U.S. AIR FORCE

STORM WATER POLLUTION PREVENTION PLAN

Fairchild Air Force Base

MSGP Permit Number WAR05F302

January 2022

ABOUT THIS PLAN

This installation-specific Environmental Management Plan (EMP) was developed using the U.S. Air Force's (AF) standardized Storm Water Pollution Prevention Plan (SWPPP) template. This plan is not an exhaustive inventory of all storm water requirements and practices. Where applicable, external resources, including Air Force Instructions (AFIs); AF Playbooks; and federal, state, local, and permit requirements are referenced.

Each section of this SWPPP begins with standardized, AF-wide "common text" language that addresses AF, Department of Defense (DoD), and federal requirements, including the Environmental Protection Agency (EPA) Multi-Sector General Permit (MSGP) requirements. This common text language is restricted from editing to ensure that it remains standard throughout all plans. The common text language is maintained and updated by the designated Office of Primary Responsibility (OPR) with assistance from the Office of Collateral Responsibility (OCR), as appropriate. Immediately following the AF-wide common text sections are Installation sections. The Installation sections contain installation-specific content to address state, local, and installation-specific requirements. Installation sections are unrestricted and are maintained and updated by installation or Section personnel.

This document is optimized to be accessed and viewed electronically. The eDASH website at https://cs2.eis.af.mil/sites/10040 is the primary communication tool for AF EMPs.

This AF standardized template may differ in format and organization from other templates developed by regulatory agencies or other organizations. If applicable, a cross-reference table of sections is included below to simplify review.

Cross-Reference: AF SWPPP Template and EPA Template

EPA Template Section Title	EPA Template Section Number	AF Template Section Title	AF Template Section Number
Introduction	1.0	Overview and Scope	1.0
Storm Water Pollution Prevention Team	2.0	General Roles and Responsibilities	4.0
Site Description	3.0	Installation Profile	2.0
Receiving Waters and Wetlands	4.0	Environmental Management System	3.0
Summary of Potential Pollutant Sources	5.0	Potential Pollution Sources	7.1
Identification of Storm Water Pollution Prevention Controls	6.0	Minimum Control Measures and Best Management Practices	7.0
Additional Documentation	7.0		
Monitoring and Reporting	8.0	Schedules and Procedures for Monitoring	7.3
Corrective Action	9.0	Record Keeping and Reporting	6.0
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CERTIFICATION

This section contains the certification, signed by the appropriate Responsible Official. Insert the scanned document into this section, or insert the statement prescribed by the regulator below.

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

Printed Name: Tyler J. Smith Date: 1/27/22

Signature: _____ Title: Deputy Base Civil Engineer

DOCUMENT CONTROL

Standardized SWPPP Template

In accordance with (IAW) the Air Force Civil Engineer Center (AFCEC) Environmental Directorate (CZ) Business Rule (BR) 08, *EMP Review, Update, and Maintenance*, the standard content in this SWPPP template is reviewed periodically, updated as appropriate, and approved by the Water Quality Subject Matter Expert (SME).

This version of the template is current as of 06/26/2020 and supersedes the 2018 version.

NOTE: Installations are not required to update their SWPPPs every time this template is updated. When it is time for installations to update their SWPPPs, they should refer to the eDASH EMP Repository to ensure they have the most current version.

Installation SWPPP

Record of Updates – The SWPPP is modified and updated IAW applicable permit requirements.

Page/Section	Nature of Change	Date of Change	Approved By:
All	SWPPP updated based on 2021 MSGP	13 Jan 2022	WWS
P26	DELETED "WASTE, GARBAGE, AND..."	January 31, 2022	WWS
P26	Added "DUMPSTER lids will remain closed..."	February 1, 2022	WWS

Record of Review – IAW AFI 32-1067, *Water and Fuel Systems*, the SWPPP is reviewed based on permit requirements.

Review Date	Review Participants	Notes/Remarks	Results in Plan Update (Yes or No)

Version Table – A new version of the plan is created when pen and ink changes are incorporated. Below is a list of all versions updated under the current permit.

