meets the historic preservation provisions of the Permit under <u>Criterion A: there is no potential of an adverse effect on historic properties</u> and no new subsurface control measures will be constructed or installed.
This page intentionally left blank

8.1 SWP3 Implementation

The KAFB Environmental Office has the primary responsibility for implementing the SWP3. This office will interact with other organizations to collect and verify information, provide input, and train personnel about storm water pollution prevention.

8.2 NOI Submittal

KAFB will submit the NOI for Permit coverage on 30 May 2021 via the EPA electronic reporting system NeT-MSGP. A copy of the NOI is included in Appendix A.

8.3 SWP3 Implementation, Personnel, and Schedule

The Permit implementation schedules are discussed in Section 6. The Water Quality Program Manager is the primary point of contact concerning the Permit. The Water Quality Program Manager coordinates and documents implementation of BMPs and control measures through in-house or contracted services. The Installation Commander is the responsible party and signatory for the Permit requirements. At KAFB, the Installation Commander has delegated signature authority to the Environmental Management Office to include the MSGP SWP3, MSGP Annual Reports, DMRs, inspection reports, corrective action reports and any other compliance documentation required under the permit, however delegation does not include NOIs and NOTs.

8.4 SWP3 Review, Modification, or Update

The SWP3 must be reviewed annually in conjunction with the annual report. Modifications based on corrective actions shall be completed per the deadlines required under Part 5.1 of the Permit and documented per Part 5.3. Modifications must be signed and dated in accordance with permit signatory requirements.

8.5 Reporting

8.5.1 Annual Report

The annual report must be submitted to EPA Region 6 using NeT-MSGP no later than 30 January. The report shall cover the previous year from 01 January to 31 December. The Annual Report must include:

- A summary of the past year's routine facility inspection documentation (Part 3.1.6), quarterly visual assessment documentation (Part 3.2.3), and corrective action documentation (Part 5.3), if applicable (if corrective action is not yet completed, a description of any outstanding corrective actions must be submitted).
- Any incidents of noncompliance observed within the past year, or if there is no noncompliance, a certification stating the facility is in compliance with this Permit in accordance with Appendix B, Subsection 11 of the permit.

8.5.2 Numeric Effluent Limitations Exceedance Reporting

If a numeric effluent limit is exceeded based on monitoring conducted per Part 4.2.3.3 of the Permit, an Exceedance Report must be submitted to EPA not later than 30 days after receipt of laboratory results. The Report must be sent to EPA Region 6 listed in Permit Part 7.8 and reported through NeT-DMR. The report must include information as contained in Part 7.5. A summary of reporting requirements is provided in Appendix B, Subsection 13 of the Permit.

8.6 Record Keeping

The KAFB Environmental Office will retain the following records associated with the SWP3 for at least 5 years after coverage under the Permit. Records will be kept on-site in a consolidated binder or electronic format:

- A copy of the NOI submitted to EPA along with any correspondence exchanged between you and EPA specific to coverage under the permit
- A copy of the authorization email received from the EPA assigning the NPDES ID
- A copy of the permit (either a hard copy or an electronic copy easily available to SWP3 personnel)
- Documentation of any maintenance and repairs of stormwater control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacement, and for repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance/repair schedules (see Part 2.1.2.3)
- All inspection reports, including the Routine Facility Inspection Reports (see Part 3.1.6) and Visual Assessment Documentation (see Part 3.2.3)
- Description of any deviations from the schedule for visual assessments and/or monitoring, and the reason for the deviations (e.g., adverse weather or it was impracticable to collect samples within the first 30 minutes of a measurable storm event) (see Parts 3.2.4 and 4.1.5)
- Corrective action documentation required per Part 5.1
- Documentation of any benchmark threshold exceedances, which AIM Level triggering event the exceedance caused, and AIM response you employed per Part 5.2, including:
 - o The AIM triggering event
 - The AIM response taken
 - o Any rationale that SWP3/SCM changes were unnecessary
 - o Any documentation required to meet any AIM exception per Part 5.2.6
- Documentation to support any determination that pollutants of concern are not expected to be present above natural background levels if discharged directly to impaired waters, and that such pollutants were not detected in discharge after three years or were solely attributable to natural background sources (see Part 4.2.5.1)
- Types and monthly quantities of deicer chemical used
- Sector L (C&D Landfill) keep records of the types of wastes disposed of in each cell or trench of the landfill

Section 9 References

Albuquerque Bernalillo County Water Utility Authority (ABCWUA)

2020. KAFB Wastewater Discharge Permit 2068A.

Department of Defense (DoD)

2010. Multiservice Oil/Water Separator Guidance.2014. Unified Facilities Criteria. Accessed from http://www.wbdg.org/references/pa_dod.php>

Environmental Protection Agency (EPA)

2019. NPDES Permit No. NM0031216
2010. Resource Conservation and Recovery Act (RCRA) Permit.
2017. Construction General Permit NMR100000
2015. MS4 Permit NMR04A009
2021. Multi-Sector General Permit NMR050000

Kirtland Air Force Base (KAFB)

1994. Cross-Connection, Infiltration and Inflow Sewer Survey.
2015a. Installation Development Plan.
2015b. Storm Water Management Plan.
2018a. Integrated Natural Resources Management Plan.
2018b. Spill Prevention Control and Countermeasure Plan.
2020a. Integrated Solid Waste Management Plan.
2020b. Installation Emergency Management Plan
2020c. Integrated Cultural Resource Management Plan.
2020d. Base Maintenance Contract.
2020e. Fence-to-Fence Environmental Services Contract.
2020f. Hazardous Waste Management Plan.

This page intentionally left blank

Appendix A: Notice of Intent This page intentionally left blank

Appendix B: Site Specific Inspection Forms

This page intentionally left blank

General Information					
Facility Name	KAFB - Explosive Ordn	KAFB – Explosive Ordnance Disposal Range			
NPDES Tracking No.					
Date of Inspection		Start/End Time			
Inspector's Name(s)					
Inspector's Title(s)					
Inspector's Contact Information					
Inspector's Qualifications					
	Weather Informat	ion			
Weather at time of this inspection? Clear Cloudy Rain Sleet Fog Snow High Winds Other: Temperature:					
Have any previously unidentified pollutants been found, or discharge occurred since the last inspection? □Yes □ No If yes, describe:					
Are there any discharges occurring at the time of inspection? D Yes D No If yes, describe:					
Control Measures					

- Number the structural storm water control measures identified in your SWP3 on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.
- Describe corrective actions initiated, date completed, and note the person that completed the work in the *Corrective Action Log.*

	Structural/Non-	Control	If No, In Need	Corrective Action Needed and Notes
	Structural Control	Measure is	of Maintenance,	(identify needed maintenance and
	Measure	Operating	Repair, or	repairs, or any failed control measures
		Effectively?	Replacement?	that need replacement)
1	Berms around range	□ Yes □No	□ Maintenance	
			🗖 Repair	
			Replacement	

Areas of Industrial Materials or Activities exposed to storm water Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Material loading/unloading and storage areas	□Yes □No □ N/A	□Yes □No	
2	Equipment operations and maintenance areas	□Yes □No □ N/A	□Yes □No	
3	Fueling areas	□Yes □No □ N/A	□Yes □No	
4	Outdoor vehicle and equipment washing areas	□Yes □No □ N/A	□Yes □No	
5	Waste handling and disposal areas	□Yes □No □ N/A	□Yes □No	
6	Erodible areas/construction (including areas not yet fully stabilized)	□Yes □No □ N/A	□Yes □No	
7	Non-storm water/ illicit connections	□Yes □No □ N/A	□Yes □No	
8	Salt storage piles or pile containing salt	□Yes □No □ N/A	□Yes □No	
9	Dust generation and vehicle tracking including entrance, exit, and adjoining off- site paved roads that connect dirt access roads	□Yes □No □ N/A	□Yes □No	
10	Processing areas	□Yes □No □ N/A	□Yes □No	
11	Areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water	□Yes □No □ N/A	□Yes □No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
12	Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by- products used or created by the facility	□Yes □No □ N/A	□Yes □No	
13	Facility perimeter	□Yes □No □ N/A	□Yes □No	
14	Areas where spills/leaks have occurred within the past 3 years (if applicable)	□Yes □No □ N/A	□Yes □No	

At discharge points, describe any evidence of, or the potential for, pollutants entering the drainage system. Also describe observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water. Identify if any corrective action is needed.

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Notes

Use this space for any additional notes or observations from the inspection:

INSPECTOR'S SIGNATURE

Print name and title: _____

Signature:	

CERTIFICATION STATEMENT

Date:_____

"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:	Date:

General Information					
Facility Name	KAFB - Construction and Demolition Debris Landfill				
NPDES Tracking No.					
Date of Inspection	Start/End Time				
Inspector's Name(s)					
Inspector's Title(s)					
Inspector's Contact					
Information					
Inspector's Qualifications					
	Weather Information				
Weather at time of this inspection	on?				
\Box Clear \Box Cloudy \Box Rain	🗅 Sleet 🛛 Fog 🖓 Snow 🖓 High Winds				
□ Other:	Temperature:				
Have any previously unidentified pollutants been found, or discharges occurred since the last inspection? □Yes □No If yes, describe:					
Are there any discharges occurring at the time of inspection? Yes No If yes, describe:					
Control Measures					

- Number the structural storm water control measures identified in your SWP3 on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.
- Describe corrective actions initiated, date completed, and note the person that completed the work in the *Corrective Action Log.*

	Structural/Non-	Control	If No, In Need	Corrective Action Needed and Notes
	Structural Control	Measure is	of Maintenance,	(identify needed maintenance and
	Measure	Operating	Repair, or	repairs, or any failed control measures
		Effectively?	Replacement?	that need replacement)
1	Oil water	□ Yes □No	□ Maintenance	
	separator/washrack-		🗖 Repair	
	west of office just		Replacement	
	south of fence line		_	
2	Holding pond water	🛛 Yes 🖾 No	Maintenance	
	quality and lining		🗖 Repair	
	integrity		Replacement	
3	Secondary	□ Yes □No	□ Maintenance	
	containment-used oil		🗖 Repair	
	tank		Replacement	
4	Diesel tank- concrete	□ Yes □No	□ Maintenance	
	secondary		🗖 Repair	
	containment		Replacement	
5	Diesel tank- built in	□ Yes □No	□ Maintenance	
	secondary		🗖 Repair	
	containment		Replacement	

	Structural/Non- Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
6	Sediment and erosion control berms located east and south borders of landfill to prevent run-on	☐ Yes ☐No	 Maintenance Repair Replacement 	^ /

Areas of Industrial Materials or Activities exposed to storm water Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Material loading/unloading and storage areas	□ Yes □No □ N/A	□Yes □No	
2	Equipment operations and maintenance areas	□ Yes □No □ N/A	□Yes □No	
3	Fueling areas	□ Yes □No □ N/A	□Yes □No	
4	Outdoor vehicle and equipment washing areas	□ Yes □No □ N/A	□Yes □No	
5	Waste handling and disposal areas	□ Yes □No □ N/A	□Yes □No	
6	Erodible areas/construction (including landfill areas not yet fully stabilized)	□ Yes □No □ N/A	□Yes □No	
7	Non-storm water/ illicit connections	□ Yes □No □ N/A	□Yes □No	
8	Dust generation and vehicle tracking including entrance, exit, and adjoining off- site paved roads that connect dirt access roads	□ Yes □No □ N/A	□Yes □No	
9	Processing areas	□ Yes □No □ N/A	□Yes □No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
10	Areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water	□Yes □No □ N/A	□Yes □No	
11	Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by- products used or created by the facility	□Yes □No □ N/A	□Yes □No	
12	Facility perimeter	□Yes □No □ N/A	□Yes □No	
13	Active waste disposal areas	□Yes □No □ N/A	□Yes □No	
14	Areas where spills/leaks have occurred within the past 3 years (if applicable)	□Yes □No □ N/A	□Yes □No	

At discharge points, describe any evidence of, or the potential for, pollutants entering the drainage system. Also describe observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water. Identify if any corrective action is needed.

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Notes

Use this space for any additional notes or observations from the inspection:

INSPECTOR'S SIGNATURE

Print name and title: _____

Signature: _____ Date:____

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: _____ Date:

General Information					
Facility Name	KAFB – Bulk Fuels Storage Facility				
NPDES Tracking No.					
Date of Inspection		Start/End Time			
Inspector's Name(s)					
Inspector's Title(s)					
Inspector's Contact					
Information					
Inspector's Qualifications					
	Weather Informa	tion			
Weather at time of this inspectio	on?				
□ Clear □ Cloudy □ Rain	🗆 Sleet 🛛 Fog 🗔	Snow 🛛 🖬 High W	/inds		
□ Other:	Temperature:				
Have any previously unidentific inspection?	ed pollutants been found	, or discharges occ	urred since the last		
□Yes □No					
If yes, describe:					
Are there any discharges occurri	Are there any discharges occurring at the time of inspection? □Yes □ No				
If yes, describe:					
Control Measures					

- Number the structural storm water control measures identified in your SWP3 on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.
- Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.

	Structural/Non-	Control	If No, In Need	Corrective Action Needed and Notes
	Structural Control	Measure is	of Maintenance,	(identify needed maintenance and
	Measure	Operating	Repair, or	repairs, or any failed control measures
		Effectively?	Replacement?	that need replacement)
1	Oil water	□ Yes □No	□ Maintenance	
	separator/wash rack		Repair	
			Replacement	
2	Lined secondary	□ Yes □No	□ Maintenance	
	containment around		🗖 Repair	
	JP-8 storage tanks		Replacement	
3	Lined secondary	□ Yes □No	□ Maintenance	
	containment around		🗖 Repair	
	diesel and unleaded		Replacement	
	fuel AST		_	
4	Exposed pipeline	□ Yes □No	□ Maintenance	
	with secondary		🗖 Repair	
	containment		Replacement	

	Structural/Non-	Control	If No, In Need	Corrective Action Needed and Notes
	Structural Control	Measure is	of Maintenance,	(identify needed maintenance and
	Measure	Operating	Repair, or	repairs, or any failed control measures
		Effectively?	Replacement?	that need replacement)
5	Secondary	🛛 Yes 🗖 No	□ Maintenance	
	containment at JP-8		🗖 Repair	
	fuel stands and		Replacement	
	receiving areas		-	
6	Secondary	🛛 Yes 🖵 No	□ Maintenance	
	containment at		🗖 Repair	
	deicing AST		Replacement	
7	Secondary	□ Yes □No	□ Maintenance	
	containment for 1000		🗖 Repair	
	gallon tank that		Replacement	
	holds Plus 100		-	
	Product Additive			
8	Shut off valve at	□ Yes □No	□ Maintenance	
	storage tanks to		🗖 Repair	
	isolate problems		Replacement	
9	Daily visual	□ Yes □No	□ Maintenance	
	inspections on tanks,		🗖 Repair	
	pipes and valves		Replacement	
			-	
10	Spill kits at fuel	□ Yes □No	□ Maintenance	
	stands and unloading		🗖 Repair	
	areas		Replacement	

Areas of Industrial Materials or Activities exposed to storm water Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Material loading/unloading and storage areas (including off-loading and temporary off- loading areas)	□ Yes □No □ N/A	□Yes □No	
2	Equipment operations and maintenance areas (including storage areas for items awaiting maintenance)	□ Yes □No □ N/A	□Yes □No	
3	Fueling areas (fueling stations, pumping station, off-loading area, fueling truck storage facility)	□ Yes □No □ N/A	□Yes □ No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
4	Outdoor vehicle and equipment washing areas	□ Yes □No □ N/A	Yes No	
5	Waste handling and disposal areas	□ Yes □No □ N/A	□Yes □No	
6	Erodible areas/construction	□ Yes □No □ N/A	□Yes □No	
7	Non-storm water/ illicit connections	□ Yes □No □ N/A	□Yes □No	
8	Dust generation and vehicle tracking including site entrance and exit	□Yes □No □ N/A	□Yes □No	
9	Processing areas	□Yes □No □ N/A	□Yes □No	
10	Areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water	□Yes □No □ N/A	□Yes □No	
11	Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by- products used or created by the facility	□Yes □No □ N/A	□Yes □No	
12	Facility perimeter	□Yes □No □ N/A	□Yes □No	
13	Area where spill/leaks have occurred within past 3 years (if applicable)	□Yes □No □ N/A	□Yes □No	
14	Any aboveground temporary storage facility	□Yes □No □ N/A	□Yes □No	

At discharge points, describe any evidence of, or the potential for, pollutants entering the drainage system. Also describe observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water. Identify if any corrective action is needed.

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Notes

Use this space for any additional notes or observations from the inspection:

INSPECTOR'S SIGNATURE

Print name and title:

Signature: _____ Date: ____

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:	Date:

General Information					
Fac	ility Name	KAFB – V	ehicle Maintenanc	e Facility	
NP	DES Tracking No.				
Dat	e of Inspection		Start	/End Time	
Ins	pector's Name(s)				
	pector's Title(s)				
	pector's Contact				
	ormation pector's Qualifications				
1115	pector s Qualifications				
			eather Information		
	ather at time of this insp Elear □Cloudy □ R Other:		□ Fog □ Snow Temperature:	v 📮 High Winds	
ins	re any previously unide pection? es D No	ntified polluta	nts been found, or o	discharges occurred since the last	
	es, describe:				
Are there any discharges occurring at the time of inspection? □Yes □ No If yes, describe:					
C	ontrol Measures				
C (Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio	rol measures as a ions. This list wa	are implemented on-si ill ensure that you are	l in your SWP3 on your site map and list then te). Carry a copy of the numbered site map wi e inspecting all required control measures at y the person that completed the work in the	
•	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio Corrective Action Log.	rol measures as d ons. This list w ns initiated, date	are implemented on-si ill ensure that you are completed, and note t	ite). Carry a copy of the numbered site map wi e inspecting all required control measures at y the person that completed the work in the	
•	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio	rol measures as a ions. This list wa	are implemented on-si ill ensure that you are	te). Carry a copy of the numbered site map wite inspecting all required control measures at y the person that completed the work in the Corrective Action Needed and Notes	
•	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio Corrective Action Log. Structural/Non-	rol measures as a fons. This list want ns initiated, date Control Measure is Operating	ire implemented on-si ill ensure that you are completed, and note t If No, In Need of Maintenance, Repair, or	te). Carry a copy of the numbered site map with inspecting all required control measures at y the person that completed the work in the Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures	
•	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio Corrective Action Log. Structural/Non- Structural Control Measure	rol measures as a ons. This list want ns initiated, date Control Measure is Operating Effectively?	are implemented on-si ill ensure that you are completed, and note t If No, In Need of Maintenance, Repair, or Replacement?	te). Carry a copy of the numbered site map wite inspecting all required control measures at y the person that completed the work in the Corrective Action Needed and Notes (identify needed maintenance and	
•	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio Corrective Action Log. Structural/Non- Structural Control Measure Oil Water Separator-	rol measures as a fons. This list want ns initiated, date Control Measure is Operating	The implemented on-si ill ensure that you are completed, and note the If No, In Need of Maintenance, Repair, or Replacement?	te). Carry a copy of the numbered site map with inspecting all required control measures at y the person that completed the work in the Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures	
•	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio Corrective Action Log. Structural/Non- Structural Control Measure Oil Water Separator- inside Buildings	rol measures as a ons. This list want ns initiated, date Control Measure is Operating Effectively?	ire implemented on-si ill ensure that you are completed, and note t If No, In Need of Maintenance, Repair, or Replacement? Maintenance Repair	te). Carry a copy of the numbered site map with inspecting all required control measures at y the person that completed the work in the Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures	
•	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio Corrective Action Log. Structural/Non- Structural Control Measure Oil Water Separator- inside Buildings 20344 and 377	rol measures as a fons. This list want is initiated, date Control Measure is Operating Effectively? Yes DNo	ine implemented on-si ill ensure that you are completed, and note t If No, In Need of Maintenance, Repair, or Replacement? Maintenance Repair Repair Repair Replacement	te). Carry a copy of the numbered site map with inspecting all required control measures at y the person that completed the work in the Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures	
•	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio Corrective Action Log. Structural/Non- Structural Control Measure Oil Water Separator- inside Buildings 20344 and 377 Secondary	rol measures as a ons. This list want ns initiated, date Control Measure is Operating Effectively?	<pre>implemented on-si ill ensure that you are completed, and note t If No, In Need of Maintenance, Repair, or Replacement? Maintenance Repair Repair Replacement Maintenance</pre>	te). Carry a copy of the numbered site map with inspecting all required control measures at y the person that completed the work in the Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures	
•	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio Corrective Action Log. Structural/Non- Structural Control Measure Oil Water Separator- inside Buildings 20344 and 377 Secondary containment to used oil ASTs (Buildings	rol measures as a fons. This list want is initiated, date Control Measure is Operating Effectively? Yes DNo	ine implemented on-si ill ensure that you are completed, and note t If No, In Need of Maintenance, Repair, or Replacement? Maintenance Repair Repair Repair Replacement	te). Carry a copy of the numbered site map with inspecting all required control measures at y the person that completed the work in the Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures	
•	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio Corrective Action Log. Structural/Non- Structural Control Measure Oil Water Separator- inside Buildings 20344 and 377 Secondary containment to used oil ASTs (Buildings 377, 20338, 20349)	rol measures as a fons. This list want is initiated, date Control Measure is Operating Effectively? Yes DNo	ire implemented on-si ill ensure that you are completed, and note the If No, In Need of Maintenance, Repair, or Replacement? Deplacement? Replacement Replacement Replacement Replarement Replarement Replacement	te). Carry a copy of the numbered site map with inspecting all required control measures at y the person that completed the work in the Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures	
•	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio Corrective Action Log. Structural/Non- Structural Control Measure Oil Water Separator- inside Buildings 20344 and 377 Secondary containment to used oil ASTs (Buildings 377, 20338, 20349) Scrap metal	rol measures as a fons. This list want is initiated, date Control Measure is Operating Effectively? Yes DNo	<pre>interimplemented on-si iil ensure that you are completed, and note t If No, In Need of Maintenance, Repair, or Replacement? Maintenance Repair Repair Replacement Maintenance Repair Replacement Replacement Replacement Maintenance</pre>	te). Carry a copy of the numbered site map with inspecting all required control measures at y the person that completed the work in the Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures	
•	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio Corrective Action Log. Structural/Non- Structural Control Measure Oil Water Separator- inside Buildings 20344 and 377 Secondary containment to used oil ASTs (Buildings 377, 20338, 20349) Scrap metal container with lid,	rol measures as a fons. This list want is initiated, date Control Measure is Operating Effectively? Yes DNo	<pre>implemented on-si iil ensure that you are completed, and note t If No, In Need of Maintenance, Repair, or Replacement? Maintenance Repair Replarement Maintenance Repair Repair Replacement Maintenance Repair Replacement </pre>	te). Carry a copy of the numbered site map with inspecting all required control measures at y the person that completed the work in the Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures	
• 1 2 3	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio Corrective Action Log. Structural/Non- Structural/Non- Structural Control Measure Oil Water Separator- inside Buildings 20344 and 377 Secondary containment to used oil ASTs (Buildings 377, 20338, 20349) Scrap metal container with lid, Building 20344	rol measures as a ons. This list was ns initiated, date Control Measure is Operating Effectively? Quest No Quest No	 <i>intermented on-si</i> <i>intermented on-si</i> <i>intermented on-si</i> <i>intermented on note t</i> <i>intermented on note t</i> <i>intermented of Maintenance</i>, <i>Repair, or</i> <i>Repair</i> <i>Replacement</i> <i>Maintenance</i> <i>Repair</i> <i>Replacement</i> <i>Repair</i> <i>Replacement</i> 	te). Carry a copy of the numbered site map with inspecting all required control measures at y the person that completed the work in the Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures	
•	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio Corrective Action Log. Structural/Non- Structural Control Measure Oil Water Separator- inside Buildings 20344 and 377 Secondary containment to used oil ASTs (Buildings 377, 20338, 20349) Scrap metal container with lid, Building 20344 Rubber container,	rol measures as a fons. This list want is initiated, date Control Measure is Operating Effectively? Yes DNo	 <i>intermented on-si</i> <i>intermented on-si</i> <i>intermented on-si</i> <i>intermented on note t</i> <i>intermented of Maintenance</i>, <i>Repair, or Replacement?</i> <i>Maintenance</i> <i>Repair</i> <i>Replacement</i> 	te). Carry a copy of the numbered site map with inspecting all required control measures at y the person that completed the work in the Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures	
• 1 2 3	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio Corrective Action Log. Structural/Non- Structural/Non- Structural Control Measure Oil Water Separator- inside Buildings 20344 and 377 Secondary containment to used oil ASTs (Buildings 377, 20338, 20349) Scrap metal container with lid, Building 20344	rol measures as a ons. This list was ns initiated, date Control Measure is Operating Effectively? Quest No Quest No	 <i>intermented on-si</i> <i>intermented on-si</i> <i>intermented on-si</i> <i>intermented on note t</i> <i>intermented on note t</i> <i>intermented of Maintenance</i>, <i>Repair, or</i> <i>Repair</i> <i>Replacement</i> <i>Replacement</i> <i>Replarement</i> 	te). Carry a copy of the numbered site map with inspecting all required control measures at y the person that completed the work in the Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures	
• 1 2 3	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio Corrective Action Log. Structural/Non- Structural Control Measure Oil Water Separator- inside Buildings 20344 and 377 Secondary containment to used oil ASTs (Buildings 377, 20338, 20349) Scrap metal container with lid, Building 20344 Rubber container,	rol measures as a ons. This list was ns initiated, date Control Measure is Operating Effectively? Quest No Quest No	ine implemented on-si iil ensure that you are completed, and note the If No, In Need of Maintenance, Repair, or Replacement? Maintenance Repair Replacement Maintenance Repair Replacement Replacement Repair Replacement Replacement Replacement Replacement Replacement Replacement Replacement Replacement	te). Carry a copy of the numbered site map with inspecting all required control measures at y the person that completed the work in the Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures	
• 1 2 3 4	Number the structural s below (add as many cont you during your inspect facility. Describe corrective actio Corrective Action Log. Structural/Non- Structural Control Measure Oil Water Separator- inside Buildings 20344 and 377 Secondary containment to used oil ASTs (Buildings 377, 20338, 20349) Scrap metal container with lid, Building 20344 Rubber container, Building 20344	rol measures as a fons. This list was ns initiated, date Control Measure is Operating Effectively? Q Yes QNo Q Yes QNo Q Yes QNo	<pre>implemented on-si iil ensure that you are completed, and note t If No, In Need of Maintenance, Repair, or Replacement? Maintenance Repair Replarement Maintenance Repair Replacement Replacement </pre>	te). Carry a copy of the numbered site map with inspecting all required control measures at y the person that completed the work in the Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures	