Version Number	Description	Date

1.0 OVERVIEW AND SCOPE

This SWPPP specifies how installation personnel control pollutants in discharges to storm water from industrial operations. It contains procedures intended to minimize the risk of industrial storm water pollution in drainage areas located within the installation's boundaries. The SWPPP describes installation:

- Identification and evaluation of activities and potential storm water pollution sources
- Identification and implementation of storm water Best Management Practices (BMPs)
- Pollution reduction measures and procedures
- Monitoring and inspection procedures

The installation Storm Water Pollution Prevention Team (SWPPT) is responsible for developing, implementing, and managing the SWPPP.

Installation Supplement – Overview and Scope

1.1 Installation Background

Fairchild Air Force Base (FAFB) is located 12 miles west of Spokane, Washington. It is bounded by State Highway 2 to the north, Brooks Road to the west, State Highway 902 to the south, and Rambo Road to the east. FAFB generates very little storm water runoff because the majority of precipitation infiltrates and evaporates in the local topography. The installation contains approximately 500 acres of wetlands with a significant portion of the remaining land resting upon a shallow perched water table. As a result, it is unlikely that typical storm water discharges from the installation will reach impaired water bodies located in the Lower Spokane Watershed.

1.2 Installation Activities

In support of its mission, Fairchild operates and maintains several airframes and associated supporting equipment, including material storage, deicing aircraft and pavement, vehicle washing and maintenance and fueling.

1.3 Precipitation Information

FAFB has a continental, semi-arid climate, characterized by cold winters and warm summers. Precipitation each year averages around 20 inches while snowfall occurs at an annual rate of 44 inches during winter months. Precipitation is concentrated in the cooler half of the year, with the summer typically having dry and stable weather. The average precipitation intensity for the installation is 1.06 inches over a 24-hour time period (Highway Runoff Manual - Washington State Department of Transportation, 2019). A summary of average precipitation and snowfall rates is illustrated in Table 1.1.

TABLE 1.1 FAIRCHILD AFB PRECIPITATION/SNOWFALL SUMMARY

Month	Precipitation (inches)	Snowfall (inches)
January	1.5	8.6
February	2.5	11.1
March	2.1	3.1
April	1.9	0.4
May	1.4	0.0
June	1.7	0.3
July	1.3	0.4
August	0.4	0.0

Month	Precipitation (inches)	Snowfall (inches)
September	1.2	0.3
October	1.3	0.4
November	2.2	12.9
December	3.4	42.5

(Spokane – Western Regional Climate Center)

1.4 Drainage Basin Information

FAFB is divided into eight distinct storm water drainage basins; however, not all basins at the installation directly discharge storm water off base or contain industrial activities. Drainage basins 1, 3, 6 and 7 all contain industrial activities that potentially discharge storm water off base.
Drainage Basins 2, 4, 5, and 8 do not directly discharge storm water off base. Drainage Basin 4 does not contain any industrial activities and contains an inactive landfill, designated SW-1.
A general description of industrial activities occurring in each drainage basin is summarized in Table 1.2. An overall Drainage Basin Exhibit and Individual Drainage Basin Exhibits are illustrated in Appendix C.

TABLE 1.2 DRAINAGE BASIN DESCRIPTION AND ACTIVITIES

Basin	Acres	Description	Industrial Activities
1	1,833.9	Located on the Main Base. Flows in a general northwest to southeast direction via storm sewer, open storm conveyances, and sheet flow into a series of collection/ treatment ponds before discharging off base.	Aircraft maintenance, washing, and refueling; vehicle maintenance, washing, and refueling; outdoor equipment and vehicle storage; bulk fuel storage; personal vehicle maintenance and washing; outdoor equipment storage; deicing/anti-icing
2	166.1	Located on the northeast portion of the Main Base. Flows in a southeastern direction into Drainage Basin 1 and does not have a direct discharge off base.	Outdoor equipment storage; bulk fuel storage
3	252.2	Located on the north to northwest section of the Main Base. Discharges off base via a ditch near the main gate entrance to the base.	Bulk fuel storage, fuel transfer; hazardous waste storage; recycling and scrap material storage; outdoor equipment storage
4	423.2	Located on the western portion of the Main Base. Contains the inactive landfill designated SW-1 and the southwestern portion of the runway. Does not have a direct discharge off base.	No industrial activities
5	404.0	Located on both the Main Base and the SERE portions of the base. Flows in a southeastern direction into Drainage Basin 6. Does not have a direct discharge off base.	Aircraft maintenance, washing, and refueling, vehicle maintenance, washing, refueling; outdoor equipment storage; bulk fuel storage