	Structural/Non-	Control	If No, In Need of	Corrective Action Needed and Notes
	Structural Control	Measure is	Maintenance,	(identify needed maintenance and
	Measure	Operating	Repair, or	repairs, or any failed control measures
		Effectively?	Replacement?	that need replacement)
6	Poly and 2 corrosive	□ Yes □No	Maintenance	
	lockers (storage of		Repair	
	new/used lead		Replacement	
	batteries) Building		-	
	20341			

Areas of Industrial Materials or Activities exposed to storm water Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Material loading/unloading and storage areas	□ Yes □No □ N/A	□Yes □No	
2	Equipment operations and maintenance areas (including storage areas for items awaiting maintenance)	□ Yes □No □ N/A	□Yes □No	
3	Fueling areas	□ Yes □No □N/A	□Yes □No	
4	Outdoor vehicle and equipment washing areas	□ Yes □No □ N/A	□Yes □No	
5	Waste handling and disposal areas	□ Yes □No □ N/A	□Yes □No	
6	Erodible areas/construction	□Yes □No □ N/A	□Yes □No	
7	Non-storm water/ illicit connections	□ Yes □No □ N/A	□Yes □No	
8	Dust generation and vehicle tracking including site entrance and exit	□Yes □No □ N/A	□Yes □No	
9	Processing areas	□Yes □No □ N/A	□Yes □No	
10	Areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water	□Yes □No □ N/A	□Yes □No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
11	Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by- products used or created by the facility	□Yes □No □ N/A	□Yes □No	
12	JP-8 tank used to calibrate fuel truck equipment	□ Yes □No □ N/A	□Yes □No	
13	Facility perimeter	□Yes □No □N/A	□Yes □No	
14	Area where spill/leaks have occurred within past 3 years (if applicable)	□Yes □No □ N/A	□Yes □No	
15	Outdoor industrial areas around buildings	□Yes □No □ N/A	□Yes □No	
16	Any aboveground temporary storage facilities	□Yes □No □ N/A	□Yes □No	
17	Storage areas for vehicles/equipment awaiting maintenance	□Yes □No □ N/A	□Yes □No	

At discharge points, describe any evidence of, or the potential for, pollutants entering the drainage system. Also describe observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water. Identify if any corrective action is needed.

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Notes

Use this space for any additional notes or observations from the inspection:

INSPECTOR'S SIGNATURE

Print name and title: _____

Signature: _____ Date: _____

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:	Date:

	General Information					
Faci	lity Name	KAFB - At	uto Hobby Shop			
NPI	DES Tracking No.					
Date	e of Inspection		Sta	rt/End Time		
Insp	pector's Name(s)					
-	vector's Title(s)					
	pector's Contact prmation					
	pector's Qualifications					
		W	eather Informatio	n		
Wea	ther at time of this inspe	ection?				
	lear □Cloudy □ Ra hther:		□ Fog □ Snow Temperature:	High Winds		
	uici.		remperature.			
		tified pollutant	s been found, or d	ischarges occurred since the last		
	pection?					
	es 🗆 No					
II ye	es, describe:					
Are	there any discharges occ	urring at the tin	ne of inspection?	Yes 🛛 No		
	es, describe:	0	I			
Co	ontrol Measures	un anaton control	magazina identified	in your CIAID? on your site man and list them		
•				<i>in your SWP3 on your site map and list them</i> <i>e). Carry a copy of the numbered site map with</i>		
				inspecting all required control measures at your		
	facility.		<i></i>	······································		
٠		s initiated, date co	ompleted, and note th	e person that completed the work in the		
-	Corrective Action Log.					
	Structural/Non- Structural Control	Control Measure is	If No, In Need of Maintenance,	Corrective Action Needed and Notes		
	Measure	Operating	Repair, or	(identify needed maintenance and repairs, or any failed control measures that need		
	Wiedbure	Effectively?	Replacement?	replacement)		
1	Oil Water Separators-	□ Yes □No	□ Maintenance			
	inside Building 20375		Repair			
			Replacement			
2	Polypacks	□ Yes □No	□ Maintenance			
			□ Repair			
2	Cocon dam:		Replacement			
3	Secondary Containment of AST	□ Yes □No	MaintenanceRepair			
	Containing of AUT		Replacement			

Areas of Industrial Materials or Activities exposed to storm water Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Inspected?	Controls	Corrective Action Needed and
	Anca Activity	inspected.	Adequate (appropriate, effective, and operating)?	Notes
1	Material loading/unloading and storage areas	□ Yes □No □ N/A	□Yes □No	
2	Equipment operations and maintenance areas (including storage areas for items awaiting maintenance)	□ Yes □No □ N/A	□Yes □No	
3	Fueling areas	□ Yes □No □N/A	□Yes □No	
4	Outdoor vehicle and equipment washing areas	□ Yes □No □ N/A	□Yes □No	
5	Waste handling and disposal areas	□ Yes □No □ N/A	□Yes □No	
6	Erodible areas/construction	□Yes □No □ N/A	□Yes □No	
7	Non-storm water/ illicit connections	□ Yes □No □ N/A	□Yes □No	
8	Salt storage piles or pile containing salt	□Yes □No □ N/A	□Yes □No	
9	Dust generation and vehicle tracking including site entrance and exit	□Yes □No □ N/A	□Yes □No	
10	Processing areas	□Yes □No □ N/A	□Yes □No	
11	Areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water	□Yes □No □ N/A	□Yes □No	
12	Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by- products used or created by the facility	□Yes □No □ N/A	□Yes □No	
13	Facility perimeter and areas around buildings	□ Yes □No □ N/A	□Yes □No	
14	Long term parking area	□Yes □No □ N/A	□Yes □No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
15	Area where spill/leaks have occurred within past 3 years (if applicable)	□Yes □No □ N/A	□Yes □No	
16	Any aboveground temporary storage facilities	□Yes □No □ N/A	□Yes □No	

At discharge points, describe any evidence of, or the potential for, pollutants entering the drainage system. Also describe observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water. Identify if any corrective action is needed.

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Notes

Use this space for any additional notes or observations from the inspection:

INSPECTOR'S SIGNATURE

Print name and title:

Signature: _____ Date: _____

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: _____ Date: _____

General Information				
Faci	lity Name	KAFB – Po	ower Pro	
NPI	DES Tracking No.			
Dat	e of Inspection		Sta	rt/End Time
Insp	vector's Name(s)			
Insp	pector's Title(s)			
	vector's Contact			
Information Inspector's Qualifications				
msp	bector's Quantications			
			eather Informatio	n
	ather at time of this inspe lear □Cloudy □ Ra hther:	in 🗖 Sleet	□ Fog □ Snow Γemperature:	High Winds
insp □Ye	e any previously uniden pection? es □No es, describe:	tified pollutant	s been found, or d	ischarges occurred since the last
	there any discharges occ es, describe:	urring at the tin	ne of inspection? [Yes 🛛 No
•	below (add as many contr you during your inspectic facility.	ol measures as are ns. This list will	e implemented on-site ensure that you are i	in your SWP3 on your site map and list them e). Carry a copy of the numbered site map with inspecting all required control measures at your he person that completed the work in the
	Structural/Non-	Control	If No, In Need	Corrective Action Needed and Notes
	Structural Control	Measure is	of Maintenance,	(identify needed maintenance and repairs,
	Measure	Operating	Repair, or	or any failed control measures that need
1	Oil Water Concreters	Effectively?	Replacement?	replacement)
1	Oil Water Separators near Washracks	□ Yes □No	 Maintenance Repair 	
neur vusniuens				
2	Polypacks	□ Yes □No	□ Maintenance	
			🗖 Repair	
	0 1		Replacement	
3	Secondary Containment of AST	□ Yes □No	□ Maintenance	
	Containment of A51		RepairReplacement	
4	Spill Kits	□ Yes □No		
	•		□ Repair	
			Replacement	

Areas of Industrial Materials or Activities exposed to storm water

Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Inspected?	Controls	Corrective Action Needed and
	Anea Activity	mspecteu:	Adequate	Notes
			(appropriate,	Troles
			effective, and	
			operating)?	
1	Material	□ Yes □No □ N/A	□Yes □No	
1	loading/unloading and			
	storage areas			
2	Equipment operations	□ Yes □No □ N/A	□Yes □No	
~	and maintenance areas			
	(including storage areas			
	for items awaiting			
	maintenance)			
3	Fueling areas	□ Yes □No □N/A	□Yes □No	
5	i ucing areas			
4	Outdoor vehicle and	□ Yes □No □ N/A	□Yes □No	
	equipment washing			
	areas (Bldg. 20698)			
5	Waste handling and	□ Yes □No □ N/A	□Yes □No	
	disposal areas			
6	Erodible	□Yes □No □N/A	□Yes □No	
	areas/construction			
7	Non-storm water/ illicit	□ Yes □No □ N/A	□Yes □No	
	connections			
8	Dust generation and	□Yes □No □ N/A	□Yes □No	
	vehicle tracking			
	including site entrance			
	and exit			
9	Processing areas	□Yes □No □N/A	□Yes □No	
10	Areas where industrial	□Yes □No □N/A	□Yes □No	
	activity has taken place			
	in the past and			
	significant materials			
	remain and are exposed			
	to storm water			
11	Immediate access roads	□Yes □No □N/A	□Yes □No	
	and rail lines used or			
	traveled by carriers of			
	raw materials,			
	manufactured products,			
	waste material, or by-			
	products used or			
	created by the facility			
10	T 111			
12	Facility perimeter and	□ Yes □No □ N/A	□Yes □No	
	areas around buildings			
14	Area where spill/leaks	□Yes □No □ N/A	□Yes □No	
	have occurred within			
	past 3 years (if			
	applicable)			

	Area/Activity	Inspected?	Controls	Corrective Action Needed and
			Adequate	Notes
			(appropriate,	
			effective, and	
			operating)?	
15	Any aboveground	□Yes □No □N/A	□Yes □No	
	temporary storage			
	facilities			

At discharge points, describe any evidence of, or the potential for, pollutants entering the drainage system. Also describe observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water. Identify if any corrective action is needed.

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Notes

Use this space for any additional notes or observations from the inspection:

INSPECTOR'S SIGNATURE

Print name and title:

Signature: _____ Date:_____

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:	

General Information					
Facility Name	Facility Name KAFB – 58th Special Operations Wing				
NPDES Tracking No.					
Date of Inspection	Start/End Time				
Inspector's Name(s)					
Inspector's Title(s)					
Inspector's Contact Information					
Inspector's Qualifications					
	Weather Information				
Weather at time of this inspectio	n?				
□ Clear □Cloudy □ Rain □ Other:	□ Sleet □ Fog □ Snow □ High Winds Temperature: .				
Have any previously unidentified pollutants been found, or discharges occurred since the last inspection? □Yes □No If yes, describe:					
Are there any discharges occurri If yes, describe:	ng at the time of inspection? □Yes □ No				
Control Measures	r control measures identified in your SIA/P3 on your site man and list them				

- Number the structural storm water control measures identified in your SWP3 on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.
- Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.

	Structural/Non-	Control	If No, In Need	Corrective Action Needed and Notes
	Structural Control	Measure is	of Maintenance,	(identify needed maintenance and
	Measure	Operating	Repair, or	repairs, or any failed control measures
		Effectively?	Replacement?	that need replacement)
1	Centralized storage of	□Yes □No	□ Maintenance	
	ground equipment		🗖 Repair	
	along fence line north		Replacement	
	of Hangar 1002			
2	Centralized storage of	🗆 Yes 🗖 No	Maintenance	
	ground equipment		🗖 Repair	
	north of CV-22		Replacement	
3	Centralized storage of	🗖 Yes 🗖 No	□ Maintenance	
	ground equipment in		🗖 Repair	
	parking lot of		Replacement	
	building 381.			
4	Double walled, used	🗆 Yes 🗖 No	Maintenance	
	oil/fuel tanks,		🗖 Repair	
	Buildings 336, 381,		Replacement	
	992, 704, 1000, 1001		_	

	Structural/Non-	Control	If No, In Need	Corrective Action Needed and Notes
	Structural Control	Measure is	of Maintenance,	(identify needed maintenance and
	Measure	Operating	Repair, or	repairs, or any failed control measures
		Effectively?	Replacement?	that need replacement)
5	Oil water separators,	□ Yes □No	□ Maintenance	
	east of Building 381,		🗖 Repair	
	and between Hangars		Replacement	
	1001 and 1002.		_	
6	Polypaks storage of	🛛 Yes 🖾No	□ Maintenance	
	initial accumulation		🗖 Repair	
	point waste		Replacement	
	containers west of			
	Building 381 (bermed			
	area) and any other			
	hazardous materials			
	storage units (storage			
	lockers).			
7	Fuel tanks Building	🗖 Yes 🗖 No	Maintenance	
	704 (JP-8), 381 (Diesel		🗖 Repair	
	and Mogas) with		Replacement	
	secondary			
	containment			
8	Oil pans under	□Yes □No	Maintenance	
	equipment at Engine		🗖 Repair	
	Test Cell (Building		Replacement	
	704)			

Areas of Industrial Materials or Activities exposed to storm water

Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Material loading/unloading and storage areas	□ Yes □No □ N/A	🗖 Yes 🗖 No	
2	Equipment operations and maintenance areas	□ Yes □No □ N/A	🗆 Yes 🗖 No	
3	Fueling areas	□ Yes □No □ N/A	□ Yes □No	
4	Outdoor vehicle and equipment washing areas.	□ Yes □No □ N/A	□ Yes □No	
	Note - Ensure that wash water is disposed of through OWS when alcohol is not added.			
5	Waste handling and disposal areas	□ Yes □No □ N/A	🗆 Yes 🗖 No	
6	Erodible areas/construction	□Yes □No □ N/A	□Yes □No	

7	Area/Activity Non-storm water/ illicit	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
8	connections Dust generation and vehicle tracking including site entrance and exit	□Yes □No □ N/A	□Yes □No	
9	Processing areas	□Yes □No □ N/A	□Yes □No	
10	Areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water	□Yes □No □ N/A	□Yes □No	
11	Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by- products used or created by the facility	□Yes □No □ N/A	□Yes □No	
12	Facility perimeter	□Yes □No □N/A	□Yes □No	
13	Flight line and tarmac outside hangars, including designated deicing areas	□Yes □No □ N/A	□Yes □No	
14	Engine test facility concrete	□Yes □No □ N/A	□Yes □No	
15	Area where spill/leaks have occurred within past 3 years (if applicable)	□Yes □No □ N/A	□Yes □No	

At discharge points, describe any evidence of, or the potential for, pollutants entering the drainage system. Also describe observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water. Identify if any corrective action is needed.
Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Notes

Use this space for any additional notes or observations from the inspection:

INSPECTOR'S SIGNATURE

Print name and title: _____

Date:____ Signature:

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: Date:

Storm Water Industrial Routine Facility Inspection Report

General Information			
Facility Name	KAFB - US Customs and Border Protection		
NPDES Tracking No.			
Date of Inspection		Start/End Time	
Inspector's Name(s)		· · · ·	
Inspector's Title(s)			
Inspector's Contact Information			
Inspector's Qualifications			
	Weather Informa	tion	
Weather at time of this inspectio	on?		
\Box Clear \Box Cloudy \Box Rain	□ Sleet □ Fog □ S	Snow 🛛 🛛 High Wi	nds
□ Other:	Temperature:		
Have any previously unidentified pollutants been found, or discharges occurred since the last inspection? □Yes □No If yes, describe:			
Are there any discharges occurring at the time of inspection? □Yes □ No If yes, describe:			

Control Measures

- Number the structural storm water control measures identified in your SWP3 on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.
- Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.

	Structural/Non-	Control	If No, In Need	Corrective Action Needed and Notes
	Structural Control	Measure is	of Maintenance,	(identify needed maintenance and
	Measure	Operating	Repair, or	repairs, or any failed control measures
		Effectively?	Replacement?	that need replacement)
1	Oil Water	□ Yes □No	□ Maintenance	
	Separator/wash rack,		🗖 Repair	
	west of Building 291		Replacement	
2	Spill kits near	□ Yes □No	Maintenance	
	fueling areas		🗖 Repair	
			Replacement	
3	Poly pack south of	□ Yes □No	□ Maintenance	
	buildings and any		🗖 Repair	
	other hazardous		Replacement	
	materials storage			
	units (storage			
	lockers)			
4	Covered storage area	□ Yes □No	Maintenance	
			🗖 Repair	
			Replacement	

Areas of Industrial Materials or Activities exposed to storm water

Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Material loading/unloading and storage areas	□ Yes □No □ N/A	□ Yes □No	
2	Equipment operations and maintenance areas	□ Yes □No □ N/A	□ Yes □No	
3	Fueling areas including fuel truck storage	□Yes □No □N/A	□ Yes □No	
4	Outdoor vehicle and equipment washing areas	□ Yes □No □ N/A	□ Yes □No	
5	Waste handling and disposal areas	□ Yes □No □ N/A	□ Yes □No	
6	Erodible areas/construction	□ Yes □No □ N/A	□Yes □No	
7	Non-storm water/ illicit connections	□ Yes □No □ N/A	□Yes □No	
8	Dust generation and vehicle tracking including site entrance and exit	□ Yes □No □ N/A	□Yes □No	
9	Processing areas	□Yes □No □ N/A	□Yes □No	
10	Areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water	□Yes □No □ N/A	□Yes □No	
11	Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by- products used or created by the facility	□Yes □No □ N/A	□Yes □No	
12	Facility perimeter	□Yes □No □ N/A	□Yes □No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
13	Area where spill/leaks have occurred within past 3 years (if applicable)	□Yes □No □N/A	□Yes □No	

Discharge Points

At discharge points, describe any evidence of, or the potential for, pollutants entering the drainage system. Also describe observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water. Identify if any corrective action is needed.

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Notes

Use this space for any additional notes or observations from the inspection:

INSPECTOR'S SIGNATURE

Print name and title:

Signature: _____ Date:_____

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:	Date:

Storm Water Industrial Routine Facility Inspection Report

General Information			
Facility Name	KAFB - 150th Air National Guard		
NPDES Tracking No.			
Date of Inspection	Start/End Time		
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact			
Information			
Inspector's Qualifications			
	Weather Information		
Weather at time of this inspection	on?		
□ Clear □ Cloudy □ Rain	🗖 Sleet 🛛 Fog 🖓 Snow 🖓 High Winds		
□ Other:	Temperature:		
Have any previously unidentified pollutants been found, or discharges occurred since the last inspection? □Yes □No If yes, describe:			
Are there any discharges occurring at the time of inspection? □Yes □ No If yes, describe:			

Control Measures

- Number the structural storm water control measures identified in your SWP3 on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.
- Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.

	Structural/Non- Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
1	2 double walled (secondary containment) tanks, filling station south of Building 1058	□ Yes □No	 Maintenance Repair Replacement 	
2	Poly Pak- containment for initial accumulation point of waste located north of Building 1058 and east of Building 1069 and any other hazardous materials storage units (storage lockers)	□ Yes □No	 Maintenance Repair Replacement 	

	Structural/Non- Structural Control Measure	Control Measure is Operating Effectively?	If No, In Need of Maintenance, Repair, or Replacement?	Corrective Action Needed and Notes (identify needed maintenance and repairs, or any failed control measures that need replacement)
3	Oil Water Separators, Buildings 1069, 1061, 1077 and fuel truck parking area.	□ Yes □No	 Maintenance Repair Replacement 	
4	Wash rack south end of flight line.	□ Yes □No	 Maintenance Repair Replacement 	

Areas of Industrial Materials or Activities exposed to storm water

Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Material loading/unloading and storage areas	□ Yes □No □ N/A	□ Yes □No	
2	Equipment operations and maintenance areas	□ Yes □No □ N/A	□ Yes □No	
3	Fueling areas	□ Yes □No □ N/A	□ Yes □No	
4	Outdoor vehicle and equipment washing areas	□ Yes □No □ N/A	□ Yes □No	
5	Waste handling and disposal areas	□ Yes □No □ N/A	□ Yes □No	
6	Erodible areas/construction	□Yes □No □N/A	□Yes □No	
7	Non-storm water/ illicit connections	□Yes □No □N/A	□Yes □No	
8	Dust generation and vehicle tracking including site entrance and exit	□Yes □No □ N/A	□Yes □No	
9	Processing areas	□Yes □No □N/A	□Yes □No	
10	Areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water	□Yes □No □ N/A	□Yes □No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
11	Immediate access roads	□Yes □No □N/A	□Yes □No	
	and rail lines used or			
	traveled by carriers of			
	raw materials,			
	manufactured			
	products, waste material, or by-			
	products used or			
	created by the facility			
12	Facility perimeter	□Yes □No □N/A	□Yes □No	
13	Flight line and tarmac	□Yes □No □N/A	□Yes □No	
	outside hangars,			
	including designated			
	deicing areas			
14	Area where spill/leaks	□Yes □No □N/A	□Yes □No	
	have occurred within			
	past 3 years (if			
	applicable)			

Discharge Points

At discharge points, describe any evidence of, or the potential for, pollutants entering the drainage system. Also describe observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water. Identify if any corrective action is needed.

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Notes

Use this space for any additional notes or observations from the inspection:

INSPECTOR'S SIGNATURE

Print name and title:

Signature: Date:____

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."

Date:

Print name and title:		

Signature: _____

Storm Water Industrial Routine Facility Inspection Report

General Information			
Facility Name	KAFB – US Forest Service Air Tanker Facility		
NPDES Tracking No.			
Date of Inspection	Start/End Time		
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Inspector's Qualifications			
	Weather Information		
Weather at time of this inspectio	on?		
\Box Clear \Box Cloudy \Box Rain	0		
□ Other:	Temperature:		
Have any previously unidentified pollutants been found, or discharges occurred since the last inspection? □Yes □No If yes, describe:			
Are there any discharges occurri If yes, describe:	ng at the time of inspection? □Yes □ No		
Control Measures			

•

- Number the structural storm water control measures identified in your SWP3 on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.
- Describe corrective actions initiated, date completed, and note the person that completed the work in the • Corrective Action Log.

	Structural/Non-	Control	If No, In Need of	Corrective Action Needed and Notes
	Structural Control	Measure is	Maintenance,	(identify needed maintenance and
	Measure	Operating	Repair, or	repairs, or any failed control
		Effectively?	Replacement?	measures that need replacement)
1	Fire retardant	□ Yes □No	Maintenance	
	secondary		🗖 Repair	
	containment –		Replacement	
	berms and concrete		_	
2	Oil water separator	□ Yes □No	Maintenance	
			🗖 Repair	
			Replacement	
3	Wastewater	□ Yes □No	Maintenance	
	holding tank		🗖 Repair	
			Replacement	
4	Storm water valve	□ Yes □No	Maintenance	
	for holding tank		🗖 Repair	
			Replacement	

	Structural/Non-	Control	If No, In Need of	Corrective Action Needed and Notes
	Structural Control	Measure is	Maintenance,	(identify needed maintenance and
	Measure	Operating	Repair, or	repairs, or any failed control
		Effectively?	Replacement?	measures that need replacement)
5	Apron	□ Yes □No	Maintenance	
	grading/berms		🗖 Repair	
	(ensure discharge is		Replacement	
	to holding tank)		-	
6	Valve function and	□ Yes □No	Maintenance	
	diverter box.		🗖 Repair	
			Replacement	
	Ensure valve is in		-	
	correct position to			
	discharge to the			
	appropriate system.			

Areas of Industrial Materials or Activities exposed to storm water

Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
1	Material loading/unloading and storage areas	□ Yes □No □ N/A	□ Yes □No	
2	Equipment operations and maintenance areas	□ Yes □No □ N/A	□ Yes □No	
3	Fueling areas, including parking apron fueling area.	□ Yes □No □ N/A	□ Yes □No	
4	Outdoor vehicle and equipment washing areas (apron)	□ Yes □No □ N/A	□ Yes □No	
5	Waste handling and disposal areas	□ Yes □No □ N/A	□ Yes □No	
6	Erodible areas/construction	□Yes □No □N/A	□Yes □No	
7	Non-storm water/ illicit connections	□ Yes □No □ N/A	□Yes □No	
8	Dust generation and vehicle tracking including site entrance and exit	□Yes □No □ N/A	□Yes □No	
9	Processing areas	□Yes □No □ N/A	□Yes □No	
10	Areas where industrial activity has taken place in the past and significant	□Yes □No □ N/A	□Yes □No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
	materials remain and are exposed to storm water			
11	Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by- products used or created by the facility	□Yes □No □ N/A	□Yes □No	
12	Facility perimeter	□Yes □No □N/A	□Yes □No	
13	Area where spill/leaks have occurred within past 3 years (if applicable)	□Yes □No □ N/A	□Yes □No	
14	Any aboveground temporary storage facility	□Yes □No □ N/A	□Yes □No	

Discharge Points

At discharge points, describe any evidence of, or the potential for, pollutants entering the drainage system. Also describe observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water. Identify if any corrective action is needed.

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Notes

Use this space for any additional notes or observations from the inspection:

INSPECTOR'S SIGNATURE

Print name and title: _____

Signature: _____ Date: _____

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: _____ Date:_____

Storm Water Industrial Routine Facility Inspection Report

General Information				
Facility Name	Facility Name KAFB – Transient Alert, Civil Air Patrol, and Aero Club			
NPDES Tracking No.				
Date of Inspection	Start/End Time			
Inspector's Name(s)				
Inspector's Title(s)				
Inspector's Contact				
Information				
Inspector's Qualifications				
	Weather Information			
Weather at time of this inspe	ection?			
\Box Clear \Box Cloudy \Box Ra	in 🗖 Sleet 🗖 Fog 🗖 Snow 🗖 High Winds			
□ Other:	□ Other: Temperature:			
Have any previously uniden inspection?	tified pollutants been found, or discharges occurred since the last			
DYes DNo				
If yes, describe:				
Are there any discharges occurring at the time of inspection? \Box Yes \Box No				
If yes, describe:				

Control Measures

- Number the structural storm water control measures identified in your SWP3 on your site map and list them below (add as many control measures as are implemented on-site). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required control measures at your facility.
- Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.

	Structural/Non-	Control	If No, In Need of	Corrective Action Needed and Notes
	Structural Control	Measure is	Maintenance,	(identify needed maintenance and
	Measure	Operating	Repair, or	repairs, or any failed control
		Effectively?	Replacement?	measures that need replacement)
1	Oil water separator	□ Yes □No	□ Maintenance	
	and wash rack		🗖 Repair	
			Replacement	
2	Waste Collection	□ Yes □No	Maintenance	
	Site		🗖 Repair	
			Replacement	

Areas of Industrial Materials or Activities exposed to storm water

Below are some general areas that should be assessed during routine inspections. Customize this list as needed for the specific types of industrial materials or activities at your facility.

	Area/Activity	Inspected?	Controls Adequate (appropriate,	Corrective Action Needed and Notes
			effective, and operating)?	
1	Material loading/unloading and storage areas including ground equipment storage north of flight line and AGE storage area	□ Yes □No □ N/A	□Yes □No	
2	Equipment operations and maintenance areas	□ Yes □No □ N/A	□ Yes □No	
3	Fueling areas	□ Yes □No □ N/A	□Yes □No	
4	Outdoor vehicle and equipment washing areas	□ Yes □No □ N/A	□ Yes □No	
5	Waste handling and disposal areas	□ Yes □No □ N/A	□Yes □No	
6	Erodible areas/construction	□Yes □No □N/A	□Yes □No	
7	Non-storm water/ illicit connections	□ Yes □No □ N/A	□Yes □No	
8	Dust generation and vehicle tracking including site entrance and exit	□Yes □No □N/A	□Yes □No	
9	Processing areas	□Yes □No □N/A	□Yes □No	
10	Areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water	□Yes □No □ N/A	□Yes □No	
11	Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by- products used or created by the facility	□Yes □No □ N/A	□Yes □No	
12	Facility perimeter	□Yes □No □N/A	□Yes □No	

	Area/Activity	Inspected?	Controls Adequate (appropriate, effective, and operating)?	Corrective Action Needed and Notes
13	Parking aprons	□Yes □No □ N/A	□Yes □No	
14	Area where spill/leaks have occurred within past 3 years (if applicable)	□Yes □No □ N/A	□Yes □No	
15	Any above ground temporary storage facility	□Yes □No □ N/A	□Yes □No	

Discharge Points

At discharge points, describe any evidence of, or the potential for, pollutants entering the drainage system. Also describe observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or the receiving water. Identify if any corrective action is needed.

Non-Compliance

Describe any incidents of non-compliance observed and not described above:

Additional Control Measures

Describe any additional control measures needed to comply with the permit requirements:

Notes

Use this space for any additional notes or observations from the inspection:

INSPECTOR'S SIGNATURE

Print name and title: _____

Signature: _____ Date: _____

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."

KAFB, STORM WATER POLLUTION PREVENTION PLAN

K-1 Introduction

The Explosive Ordnance Disposal (EOD) Range is an industrial facility eligible for coverage under Sector K: hazardous waste treatment, storage, or disposal facilities.

This sector-specific section of this SWP3 contains information exclusive to Sector K. General information applicable to all facilities is provided in the general SWP3.

K-2 Pollution Prevention Team

The KAFB PPT is responsible for ensuring that all the requirements outlined in this document are performed in accordance with the EPA requirements. Table 2-1 lists the PPT members.

K-3 Site Description

K-3.1 General Site Description

The EOD Range is 2 miles southeast of the Manzano Mountains in the southeastern portion of KAFB (Figure K-3-1). The EOD Range was constructed in 1968 but is no longer in operation. The approximate center of the EOD Range is at 34.977950° latitude and -106.476279° longitude. The area covered by the EOD Range is 212 acres with 99% pervious land coverage. The average rainfall is 9.42 inches per year. Rainfall during the wet season of July – October sees 5.18 inches per year on average. The area surrounding the EOD Range is bermed to prevent runoff from the site. Storm water runoff that leaves the facility flows south and southwest to a swale and is monitored at Outfall E.

To control runoff, a three-berm-system was built in concentric rings of approximate radii of 200, 400, and 600 ft. around the primary explosion area. The berms are approximately 1 ft. high and serve to retain storm water for infiltration and evaporation. Potential for infiltration was high near the primary explosion area due to repeated "fluffing" of the ground from events.

Rainfall occurring outside the outer berm, if in sufficient quantity to result in surface runoff, will move to the west in sheet-flow and minor surface troughs at a grade of approximately 3 percent. Runoff eventually intersects with Demolition Range Road, where it collects on the eastern edge, ponds, and proceeds south in the roadside ditch to a 30-inch corrugated metal pipe (CMP) culvert. Additional ponding occurs at the upstream side of the inlet-controlled culvert. Runoff from the EOD Range eventually impacts an unnamed arroyo in the lower reaches of the drainage basin following extremely intense precipitation events.

K-3.2 Industrial Activities

The EOD range is inactive and has not been used within the last 10 years. The primary mission of the EOD Range is the safe treatment of ordnance, munitions, and contraband through open detonations or open burning. In addition, the EOD Range has been used for research and development of explosives and explosives devices. It is estimated that fallout from explosions and burning could impact an area extended as a circle of approximately



Figure K-3-1. Explosive Ordnance Disposal Range Map

2,000 ft. radius around the primary explosion area. When operational, the EOD Range had the capacity to detonate 100,000 pounds of net explosive weight per year and burn 80,000 pounds of material per year. Activities at the EOD range no longer occur and the site is pending closure.

K-4 Summary of Potential Pollutants

Reoccurring compliance site inspections at the EOD Range were utilized to identify the potential pollution sources at this facility.

K-4.1 Activities in the Area

Potential sources of pollution at the EOD Range include dust, debris, or sediments contaminated with combustion byproducts that have landed outside the outer berm around the primary explosion area. Fallout from explosions could impact an estimated area of approximately 2,000 ft. radius around the primary explosion area. Runoff generated from precipitation events could potentially transport pollutants offsite. Recent cleanup efforts have made the presence of these pollutants unlikely. No unexploded or non-combusted hazardous chemicals or materials are stored in bulk on-site.

K-4.2 Potential Storm Water Pollutants

The potential storm water pollutants at the EOD Range are summarized below:

Source Activity/Area	Pollutant(s) of Concern
Loading/unloading, material handling operations	Activity not present
Products (intermediate, by-products, final, and waste) and materials	Petroleum hydrocarbons, heavy metals, nitro- aromatics, nitrates-nitrites, ammonia, volatile organic compounds (VOCs), and cyanides.
Significant dust or particulate generating activities	Particulate matter and hazardous air pollutant and incompletely oxidized explosives and incinerated material
Onsite waste disposal, treatment, or storage	Waste treatment by detonation and burning
Hazardous waste sites	Petroleum hydrocarbons, heavy metals, nitro- aromatics, nitrates-nitrites, ammonia, VOCs, and cyanides.
Erosion potential	Low potential

Table K-4-1. EOD Range Potential Pollutants

K-4.2.1 Loading/Unloading Operations – Waste Hauling and Loading/Unloading

Loading and unloading does not occur at the EOD range; however historic activities at the EOD Range consisted of unloading solid materials to be detonated or burned at the facility and diesel fuel to be used for the open burn pit. The ash generated from the burning event was unloaded from the burn pan and loaded into containers for disposal.

K-4.2.2 Products (Intermediate, By-products, Final, and Waste) and Materials

The products and materials from the site include chemical constituents associated with incomplete combustion of explosives, degradation of metal explosive device components, byproducts of incomplete incineration, spills of fuel during delivery of diesel fuel to the

incinerator, and suspended solids. Possible contaminant groups include petroleum hydrocarbons, heavy metals, nitro-aromatics, nitrates-nitrites, ammonia, VOCs, and cyanides.

K-4.2.3 Outdoor Storage Activities

Outdoor storage activities no longer occur at this facility.

K-4.2.4 Significant Dust or Particulate Generating Activities

Since the EOD Range is no longer active, there are no ongoing operations to produce a significant potential for generation of dust and particulates. The only potential for dust and particulate generation would be due to travel on dirt roads. Since the facility is no longer active, the dirt roads are not utilized or maintained, therefore this is no longer considered a significant source of dust or particulates.

K-4.2.5 Onsite Waste Disposal, Treatment, or Storage Practices

The EOD Range is specifically designed for the disposal of materials by detonation and burning. Following detonations, the area is scoured for large debris to be collected and managed as scrap metal. The burn unit ash is disposed at a permitted hazardous waste landfill. The detonation pit is backfilled and regraded on an as-needed basis. Although the majority of the ordnance is exploded, small particles of unexploded HazMat may be deposited at various points around the site, depending upon such factors as weather conditions and amount and type of material detonated. Material deposited within the outer berm is not subject to storm water conveyance, as that water is retained until it has infiltrated or evaporated.

K-4.2.6 Hazardous Waste Sites

The EOD Range has been identified as a hazardous waste site under the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI). An Open Burn/Open Detonation (OB/OD) RCRA permit (Permit #NM9570024423-OB) was established through the New Mexico Environmental Department (NMED), Hazardous Waste Bureau. Operations at the EOD Range have terminated awaiting active remediation once NMED grants approval of the Closure Plan. The majority of the site will be remediated to unrestricted land use standards.

K-4.2.7 Activities Not Conducted At the Facility

The following activities and associated potential pollutants do not occur at the EOD Range: industrial machinery; outdoor manufacturing or processing; fueling, refueling or fuel transfer activities; vehicle, aircraft, and equipment maintenance or cleaning; liquid storage tanks; areas with a high potential for significant soil erosion; and HazMat storage.

K-4.3 Significant Spills and Leaks

No known significant releases of toxic or hazardous pollutants occurred at the EOD Range that are subject to storm water conveyance. No activities occur at the EOD Range that are susceptible to significant spills or leaks.

K-4.4 Non-storm Water Discharges

No non-storm water discharges occur at this facility.

K-5 Description of Control Measures

The following sections describe the control measures utilized at the EOD Range to meet the non-numeric technology-based effluent limits.

K-5.1 Non-numeric Technology-based Effluent Limits

Storm water pollution from permitted facilities will be minimized by implementing BMPs that limit storm water from coming into contact with potential pollutant sources. The full text of the general BMPs are listed in Section 5 of the SWP3.

Category	ВМР
Eliminating/Minimizing exposure	Eliminating/minimizing exposure BMPs # 1, 2, 3, 4, and 5
Good housekeeping	Good housekeeping BMPs # 4, 6, 13, 14, 15, 17, and 19
Preventive maintenance	Preventative maintenance BMPs # 1 and 4
Spill prevention and response	Spill prevention and response BMPs # 1, 2, 3, 5, 8, and 12
Sediment and erosion control	Sediment and erosion control BMPs # 1 and 3
Runoff management	Runoff management BMPs # 1, 3, and 4
Employee Training	Employee training BMPs # 1, 2, and 4
Non-storm Water Discharges	Non-storm water discharge BMP # 1
Dust Generation and Vehicle Tracking of Industrial Materials	Dust generation and vehicle tracking BMP # 2 and 3
Record keeping and reporting	Record keeping and reporting BMP # 1, 2, 4, and 5
Site Specific BMPs	 Ensure that drip pans and other management practices are utilized if outdoor maintenance is conducted on equipment. Maintain structural practices to divert storm water flows away from exposed areas, convey runoff, prevent sediments from moving offsite, and reduce the erosive forces of runoff. Minimize storm water run-on and runoff to disturbed areas or contaminated areas, and storm water volumes in general by diverting storm water away from the area utilizing the facility's earthen berms. Conduct training as necessary to individuals outside the PPT, to the extent which their duty is related to the SWP3 as appropriate, as detailed in Section 5.1 of this SWP3.

Table K-5-1. EOD Range Best Management Practices

K-5.2 Numeric Effluent Limitations Based on Effluent Limitations Guidelines

The EOD Range is exempt from Effluent Limitations Guidelines (ELG) monitoring per Part 8.K.7 of the Permit exemption (d) KAFB does not charge other agencies for use of the OB/OD unit for disposal of materials. Additionally, the EOD Range is not currently operational and is regarded as an inactive facility.

K-6 Schedules and Procedures

Section 6 outlines the general control measures, inspection and monitoring requirements. The following section describes specific procedures applicable to the EOD Range.

K-6.1 Preventative Maintenance/Erosion Control

Maintenance at the EOD Range primarily consists of care to the berms and site as necessary. This includes grading the explosion range surface, and grading the berms around the site as needed to maintain structural integrity and prevent erosion.

K-6.2 Inspections

Additional items specific to the EOD Range routine facility inspection include the following:

- Perimeter of the entire facility for erosion and drainage
- Inner and outer storm water retention berms.

Quarterly visual samples for the EOD Range will be collected from Outfall E.

K-6.3 Monitoring

Table K-6-1 below details the sampling parameters and benchmark monitoring concentrations for monitoring at the EOD Range.

Table K-6-1. Benchmark Monitoring for EOD Range

Parameter	Benchmark Monitoring Concentration
Ammonia	2.14 (mg/L)
Chemical Oxygen Demand	120 (mg/L)
Total Recoverable Arsenic	9 (μg/L) dissolved
Total Recoverable Cadmium	1.65 (μg/L)
Total Recoverable Cyanide	5.2 (μg/L)
Total Recoverable Lead	14 (μ g/L) dissolved
Total Recoverable Mercury	0.77 (µg/L)
Total Recoverable Selenium	5 (µg/L)
Total Recoverable Silver	3.2 (μg/L)

L-1 Introduction

The construction and demolition debris (C&D) landfill has been identified as an industrial facility eligible for coverage under Sector L: landfills, land application sites, and open dumps.

This sector-specific section of this SWP3 contains information exclusive to Sector L. General information applicable to all facilities is provided in the general SWP3.

L-2 Pollution Prevention Team

The KAFB PPT is responsible for ensuring all the requirements outlined in this document are performed in accordance with the EPA requirements. Table 2-1 lists the PPT members.

L-3 Site Description

L-3.1 General Site Description

The C&D landfill facility is in the northeast part of KAFB, northeast of the intersection of Power Line Road and Pennsylvania Street (Figure L-3-1). The approximate center of the C&D landfill is at 35.034321° latitude and -106.525581° longitude. The area covered by the C&D landfill is approximately 79 acres with 99% pervious land coverage. The average rainfall is 9.42 inches per year. Rainfall during the wet season of July – October sees 5.18 inches per year on average.

The natural ground surface at the C&D landfill drains from the northeast to the southwest at a slope of approximately 3 percent. The active disposal cell is protected from storm water run-on by an earthen berm constructed on the east and south sides of the site, which divert potential run-on to the south then west around the landfill area.

Storm water runoff is managed in several ways, as outlined below:

- Storm water runoff in the active disposal cell flows into the low point in the cell where the water either evaporates or infiltrates into the vadose zone.
- Storm water runoff from the eastern portion of the site flows toward a diversion berm on the west side of the adjacent abandoned landfill and is diverted toward a depression on the northwest corner of the abandoned site where it either evaporates, infiltrates into the vadose zone, or in extreme precipitation events, flows into Tijeras Arroyo.
- Precipitation that falls within the bermed area of the southern portion of the C&D landfill flows south and west to a low spot near the southwest corner of the active landfill fenced area. A sampling point is designated here as Outfall D.
- Another discharge point on the north side of the C&D landfill is adjacent to the water truck fill station and refueling area. Storm water runoff from this location flows toward the low spot near the northwest corner of the site and eventually, during extreme storm events, into Tijeras Arroyo.



Figure L-3-1. Construction and Demolition Landfill Map

L-3.2 Industrial Activities

The primary mission of the C&D landfill is the disposal of construction and demolition debris generated at KAFB, including steel, glass, brick, concrete, asphalt roofing, pipe, gypsum wallboard, and wood. Prior to 1995, municipal solid waste from KAFB was accepted; however, that cell was capped and municipal solid waste disposal is no longer allowed.

L-4 Summary of Potential Pollutants

Reoccurring compliance site inspections at the C&D landfill were utilized to identify the potential pollution sources at this facility.

L-4.1 Activities in the Area

Storm water pollutants associated with the C&D landfill are primarily from the two aboveground diesel fuel tanks and fuel pump; wash rack and associated sedimentation basin, OWS, and retention pond; and infrequent maintenance of heavy machinery utilized in disposal operations, equipment and material storage. Sediment in the runoff from the landfill is also considered a potential pollution source.

L-4.2 Potential Storm Water Pollutants

The potential storm water pollutants at the C&D Landfill are summarized below:

Source Activity/Area	Pollutant(s) of Concern
Loading/unloading, material handling operations	Diesel fuel, oil and grease, floatables, sediment
Industrial machinery	Diesel fuel, oil and grease
Products (intermediate, by-products, final, and waste) and materials	Floatables, metals, suspended solids
Outdoor storage activities	Diesel fuel, floatables, metals, suspended solids
Outdoor manufacturing or processing activities	Oil and grease
Significant dust or particulate generating activities/Earth and soil moving	Sediment
Onsite waste disposal, treatment, or storage practices	Metals, oil and grease, sediment
Fueling stations	Diesel fuel
Vehicle/aircraft/equipment maintenance and/or cleaning areas	Diesel fuel, oil and grease
Liquid storage tanks	Diesel fuel, motor oil
Hazardous waste sites	Activity not present
Erosion potential	Total suspended solids (TSS)
Fertilizer, herbicide, and pesticide applications	Activity not conducted
Exposure of active and inactive landfill and land application areas	Sediment, floatables from inactive landfill areas. Land application areas are not present at landfill

Table L-4-1. C&D Landfill Potential Pollutants

Table L-4-1. C&D Landfill Potential Pollutants

Source Activity/Area	Pollutant(s) of Concern
Uncontrolled leachate flows and failure or leaks	Activity not present
from leachate collection and treatment system	(no leachate collection/treatment system)

L-4.2.1 Loading/Unloading Operations – Waste hauling and Loading/Unloading

Diesel fuel is delivered by a tanker truck and is unloaded at the two diesel storage tanks. One diesel fuel tank is a convault system with built-in secondary containment and the other utilizes a concrete berm. A used oil tank also receives used oil. The associated potential pollutant of concern is diesel fuel and used oil.