Basin	Acres	Description	Industrial Activities
6	467.0	Located on the SERE side of the base and contains the base's weapons storage bunkers. Flows in an east to southeast direction into a wetlands area before discharging off base.	Weapons storage
7	383.0	Located on the SERE side of the base. Flows in a southern direction and has a direct discharge off base.	No industrial activities
8	282.7	Located on the SERE side of the base. Does not have a direct discharge off base.	No industrial activities

2.0 INSTALLATION PROFILE

Installation Profile and Permit Information

Scope of Plan	FAFB
Facility Operator	Office Symbol: 92 CES/CD Address: 100 W. Ent St., Suite 100 City, State, Zip Code: City, State, Zip Code: 99011 Telephone Number: 509-247-2291 Latitude/Longitude: 47.618519, -117.643708
OPR	OPR: 92d Civil Engineer Squadron The OPR has overall responsibility for implementing the SWPPP and is the lead organization for monitoring compliance with applicable federal, state, and local storm water regulations.
Responsible Official/ Legally Responsible Person	Office Symbol: 92 CES/CD Name: Deputy Base Civil Engineer Telephone Number: 509-247-2291
Water Quality Program Manager (SWPPP Contact)	Name: William W. Shelton / Mitchell J. Beckman Title: Environmental Compliance Manager Telephone Number: 509-247-8163 / 8053 Email address: william.shelton.3@us.af.mil; mitchell.beckman.1@us.af.mil
Permitting Authority	U.S. Environmental Protection Agency
Permit Type	General
Permit Number/Permit Tracking Number	WAR05F000/WAR05F302
Permit Expiration Date	February 28, 2026
SIC Code(s)	Activity Code LF - Sector L (Landfills and Land Application Sites) SIC Code 4581 - Sector S (Vehicle Maintenance Areas, Equipment Cleaning Areas, or Deicing Areas Located at Air Transportation Facilities)
NAICS Code(s)	N/A
General Location Map	Located in Appendix A.
Site Map(s)	Located in Appendix A.

3.0 ENVIRONMENTAL MANAGEMENT SYSTEM

The AF environmental program adheres to the Environmental Management System (EMS) framework and it's Plan, Do, Check, Act cycle for ensuring mission success. Executive Order (EO) 13693, *Planning for Federal Sustainability in the Next Decade*, Department of Defense Instruction (DoDI) 4715.17, *Environmental Management Systems*, AFI 32-7001, *Environmental Management*, and International Organization for Standardization (ISO) 14001 standard, *Environmental Management Systems – Requirements with guidance for use*, provide guidance on how environmental programs should be established, implemented, and maintained to operate under the EMS framework.

IAW the installation EMS framework, the storm water program employs EMS-based processes to achieve compliance with all legal obligations and current policy drivers, effectively manage associated risks, and instill a culture of continual improvement. The SWPPP serves as an administrative operational control that defines compliance-related activities and processes.

4.0 GENERAL ROLES AND RESPONSIBILITIES

The SWPPP requires the involvement of multiple organizations and varied personnel on the installation, including contractors and other DoD organizations. The major roles/organizations involved in supporting the SWPPP at a typical installation include:

- Installation Commander
- Base Civil Engineer
- Environmental Element Chief
- Water Quality Program Manager
- Storm Water Pollution Prevention Team (identified below)
- Installation Personnel
- AFCEC
- Unit Environmental Coordinator (UEC, see AFI 32-7001)

Organizational and personnel roles and responsibilities are described throughout this SWPPP and in referenced documents. Detailed information regarding typical AF SWPPP guidance and policy is available in AFI 32-1067 and the Water Quality Playbook. Installation-specific roles and responsibilities are documented in the BMPs below.