Waste is hauled and unloaded into the active waste disposal area as-needed, as frequently as multiple times a day. Waste is generally not loaded at the landfill; however the process would be similar to the unloading process. The associated pollutants are oil and grease from leaking, unmaintained vehicles and equipment, floatables from debris or materials pending disposal, and sediment from the vehicle and equipment traffic to and from the disposal area.

L-4.2.2 Industrial Machinery

Various types of industrial machinery are used at the landfill for waste management. This includes bulldozers, bucket trucks, bobcats, forklifts, and a wood chipper. The associated pollutants are due to potential leaking machinery, and include diesel fuel, oil, and grease.

L-4.2.3 Products (Intermediate, By-products, Final, and Waste) and Materials

The intermediate and waste products associated with the landfill are the items brought to the landfill for disposal. This includes the waste construction and demolition material or scrap metals. The pollutants associated with these materials are floatables, metals, and suspended solids.

L-4.2.4 Outdoor Storage Activities Including Daily, Interim, and Final Cover material Stockpiles as well as Temporary Waste Storage Areas

Outdoor storage of materials at this facility is confined primarily to the north end of the landfill. Two covered sheds are on a concrete slab and are used to store spill kits, lubricating oil, starting fluid, and high temperature grease. An OWS connected to an evaporation pond is outdoors and the NMED Ground Water Bureau granted permission to use the water as dust suppression.

The primary waste disposal area for construction and demolition debris is in the northern portion of the landfill. This area is in a large depressed area that retains storm water collected within the basin. Storm water pollution and migration off-site is unlikely at this area. Potential pollutants associated with the area include floatables and sediment.

Six open waste bins (10×25 ft.) near the north side of the facility, collect materials not allowed in the C&D landfill, such as furniture, scrap metal and municipal waste. Contractor-owner replaces the bins when they get full. Storm water entering the bins leaves at the bottom and flows to the southwest corner of the facility. Potential pollutants are metals and suspended solids. The contractor monitors the integrity of the bins to minimize storm water pollution.

L-4.2.5 Outdoor Manufacturing or Processing Activities

A wood mulcher is stored and used outdoors at the landfill. Potential associated pollutants include oil and grease from leaks and infrequent maintenance.

L-4.2.6 Significant Dust or Particulate Generating Activities/Earth and Soil Moving

Depending on climatic conditions, dust may be generated by haul trucks on the dirt roads at this facility, by earth and soil moving operations during the daily addition of covering, and by bulldozing activities. A water truck utilizes the pond water when available and potable water, as necessary, to help control dust at the facility. Additionally, Dust Pro is applied to all roads entering the landfill area. The potential pollutant of concern is sediment.

L-4.2.7 Onsite Waste Disposal, Treatment, or Storage Practices

Construction and demolition debris hauled to the landfill is disposed of at the working face, which is covered periodically with 4 inches of dirt. Operations and maintenance of the landfill is handled by the contractor for CE. The potential pollutants of concern associated with onsite waste disposal do not leave the site.

L-4.2.8 Fueling Stations

The refueling station is directly west of the storage sheds at the north end of the facility. A 2,000-gallon AST holding diesel fuel and a fueling pump are on a concrete slab surrounded by secondary containment. A 1,000 gallon convault system containing diesel fuel was also installed, and sits directly adjacent to the other AST. The potential pollutant of concern associated with the refueling station is diesel fuel.

L-4.2.9 Vehicle/Equipment Maintenance and/or Cleaning Areas

Minor equipment maintenance and repair is performed at this facility by a contractor representing the manufacturer. Associated waste is taken off-site by the contractor.

The wash rack is used to clean landfill equipment and haul trucks. The use of detergents or degreasers at this wash rack is prohibited. Because the landfill accepts only nonhazardous waste, possible pollutants are limited to petroleum residuals from the trucks and equipment. The wash rack water is plumbed to an OWS and then discharges to the evaporation pond. The potential pollutants of concern are diesel fuel, and oil and grease.

L-4.2.10 Liquid Storage Tanks

Diesel fuel is stored in two above ground fuel tanks. All liquid storage has secondary containment. The potential pollutant of concern associated with these tanks is diesel fuel.

L-4.2.11 Hazardous Waste Sites

HazMat are not applied or disposed of at the landfill. The C&D landfill is included in Kirtland's RCRA Part B Permit under Solid Waste Management Unit (SWMU) 64.

L-4.2.12 Erosion Potential

An area with a high potential for significant soil erosion exists at the northern end of the site. During reoccurring inspection no significantly eroded areas were noted. Inspections will be conducted quarterly to ensure no significant erosion exists.

L-4.2.13 Material Inventory

Material inventory is tracked by the KAFB Hazardous Material Management Program, which controls purchases of HazMat. Materials stored at the landfill are not exposed to storm water.

L-4.2.14 Fertilizer, Herbicide, and Pesticide Applications

Fertilizer, herbicides, and pesticides are not applied or disposed of at the landfill.

L-4.2.15 Exposure of Active and Inactive Landfill and Land Application Areas

The primary waste disposal area for construction and demolition debris is in the northern portion of the landfill. This area is in a large depressed area that retains storm water collected within the basin. Storm water pollution and migration off-site is unlikely at this area. Potential pollutants associated with this area include floatables and sediment. The landfill has no land application areas; therefore land application requirements are not applicable.

L-4.2.16 Uncontrolled Leachate Flows and Failure or Leaks from Leachate Collection

The landfill accepts only C&D materials and is not required to have a leachate collection systems; therefore these permit requirements are not applicable.

L-4.3 Significant Spills and Leaks

Spills and leaks could occur wherever machinery and equipment are used on the landfill; however the most likely locations are near the vehicle or equipment storage and near the fueling areas. Fuel areas are equipped with dry spill kits in the event of a spill.

L-4.4 Non-storm Water Discharges

In October of 1999, the area adjacent to the water fill station was constructed into a fully working equipment wash rack. Equipment wash water and fill station overflow are both captured at the northwest corner of the wash rack where it enters a sediment catch basin, followed by an OWS, and into a 15,000-gallon evaporation pond. The holding pond is set up with a submersible pump and water fill stand with the intention of recycling the pond water for dust control. This wash rack facility received an approval by the NMED Ground Water Quality Bureau on July 26, 1999, to discharge processed wash water for dust suppression.

L-5 Description of Control Measures

The following sections describe the control measures utilized at the C&D landfill to meet the non-numeric technology-based effluent limits.

L-5.1 Non-numeric Technology-based Effluent Limits

Storm water pollution from permitted facilities will be minimized by implementing BMPs that limit storm water from coming into contact with potential pollutant sources. The full text of the general BMPs are listed in Section 5 of the SWP3.

Table L-5-1. C&D Landfill Best Management Practices

Category	BMP
Eliminating/Minimizing exposure	Eliminating/Minimizing exposure BMPs # 1, 2, 3, 4, 5, and 6

Category	ВМР	
Good housekeeping	Good housekeeping BMPs # 2, 3, 4, 5, 6, 7, 9, 13, and 17	
Preventive maintenance	Preventive maintenance BMPs # 1, 2, 3, 4 and 6	
Spill prevention and response	Preventive maintenance BMPs # 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 12	
Sediment and erosion control	Sediment and erosion control BMPs # 1 and 3	
Runoff management	Runoff management BMP # 1 and 4	
Employee Training	Employee training BMPs # 1, 2, and 4	
Non-storm Water Discharges	Non-storm water discharge BMP # 1 and 2	
Dust Generation and Vehicle Tracking of Industrial Materials	Dust generation and vehicle tracking BMPs # 2 and 3	
Record keeping and reporting	Record keeping and reporting BMPs # 1, 2, 4, and 5	
Site Specific BMPs	 Ensure that all wash water drains to the wash rack. Cover designated waste storage locations where materials are contained to prevent contact with storm-water runoff. Preform regular maintenance on intermediately or finally capped areas, repairing the covers as necessary, to minimize the effects of settlement, sinking, and erosion. Preform regular maintenance and cleaning of the OWS to ensure continued functionality and prevent overflows. Maintain structural practices to divert storm water flows away from exposed areas, convey runoff, prevent sediments from moving offsite, and reduce the erosive forces of storm water runoff. Manage and restore erosion with onsite equipment as needed, as soon as practicable. Provide temporary stabilization for the following areas as practicable: materials stockpiled for final cover; inactive areas of the landfill; and areas that have gotten final covers but where vegetation has yet to establish. 	

 Table L-5-1.
 C&D Landfill Best Management Practices

L-5.2 Numeric Effluent Limitations Based on Effluent Limitations Guidelines

The C&D landfill is exempt from ELG monitoring per Part 8.L.11 of the Permit exemption (a) as only C&D waste generated on KAFB is allowed at the facility.

L-6 Schedules and Procedures

Section 6 outlines the general control measures, inspection and monitoring requirements. The following section describes specific procedures applicable to the C&D landfill.

L-6.1 Control Measures

L-6.1.1 Preventative Maintenance

Outdoor maintenance may occur on as-needed basis on vehicles or equipment when it is not feasible to take the vehicle to an off-site maintenance facility. This type of maintenance will be performed by on-site personnel. Drip pans and dry cleanup methods will be utilized, and maintenance will be conducted when rainfall is not anticipated when practicable to prevent potential storm water pollution. Work orders will be submitted for defective equipment.

L-6.1.2 Erosion and Sediment Control

Regular maintenance of the capped areas of the landfill and the berms is conducted routinely by the on-site BMC to ensure structural stability and prevent erosion. This maintenance is conducted monthly, or more frequent as conditions may warrant.

L-6.2 Inspections

Additional items specific to the C&D landfill routine facility inspection include the following:

- Areas of the landfill that are not fully stabilized
- Active waste storage areas
- Outdoor storage facilities
- Perimeter of the entire facility (for erosion and drainage)
- Site entrance/exit, including the off-site paved roads that connect the access roads
- Diesel fuel ASTs and secondary containment area around the fueling station
- Inspection of wash rack , OWS and evaporation pond sampling and clean-out records

Quarterly visual samples for the C&D landfill will be collected from Outfall D.

L-6.3 Monitoring

Table L-6-1 below details the sampling parameters for indicator and benchmark monitoring concentrations for monitoring at the C&D landfill.

Table L-6-1. Indicator and Benchmark Monitoring for C&D Landfill

Parameter	Monitoring Concentration (mg/L)
Chemical Oxygen Demand	NA
pH	NA
TSS	100*

*TSS is both an indicator monitoring requirement and a benchmark monitoring requirement. The concentration provided is the benchmark value, there is no concentration requirement for indicator monitoring.

L-7 Additional Documentation Requirements

Keep records of the waste types disposed of in each cell or trench of the landfill.

Tab 3 Sector P1 – Bulk Fuels Storage Facility

P1-1 Introduction

The Bulk Fuel Storage Facility (BFSF) has been identified as an industrial facility eligible for coverage under Sector P: land transportation and warehousing facilities. The industrial activities at the BFSF take place at the outdoor fueling facility. For reference, indoor support buildings include Buildings 1026, 1027, 1032, 1033, 1036 and 1041.

This sector-specific section of this SWP3 contains information exclusive to Sector P1, the BFSF. General information applicable to all facilities is provided in the general SWP3.

P1-2 Pollution Prevention Team

The KAFB PPT is responsible for ensuring all the requirements outlined in this document are performed in accordance with the EPA requirements. Table 2-1 lists the PPT members.

P1-3 Site Description

P1-3.1 General Site Description

The main portion of the BFSF is on Fuels Drive, in the midsection of the cantonment area north of the flight line (Figure P1-3-1). The approximate center of this facility is at 35.048991° latitude and -106.578949° longitude. The area covered by the BFSF is 27.9 acres with 23.2% impervious land coverage. The average rainfall is 9.42 inches per year. Rainfall during the wet season of July – October sees 5.18 inches per year on average. Storm water runoff from the main bulk fuels storage facility flows southwest through two unlined drainage ditches. Drainage from these two ditches is eventually captured by a storm water sewer that discharges to Outfalls B and Outfalls C north of Tijeras Arroyo.

The aircraft fueling truck parking facility and wash rack are at 3300 Lowry Avenue and are associated with Building 255 at 35.051346° latitude and -106°608743 longitude. Storm water runoff from the fueling truck parking facility flows northwest to the wash rack drain. This water goes through an OWS and then to the sanitary sewer.

P1-3.2 Industrial Activities

The mission of the facility is to receive and distribute bulk quantities of fuels, including Jet-A fuel, diesel fuel, and unleaded gasoline. Deicing fluid is received and stored in an AST east of the 90-day storage facility for distribution and use. Deicing trucks from each unit meet with BFSF personnel at the deicing AST to dispense deicing fluid to the appropriate locations.

Fuels are delivered to the BFSF by tanker trucks at off-loading racks west of the fill stands. Jet-A fuels are transferred via pump station to two large ASTs. Two fill stands dispense Jet-A to aircraft refueling trucks for distribution throughout the base. Diesel and unleaded gasoline are transferred and dispensed from three ASTs at the eastern fill stand. Conventional fuel transport trucks are used for distribution to refueling stations, equipment sites and the Motor Pool.



Figure P1-3-1. Bulk Fuels Storage Facility Map

Aircraft deicing fluid is stored at the BFSF and dispersed on as-needed basis. Per AFI 32-1001, KAFB does not authorize use of urea containing deicer fluid. The Air Force has transitioned to a green product alternative that complies with military Technical Order requirements.

P1-4 Summary of Potential Pollutants

Reoccurring compliance site inspections at the BFSF were utilized to identify the potential pollution sources at this facility.

P1-4.1 Activities in the Area

Potential pollution sources at the BFSF include the various types of fuel contained in the ASTs and any fuel spills during loading and unloading activities. The fueling truck parking area has the potential for fuel spills in the event of the truck's tank failure or human error. Deicing chemicals area is a potential pollutant source from the onsite storage, loading and unloading.

P1-4.2 Potential Storm Water Pollutants

The potential storm water pollutants at the BFSF are summarized below:

Source Activity/Area	Pollutant(s) of Concern
Loading/unloading, material handling operations	Diesel fuel, gasoline, Jet-A, deicing fluid, oil/grease
Industrial machinery	Diesel fuel, gasoline, Jet-A, deicing fluid, oil/grease
Products and materials	Diesel fuel, gasoline, Jet-A, deicing fluid
Outdoor storage activities	Diesel fuel, gasoline, Jet-A, deicing fluid
On-site waste disposal, treatment, or storage	POLs, solvents, detergents, deicing fluid
Fueling stations	Diesel fuel, gasoline, Jet-A, deicing fluid
Vehicle/Equipment Maintenance or Cleaning	Oil and grease
Liquid storage tanks	Diesel fuel, gasoline, Jet-A, deicing fluid
Material Inventory	Diesel fuel, gasoline, Jet-A, deicing fluid
Erosion potential	None

Table P1-4-1. BFSF Potential Pollutants

P1-4.2.1 Loading/Unloading Operations

Loading and unloading of fuel tankers is the primary function of this facility. Bulk fuels are received, stored, and dispersed to KAFB aircraft and to the vehicle fueling stations on KAFB. Ethylene glycol-based deicing fluid is received and dispersed from this facility for aircraft.

Jet-A is routinely delivered to the facility at the unloading area. Each delivery consists of an 8,000-gallon volume. Jet fuel is dispensed to aircraft refuelers via the fill stands. Due to operational security measures, additional information will be provided upon regulatory request.
Diesel fuel and unleaded gasoline are similarly delivered in 8,000-gallon volumes. The loading/unloading area is under an awning. Diesel fuel and unleaded gasoline are stored in ASTs and dispensed to fuel trucks via the fill stand.

The potential pollutants of concern associated with this facility are Jet-A, diesel fuel, gasoline, deicing fluid, and oil and grease from leaking vehicles.

P1-4.2.2 Industrial Machinery

Industrial machinery used at the BFSF is generally limited to fueling trucks, but may include the infrequent use of bucket trucks, forklifts, and bobcats. The associated pollutants relate to leaks from this equipment and include oil, grease, fuel and deicing fluid.

P1-4.2.3 Products (Intermediate, By-products, Final, and Waste) and Materials

The primary products at the BFSF are the various types of fuels including diesel fuel, gasoline, and jet fuel. Ethylene glycol is also stored at this site.

P1-4.2.4 Outdoor Storage Activities

Outdoor storage is limited to tanks and fill-stands either contained within an OWS basin or within secondary containment. Secondary containment berms are closed and locked at all times. Before discharges of excess storm water, personnel inspect the berm for possible oil sheen.

P1-4.2.5 Onsite Waste Disposal, Treatment, or Storage Practices

Dry spill kits are located at the BFSF and parking facility. Fuel-related waste generated on-site is collected in drums which are then stored in Polypak units. Polypaks are utilized as secondary containment units to minimize storm water pollution. Potential types of waste generated include used oil, solvents, detergents, and/or used antifreeze. Municipal type waste is collected in covered dumpsters and managed by a waste contractor.

P1-4.2.6 Fueling Stations

Three permanent fuel areas dispense Jet-A, diesel fuel, and unleaded gasoline. Deicing fluid is pumped directly from the deicing AST into transport vehicles. Potential pollutants of concern are fuels and deicing fluids.

P1-4.2.7 Vehicle/Equipment Maintenance and/or Cleaning Areas

Fuel trucks are cleaned at a wash rack at the parking facility at Building 255. The wash rack is at the northwest end of the parking area and is used only to clean the refueling trucks. The wash water flows to an OWS, which discharges to the sanitary sewer.

P1-4.2.8 Liquid Storage Tanks

This facility contains ASTs dedicated for fuel and deicing fluids:

- Jet-A is stored in two large ASTs with 1.7 million gallon capacity each. Each tank is provided with an earthen secondary containment berm. A fuel-additive tank is located next to the fill-stand in a secondary containment berm.
- Diesel fuel is stored in two ASTs with capacities of 5,000 and 10,000 gallons. Unleaded fuel is stored in one AST with a capacity of 10,000 gallons. These ASTs are contained within a secondary containment berm.

• Deicing fluid is stored in one AST with a capacity of 6,000 gallons. The tank is provided with secondary containment curbing.

P1-4.2.9 Material Inventory

Material inventory is tracked by the KAFB Hazardous Material Program, which controls purchases of HazMat. HazMat at the BFSF is stored indoors. A used-oil reclamation tank is stored in Bldg. 1033. Fuel throughput is tracked through a separate fuels inventory program.

P1-4.2.10 Activities Not Conducted At the Facility

The following activities and associated potential pollutants do not occur at the BFSF: outdoor manufacturing or processing; significant dust or particulate generating activities (all roads are paved); areas with a high potential for significant soil erosion; hazardous material storage; and illicit pluming connections.

P1-4.3 Significant Spills and Leaks

Spills and leaks are most likely to occur during fuel loading or offloading. These areas are within secondary containment with drainage to OWS basins. The basins are designed with a capacity of 110% of one fuel truck. The OWS values are maintained in a locked position to prevent free flow to the sanitary sewer. Fuel trucks are equipped with dry spill kits in the event of a spill. Spill prevention training is implemented annually to prevent reoccurring incidences.

P1-4.4 Non-storm Water Discharges

Non-storm water discharges have not occurred at this facility. The network of berms and OWSs drains to the sanitary sewer system and do not contribute non-storm water discharges.

P1-5 Description of Control Measures

The following section describes the control measures utilized at the BFSF to meet the nonnumeric technology-based effluent limits. Storm water pollution from permitted facilities will be minimized by implementing BMPs that limit storm water from coming into contact with potential pollutant sources. The full text of the general BMPs are listed in Section 5 of the SWP3. Numeric effluent limitations based on ELGs are not required for Sector P facilities, however indicator monitoring is required.

Category	ВМР
Eliminating/Minimizing exposure	Eliminating/minimizing exposure BMPs # 1, 2, 4, and 6
Good housekeeping	Good housekeeping BMPs # 2, 3, 5, 7, 9, 12, 13, and 19
Preventive maintenance	Preventative maintenance BMPs # 1, 2, 3, 4, and 6
Spill prevention and response	Spill prevention and response BMPs # 1 through 12
Sediment and erosion control	Sediment and erosion control BMP #1 and 3
Runoff management	Runoff management BMP # 1, 2, 4 and 5

Table P1-5-1. BFSF Best Management Practices

Category	ВМР	
Employee Training	Employee training BMPs # 1, 2, and 4	
Non-storm Water Discharges	Non-storm water discharge BMP # 1	
Dust Generation and Vehicle Tracking	Dust generation and vehicle tracking BMPs # 2 and 3	
Record keeping and reporting	Record keeping and reporting BMPs # 1, 2, 4, and 5	
Site Specific BMPs	• Minimize contamination of storm water runoff from fueling areas by utilizing awnings when fueling, using spill/overflow protection and cleanup equipment, using dry cleanup methods, and utilizing the network of OWS.	
	 Conduct regular, scheduled maintenance on tanks as directed by the SPCC Plan (e.g. integrity testing). 	
	 Preform regular maintenance and cleaning of the OWS to ensure continued functionality and prevent overflows. 	
	• Conduct training as necessary to individuals outside the PPT, to the extent which their duty is related to the SWP3 as appropriate, as detailed in Section 5.1 of this SWP3.	

Table P1-5-1. BFSF Best Management Practices

P1-6 Schedules and Procedures

Section 6 outlines the general control measures, inspection, and monitoring requirements. The following section describes specific procedures applicable to the BFSF.

P1-6.1 Preventative Maintenance

Maintenance items at the BFSF are primarily included in the general provisions of Section 6.1. Maintenance and operation of the facility is discussed in the SPCC Plan. Work orders are submitted for defective equipment, and are tracked for record keeping purposes.

P1-6.2 Inspections

Additional items specific to the BFSF routine facility inspection include the following:

- Perimeter of the entire facility for erosion and drainage
- Pipeline trenches, pumping stations and bermed areas around ASTs
- Off-loading and fueling stations for diesel, unleaded gasoline, Jet-A, and deicing fluid
- Fueling truck parking facility and wash rack.

Quarterly visual samples for the BFSF will be collected from Outfalls B and C.

P1-6.3 Monitoring

Benchmark and ELG monitoring is not required for the BFSF per Sector P requirements; however indicator monitoring is required. Table L-6-1 below details the sampling parameters for indicator monitoring at the BFSF.

Parameter	Monitoring Concentration (mg/L)	
Chemical Oxygen Demand	NA	
pH	NA	
TSS	NA	
РАН	NA	

Table P1-6-1. Indicator Monitoring for BFSF

Tab 4 Sector P2 – Vehicle Maintenance Facility

P2-1 Introduction

The Vehicle Maintenance Facility (VMF) has been identified as an industrial facility eligible for coverage under Sector P: land transportation and warehousing facilities. For reference, indoor support buildings include buildings 20338, 20341, 20344, 20348, 20349, and 377.

This sector-specific section of this SWP3 contains information exclusive to Sector P2, the VMF. General information applicable to all facilities is provided in the general SWP3.

P2-2 Pollution Prevention Team

The KAFB PPT is responsible for ensuring all the requirements outlined in this document are performed in accordance with the EPA requirements. Table 2-1 lists the PPT members.

P2-3 Site Description

P2-3.1 General Site Description

The VMF is near Ridgecrest Drive Southeast and 1st Street Southeast, in the midsection of the cantonment area east of the flight line (Figure P2-3-1). The approximate center of this facility is at 35.051062° latitude and -106.552473° longitude. The area covered by the VMF is 11.4 acres with 96% impervious land coverage. The average rainfall is 9.42 inches per year. Rainfall during the wet season of July – October sees 5.18 inches per year on average.

These facilities are predominantly paved except for the north side of Bldg. 20338. Storm water runoff flows directly to on-site storm drains that convey the runoff to Outfall A. Bldg. 377 is on a paved area of the flight line. Storm water runoff at the fueling truck maintenance facility flows southwest onto the flight line and eventually discharges at Outfall B.

P2-3.2 Industrial Activities

The mission of the VMF is to maintain 377th Air Base Wing ground vehicles and specialty military vehicles. The specialized purpose of each building is summarized below.

Building Number	Facility Mission	Activities
20338	General Purpose	General maintenance and repair
20341	Vehicle Maintenance Office	Receive and disperse chemicals to VMFs
20344	Allied Trades	Auto body work and painting
20348	Offices and Training	Training and storage
20349	Special Purpose	Specialty vehicle maintenance and repair
377	Refueling Truck Maintenance	Maintain and repair for fuel trucks

Table P2-3-1. VMF Industrial Activities



Figure P2-3-1. Vehicle Maintenance Facility Map

P2-4 Summary of Potential Pollutants

Reoccurring compliance site inspections and the inventory of on-site chemicals at the VMF were utilized to identify the potential pollution sources at this facility.

P2-4.1 Activities in the Area

Potential pollution sources at the VMF include Jet-A, diesel fuel, unleaded gasoline, oil and grease, petroleum hydrocarbons, VOCs, deicing fluid, solvents, and paint residue.

P2-4.2 Potential Storm Water Pollutants

The potential storm water pollutants at the VMF are summarized below:

Source Activity/Area	Pollutant(s) of Concern
Loading/unloading, material handling operations	Diesel fuel, gasoline, Jet-A, deicing fluid, oil/grease
Industrial machinery	Oil/grease, diesel fuel, gasoline, hydraulic fluid
Products and materials	Oil/grease, diesel fuel, gasoline
Outdoor storage activities	Oil/grease, petroleum hydrocarbons, paint, metals
Significant dust or particulate generating activities	Paint, metals, fiberglass
Onsite waste disposal, treatment, or storage	POLs, solvents, detergents, antifreeze
Vehicle/equipment maintenance	Oil/grease, petroleum hydrocarbons, antifreeze, paint, solvents
Liquid storage tanks	Used oil
Erosion potential	None
Material Inventory	Oil/grease, petroleum hydrocarbons, antifreeze, paint, solvents

Table P2-4-1. VMF Potential Pollutants

P2-4.2.1 Loading/Unloading Operations

Loading and unloading occurs on the east side of Building 20341, the delivery point for the VMF. Materials are delivered in sealed containers, reducing the likelihood of spills. Chemicals in bulk quantities (55 gallons) are typically loaded and unloaded indoors at each building. Used oil and solvent tanks are stored indoors and are pumped for recycling by an appointed contractor. The potential pollutants of concern are oil and grease, petroleum hydrocarbons, paint, and ethylene glycol. Spill kits are kept in each building in the case of a spill.

P2-4.2.2 Industrial Machinery

Industrial machinery is generally limited at the VMF, but may include the infrequent use of forklifts, bobcats, or hydraulic machines. Pollutants associated with these machines include oil and grease, hydraulic fluid, diesel fuel, and gasoline.

P2-4.2.3 Products (Intermediate, By-products, Final, and Waste) and Materials

Products associated with the VMF are managed indoors and are generally fluids and fuels required for vehicle maintenance to include oil and grease, diesel fuel, and gasoline.

P2-4.2.4 Outdoor Storage Activities

Most materials are stored indoors. Outdoor storage areas are summarized below:

- *Building 377*, Fuel Truck Maintenance: All maintenance work is done inside the facility. Any residual POLs from maintenance drain to a drop inlet inside, which then goes to an OWS. The OWS discharges to the sanitary sewer.
- *Building 20338, General Purpose*: Vehicles awaiting maintenance are stored outside, thus the potential for vehicle fluid spills are slightly higher. Vehicles with visible leaks are prioritized for maintenance. Drip pans are also used to minimize storm water contamination. Where necessary, vehicle fluids are drained while awaiting repair.
- *Building 20341, Vehicle Maintenance Office:* One Polypak is used for storage of used lead acid batteries to be picked up for recycling. New lead acid batteries are in a storage locker next to the used battery Polypak. A used-oil reclamation tank is also stored at this facility. These items are located on the west side of the building.
- *Building 20344, Body Shop:* Dumpsters used for scrap metal recycling on the east side of the building are exposed to storm water.
- *Building 20349, Special Purpose:* Vehicles awaiting maintenance are stored outside, thus the potential for vehicle fluid spills are slightly higher. Vehicles with visible leaks are prioritized for maintenance. Drip pans are also used to minimize storm water contamination. Where necessary, vehicle fluids are drained while awaiting repair.

P2-4.2.5 Significant Dust or Particulate Generating Activities

Building 20344 is occasionally used for sanding vehicles in preparation for painting. These activities occur in designated indoor areas with special filtering equipment. The associated pollutants are paint, metals or fiberglass.

P2-4.2.6 Onsite Waste Disposal, Treatment, or Storage Practices

Dry spill kits are located at the facilities. POL related waste generated on-site is collected in drums which are then stored in Polypak units. Polypaks are utilized as secondary containment units to minimize storm water pollution. Potential types of waste generated include used oil, solvents, detergents, and/or used antifreeze.

P2-4.2.7 Vehicle/Equipment Maintenance and/or Cleaning Areas

Maintenance and cleaning activities are conducted at buildings 377, 20338, 20344, and 20349. Maintenance activities are performed indoors. Each facility has an interior drain system that flows to an OWS, which discharges to the sanitary sewer.

P2-4.2.8 Liquid Storage Tanks

Buildings 377, 20338 and 20349 each contain a 100-gallon used oil AST stored indoors.

P2-4.2.9 Hazardous Waste Sites

VMF maintains multiple IAPs utilized to collect hazardous waste.

P2-4.2.10 Material Inventory

Material inventory is tracked by the KAFB Hazardous Materials Program, which controls purchases of HazMat. Quantities are limited to a working basis and bulk storage of HazMat does not occur at these facilities.

P2-4.2.13 Activities Not Conducted At the Facility

The following activities and associated potential pollutants do not occur at the VMF: outdoor manufacturing or processing; fueling stations; areas with a high potential for significant soil erosion; dirt/gravel parking areas; and illicit plumbing connections.

P2-4.3 Significant Spills and Leaks

Spills and leaks are most likely to occur during loading or unloading, or other transportation activities occurring outdoors. Dry spill kits are kept on-site in the event of a spill. Spill prevention training is implemented annually to prevent reoccurring incidences.

P2-4.4 Non-storm Water Discharges

Non-storm water discharges have not occurred at this facility. The network of drains and OWSs connect to the sanitary sewer system and do not contribute non-storm water discharges.

P2-5 Description of Control Measures

The following section describes the control measures utilized at the VMF to meet the nonnumeric technology-based effluent limits. Storm water pollution from permitted facilities will be minimized by implementing BMPs that limit storm water from coming into contact with potential pollutant sources. The full text of the general BMPs are listed in Section 5 of the SWP3. Numeric effluent limitations based on ELGs are not required for Sector P facilities.

Category	ВМР
Eliminating/Minimizing exposure	Eliminating/minimizing exposure BMPs # 1, 2, 3, 4, 5, and 6
Good housekeeping	Good housekeeping BMPs # 1, 2, 3 and 5 through 20
Preventive maintenance	Preventive maintenance BMPs # 1, 2, 3, and 4
Spill prevention and response	Spill prevention and response BMPs # 1, 2, 4, 5 and 7 through 12
Sediment and erosion control	Sediment and erosion control BMPs # 1
Runoff management	Runoff management BMP # 3 and 4
Employee Training	Employee training BMPs # 1, 2 and 4
Non-storm Water Discharges	Non-storm water discharge BMP # 1 and 2
Dust Generation and Vehicle Tracking	Dust generation and vehicle tracking BMPs # 1, 2, and 3
Record keeping and reporting	Record keeping and reporting BMPs # 1, 2, 3, 4, and 5
Site specific BMPs	Conduct vehicle and equipment maintenance indoors.

Table P2-5-1. VMF Best Management Practices

Category	ВМР
	Drain parts of maintenance equipment prior to disposal
	 Utilize dry cleanup practices in lieu of wet cleanup practices, when wet cleanup has the potential to discharge pollutants to storm water drainage systems.
	• Utilize site berming and grading to divert storm water runoff, or minimize storm water contact with maintenance areas when practicable.
	• Conduct training as necessary to individuals outside the PPT, to the extent which their duty is related to the SWP3 as appropriate, as detailed in Section 5.1 of this SWP3.
	 Monitor for dust generation and tracking from indoor sanding activities at Building 20344. Preform regular maintenance on filtering equipment.

Table P2-5-1. VMF Best Management Practices

P2-6 Schedules and Procedures

Section 6 outlines the general control measures, inspection and monitoring requirements. The following section describes specific procedures applicable to the VMF.

P2-6.1 Preventative Maintenance

Maintenance items at the VMF are primarily included in the general provisions of Section 6.1. Typical maintenance items at the VMF include regular cleanout of drains, the completion of work orders for repairs, and the use of drip pans or immediate repair of all leaking equipment.

P2-6.2 Inspections

Additional items specific to the VMF routine facility inspection include the following:

- Perimeter of the entire facility for erosion and drainage
- ASTs, OWSs, and wash rack
- Material storage areas, and
- Storage areas for vehicles/equipment awaiting maintenance, loading/unloading areas

Quarterly visual samples for the VMF will be collected from Outfalls A and B.

P2-6.3 Monitoring

Benchmark and ELG monitoring is not required for the VMF per Sector P requirements. Table P2-6-1 below details the sampling parameters for indicator monitoring at the VMF.

Parameter	Monitoring Concentration (mg/L)
Chemical Oxygen Demand	NA
pH	NA
TSS	NA
РАН	NA

Table P2-6-1. Indicator Monitoring for VMF

Tab 5 Sector P3 – Auto Hobby Shop

P3-1 Introduction

The Auto Hobby Shop, Building 20375, has been identified as an industrial facility eligible for coverage under Sector P: land transportation and warehousing facilities. The facility consists of Building 20375, a parking area west of the building, and a vehicle washing area across Texas St.

This sector-specific section of this SWP3 contains information exclusive to Sector P3, the Auto Hobby Shop. General information applicable to all facilities is provided in the general SWP3.

P3-2 Pollution Prevention Team

The KAFB PPT is responsible for ensuring that all the requirements outlined in this document are performed in accordance with the EPA requirements. Table 2-1 lists the PPT members.

P3-3 Site Description

P3-3.1 General Site Description

The Auto Hobby Shop is north of the intersection at Texas St. and Griffin Ave (Figure P3-3-1). The approximate center of this facility is at 35.049895° latitude and -106.557090° longitude. The area covered by the Auto Hobby Shop is 3.4 acres with 72% impervious land coverage. The average rainfall is 9.42 inches per year. Rainfall during the wet season of July – October sees 5.18 inches per year on average.

The area surrounding Building 20375 is paved. An unpaved area west of Building 20375 is used to store vehicles associated with activities inside the building. Storm water runoff at the Auto Hobby Shop facility flows north and west. Storm water flows to a storm water drain that discharges at Outfall A.

P3-3.2 Industrial Activities

The Auto Hobby Shop is available to base personnel for the purpose of repairing and/or painting personal vehicles. These maintenance activities occur exclusively indoors. An unpaved, long term parking area west of the building stores vehicles awaiting maintenance or long term vehicle storage for personnel on leave or deployment.

P3-4 Summary of Potential Pollutants

Reoccurring compliance site inspections at the Auto Hobby Shop were utilized to identify the potential pollution sources at this facility



Figure P3-3-1. Auto Hobby Shop Map

P3-4.1 Activities in the Area

Potential pollution sources at the Auto Hobby Shop include oil and grease, petroleum hydrocarbons, antifreeze, paint residues, solvents, soap and cleaning fluid. All maintenance activities occur indoors. The facility contains an interior drain to an OWS and sanitary sewer.

P3-4.2 Potential Storm Water Pollutants

The potential storm water pollutants at the Auto Hobby Shop are summarized below:

Source Activity/Area	Pollutant(s) of Concern
Loading/unloading , material handling operations	Oil/grease, petroleum hydrocarbons, antifreeze
Products and materials	Petroleum hydrocarbons
Outdoor storage activities	Oil/grease, petroleum hydrocarbons, paint, metals
Significant dust or particulate generating activities	Paint, metals, fiberglass
Onsite waste disposal, treatment, or storage	POLs, solvents, detergents, antifreeze
Vehicle/equipment maintenance	Oil and grease, petroleum hydrocarbons, ethylene glycol, paint, solvents
Liquid storage tanks	Used oil
Erosion potential	Low
Material Inventory	Oil/grease, petroleum hydrocarbons, antifreeze, paint, solvents (limited quantities)
Dirt/gravel parking areas for vehicles awaiting maintenance	Oil/grease, petroleum hydrocarbons, antifreeze, metals

Table P3-4-1.	Auto Hobby	Shop F	Potential	Pollutants
	11000 J	Unop 1	otentiai	I onutanto

P3-4.2.1 Loading/Unloading Operations

The Auto Hobby Shop has a designated loading/unloading area outside. Used oil and solvent tanks are stored indoors and are pumped for recycling by an appointed contractor. The potential pollutants of concern are oil and grease, petroleum hydrocarbons, paint, and antifreeze. Spill kits are kept in the building in the case of a spill.

P2-4.2.2 Products (Intermediate, By-products, Final, and Waste) and Materials

Products associated with the Auto Hobby Shop are managed indoors and are generally fluids and fuels required for vehicle maintenance including petroleum hydrocarbons.

P3-4.2.3 Outdoor Storage Activities

Drums of waste POLs are stored inside Building 20375. One 660-gallon double-walled AST is no longer used to store used motor oil. Vehicles awaiting maintenance or long term storage are located west of Building 20375. All personnel are required to drain vehicles of all fluids prior to storage. Potential pollutants of concerns are oil and grease, petroleum hydrocarbons, paint and metals.

P3-4.2.4 Significant Dust or Particulate Generating Activities

Painting is occasionally conducted indoors in designated areas with special filtering equipment. The associated pollutants are paint and metals or fiberglass.

P3-4.2.5 Onsite Waste Disposal, Treatment, or Storage Practices

Dry spill kits are located at the facility. Auto Hobby Shop customers bring personal materials for use. Only limited quantities of HazMat is stored at the facility at any given time. POL related waste generated on-site is collected in drums and stored inside Building 20375 to minimize storm water pollution. Potential types of waste generated include used oil, solvents, detergents, and/or antifreeze.

P3-4.2.6 Vehicle/Equipment Maintenance and/or Cleaning Areas

Various types of automotive work and repair are performed at the facility. All maintenance activities occur indoors. The facility contains an interior drain to an OWS and sanitary sewer. Vehicle washing is conducted at the vehicle washing area east of Building 20375 and across Texas St.

P3-4.2.7 Liquid Storage Tanks

An AST for used oil is west of Building 20375. The AST is double-walled and only Auto Hobby shop personnel are allowed to add used oil, thus reducing the possibility of spills.

P3-4.2.8 Hazardous Waste Sites

The Auto Hobby Shop maintains multiple IAPs utilized to collect hazardous waste.

P3-4.2.9 Material Inventory

Material inventory is tracked by the KAFB Hazardous Materials Program, which controls purchases of HazMat. Quantities are limited to a working basis and bulk storage of HazMat does not occur at these facilities. Customers are permitted to use personal materials.

P3-4.2.10 Dirt/Gravel Parking Areas for Vehicles Awaiting Maintenance

The long term parking area stores vehicles awaiting maintenance and parked vehicles. The vehicles awaiting maintenance contain potential pollutants from leaking fluids including oil and grease, petroleum hydrocarbons, antifreeze, paint and metals. Parked vehicles are drained before storage or use drip pans to collect any leaking fluids.

P3-4.2.11 Activities Not Conducted At the Facility

The following activities and associated potential pollutants do not occur at the Auto Hobby Shop: industrial machinery; outdoor manufacturing or processing; fueling stations; areas with a high potential for significant soil erosion; and illicit plumbing connections.

P3-4.3 Significant Spills and Leaks

Spills and leaks are most likely to occur from a leaking vehicle at the long-term parking area or during loading or unloading activities into a maintenance bay. All fluid maintenance must be conducted inside the shop. Leaking vehicles must be repaired or removed with 48 hours of visible staining. Dry spill kits are kept on-site in the event of a spill. Spill prevention training is implemented annually to prevent reoccurring incidences.

P3-4.4 Non-storm Water Discharges

Non-storm water discharges have not occurred at this facility. The network of drains and OWSs discharge to the sanitary sewer and do not contribute non-storm water discharges.

P3-5 Description of Control Measures

The following section describes the control measures utilized at the Auto Hobby Shop to meet the non-numeric technology-based effluent limits. Storm water pollution from permitted facilities will be minimized by implementing BMPs that limit storm water from coming into contact with potential pollutant sources. The full text of the general BMPs are listed in Section 5 of the SWP3. Numeric effluent limitations based on ELGs are not required for Sector P facilities.

Category	BMP
Eliminating/Minimizing exposure	Eliminating/minimizing exposure BMPs # 1, 2, 3, 4, 5, and 6
Good housekeeping	Good housekeeping BMPs # 1, 2, 3 and 5 through 20
Preventive maintenance	Preventive maintenance BMPs # 1, 2, 3, and 4
Spill prevention and response	Spill prevention and response BMPs # 1, 2 and 4 through 12
Sediment and erosion control	Sediment and erosion control BMPs # 1 and 3
Runoff management	Runoff management BMP # 1 and 4
Employee Training	Employee training BMPs # 1, 2, and 4
Non-storm Water Discharges	Non-storm water discharge BMP # 1 and 2
Dust Generation and Vehicle Tracking	Dust generation and vehicle tracking BMP # 1, 2, and 3
Record keeping and reporting	Record keeping and reporting BMPs # 1, 2, 3, 4, and 5

Table P3-5-1. Auto Hobby Shop Best Management Practices

Category	ВМР
Site specific BMPs	 Remove fluids from wrecked or damaged vehicles to prevent spills or leaks. Conduct vehicle and equipment maintenance indoors.
	 Utilize drip pans and other preventative measures when vehicles or equipment, especially those awaiting maintenance, are stored outdoors.
	 Utilize dry cleanup practices in lieu of wet cleanup practices, when wet cleanup has the potential to discharge pollutants to storm water drainage systems.
	• Utilize site berming and grading to treat storm water runoff, or minimize storm water contact with maintenance areas when practicable.
	 Utilize and maintain awnings and site grading to minimize fuel spills and leaks or loading/unloading areas from coming into contact with storm water.
	• Conduct training as necessary to individuals outside the PPT, to the extent which their duty is related to the SWP3 as appropriate, as detailed in Section 5.1 of this SWP3.
	• Monitor for dust generation and tracking from indoor sanding activities at Building 20375, and control as appropriate. Preform regular maintenance on filtering equipment to ensure dust is not generated.
	• Monitor for dust generation and tracking from unpaved, long term parking area. Control dust as appropriate.

Table P3-5-1. Auto Hobby Shop Best Management Practices

P3-6 Schedules and Procedures

Section 6 outlines the general control measures, inspection and monitoring requirements. The following section describes specific procedures applicable to the Auto Hobby Shop.

P3-6.1 Preventative Maintenance

Maintenance items at the Auto Hobby Shop are primarily included in the general provisions of Section 6.1. Typical maintenance items at the Auto Hobby Shop include regular cleanout of drains, submitting and tracking work orders for defective equipment, and the use of drip pans or immediate repair of all leaking equipment.

P3-6.2 Inspections

Additional items specific to the Auto Hobby Shop routine facility inspection include:

- Perimeter of the entire facility for erosion and drainage
- Storage areas for vehicles awaiting maintenance (e.g. long term parking area)
- AST and OWS
- Vehicle washing area
- Unpaved areas for erosion, and

• Material loading and unloading areas and storage areas

Quarterly visual samples for the Auto Hobby Shop will be collected from Outfall A.

P3-6.3 Monitoring

Benchmark and ELG monitoring is not required for the Auto Hobby Shop per Sector P requirements. Table P3-6-1 below details the sampling parameters for indicator monitoring at the Auto Hobby Shop.

Parameter	Monitoring Concentration (mg/L)
Chemical Oxygen Demand	NA
pH	NA
TSS	NA
РАН	NA

Table P3-6-1.	Indicator	Monitoring for	Auto Hobby Shop
			· · · · · · · · · · · · · · · · · · ·

Tab 6 Sector P4 – Power Pro Operations

P4-1 Introduction

The Power Pro operations at KAFB are contract services to operate, inspect, test, exercise and maintain an inventory of electric power systems. Examples of these systems include portable and stationary generators, power conditioning equipment, uninterruptable power supplies, and emergency fire pumps. The contract services also include refueling the Base emergency generators and providing portable generators to installation customers to meet mission needs.

P4-2 Pollution Prevention Team

The KAFB PPT is responsible for ensuring all the requirements outlined in this document are performed in accordance with the EPA requirements. Table 2-1 lists the PPT members.

P4-3 Site Description

P4-3.1 General Site Description

Backup generators, power reliability equipment, and fire protection systems are located throughout the Base to maintain the availability of critical equipment and operations in the event of a power outage or another emergency. An inventory of emergency generators that includes type, location, capacity, manufacturer, fuel tank type and capacity, year of manufacture and load information is maintained. The approximate size of the Power Pro facility is 7.4 acres with its centroid at approximately 35.046832, -106.548394.

P4-3.2 Industrial Activities

Power Pro operations include maintenance of diesel and gasoline fueled equipment. Maintenance activities are performed inside of Building 20678. Chemicals used for maintenance are stored in flammable cabinets located on the exterior of the building, under a metal roof. Chemicals and hazardous waste are stored inside the building, within larger outer containers that provide secondary containment. Used oil is stored in a 250-gallon aboveground storage tank (AST) located outside near the flammable cabinets. The AST is stored within a steel containment on a poured concrete pad (see Figure P4-3-1). Power Prop operations also include maintenance and testing of stationary emergency generators located throughout the Base. Vehicles and equipment are periodically washed in a wash racks located at Building 20698.

P4-4 Summary of Potential Pollutants

A site inspection at Building 20678 and follow-up discussions were utilized to identify the potential pollutant sources at this facility. A material authorization document lists a chemical inventory that includes lead-acid batteries, refrigerants, fuel additives, automotive cleaning agents, degreasers, coolants, sealants, adhesives, lubricants, motor oils, and transmission fluids. The site visit confirmed that these materials are stored indoors with secondary containment or in the flammable cabinets located outside of the building.