Installation Supplement – General Roles and Responsibilities

At FAFB, the Hazardous Materials Management Process team (HMMP) serve as the Storm Water Pollution Prevention Team (SWPPT) members. The HMMP is chaired by the deputy Base Civil Engineer. The SWPPT provides recommendations and updates to the Environmental Safety, Occupational Health Council (ESOHC). The ESOHC, chaired by the 92d Vice Wing commander, provides the decision-making function for SWPPP development, modifications, implementation and control measures, and corrective actions.

Team members include, but are not limited to, representatives from the Environmental Element (92 CES/CEIE), Bioenvironmental Engineering (92 AMDS/SGPB), the Fire Emergency Services (92 CES/CEF), the Fuels Management Flight (92 LRS/LGRF), Aircraft Maintenance (92 AMXS/MXQ), and 141st Washington Air National Guard.

The SWPPT will evaluate existing environmental management plans for consistency and determine which provisions, if any, can be incorporated in the SWPPP during the annual update. If any conflicts between the plans exist, SWPPT leadership will need to work with team members to resolve the conflict. The 92 CES/CEIE staff will act in an advisory role to the SWPPT leadership on matters of policy and financial commitment.

SWPPT members are identified by name or title, along with their individual responsibilities in the Storm Water Pollution Prevention Team Members table below.

TABLE 4.1 Storm Water Pollution Prevention Team Members

Job Title	Organization	Responsibilities	Contact Information
Environmental Element	92 CES/CEIE	• Conduct quarterly visual storm water sampling and ensure record keeping requirements are met • Perform the routine facility inspections	(509) 247-2313

Job Title	Organization	Responsibilities	Contact Information
		• Report analytical monitoring results to the USEPA • Provide notification to USAF and public agencies for all reportable spills • Review emergency and spill response plans • Provide training for hazardous material/waste management; storm water management and NPDES permit requirements; deicing and anti-icing procedures • Annually update the SWPPP or as changes occur • Manage corrective actions for SWPPP compliance • Maintain all analytical sampling results • Direct contractor to collect storm water samples and submit the samples to a state certified analytical laboratory for analysis • Implement and follow tracking procedures for all hazardous materials and waste • Use applicable federal, state, and USAF regulations to dispose of wastes	
Bioenvironmental Engineering	92 OMRS/SGXB	• Support SWPPT efforts by providing technical support as needed	(509) 247-2391
Fire Emergency Services	92 CES/CEF	• Respond and maintain records of all major spills	(509) 247-5215
Fuels Management Flight	92 LRS/LGRF	• Perform visual inspections of bulk fuel tanks, hydrant systems, and associated containment areas.	(509) 247-2411
Aircraft Maintenance	92 AMXS/MXA 141 AMXS	• Ensure all personnel responsible for operating deicing equipment receive annual aircraft deicing/anti-icing training. • Document deicer application usage (transient aircraft) and collection amounts • Block storm water drains during dry weather aircraft deicing events	(509) 247-5300

Job Title	Organization	Responsibilities	Contact Information
		• Report any unusual aircraft deicing occurrences to 92 CES/CEIE, Environmental	
ANG Environmental Office	141 CES/CEV	• Advise 141 ARW on SWPPP requirements for construction, operations, and aircraft maintenance • Coordinate inspections of ANG facilities with 92 CES/CEIE	
Contractor	Aircraft Services Provider	• Ensure all personnel responsible for operating deicing equipment receive annual aircraft deicing/anti-icing training. • Document deicer application usage (transient aircraft) and collection amounts • Report any unusual aircraft deicing occurrences to 92 CES/CEIE, Environmental	(509) 247-5300
Contractor	Fence to Fence Contractor	• Monitor weather to determine a measurable storm water event and conduct storm water sampling	

5.0 TRAINING

The installation implements storm water training programs to ensure installation personnel, contractors, and visitors are aware of their roles in the program and the importance of their participation in its success. DoDI 4715.10, *Environmental Education, Training, and Career Development*, implements policy and provides the procedures to obtain environmental education, training, and career development programs for DoD personnel. Installation leadership ensures that appropriate personnel complete required education, training, and certification necessary to perform their jobs. Priority for training is given to the use of AF- approved education/training sources such as the Air Force Institute of Technology (AFIT) training courses and official AF-approved computer-based training resources (e.g., The Environmental Awareness Course Hub [TEACH], Advanced Distributed Learning Service [ADLS], ArcNet, etc.) to meet training needs.