No storm water grates are located in the outdoor areas surrounding Building 20678 where the AST, flammable cabinets and portable generators are stored. Two emergency generators located south of Building 20602 are located in close proximity to storm water grates (see Figure P4-3-1).

The wash rack drains located at Building 20698 flow to an oil-water separator and then to the sanitary sewer system. The oil-water separators are cleaned out at least every two years.



Figure P4-3-1. Power Pro Map

P4-4.1 Activities in the Area

Potential pollution sources at Power Pro include oil and grease, petroleum hydrocarbons, antifreeze, solvents, cleaners and degreasers. All product storage and maintenance activities occurs indoors. Portable and towed generators and mobile light carts/stands are stored on asphalt areas adjacent to Building 20678.

P4-4.2 Potential Storm Water Pollutants

The potential storm water pollutants at Power Pro are summarized below:

Source Activity/Area	Pollutant(s) of Concern
Loading/unloading, material handling operations	Oils, solvents, petroleum hydrocarbons, used oil, antifreeze
Products and materials	POL, lead-acid batteries
Outdoor storage activities	Used oil, diesel and gasoline fluids
Significant dust or particulate generating activities	None
Onsite waste disposal, treatment, or storage	POL, solvents, used oil, antifreeze
Vehicle/equipment maintenance	Oil and grease, petroleum hydrocarbons, ethylene glycol, solvents, antifreeze
Liquid storage tanks	Used oil and petroleum fuels
Erosion potential	Low
Material Inventory	Oils, solvents, petroleum hydrocarbons, used oil, antifreeze, lead-acid batteries
Asphalt parking/storage areas/	Emergency generators containing petroleum fuels

Table P4-4-1. Power Pro Potential Pollutants

P4-4.2.1 Loading/Unloading Operations

The Power Pro building has a designated loading/unloading area outside. Containers handled are 55 gallons in size or smaller. Personnel are trained on hazardous materials handling. The potential pollutants of concern are oil and grease, petroleum hydrocarbons, and antifreeze. Spill pads are kept in the building in the case of a spill or leak and more spill response materials are available in Building 20678.

Fuel transfers to the stationary emergency generators located throughout the Base are performed by KAFB Fuels Management office. Personnel are trained in spill prevention and response and the refueling truck is equipped with spill response materials.

P4-4.2.2 Products (Intermediate, By-products, Final, and Waste) and Materials

Products associated with Power Pro are managed indoors and are generally fluids and fuels required for equipment maintenance including petroleum hydrocarbons. Drums of waste POLs are stored in polypack containers inside the building.

P4-4.2.3 Outdoor Storage Activities

One 250-gallon double-walled AST used to store used motor oil is located outside. The tank is stored inside of a steel containment and is located on a poured concrete pad. Portable

generators needing maintenance or stored for use by Base operations are located on asphalt surfaces. All personnel are required to drain vehicles of all fluids prior to storage. Potential pollutants of concerns are oil and grease, petroleum hydrocarbons, paint and metals.

The stationary generators are located outdoors. These generators are inspected at least monthly for leaks.

P4-4.2.4 Significant Dust or Particulate Generating Activities

No significant dust generating activities are associated with the Power Pro operations.

P4-4.2.5 Onsite Waste Disposal, Treatment, or Storage Practices

Dry spill kits are located at the facility. Only limited quantities of HazMat are stored at the facility at any given time. POL related waste generated on-site is collected in drums which are then stored in Polypak units. Polypaks are utilized as secondary containment units to minimize storm water pollution. Potential types of waste generated include used oil, solvents, cleaning agents, and/or antifreeze.

P4-4.2.6 Vehicle/Equipment Maintenance and/or Cleaning Areas

Various types of equipment maintenance and repair are performed at the facility. All maintenance activities occur indoors to reduce potential impacts to storm water. The washrack is used to wash vehicles.

P4-4.2.7 Liquid Storage Tanks

An AST for used oil is located outside and east of Building 20678. The 250-gallon steel AST is contained within a steel outer container and only Power Pro personnel are allowed to add used oil, thus reducing the possibility of spills.

P4-4.2.8 Hazardous Waste Sites

The Power Pro operation maintains an IAP utilized to collect hazardous waste (used coolant and used engine filters).

P4-4.2.9 Material Inventory

Material inventory is tracked by the KAFB Hazardous Materials Program, which controls purchases of HazMat. Quantities are limited to a working basis and bulk storage of HazMat does not occur at these facilities.

P4-4.2.10 Paved Asphalt Areas for Storing Mobile Emergency Generators

The Power Pro Operation includes five portable generators, five towed generators and six diesel- fueled light carts/stands. This equipment represents a pollutant source due to potential leaks of diesel and gasoline.

P4-4.2.11 Activities Not Conducted At the Facility

The following activities and associated potential pollutants are not present at the Power Pro area: outdoor manufacturing or processing; outdoor maintenance activities; fuel islands; areas with a high potential for significant soil erosion; and illicit plumbing connections.

P4-4.3 Significant Spills and Leaks

Spills and leaks are most likely to occur from equipment stored outside of the facility or from the stationary generators located throughout the base which are maintained under the Power Pro Operation. Absorbent spill pads are kept on-site in the event of a spill. Spill prevention training is implemented annually to prevent reoccurring incidences.

P4-4.4 Non-storm Water Discharges

Non-storm water discharges have not occurred at this facility. The wash rack drains flow to OWSs and discharge to the sanitary sewer. These activities do not contribute non-storm water discharges.

P4-5 Description of Control Measures

The following section describes the control measures utilized at Power Pro to meet the nonnumeric technology-based effluent limits. Storm water pollution from permitted facilities will be minimized by implementing BMPs that limit storm water from coming into contact with potential pollutant sources. The full text of the general BMPs are listed in Section 5 of the SWP3. Numeric effluent limitations based on ELGs are not required for Sector P facilities.

Category	ВМР
Eliminating/Minimizing exposure	Eliminating/minimizing exposure BMPs # 1, 2, 3, 4, 5, and 6
Good housekeeping	Good housekeeping BMPs # 1, 2, 3 and 5 through 20
Preventive maintenance	Preventive maintenance BMPs # 1, 2, 3, and 4
Spill prevention and response	Spill prevention and response BMPs # 1, 2 and 4 through 12
Runoff management	Runoff management BMP # 1 and 4
Employee Training	Employee training BMPs # 1, 2, and 4
Non-storm Water Discharges	Non-storm water discharge BMP # 1 and 2
Dust Generation and Vehicle Tracking	Dust generation and vehicle tracking BMP # 1, 2, and 3
Record keeping and reporting	Record keeping and reporting BMPs # 1, 2, 3, 4, and 5

Table P4-6-1. Power Pro Best Management Practices

Category	BMP
Site specific BMPs	 Conduct vehicle and equipment maintenance indoors. Utilize drip pans and other preventative measures when vehicles or equipment, especially those awaiting maintenance, are stored outdoors.
	 Utilize dry cleanup practices in lieu of wet cleanup practices, when wet cleanup has the potential to discharge pollutants to storm water drainage systems.
	• Utilize site berming and grading to treat storm water runoff, or minimize storm water contact with maintenance areas when practicable.
	 Utilize and maintain awnings and site grading to minimize fuel spills and leaks or loading/unloading areas from coming into contact with storm water.
	• Conduct training as necessary to individuals outside the PPT, to the extent which their duty is related to the SWP3 as appropriate, as detailed in Section 5.1 of this SWP3.
	 Monitor for leaks from portable equipment stored outdoors and from stationary generators located throughout the Base.

Table P4-6-1. Power Pro Best Management Practices

P4-6 Schedules and Procedures

Section 6 outlines the general control measures, inspection and monitoring requirements. The following section describes specific procedures applicable to Power Pro.

P4-6.1 Preventative Maintenance

Maintenance items at Power Pro are primarily included in the general provisions of Section 6.1. Typical maintenance items at Power Pro include regular cleanout of the OWS serving the facility drains, submitting and tracking work orders for defective equipment, and the use of drip pans or immediate repair of all leaking equipment.

P4-6.2 Inspections

Additional items specific to the Power Pro routine facility inspection include:

- Perimeter of the entire facility for erosion and drainage
- Storage areas for equipment awaiting maintenance (e.g. long term parking area)
- AST and OWS
- Vehicle washing area
- Unpaved areas for erosion, and
- Material loading and unloading areas and storage areas

Quarterly visual samples for Power Pro will be collected from Outfall A.

P4-6.3 Monitoring

Benchmark and ELG monitoring is not required for Power Pro per Sector P requirements. Table P4-6-1 below details the sampling parameters for indicator monitoring for Power Pro.

Parameter	Monitoring Concentration (mg/L)
Chemical Oxygen Demand	NA
pH	NA
TSS	NA
РАН	NA

Table P4-6-1. Indicator Monitoring for Power Pro

Tab 7 Sector S1 – 58th Special Operations Wing

S1-1 Introduction

The 58th Special Operations Wing (58th SOW) is an industrial facility eligible for coverage under Sector S: Air Transportation.

This sector-specific section of this SWP3 contains information exclusive to Sector S1, the 58th SOW. General information applicable to all facilities is provided in the general SWP3.

S1-2 Pollution Prevention Team

The KAFB PPT is responsible for ensuring all the requirements outlined in this document are performed in accordance with the EPA requirements. Table 2-1 lists the PPT members.

S1-3 Site Description

S1-3.1 General Site Description

The 58th SOW facilities are in the western portion of the cantonment area north of the runway and include several buildings and hanger (Figures S1-3-1, A and B). The industrial activities exposed to storm water at the 58th SOW are generally limited to the flight line and aprons. The approximate center of this facility is at 35.048772° latitude and -106.594709° longitude. The area covered by the 58th SOW is 173.4 acres with 99.3% impervious land coverage. The average rainfall is 9.42 inches per year. Rainfall during the wet season of July – October sees 5.18 inches per year on average.

Storm water runoff flows south to on-site storm drains that connect to the storm water system. Runoff from areas east of Hangar 1000 generally flows to Outfall C and into Tijeras Arroyo, while runoff from areas west of Hangar 1000 generally flows to Outfall B. Storm water discharges associated with Outfall B are impounded by a water retention pond and may not actually reach the Tijeras Arroyo channel. Storm water runoff from the engine test facility at Building 704 generally pools and evaporates. During extreme precipitation events, storm water at Building 704 will discharge directly into Tijeras Arroyo.

S1-3.2 Industrial Activities

The mission of the 58th SOW is to train Air Force pilots. Information regarding particular facilities, mission and activities are summarized below:

Building/ Hangar No	Facility Mission	Activities
336	Propulsion shop	Engine maintenance, conducted indoors.
381	Aerospace ground equipment (AGE) shop	Maintenance of portable AGE used to service aircraft, including hydraulics, generators, heaters and air compressors. Activities generally conducted indoors except for equipment fueling.
481	DOE Hanger	Bulk transport of materials and personnel, as needed.
482	Non-destructive Inspection Lab	X-ray of aircraft parts to check for integrity. Activities conducted indoors. Building is shielded to prevent X-ray exposure.
703/704	Engine testing facility	Test rebuilt aircraft engines for performance. Activities are conducted under an awning outdoors.
980/981	Material Storage	Vehicle and material storage, offices and test labs.
985	Corrosion Control	Sanding and painting of aircraft. Activities conducted indoors.
986	Fuel Cell	Maintenance and inspection of aircraft fuel tanks and structural features. Activities conducted indoors.
992	Material Supply	Aircraft part storage and issue for routine repairs and maintenance. Activities conducted indoors
1000	Aircraft maintenance	Helicopter maintenance and inspections of blades, engines and related components. Maintenance generally conducted under hangar awning, though may be conducted outdoors if necessary.
1001	Aircraft maintenance	Maintenance of aircraft fuselages and structural features. Bead blast equipment building includes a wood shop, metals technology lab, and structural maintenance shop. Maintenance generally conducted under hangar awning, though may be conducted outdoors if necessary.
1002	Aircraft maintenance	Phase inspections on C-130 aircraft along with replacement of engines and other related components. Maintenance generally conducted under hangar awning, though may be conducted outdoors if necessary.
1008/1009	Material Storage	Aircraft part and equipment storage.
1037	Fuel systems maintenance facility	Maintenance and repair of fuel cells and fuel system components. Activities conducted indoors.

S1-4 Summary of Potential Pollutants

Reoccurring compliance site inspections and the inventory of on-site chemicals at the 58th SOW were utilized to identify the potential pollution sources at this facility.



Cooperative Agreement Number: W9126G-14-2-0018 - W9126G-20-2-0004

Prepared By: Aric Mccrumb, CSU-CEM ML GIS Analyst, Aric.Mccrumb.ctr@us.af.mil

Figure S1-3-1 A. 58th Special Operations Wing Map A



Figure S1-3-1 B. 58th Special Operations Wing Map B



Figure S1-3-1 C. 58th Special Operations Wing Map C
S1-4.1 Activities in the Area

The main potential pollution sources at the 58th SOW are potential spills or leaks during fueling, operations or repair, aircraft wash down and HazMat storage areas. However, the majority of aircraft maintenance and non-flight operations occur indoors.

S1-4.2 Potential Storm Water Pollutants

The potential storm water pollutants at the 58th SOW are summarized below:

Source Activity/Area	Pollutant(s) of Concern
Loading/unloading, material handling operations	Diesel fuel, unleaded gasoline, jet fuel, POLs
Industrial machinery	Diesel fuel, hydraulic fluid, POLs
Products and materials	Diesel fuel, unleaded gasoline, jet fuel, POLs, floatables, metals, suspended solids
Outdoor storage activities	POLs, diesel fuel, jet fuel, antifreeze
Onsite waste disposal, treatment, or storage	POLs, solvents, detergents, antifreeze
Fueling stations	Diesel fuel, jet fuel, POLs
Vehicle/aircraft maintenance and/or cleaning	POLs, Diesel fuel, deicing fluids, antifreeze
Liquid storage tanks	POLs, jet fuel, diesel
Erosion potential	None
Material inventory	Diesel fuel, unleaded gasoline, jet fuel, POLs
Aircraft deicing operations	Deicing fluid

S1-4.2.1 Loading/Unloading, Material Handling Operations

Fuels are delivered by tanker truck to a diesel AST in building 381 and a Jet-A AST at building 704. Fuel tanks from the BFSF fuel aircraft on the flight line. Material loading and unloading additional materials occurs at the respective facilities. Materials are delivered in cases or drums and are not exposed to storm water. The potential pollutants of concern are POLs, diesel fuel, unleaded gasoline and jet fuel.

S1-4.2.2 Industrial Machinery

Heavy machinery is used to load, unload, or haul materials and products and is stored at the facility. Types include heavy lifters, bucket trucks, fork lifts, and bobcats. Pollutants associated with machinery include oil and grease, hydraulic fluid and diesel fuel.

S1-4.2.3 Products (Intermediate, By-products, Final, and Waste) and Materials

Diesel fuel, unleaded gasoline, jet fuel, POL, and deicing chemicals are stored at the facility. Other materials used on-site may include aircraft or maintenance parts stored indoors.

S1-4.2.4 Outdoor Storage Activities

Fuel products are stored in AST at several facilities. New materials are stored indoors. Waste materials stored outdoors are summarized below:

- *Building 336, Propulsion Shop:* Waste POLs are stored in a 250-gallon double-walled AST west of the building.
- *Building 381, AGE Shop:* A 660-gallon double-walled AST for used oil and an IAP for hazardous waste are west of the building. Two 6,000-gallon double-walled ASTs for Jet-A are located west of the building.
- *Building 704, Engine Testing Facility:* A 130-gallon double-walled AST for used oil is northeast of the building. A 3,000-gallon double-walled AST for Jet-A is to the north.
- *Building 992, Tool Shop:* A 250-gallon double-walled AST for used is to the northeast.
- *Hangars 1000, 1001, 1002 Aircraft Maintenance:* Two 660-gallon double-walled ASTs for waste POLs are stored on the flight line.
- *Building 1037, Fuel Systems Maintenance Facility:* One covered outdoor storage locker south of the building contains POLs and grounds maintenance equipment.

The potential pollutants of concern associated with these storage areas are solvents, POLs, diesel fuel, jet fuel and antifreeze.

S1-4.2.5 Onsite Waste Disposal, Treatment, or Storage Practices

Dry spill kits are located at the facilities. Waste generated on-site is collected and stored in drums which are then stored in Polypak units. Polypaks are utilized as secondary containment units to minimize storm water pollution. Potential types of waste generated include used oil, solvents, detergents, and used antifreeze.

S1-4.2.6 Fueling Stations

The fueling stations for the 58th SOW are discussed below:

- *Building 381, AGE Shop:* AGE is refueled at the fueling station southwest of the building.
- *Building 704, Engine Test Facility:* Engines are supplied with fuel from an AST north of the building. Aircraft refueling is not conducted at this facility.
- *Hangars 1000, 1001, 1002, Aircraft Maintenance:* Fuel tanker trucks are used to refuel aircraft on the flight line.

S1-4.2.7 Vehicle/Equipment Maintenance and/or Cleaning Areas

Several maintenance and cleaning areas exist in the 150th ANG as summarized below:

- *Building 336, Propulsion Shop:* Aircraft engine maintenance and cleaning is performed indoors at this facility. All HazMat is stored in covered storage areas.
- *Building 381, AGE Shop:* AGE is maintained and repaired at this facility. Maintenance work is performed indoors. Equipment is stored outside in a bermed area.
- *Building 482, Non Destructive Inspection Lab:* Aircraft parts and components are disassembled and inspected using x-ray technology. All work is performed indoors.
- *Building 704, Engine Test Facility:* Aircraft engines are tested outdoors under an awning at this facility. Each engine is on a stand and drip pans are in place at all times.

- *Building 985, Corrosion Control Facility:* Aircraft sanding and painting occur at this facility. All activities are performed indoors.
- *Building 986, Fuel Cell Facility:* Aircraft fuel cell maintenance, repair and inspections occur at this facility. All activities are performed indoors.
- *Hangars 1000, 1001, 1002, Aircraft Maintenance:* Maintenance and repair activities are conducted indoors. Buildings are serviced by interior floor drains that connect to an OWS that discharges to the sanitary sewer. Deicing operations are performed on the flight line adjacent to the buildings. A wash rack, which is connected to an OWS and the sanitary sewer, is used to clean aircraft.
- *Building 1037, Fuel Systems Maintenance Facility:* Aircraft fuel systems are maintained at this facility. All activities are performed indoors.

Potential pollutants of concern are POLs, fuel products, deicing fluids, and antifreeze.

S1-4.2.8 Liquid Storage Tanks

Building 381 has two 6,000-gallon double-walled ASTs for Jet-A located west of the building. Building 704 has one 3,000-gallon double-walled AST for Jet-A located north of the building. Multiple 100-gallon mobile fuel bowers are stored on-site for fuel recovery. The potential pollutants of concern associated with these liquid storage tanks are jet fuel and POLs.

S1-4.2.9 Hazardous Waste Sites

The 58th SOW maintains multiple IAPs utilized to collect hazardous waste. Waste stored at these sites is collected in drums and/or polypacks and is not exposed to storm water.

S1-4.2.10 Material Inventory

Material inventory is tracked by the KAFB Hazardous Materials Program, which controls purchases of HazMat. Quantities are limited to a working basis and bulk storage of HazMat does not occur at the facility.

S1-4.2.11 Aircraft Deicing Operation

When possible, heat lamps are used in place of deicer; however, aircraft deicing operations occur on the flight line, if necessary. Deicer is issued from the BFSF and applied per military Technical Order. Specific information for deicing procedures is not releasable to the public.

S1-4.2.12 Activities Not Conducted At the Facility

The following activities and associated potential pollutants do not occur at the 58th SOW: outdoor manufacturing or processing activities; significant dust or particulate generating activities; and areas with a high potential for significant soil erosion.

S1-4.3 Significant Spills and Leaks

Spills and leaks are most likely to occur during fueling and equipment usage along the flight line. Fuel trucks are equipped with dry spill kits in the event of a spill. Spill prevention training is implemented annually to prevent reoccurring incidences.

S1-4.4 Non-storm Water Discharges

Deicing operations conducted at the 58th SOW have the potential to result in non-storm water discharges. Historically, less than 100,000 gallons of pure deicing fluid was used annually at KAFB. Test engines at building 704 are mounted on stands inside spill pans at all times. No other non-storm water discharges are generated by the 58th SOW.

S1-5 Description of Control Measures

The following section describes the control measures utilized at the 58th SOW to meet the nonnumeric technology-based effluent limits. Storm water pollution from permitted facilities will be minimized by implementing BMPs that limit storm water from coming into contact with potential pollutant sources. The full text of the general BMPs are listed in Section 5 of the SWP3. The 58th SOW does not qualify for the numeric effluent limitations based on ELGs.

Category	ВМР
Eliminating/Minimizing exposure	Eliminating/minimizing exposure BMPs 1, 2, 3, 4, 5, and 6
Good housekeeping	Good housekeeping BMPs # 1 through 20
Preventive maintenance	Preventive maintenance BMPs # 1, 2, 3, 4, and 6
Spill prevention and response	Spill prevention and response BMPs # 1 through 12
Sediment and erosion control	Sediment and erosion control BMP # 1
Runoff management	Runoff management BMPs # 1, 2, 3, 4, and 5
Employee Training	Employee training BMPs # 1, 2, and 4
Non-storm Water Discharges	Non-storm water discharge BMP #1 and 2
Dust Generation and Vehicle Tracking	Dust generation and vehicle tracking BMPs # 1, 2, and 3
Record keeping and reporting	Record keeping and reporting BMPs # 1, 2, 3, 4, and 5
Site specific BMPs	 Ensure that all wash water drains to the wash rack. Drain parts of maintenance equipment prior to disposal. Stockpile snow melt mixed with deicer in a vegetated area Cover centralized waste storage locations where materials are contained to prevent contact with storm-water runoff. Ensure that drip pans and other appropriate management practices are utilized if outdoor maintenance is conducted. Preform regular maintenance and cleaning of the OWS to ensure continued functionality and prevent overflows. Minimize storm water run-on and runoff to material storage areas, and storm water volumes in general by

Table S1-5-1. 58th SOW Best Management Practices

Category	BMP
	diverting storm water away from the area utilizing the facility's earthen berms.
	• Conduct training as necessary to individuals outside the PPT, to the extent which their duty is related to the SWP3 as appropriate, as detailed in Section 5.1 of this SWP3.

Table S1-5-1. 58th SOW Best Management Practices

S1-6 Schedules and Procedures

Section 6 outlines the general control measures, inspection and monitoring requirements. The following section describes the specific procedures applicable to the 58th SOW.

S1-6.1 Deicing Season

The aircraft deicing season for KAFB is typically November–March, outside the typical rainy season, though deicing may occur outside that window. The control measures and BMPs specific to deicing will be implemented with particular emphasis during deicing activities. Per AFI 32-1001, KAFB does not authorize use of urea containing deicer fluid.

S1-6.2 Preventative Maintenance

Outdoor fueling or maintenance may occur on vehicles or equipment when it is not feasible to relocate to a designated maintenance facility. Drip pans and dry cleanup methods will be used as preventative measures in this circumstance. Work orders will be submitted for defective equipment for tracking purposes.

S1-6.3 Good Housekeeping

The flight line is cleaned with dry absorbent methods. Vehicles and equipment awaiting maintenance are generally kept indoors, and drip pans are utilized if these items must be kept outdoors. Standard procedures require the flight line be clean, orderly and free of debris.

S1-6.4 Management of Runoff

Runoff from the facilities drains to an OWS prior to entering the sanitary sewer. OWSs are routinely cleaned and inspected. Snow melt commingled with deicing fluid is stockpiled in a vegetated area prior to entering the storm drainage system. The flight line drains to storm water inlets located on the airfield. This runoff drains to a retention basin located near Outfall B.

S1-6.5 Inspections

Additional items specific to the 58th SOW routine facility inspection include the following:

- Perimeter of the entire facility for erosion and drainage
- Outdoor HazMat storage units, ASTs, OWSs and wash racks
- Fueling stations and Fueling operations area
- Engine test facility, flight line, parking apron and designated deicing areas

Quarterly visual samples for the 58th SOW will be collected from Outfalls B and C.

S1-6.3 Monitoring

KAFB does not use more than 100,000 gallons of pure glycol-based deicing chemicals on an average annual basis. Per AFI 32-1001, KAFB does not authorize use of urea containing deicer fluid. Runway areas are managed and maintained by the City of Albuquerque Sunport. Indicator monitoring is required for Air Transportation Facilities and is included in Table S1-6-1 below details the sampling parameters for indicator monitoring at the 58th SOW.

Table W1-6-1. Indicator Monitoring for 58th SOW

Parameter	Monitoring Concentration (mg/L)
РАН	NA

S1-7 Additional Documentation Requirements

Kirtland is authorized to discharge waste water to the City of Albuquerque sanitary sewer system by an Industrial Pretreatment Permit. The permit contains standards, which regulate constituent levels allowable for discharge to the sanitary sewer.

The Permit requires documentation of the types of deicer, and monthly quantities used. Records will be kept with this SWP3.

Tab 8 Sector S2 – U.S. Customs

S2-1 Introduction

The U.S. Customs and Border Protection Facility (USCBP) is an industrial facility eligible for coverage under Sector S: Air Transportation.

This sector-specific section of this SWP3 contains information exclusive to Sector S2, USCBP. General information applicable to all facilities is provided in the general SWP3.

S2-2 Pollution Prevention Team

The KAFB PPT is responsible for ensuring all the requirements outlined in this document are performed in accordance with the EPA requirements. Table 2-1 lists the PPT members.

S2-3 Site Description

S2-3.1 General Site Description

USCBP is in the western edge of the cantonment area, south of Randolph Ave (Figure S2-3-1). The facility includes Building 290 and Hangar 291; however the industrial activates exposed to storm water are limited to the outdoor area associated with the hangar. The approximate center of this facility is at 35.050209° latitude and -106.607545° longitude. The area covered by USCBP is 3.78 acres with 100% impervious land coverage. The average rainfall is 9.42 inches per year. Rainfall during the wet season of July – October sees 5.18 inches per year on average.

Storm water runoff from this facility flows northeast toward the hangar, off the tarmac, and into the storm water system. One area to the south of the hangar collects storm water in a sump that is periodically pumped. The storm water system discharges into a tributary of the Tijeras Arroyo at Outfall B. Storm water discharges associated with this outfall are impounded by a water retention pond and may not actually reach the Tijeras Arroyo channel.

S2-3.2 Industrial Activities

The function of the USCBP is to maintain the helicopters and light aircraft used in the enforcement of U.S. Customs. Other law enforcement agencies have access to these aircraft.

Maintenance functions are conducted inside the hangar where the aircraft are stored. The only maintenance/cleaning task conducted outdoors is washing of aircraft, which takes place at the wash rack adjacent to the parking apron at Hangar 291. Deicing fluid is not used at this facility as aircraft are stored inside the hangar. One covered outdoor storage shed, one indoor storage room, and two locking cabinets exist at the facility for storage of POLs, detergents and cleaners.

S2-4 Summary of Potential Pollutants

Reoccurring compliance site inspections at the USCBP were utilized to identify the potential pollution sources at this facility.



Figure S2-3-1. Customs and Border Protection Map

S2-4.1 Activities in the Area

The main potential pollution sources at USCBP are materials used in cleaning and maintaining aircraft. Maintenance operations occur inside. The transportation, aircraft use and support, and atypical light maintenance activities have the potential to pollute storm water.

S2-4.2 Potential Storm Water Pollutants

The potential storm water pollutants at the USCBP are summarized below:

Table 32-4-1. Cochi i otentiai i onutants	
Source Activity/Area	Pollutant(s) of Concern
Loading/unloading, material handling operations	POLs, diesel fuel, unleaded gasoline, jet fuel, surfactants, floatables and metals
Industrial machinery	POLs, diesel fuel, unleaded gasoline, surfactants
Products and materials	Diesel fuel, unleaded gasoline, surfactants, floatables and metals
Outdoor storage activities	POLs, paint, detergents, solvents
Onsite waste disposal, treatment, or storage	POLs, solvents, paints, alcohols
Fueling stations	Jet fuel and POLs
Vehicle/aircraft maintenance and/or cleaning	POLs, detergents, solvents
Liquid storage tanks	Diesel
Erosion potential	None
Material inventory	Diesel, jet fuel, detergents, solvents

Table S2-4-1. USCBP Potential Pollutants

S2-4.2.1 Loading/Unloading, Material Handling Operations

Loading, unloading and material handling operations are generally limited to the transportation of shop equipment. This equipment is typically packed in a secure container and is not at risk of polluting storm water, even if the loading/unloading occurred during a rain event. The loading of the jet fuel tanker trucks occurs at the BFSF, and loading of the diesel fuel tanks occurs indoors, thus the potential for storm water pollution is minimal.

S2-4.2.2 Industrial Machinery

Heavy machinery may be used to load, unload, or haul materials and products. This may include heavy lifters, bucket trucks, fork lifts, and bobcats. Pollutants associated with machinery include oil and grease, hydraulic fluid, diesel fuel and unleaded gasoline.

S2-4.2.3 Products (Intermediate, By-products, Final, and Waste) and Materials

Diesel fuel, unleaded gasoline, and cleaning products are stored at the facility. Other materials used on-site may include aircraft equipment or parts stored indoors.

S2-4.2.4 Outdoor Storage Activities

An outdoor storage shed is used for POLs, waste POLs, detergents and other cleaners. The outdoor storage is locked and has a curbed doorway to prevent the accidental escape of HazMat to the parking apron. The potential pollutants of concern associated with this activity are oil and grease, detergents, and solvents.

S2-4.2.5 Onsite Waste Disposal, Treatment, or Storage Practices

Dry spill kits are located at the facility. POL, solvent and alcohol related waste generated on-site is collected in drums which are then stored in Polypak units or inside Hanger 291. Polypaks are utilized as secondary containment units to minimize storm water pollution. Potential types of waste generated include used oil, solvents and detergents.

S2-4.2.6 Fueling Stations

Fuel tanker trucks associated with the BFSF are parked on the apron west of Hanger 291. Aircraft refueling is done on the apron west of the hanger. The potential pollutants of concern are Jet-A and petroleum hydrocarbons.

S2-4.2.7 Vehicle/Equipment Maintenance and/or Cleaning Areas

Vehicle, aircraft, and equipment maintenance are conducted inside Hangar 291. Aircraft washing is performed at a wash rack that discharges to an OWS and to the sanitary sewer. The potential pollutants of concern associated with this activity are POLs, detergents, and solvents.

S2-4.2.8 Liquid Storage Tanks

The USCBP facility has three 300-gallon ASTs to supply a backup power generator and emergency fire suppression pumps. Tanks are stored indoors within secondary containment.

S2-4.2.9 Hazardous Waste Sites

The USCBP maintains multiple IAPs utilized to collect hazardous waste.

S2-4.2.10 Material Inventory

Material inventory is tracked by the KAFB Hazardous Materials Program, which controls purchases of HazMat. Quantities are limited to a working basis and bulk storage of HazMat does not occur at the facility.

S2-4.2.11 Activities Not Conducted At the Facility

The following activities and associated potential pollutants do not occur at the USCBP: outdoor manufacturing or processing; significant dust or particulate generating activities; areas with a high potential for significant soil erosion; and aircraft deicing (aircraft are stored indoors).

S2-4.3 Significant Spills and Leaks

Spills and leaks are most likely to occur during fueling or from outdoor aircraft or vehicle operations. Fuel trucks are equipped with dry spill kits in the event of a spill. Spill prevention training is implemented annually to prevent reoccurring incidences.

S2-4.4 Non-storm Water Discharges

Deicing operations are not conducted at USCBP due to indoor storage of aircraft. No other nonstorm water discharges are generated by USCBP.

S2-5 Description of Control Measures

The following section describes the control measures utilized at the USCBP to meet the nonnumeric technology-based effluent limits. Storm water pollution from permitted facilities will be minimized by implementing BMPs that limit storm water from coming into contact with potential pollutant sources. The full text of the general BMPs are listed in Section 5 of the SWP3. The USCBP does not qualify for the numeric effluent limitations based on ELGs.

Category	ВМР
Eliminating/Minimizing exposure	Eliminating/minimizing exposure BMPs # 1, 2, 3, 4, 5, and 6
Good housekeeping	Good housekeeping BMPs # 1, 2, 3 and 5 through 20
Preventive maintenance	Preventive maintenance BMPs # 1, 2, 3, 4, and 6
Spill prevention and response	Spill prevention and response BMPs # 1, 2, 3, 4, 5, 8, 9, 10, 11, and 12
Sediment and erosion control	Sediment and erosion control BMP # 1
Runoff management	Runoff management BMPs # 1 and 5
Employee Training	Employee training BMPs # 1, 2, and 4
Non-storm Water Discharges	Non-storm water discharge BMP # 1
Dust Generation and Vehicle Tracking of Industrial Materials	Dust generation and vehicle tracking BMPs # 1 and 2.
Record keeping and reporting	Record keeping and reporting BMPs # 1, 2, 3, 4, and 5
Site Specific BMPs	• Ensure that all wash water drains to the wash rack.
	• Drain parts of maintenance equipment prior to disposal.
	• Ensure that drip pans and other appropriate management practices are utilized if outdoor maintenance is conducted.
	 Perform regular maintenance and cleaning of the OWS to ensure continued functionality and prevent overflows.
	• Minimize storm water run-on and runoff to material storage areas, and storm water volumes in general by diverting storm water away from the area utilizing the facility's berms, curbs, and grading.
	• Conduct training as necessary to individuals outside the PPT, to the extent which their duty is related to the SWP3 as appropriate, as detailed in Section 5.1 of this SWP3.

Table S2-5-1. USCBP Best Management Practices

S2-6 Schedules and Procedures

Section 6 outlines the general control measures, inspection and monitoring requirements. The following section describes the specific procedures applicable to the USCBP.

S2-6.1 Preventative Maintenance

Outdoor fueling or maintenance may occur on vehicles or equipment when it is not feasible to relocate to a designated maintenance facility. Drip pans and dry cleanup methods will be used as preventative measures in this circumstance. Work orders will be submitted for defective equipment for tracking purposes.

S2-6.2 Good Housekeeping

The flight line is cleaned with dry absorbent methods. Vehicles and equipment awaiting maintenance are generally kept indoors, and drip pans are utilized if these items must be kept outdoors. Standard procedures require the flight line be clean, orderly and free of debris.

S2-6.3 Management of Runoff

Runoff from the aircraft apron and wash rack drains to an OWS prior to entering the sanitary sewer. OWSs are routinely cleaned and inspected.

S2-6.4 Inspections

Additional items specific to the USCBP routine facility inspection include the following:

- Perimeter of the entire facility for erosion and drainage
- OWS, wash rack and storage areas
- Repair/maintenance areas, fueling areas and flight apron

Quarterly visual samples for the USCBP will be collected from Outfall B.

S2-6.3 Monitoring

KAFB does not use more than 100,000 gallons of pure glycol-based deicing chemicals on an average annual basis. Per AFI 32-1001, KAFB does not authorize use of urea containing deicer fluid. Runway areas are managed and maintained by the City of Albuquerque Sunport. As such, ELG monitoring is not required per Sector S requirements. Table S2-6-1 below details the sampling parameters for indicator monitoring at the USCBP.

Table S2-6-1. Indicator Monitoring for USCB{

Parameter	Monitoring Concentration (mg/L)
РАН	NA

S2-7 Additional Documentation Requirements

Kirtland is authorized to discharge waste water to the City of Albuquerque sanitary sewer system by an Industrial Pretreatment Permit. The permit contains standards, which regulate constituent levels allowable for discharge to the sanitary sewer.

Tab 9 Sector S3 – 150th Air National Guard

S3-1 Introduction

The 150th Air National Guard (150th ANG) is an industrial facility eligible for coverage under Sector S: Air Transportation.

This sector-specific section of this SWP3 contains information exclusive to Sector S3, the 150th ANG. General information applicable to all facilities is provided in the general SWP3.

S3-2 Pollution Prevention Team

The KAFB PPT is responsible for ensuring that all the requirements outlined in this document are performed in accordance with the EPA requirements. Table 2-1 lists the PPT members.

S3-3 Site Description

S3-3.1 General Site Description

The 150th ANG is at east end of the cantonment area, along Randolph Ave (Figure S3-3-1). The approximate center of this facility is at 35.048995° latitude and -106.572254° longitude. The facility includes several buildings; however the industrial activities exposed to storm water are generally limited to the outdoor, paved areas along the flight line and the storage areas. The area covered by the 150th ANG is 79.6 acres with 73.2% impervious land coverage. The average rainfall is 9.42 inches per year. Rainfall during the wet season of July – October sees 5.18 inches per year on average.

Storm water runoff from areas north of the flight line flows to on-site storm drains that connect to the storm water system. Storm water discharges from the flight line area flow south as sheet flow to a storm water system that discharges at Outfall C. Storm water runoff from Buildings 1051, 1060, and 1061 areas drains to an OWS that discharges into the sanitary sewer.

S3-3.2 Industrial Activities

The mission of the 150th ANG includes the Rapid Engineer Deployable Heavy Operational Repair Squadron Engineers (REDHORSE) unit, whose mission is primarily heavy-construction, training, and mission support. The REDHORSE unit operates a C-26 aircraft. The 150th ANG is expecting another air mission in the near future.

Maintenance functions are conducted indoors; however maintenance on the C-26 may occur outdoors, if necessary. Fueling activities are conducted on the flight line. Vehicles and equipment awaiting maintenance are typically stored outdoors. Deicing operations occur outdoors on the apron, if necessary.

S3-4 Summary of Potential Pollutants

Reoccurring compliance site inspections and the inventory of on-site chemicals at the 150th ANG were utilized to identify the potential pollution sources at this facility.



Figure S3-3-1. 150th Air National Guard Map

S3-4.1 Activities in the Area

The main potential pollution sources at the 150th ANG are potential fuel spills during fueling operations, equipment wash down and covered HazMat storage areas.

S3-4.2 Potential Storm Water Pollutants

The potential storm water pollutants at the 150th ANG are summarized below:

Source Activity/Area	Pollutant(s) of Concern
Loading/unloading, material handling operations	Oil/grease, VOCs, diesel fuel, unleaded gasoline
Industrial machinery	Oil/grease, hydraulic fluid, diesel fuel
Products and materials	Diesel fuel, unleaded gasoline, jet fuel, floatables, metals, suspended solids
Outdoor storage activities	Paint, solvents, oil/grease, unleaded gasoline, diesel fuel, jet fuel, antifreeze
Onsite waste disposal, treatment, or storage	POLs, solvents, detergents, antifreeze
Fueling stations	Diesel fuel, unleaded gasoline, jet fuel
Vehicle/aircraft maintenance and/or cleaning	Oil/grease, petroleum hydrocarbons, VOCs, deicing fluids, antifreeze
Liquid storage tanks	Diesel fuel, unleaded gasoline, jet fuel
Erosion potential	Low
Material inventory	Diesel fuel, unleaded gasoline, jet fuel
Aircraft deicing operations	Deicing fluid

 Table S3-4-1. 150th ANG Potential Pollutants

S3-4.2.1 Loading/Unloading, Material Handling Operations

Loading and unloading occur under awnings at Building 1056. Diesel fuel and unleaded gasoline are delivered from the BFSF to the ASTs by Building 1058. The potential pollutants of concern associated with this facility are oil and grease, VOCs, diesel fuel and unleaded gasoline.

S3-4.2.2 Industrial Machinery

Heavy machinery is used to load, unload, or haul materials and products and is stored at the facility. Types include bulldozers, heavy lifters, bucket trucks, fork lifts, and bobcats. Pollutants associated with machinery include oil and grease, hydraulic fluid and diesel fuel.

S3-4.2.3 Products (Intermediate, By-products, Final, and Waste) and Materials

Diesel fuel, unleaded gasoline, jet fuel and deicing chemicals are stored at the facility. Other materials used on-site may include aircraft or maintenance parts stored indoors.

S3-4.2.4 Outdoor Storage Activities

New materials are stored indoors. Waste materials stored outdoors are summarized below:

- Latex paint is stored in a carport type structure outside Building 1064
- Paint wastes, used oils, solvents and antifreeze are temporarily stored in 55 gallondrums contained within Polypaks east of Building 1058

- Used HazMat are temporarily stored in an outdoor IAP at Building 1063
- Vehicles awaiting maintenance are stored outdoors at Building 1060.

The potential pollutants of concern associated with these storage areas are paint, solvents, oil and grease, unleaded gasoline, diesel fuel, and antifreeze.

S3-4.2.5 Onsite Waste Disposal, Treatment, or Storage Practices

Dry spill kits are located at the facility. POL, fuels, solvents, detergents and antifreeze related waste generated on-site is collected in drums which are then stored in Polypak units. Polypaks are utilized as secondary containment units to minimize storm water pollution.

S3-4.2.6 Fueling Stations

The 150th ANG maintains two double-walled ASTs at Building 1058 for unleaded gasoline and diesel. These tanks are used to fuel AGE equipment and ground support vehicles. The potential pollutants of concern associated with fueling operations are unleaded gasoline and diesel fuel.

S3-4.2.7 Vehicle/Equipment Maintenance and/or Cleaning Areas

Several maintenance and cleaning areas exist in the 150th ANG as summarized below:

- Ground support vehicles are cleaned at a wash rack inside Building 1058. Wash water for each facility is collected by drains and routed to an OWS that discharges to the sanitary sewer.
- Aircraft maintenance operations are conducted indoors in Buildings 1043, 1046, 1063 and 1069. Buildings are serviced by an OWS that discharges to the sanitary sewer.
- Aircraft engines are tested under load in Building 1080. Oil released during testing is collected in an OWS that discharges to the sanitary sewer.
- AGE and vehicle maintenance operations are conducted indoors in Buildings 1051, 1058, 1061, and 1064. Buildings are serviced by an OWS that discharges to the sanitary sewer.

The potential pollutants of concern associated with these maintenance and cleaning areas are oil and grease, gasoline, diesel, Jet-A, and antifreeze.

S3-4.2.8 Liquid Storage Tanks

Double-walled ASTs for unleaded gasoline and diesel fuel are adjacent to Building 1058. Two Jet-A ASTs are located at Building 1080 for operation of the Hush House. Two fuel bowers are stored on-site for fuel recovery. The potential pollutants of concern associated with these liquid storage tanks are gasoline, diesel and jet fuel.

S3-4.2.9 Hazardous Waste Sites

The 150th ANG maintains multiple IAPs utilized to collect hazardous waste. Waste stored at these sites is collected in drums and/or polypacks and is not exposed to storm water.

S3-4.2.11 Material Inventory

Material inventory is tracked by the KAFB Hazardous Materials Program, which controls purchases of HazMat. Quantities are limited to a working basis and bulk storage of HazMat does not occur at the facility.

S3-4.2.12 Aircraft Deicing Operation

When possible, heat lamps are used in place of deicer; however, aircraft deicing operations occur on the flight line, if necessary. Deicer is issued from the BFSF and applied per military Technical Order. Specific information for deicing procedures is not releasable to the public.

S3-4.2.13 Activities Not Conducted At the Facility

The following activities and associated potential pollutants do not occur at the 150th ANG: outdoor manufacturing or processing; significant dust or particulate generating activities; and areas with a high potential for significant soil erosion.

S3-4.3 Significant Spills and Leaks

Spills and leaks are most likely to occur during fueling and equipment usage along the flight line. Fuel trucks are equipped with dry spill kits in the event of a spill. Spill prevention training is implemented annually to prevent reoccurring incidences.

S3-4.4 Non-storm Water Discharges

Deicing operations conducted at the 150th ANG have the potential to result in non-storm water discharges. Historically, less than 100,000 gallons of pure deicing fluid was used annually at KAFB. No other non-storm water discharges are generated by 150th ANG.

S3-5 Description of Control Measures

The following section describes the control measures utilized at the 150th ANG to meet the nonnumeric technology-based effluent limits. Storm water pollution from permitted facilities will be minimized by implementing BMPs that limit storm water from coming into contact with potential pollutant sources. The full text of the general BMPs are listed in Section 5 of the SWP3. The 150th ANG does not qualify for the numeric effluent limitations based on ELGs.

Category	BMP
Eliminating/Minimizing exposure	Eliminating/minimizing exposure BMPs # 1, 2, 3, 4, 5, and 6
Good housekeeping	Good housekeeping BMPs # 1 through 20
Preventive maintenance	Preventive maintenance BMPs # 1, 2, 3, 4, and 6
Spill prevention and response	Spill prevention and response BMPs #1 through 12
Sediment and erosion control	Sediment and erosion control BMP # 3
Runoff management	Runoff management BMPs # 1, 2, 3, 4, and 5
Employee Training	Employee Training BMPs # 1, 2, and 4
Non-storm Water Discharges	Non-storm water discharge BMP #1 and 2
Dust Generation and Vehicle Tracking	Dust generation and vehicle tracking BMPs # 1, 2, and 3
Record keeping and reporting	Record keeping and reporting BMPs # 1, 2, 3, 4, and 5
Site specific BMPs	 Ensure that all wash water drains to the wash rack. Drain parts of maintenance equipment prior to disposal. Stockpile snow melt mixed with deicer in a vegetated area

Table S3-5-1. 150th ANG Best Management Practices

Category	BMP
	• Cover centralized waste storage locations where materials are contained to prevent contact with storm-water runoff.
	 Ensure that drip pans and other appropriate management practices are utilized if outdoor maintenance is conducted.
	 Preform regular maintenance and cleaning of the OWS to ensure continued functionality and prevent overflows.
	 Minimize storm water run-on and runoff to material storage areas, and storm water volumes in general by diverting storm water away from the area utilizing the facility's berms, curbs, and grading.
	• Conduct training as necessary to individuals outside the PPT, to the extent which their duty is related to the SWP3 as appropriate, as detailed in Section 5.1 of this SWP3.

Table S3-5-1. 150th ANG Best Management Practices

S3-6 Schedules and Procedures

Section 6 outlines the general control measures, inspection and monitoring requirements. The following section describes specific procedures applicable to the 150th ANG.

S3-6.1 Deicing Season

The aircraft deicing season for KAFB is typically November–March, outside the typical rainy season, though deicing may occur outside that window. The control measures and BMPs specific to deicing will be implemented with particular emphasis during deicing activities. Per AFI 32-1001, KAFB does not authorize use of urea containing deicer fluid.

S3-6. 2 Preventative Maintenance

Outdoor fueling or maintenance may occur on vehicles or equipment when it is not feasible to relocate to a designated maintenance facility. Drip pans and dry cleanup methods will be used as preventative measures in this circumstance. Work orders will be submitted for defective equipment for tracking purposes.