Training records are maintained IAW the Recordkeeping and Reporting section of this plan.

Installation Supplement – Training

5.1 Employee Environmental Management System (EMS) General Awareness Training

All personnel that fall within the scope of the AF EMS (e.g., military, civilian, ANG state employees, tenants, contractors, etc.) will receive EMS and other appropriate environmental training applicable to their daily duties in accordance with DoD 4715.06. Personnel involved in activities impacting the environment will receive EMS General Awareness training

5.2 Storm Water Pollution Prevention Training

All installation and contractor personnel who perform any type of service or maintenance activity (i.e., aircraft, vehicles, building, or equipment), which could have a potential impact on storm water quality must be knowledgeable of storm water pollution prevention. FAFB provides storm water pollution prevention training through the FAFB Newcomer's Briefings, Facility Manager's training, and the Unit Environmental Coordinator training. Storm water training materials can be found in Appendix F.

5.3 Aircraft Deicing/Anti-Icing (hereon referred to as "deicing") Procedures Training

All installation and contractor personnel involved with the application of aircraft deicing agents must attend training on the efficient operation of deicing-related equipment. Personnel must annually train on Good Housekeeping/BMP measures related to the environmental impact of deicing. Deicing training materials can be found in Appendix F.

The following personnel must understand the requirements of the MSGP and their specific responsibilities with respect to those requirements:

- Personnel responsible for the design, installation, maintenance, and/or repair of controls (including pollution prevention measures)
- Personnel responsible for the storage and handling of chemicals and materials that could become contaminants in storm water discharges
- Personnel responsible for conducting monitoring and inspections
- Personnel responsible for documentation requirements for monitoring and inspections
- Personnel responsible for implementing and documenting corrective actions

Personnel must be trained in at least the following as related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections):

- An overview of what is in the SWPPP

- Requirements for storm inlet protection during dry weather aircraft deicing application including closing storm drain isolation valves or using drain blockers for storm drains not provided with isolation valves.
- Removal of spent deicing fluids from aircraft parking areas as soon as practical after aircraft deicing operations.
- Transporting spent deicing fluid to collection tank.
- Documentation of deicing fluid applied and collected.
- Storage of new and spent deicing fluids,
- Spill response procedures, good housekeeping, maintenance requirements, and material management practices
- The location of all BMPs and structural controls on the site required by the permit, and how they are to be maintained
- The proper procedures to follow with respect to the permit's pollution prevention requirements
- When and how to conduct inspections, record applicable findings, and take corrective action.

6.0 RECORDKEEPING AND REPORTING

Installation personnel as identified in this SWPPP implement measures to ensure compliance with applicable permit recordkeeping and reporting requirements. Records are stored and maintained IAW Air Force Manual 33-363, *Management of Records*, and records are archived and disposed IAW the Air Force Records Information Management System (AFRIMS) Records Disposition Schedule (RDS). The installation complies with permit reporting requirements.

The installation maintains the following permit, inspection, monitoring, and certification records with the SWPPP. Overseas installations may have different requirements than the list below. When possible, an electronic version of the record is made available in the references section of this plan.

- Copy of the Notice of Intent (NOI)
- Copy of the acknowledgement letter containing the permit tracking number
- Copy of the permit
- Description and dates of any significant spills, leaks, or other releases. Note: the installation maintains this information in the Enforcement Actions, Spills, and Inspections Reporting (EASIER) database, and a link is available in the references section of this SWPPP
- Employee training records
- Documentation of maintenance and repairs of control measures
- Inspection reports
- Documentation of deviations from the schedule for monitoring or assessments and the reason for the deviation
- Documentation of corrective actions taken
- Documentation of benchmark exceedances and any response actions
- Documentation to support determination that pollutants of concern are not expected to be present above natural background levels if water is discharged directly to impaired waters when required by the permitting agency

Additional state, local, or host nation recordkeeping and reporting requirements are described in the Installation Supplement, as necessary.