S3-6.3 Good Housekeeping

The flight line is cleaned with dry absorbent methods. Vehicles and equipment awaiting maintenance are generally kept indoors, and drip pans are utilized if these items must be kept outdoors. Standard procedures require the flight line be clean, orderly and free of debris.

S3-6.4 Management of Runoff

Runoff from the aircraft apron and wash rack drains to an OWS prior to entering the sanitary sewer. OWSs are routinely cleaned and inspected. Snow melt commingled with deicing fluid is stockpiled in a vegetated area prior to entering the storm drainage system. The aircraft parking apron drains to a retention basin located near Outfall B.

S3-6.5 Inspections

Additional items specific to the 150th ANG routine facility inspection include the following:

- Perimeter of the entire facility for erosion and drainage
- Outdoor HazMat storage units, ASTs, OWSs and wash racks
- Fueling stations and Fueling operations area
- Flight line, parking apron and designated deicing areas

Quarterly visual samples for the ANG will be collected from Outfall B and C.

S3-6.3 Monitoring

KAFB does not use more than 100,000 gallons of pure glycol-based deicing chemicals on an average annual basis. Per AFI 32-1001, KAFB does not authorize use of urea containing deicer fluid. Runway areas are managed and maintained by the City of Albuquerque Sunport. As such, ELG monitoring is not required per Sector S requirements. Table S3-6-1 below details the sampling parameters for indicator monitoring at the ANG.

Table S3-6-1. Indicator Monitoring for ANG

Parameter	Monitoring Concentration (mg/L)
РАН	NA

S3-7 Additional Documentation Requirements

Kirtland is authorized to discharge waste water to the City of Albuquerque sanitary sewer system by an Industrial Pretreatment Permit. The permit contains standards, which regulate constituent levels allowable for discharge to the sanitary sewer.

The Permit requires documentation of the types of deicer, and monthly quantities used. Records will be kept with this SWP3.

This page intentionally left blank

S4-1 Introduction

The United States Forest Service Air Tanker Facility (ATF) is an industrial facility eligible for coverage under Sector S: Air Transportation.

This sector-specific section of this SWP3 contains information exclusive to Sector S4, the ATF. General information applicable to all facilities is provided in the general SWP3.

S4-2 Pollution Prevention Team

The KAFB PPT is responsible for ensuring all the requirements outlined in this document are performed in accordance with the EPA requirements. Table 2-1 lists the PPT members.

S4-3 Site Description

S4-3.1 General Site Description

The AFT is in the western edge of the cantonment area, south of Randolph Ave (Figure S4-3-1). The facility includes Buildings 284 and 332. The approximate center of this facility is at 35048108° latitude and -106.607462° longitude. The area covered by the ATF is 3.1 acres with 80.7% impervious land coverage in 2015. Currently the facility is under construction and the amount of impervious land may change. The average rainfall is 9.42 inches per year. Rainfall during the wet season of July – October sees 5.18 inches per year on average.

Storm water runoff from this facility flows west towards the storm drains on the parking apron and into storm water system. This storm water system discharges into a tributary of the Tijeras Arroyo at Outfall B. Storm water discharges associated with this outfall are impounded by a water retention pond and may not actually reach the Tijeras Arroyo channel.

S4-3.2 Industrial Activities

The ATF supports fire-fighting efforts in the region. The facility consists of aircraft parking on the apron, fire retardant mixing and storage tanks, a fire retardant loading system, support buildings, and an equipment storage area northwest of mixing tanks.

The ATF is an aircraft equipment maintenance and cleaning site. All maintenance functions are conducted on the parking apron though only minor maintenance activities are allowed. Wash down activities can be extensive, including washing of aircraft and fire retardant mixture. Deicing fluid is not used at this facility as aircraft are not certified for use in icing conditions.

S4-4 Summary of Potential Pollutants

Reoccurring compliance site inspections at the ATF were utilized to identify the potential pollution sources at this facility.



Figure S4-3-1. United States Forest Service Air Tanker Facility Map

S4-4.1 Activities in the Area

The main potential pollution sources at the ATF are materials used in cleaning and maintaining aircraft, and fire retardant. Deicing operations are not performed at the ATF.

S4-4.2 Potential Storm Water Pollutants

The potential storm water pollutants at the ATF are summarized below:

Source Activity/Area	Pollutant(s) of Concern
Loading/unloading, material handling operations	Fire retardant
Industrial machinery	Oil and grease, hydraulic fluid, diesel fuel
Products and materials	Fire retardant, jet fuel, POLs
Outdoor storage activities	Detergents, solvents, diesel fuel, fire retardant
Outdoor manufacturing or processing activities	Fire retardant, sediment
Significant dust or particulate generating activities	Fire retardant
Onsite waste disposal, treatment, or storage	POLs, solvents
Fueling stations	Jet fuel
Vehicle/aircraft maintenance and/or cleaning	POLs, detergents, solvents
Liquid storage tanks	Diesel fuel, fire retardant
Erosion potential	Low
Material inventory	Fire retardant (see table below)

Table S4-4-1. ATF Potential Pollutants

Table S4-4-2. Fire Retardant Chemical Composition

Chemical compound	Percent by weight
Diammonium sulfate	65
Monammonium phosphate	15
Diammonium phosphate	5
Guar gum, hydroxypropyl	10
Performance additives ¹	5

¹ proprietary, but tested as non-hazardous

S4-4.2.1 Loading/Unloading, Material Handling Operations

Fire retardant mixed with water is loaded onto airplanes at this facility; mixed fire retardant is unloaded from returning planes as needed. A closed pump system is used to pump fire retardant from mixing tanks to aircraft parked on the apron over a catch basin. During operations, a valve system is used to divert spills from the catch basin to a holding tank which is then disposed of by a contractor.

S4-4.2.2 Industrial Machinery

Heavy machinery may be used to load, unload, or haul materials and products and may be stored at the facility. This may include heavy lifters, forklifts, and bobcats. Pollutants associated with machinery include oil and grease, hydraulic fluid, and diesel fuel.

S4-4.2.3 Products (Intermediate, By-products, Final, and Waste) and Materials

The primary product of concern at the ATF is the fire retardant. Additional products used or generated at the facility include POLs and jet fuel.

S4-4.2.4 Outdoor Storage Activities

During the fire season, up to 120 tons of fire retardant is stored outdoors, and 25 tons is stored during the winter months. Each package contains one-ton of fire retardant powder. Each one-ton package sits on a pallet and is triple-wrapped and stabilized with plastic ties. One outdoor storage shed exists at the facility for storage of POLs, waste POLs, detergents and diesel fuel. The outdoor storage is locked and has a curbed doorway to prevent the release of HazMat to the parking apron. The potential pollutants of concern associated with this activity are oil and grease, detergents, solvents and fire retardant.

S4-4.2.5 Outdoor Manufacturing or Processing Activities

Mixing of the fire retardant is performed outdoors. Particles of fire retardant powder which may land on the ground could impact storm water. The potential pollutants of concern are TSS.

S4-4.2.6 Significant Dust or Particulate Generating Activities

Dry fire retardant is delivered in one-ton pallets. When opened, the dry chemical can become airborne. Caution to prevent release of particulates is used during the mixing process. Partially used packages of fire retardant are covered under an awning and taped shut to prevent release.

S4-4.2.7 Onsite Waste Disposal, Treatment, or Storage Practices

Used oil and solvents are stored in 55-gallon drums with secondary containment in the equipment storage area. Products are recycled by a contractor.

S4-4.2.8 Fueling Stations

Fuel tanker trucks with Jet-A fuel airplanes on the parking apron. The potential pollutants of concern are Jet-A and petroleum hydrocarbons.

S4-4.2.9 Vehicle/Equipment Maintenance and/or Cleaning Areas

Minor maintenance of aircraft is conducted outside on the parking apron. Cleaning functions performed outside include washing of aircraft and hosing down the parking apron after fire retardant loading. Wash water flows through a catch basin to con-vault holding tank. Contents of the tank are tested and discharged to the sanitary sewer if standards are met. Pollutants of concern associated with this activity are POLs, detergents, solvents and fire retardant.

S4-4.2.10 Liquid Storage Tanks

The ATF has four 10,000-gallon mixing tanks, one water tank, and one convault holding tank. Berms are in place around the tanks and a sump pump is used to transfer any spills to the holding tank. The tank has a warning alarm at two-thirds full. In 2020, the entire containment area has been under construction to improve containment of potential spills and pollutants. The 10,000-gallon holding tank was replaced with a 25,000-gallon tank for catching fire retardant. The ramp was repaved, and all tanks have new concrete secondary containment. The valve system has been replaced to ensure only storm water is released to the storm water drain. Once construction is complete, this plan will be updated with the final construction completion information.

S4-4.2.11 Hazardous Waste Sites

The ATF maintains one IAP utilized to collect hazardous waste.

S4-4.2.12 Material Inventory

Material inventory is maintained by the United States Forest Service, but all hazardous materials are approved and tracked by the KAFB Hazardous Materials Program.

S4-4.2.13 Activities Not Conducted at the Facility

The following activities and associated potential pollutants do not occur at the ATF: areas with a high potential for significant soil erosion and aircraft deicing.

S4-4.3 Significant Spills and Leaks

Spills and leaks are most likely to occur during fueling or fire retardant mixing process. Dry spill kits are kept on site in the event of a spill. Spill prevention training is implemented annually to prevent reoccurring incidences.

S4-4.4 Non-storm Water Discharges

Deicing operations are not conducted at ATF. Operational water from the parking apron is diverted to a holding tank and released to the sanitary sewer after testing. No other non-storm water discharges are generated by the ATF.

S4-5 Description of Control Measures

The following section describes the control measures utilized at the ATF to meet the nonnumeric technology-based effluent limits. Storm water pollution from permitted facilities will be minimized by implementing BMPs that limit storm water from coming into contact with potential pollutant sources. The full text of the general BMPs is listed in Section 5 of the SWP3. The ATF does not qualify for the numeric effluent limitations based on ELGs.

Category	Best Management Practice
Eliminating/Minimizing exposure	Eliminating/minimizing exposure BMPs # 1, 2, 3, 4, 5, and 6
Good housekeeping	Good housekeeping BMPs # 2, 3, 4, 6, 7, 9 and 11 through 20
Preventive maintenance	Preventive maintenance BMPs # 1, 2, 3, 4, and 6
Spill prevention and response	Spill prevention and response BMPs # 1, 2, 3, 5, 8, 9, 10, 11, and 12
Sediment and erosion control	Sediment and erosion control BMPs # 1
Runoff management	Runoff management BMPs # 1 and 5
Employee Training	Employee training BMPs # 1, 2, and 4
Non-storm Water Discharges	Non-storm water discharge BMP # 1
Dust Generation and Vehicle Tracking	Dust generation and vehicle tracking BMP # 1 and 2
Record keeping and reporting	Record keeping and reporting BMPs # 1, 2, 3, 4, and 5
Site Specific BMPs	• Ensure that all wash water drains to the holding tank.
	• Drain parts of maintenance equipment prior to disposal.

Table S4-5.1. ATF BMPs

Table S4-5.1. ATF BMPs

Category	Best Management Practice
	• Ensure that drip pans and other appropriate management practices are utilized if outdoor maintenance is conducted.
	 Maintain berms or site grading to contain spills within loading pit areas and prevent storm water run-on. Contain spills to allow control measures to be implemented.
	 Monitor diverter valve to holding tank storage tank to ensure proper setting and functionality.
	Close partially used fire retardant containers
	• Conduct training as necessary to individuals outside the
	PPT, to the extent which their duty is related to the SWP3 as appropriate, as detailed in Section 5.1 of this SWP3.

S4-6 Schedules and Procedures

Section 6 outlines the general control measures, inspection and monitoring requirements. The following section describes specific procedures applicable to the ATF.

S4-6.1 Preventative Maintenance

Outdoor fueling or maintenance may occur on aircraft, vehicles or equipment when it is not feasible to relocate to a designated maintenance facility. Drip pans and dry cleanup methods will be used as preventative measures in this circumstance. ATF shall inspect the holding tank diverter value each fire season prior to filling fire retardant holding tanks.

S4-6.2 Good Housekeeping

Vehicles and equipment awaiting maintenance are generally kept indoors, and drip pans are utilized if these items must be kept outdoors. Standard procedures require the flight line be clean, orderly and free of debris.

S4-6.3 Management of Runoff

During operations, a valve system is used to divert spills from the apron to a holding tank. Contents of the tank are pumped, hauled, and disposed of through a contractor.

S4-6.4 Inspections

Additional items specific to the ATF routine facility inspection include the following:

- Perimeter of the entire facility for erosion and drainage
- Repair/maintenance areas, fueling areas, washing area and fire retardant mixing area
- ASTs, berms, storage areas, valve function and diverter box.

Quarterly visual samples for the ATF will be collected from Outfall B.

S4-6.3 Monitoring

KAFB does not use more than 100,000 gallons of pure glycol-based deicing chemicals on an average annual basis. Per AFI 32-1001, KAFB does not authorize use of urea containing deicer fluid. Runway areas are managed and maintained by the City of Albuquerque Sunport. As

such, ELG monitoring is not required per Sector S requirements. Table S4-6-1 below details the sampling parameters for indicator monitoring at the ATF.

Parameter	Monitoring Concentration (mg/L)
РАН	NA

Tab 11 Sector S5 – Transient Alert, Civil Air Patrol, and Aero Club

S5-1 Introduction

The Transient Alert, Civil Air Patrol, and Aero Club are separate functions but are co-located in Hanger 333. These facilities are combined into Sector S5 and are industrial facilities eligible for coverage under Sector S: Air Transportation.

This sector-specific section of this SWP3 contains information exclusive to Sector S5 Facilities. General information applicable to all facilities is provided in the general SWP3.

S5-2 Pollution Prevention Team

The KAFB PPT is responsible for ensuring all the requirements outlined in this document are performed in accordance with the EPA requirements. Table 2-1 lists the PPT members.

S5-3 Site Description

S5-3.1 General Site Description

The S5 Facilities are on the western edge of the cantonment area of KAFB, southwest of Carlisle Blvd (Figure S5-3-1). Maintenance is performed indoors, and aircraft parking areas include aprons east of the hanger. The approximate center of this facility is at 35.047450° latitude and -106.605864° longitude. The area covered by S5 Facilities is 77.8 acres with 84.1% impervious land coverage. The average rainfall is 9.42 inches per year. Rainfall during the wet season of July – October sees 5.18 inches per year on average.

Storm water runoff from this facility flows north toward the storm drains on the parking apron. The storm water system discharges into a tributary of the Tijeras Arroyo at Outfall B. Storm water discharges associated with this outfall are impounded by a water retention pond and may not actually reach the Tijeras Arroyo channel.

S5-3.2 Industrial Activities

Transient Alert directs visiting aircraft, provides ground support, and parks visiting aircraft. The Civil Air Patrol is a civilian auxiliary that provides emergency services, cadet programs, and aerospace education. The aero club is a member-run organization that stores and maintains aircraft for recreation. These three facilities are co-located in Hanger 333 and parking apron.

Maintenance activities are conducted indoors and limited to general services, minor repair and oil changes. The facility has an interior floor drain that discharges to an OWS and sanitary sewer. Cleaning of aircraft, if needed, is performed at the 58th SOW wash rack between Hangars 1000 and 1001. Aircraft fueling is performed on the parking apron. Deicing is not applied to any of the S5 Facilities as the smaller airframes do not fly in adverse conditions.



Figure S5-3-1. Transient Alert, Civil Air Patrol, and Aero Club Map

S5-4 Summary of Potential Pollutants

Reoccurring compliance site inspections at the S5 Facilities were utilized to identify the potential pollution sources at this facility.

S5-4.1 Activities in the Area

The main potential pollution sources at the S5 Facilities are any fuel spills during fueling, and spills or leaks that may occur during operations.

S5-4.2 Potential Storm Water Pollutants

The potential storm water pollutants at the S5 Facilities are summarized below:

Source Activity/Area	Pollutant(s) of Concern
Products and materials	Aviation gasoline, jet fuel, diesel fuel, POLs, solvents, paints
Outdoor storage activities	POLs, jet fuel, antifreeze
Onsite waste disposal, treatment, or storage	POLs, paint, detergents, solvents
Fueling stations	Jet fuel
Vehicle/aircraft equipment maintenance and/or cleaning	POLs
Liquid storage tanks	Aviation gasoline
Erosion potential	Low
Material inventory	Aviation gasoline, jet fuel, diesel fuel, POLs, solvents, paints

Table S5-4.1. S5 Facilities Potential Pollutants

S5-4.2.1 Products (Intermediate, By-products, Final, and Waste) and Materials

Diesel fuel, POLs, solvents and paints are stored indoors and are used for maintenance and cleaning. The facility has an interior floor drain that discharges to an OWS and sanitary sewer. Jet-A ASTs to the west of the hanger dispenses fuel for Civil Air Patrol and Aero Club.

S5-4.2.2 Outdoor Storage Activities

Aircraft are stored outdoors on designated parking aprons east of Hanger 333. Most AGE used by visiting aircraft is provided by the 58th SOW and stored in a fenced-off area to the northeast though Transient Alert maintains some AGE. The potential pollutants of concern associated with this activity are POLs, jet fuel and antifreeze.

S5-4.2.3 Onsite Waste Disposal, Treatment, or Storage Practices

Dry spill kits are located at the facility. One outdoor polypak east of the hanger and one indoor storage locker are used for storage of POLs, waste POLs, paint, and detergents and other cleaners. Polypaks are utilized as secondary containment units to minimize storm water pollution. The potential pollutants of concern are POLs, paint, detergents and solvents.

S5-4.2.4 Fueling Stations

Fuel tanker trucks associated with the BFSF fuel aircraft on the parking apron east of the hanger. One Jet-A AST to the west of the hanger dispenses fuel for Civil Air Patrol and Aero Club. The potential pollutants of concern are Jet-A and petroleum hydrocarbons.

S5-4.2.5 Vehicle/Equipment Maintenance and/or Cleaning Areas

Minor maintenance is conducted inside the hanger. The facility has an interior floor drain that discharges to an OWS and sanitary sewer. Minor aircraft maintenance may be performed on the apron. If major repairs are needed, the aircraft is moved to the maintenance hangar at the 58th SOW. The wash racks between Hangars 1000 and 1001 are utilized for aircraft cleaning.

S5-4.2.6 Liquid Storage Tanks

One 10,000-gallon storage AST and one 2,000-gallon dispensing ASTs west of the hanger issue aviation gasoline for the Civil Air Patrol and Aero Club. Both ASTs are double-walled.

S5-4.2.7 Hazardous Waste Sites

The S5 facilities maintain multiple IAPs utilized to collect hazardous waste.

S5-4.2.8 Material Inventory

Material inventory is tracked by the KAFB Hazardous Materials Program, which controls purchases of HazMat. Quantities are limited to a working basis and bulk storage of HazMat does not occur at the facility.

S5-4.2.9 Activities Not Conducted At the Facility

The following activities and associated potential pollutants do not occur at the S5 Facilities: loading or unloading operations; industrial machinery; outdoor manufacturing or processing; significant dust or particulate generating activities; areas with a high potential for significant soil erosion; and aircraft deicing.

S5-4.3 Significant Spills and Leaks

Spills and leaks are most likely to occur during fueling and equipment use on the flight line. Dry spill kits are kept on site in the event of a spill. Spill prevention training is implemented annually to prevent reoccurring incidences.

S5-4.4 Non-storm Water Discharges

Deicing operations are not conducted at the S5 facilities as aircraft are not rated to fly in inclement weather. No other non-storm water discharges are generated by the S5 facilities.

S5-5 Description of Control Measures

The following section describes the control measures utilized at the S5 facilities to meet the nonnumeric technology-based effluent limits. Storm water pollution from permitted facilities will be minimized by implementing BMPs that limit storm water from coming into contact with potential pollutant sources. The full text of the general BMPs are listed in Section 5 of the SWP3. The S5 facilities do not qualify for the numeric effluent limitations based on ELGs.

Category	BMP
Eliminating/Minimizing exposure	Eliminating/minimizing exposure BMPs # 1, 2, 3, 4, 5 and 6
Good housekeeping	Good housekeeping BMPs # 1, 2, 3 and 5 through 20
Preventive maintenance	Preventive maintenance BMPs # 1, 2, 3, 4, and 6
Spill prevention and response	Spill prevention and response BMPs # 1, 2, 3 and 5 through 12
Sediment and erosion control	Sediment and erosion control BMP # 1 and 3
Runoff management	Runoff management BMPs # 1 and 5
Employee Training	Employee training BMPs # 1, 2, and 4
Non-storm Water Discharges	Non-storm water discharge BMP # 1
Dust Generation and Vehicle Tracking	Dust generation and vehicle tracking BMPs #1 and 2
Record keeping and reporting	Record keeping and reporting BMPs # 1, 2, 3, 4, and 5
Site Specific BMPs	 Drain parts of maintenance equipment prior to disposal Ensure that drip pans and other appropriate management practices are utilized if outdoor maintenance is conducted Utilize alternative cleaning methods than hosing down
	 the apron or hangar floor when practicable Conduct training as necessary to individuals outside the PPT, to the extent which their duty is related to the SWP3 as appropriate, as detailed in Section 5.1 of this SWP3

Table S5-5.1. S5 Facilities Best Management Practices

S5-6 Schedules and Procedures

Section 6 outlines the general control measures, inspection and monitoring requirements. The following section describes the specific procedures applicable to the S5 Facilities.

S5-6.1 Preventative Maintenance

Outdoor maintenance may occur on vehicles or equipment when it is not feasible to relocate to a designated maintenance facility. Drip pans and dry cleanup methods will be used as preventative measures in this circumstance. Work orders will be submitted for defective equipment for tracking purposes.

S5-6.2 Good Housekeeping

The flight line is cleaned with dry absorbent methods. Vehicles and equipment awaiting maintenance are generally kept indoors, and drip pans are utilized if these items must be kept outdoors. Standard procedures require the flight line be clean, orderly and free of debris.

S5-6.3 Management of Runoff

Vehicle washing is conducted in the grass area on the east side of the building using biodegradable products. The facility drains to an OWS prior to entering the sanitary sewer. OWSs are routinely cleaned and inspected.

S5-6.4 Inspections

Additional items specific to the S5 Facilities routine facility inspection include the following:

- Perimeter of the entire facility for erosion and drainage
- ASTs, OWS and AGE storage area
- Repair/maintenance areas, fueling areas and parking aprons

Quarterly visual samples for the S5 Facilities will be collected from Outfall B.

S5-6.3 Monitoring

KAFB does not use more than 100,000 gallons of pure glycol-based deicing chemicals on an average annual basis. Per AFI 32-1001, KAFB does not authorize use of urea containing deicer fluid. Runway areas are managed and maintained by the City of Albuquerque Sunport. As such, ELG monitoring is not required per Sector S requirements. Table S5-6-1 below details the sampling parameters for indicator monitoring at Transient Alert.

Table S5-6-1. Indicator Monitoring for Transient Alert

Parameter	Monitoring Concentration (mg/L)
РАН	NA

S5-7 Additional Documentation Requirements

Kirtland is authorized to discharge waste water to the City of Albuquerque sanitary sewer system by an Industrial Pretreatment Permit. The permit contains standards, which regulate constituent levels allowable for discharge to the sanitary sewer.