Installation Supplement – Recordkeeping and Reporting

Fairchild AFB retain copies of this SWPPP (including any modifications made during the term of this permit), all reports, monitoring data, and certifications required by this permit, along with records of all data used to complete the NOI, for a period of at least 3 years from the date that the facility's coverage under this permit expires or is terminated. The administrative records accurately reflect the items summarized in the list below.

- A traceable record of BMP installation, maintenance, and monitoring results
- Revision of structural control and non-structural practices implemented
- The data collected to support continued maintenance of those practices or their abandonment in lieu of more effective control mechanisms

7.0 MINIMUM CONTROL MEASURES AND BEST MANAGEMENT PRACTICES

7.1 Potential Pollution Sources

Areas at the installation where industrial materials or activities are exposed to storm water are described in the Installation Supplement below.

Documentation of significant spills is maintained in the AF EASI database. A link to EASI is available in the references section of this plan and required information may be maintained in an appendix.

Installation Supplement – Potential Pollution Sources

Table 7.1 - Industrial Activities and Associated Pollutants

SIC and Name of Industrial Activity	Associated Pollutants
Sector L – Landfills, Land Application Suites, and Open Dumps	None - Inactive landfill
Sector S – Air Transportation	Vehicle, Equipment Maintenance, Equipment Storage, Deicing Fluid Distribution, Fuel Distribution

An active list of potential pollution areas are listed below

Table 7.2 - Areas of Site Where Potential Spills/Leaks Could Occur

Facility No	Drainage Basin	Activity	Storm Water Control Measures (SCMs) (See 7.2 Storm Water Control Measures)
B2190	2	Administrative Housing Maintenance	6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21
B0456	1	Administrative Industrial Shops	6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21
B2451	3	Administrative Industrial Shops	6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21
B0285	1	Administrative Storage	6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21
B0459	1	Administrative Storage	6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21
B2045	1	Administrative Storage	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 9; 12; 13; 14; 15; 16
B1009	1	Aircraft Deicing Support Vehicle/Equipment Maintenance Vehicle/Equipment Storage	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
B1003	1	Aircraft Maintenance	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
B1007	1	Aircraft Maintenance	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
B1011	1	Aircraft Maintenance	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
B1012	1	Aircraft Maintenance	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
B1015	1	Aircraft Maintenance	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
B1033	5	Aircraft Maintenance	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
B1037	5	Aircraft Maintenance	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
B2097	1	Aircraft Maintenance Support	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
B1005	1	Aircraft Maintenance Aircraft Washing	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28

Facility No	Drainage Basin	Activity	Storm Water Control Measures (SCMs) (See 7.2 Storm Water Control Measures)
B1029	5	Aircraft Maintenance Aircraft Washing	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
B2050	1	Aircraft Maintenance Vehicle/Equipment Washing	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
Other	1	Aircraft Parking Stubs Aircraft Refueling	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
Other	5	Aircraft Parking Aircraft Refueling	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
B1019	1	Aircraft Washing	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
B1254	7	Aircrew Training Parachute Maintenance/Repair	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
B2046	1	Deicing Fluid Distribution/Storage	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
B2047	1	Deicing Fluid Distribution/Storage	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21; 22; 23; 24; 25; 26; 27; 28
B1001	1	Equipment Storage	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16;
B1013	1	Equipment Storage	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16;
B1017	1	Equipment Storage	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16;
B1048	5	Fire Suppression System Water Storage	1; 2; 4; 10; 11; 13; 9; 14; 15; 16;
B2167	1	Fuel Dispensing	1; 3; 10; 11; 13; 9; 10; 11; 14; 15; 16;
B1022	1	Fuel Distribution	1; 3; 10; 11; 13; 9; 10; 11; 14; 15; 16;
B2028	1	Fuel Distribution	1; 3; 10; 11; 13; 9; 10; 11; 14; 15; 16;
B2166	1	Fuel Distribution Support	1; 2
B2414	3	Fuel Distribution Support	1; 2
B2417	3	Fuel Distribution Support	1; 3; 10; 11; 13; 9; 10; 11; 14; 15; 16;
B2029	1	Fuel Distribution/Storage	1; 3; 10; 11; 13; 9; 10; 11; 14; 15; 16;
B2051	1	Fuel Distribution/Storage	1; 3; 10; 11; 13; 9; 10; 11; 14; 15; 16;
B2151	1	Fuel Distribution/Storage	1; 3; 10; 11; 13; 9; 10; 11; 14; 15; 16;
B2325	1	Fuel Distribution/Storage	1; 3; 10; 11; 13; 9; 10; 11; 14; 15; 16;
B2400	3	Fuel Distribution/Storage	1; 3; 10; 11; 13; 9; 10; 11; 14; 15; 16;
B2405	3	Fuel Distribution/Storage	1; 3; 10; 11; 13; 9; 10; 11; 14; 15; 16;
B2410	3	Fuel Distribution/Storage	1; 3; 10; 11; 13; 9; 10; 11; 14; 15; 16;
B2037	1	Fuel Storage	1; 3; 10; 11; 13; 9; 10; 11; 14; 15; 16;
B2038	1	Fuel Storage	1; 3; 10; 11; 13; 9; 10; 11; 14; 15; 16;
B2143	1	Fuel Storage	1; 3; 10; 11; 13; 9; 10; 11; 14; 15; 16;
B2152	1	Fuel Storage	1; 3; 10; 11; 13; 9; 10; 11; 14; 15; 16;
B4404	1	Hazardous Materials Storage	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16;
B2409	3	Hazardous Materials/Waste Accumulation	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16;
B2411	3	Hazardous Materials/Waste Accumulation	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 12; 13; 14; 15; 16;
B1248	7	Non-Hazardous Storage	6; 7; 8; 9;
B1414	6	Non-Hazardous Storage	6; 7; 8; 9;
B4402	1	Non-Hazardous Storage	6; 7; 8; 9;
B4403	1	Non-Hazardous Storage	6; 7; 8; 9;

Facility No	Drainage Basin	Activity	Storm Water Control Measures (SCMs) (See 7.2 Storm Water Control Measures)
B4405	1	Non-Hazardous Storage	6; 7; 8; 9;
B9002	1	Non-Hazardous Storage	6; 7; 8; 9;
B1238	7	Raft Maintenance/Repair	6; 7; 8; 9; 10; 11; 13; 9; 12; 13; 14; 15; 16
Other	1	Snow Barn Yard: Deicing Fluid Distribution/Storage Vehicle/Equipment Storage	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B0455	1	Storage	1; 2; 4; 10; 11; 13; 9; 12; 13; 14; 15; 16
B2163	1	Storage and Issue	1; 2; 4; 10; 11; 13; 9; 12; 13; 14; 15; 16
B2447	3	Storage Vehicle/Equipment Maintenance Vehicle/Equipment Storage	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B1249	7	Vehicle/Equipment Maintenance	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B2319	1	Vehicle/Equipment Maintenance	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B4401	1	Vehicle/Equipment Maintenance	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B1039	5	Vehicle/Equipment Maintenance Vehicle/Equipment Storage Vehicle/Equipment Washing	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B2025	1	Vehicle/Equipment Maintenance Vehicle/Equipment Storage Vehicle/Equipment Washing	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B2044	1	Vehicle/Equipment Maintenance Vehicle/Equipment Storage Vehicle/Equipment Washing	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B2115	1	Vehicle/Equipment Maintenance Vehicle/Equipment Storage Vehicle/Equipment Washing	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B0003	1	Vehicle/Equipment Maintenance Vehicle/Equipment Washing	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B1409	6	Vehicle/Equipment Storage	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B2022	1	Vehicle/Equipment Storage	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B2023	1	Vehicle/Equipment Storage	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
Other	1	Vehicle/Equipment Storage (AFRC - B1003)	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
Other	1	Vehicle/Equipment Storage (AFRC-Yard)	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
Other	5	Vehicle/Equipment Storage (B1039)	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
Other	3	Vehicle/Equipment Storage (CE Storage Yard)	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
Other	7	Vehicle/Equipment Storage (SERE Vehicle Maint)	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
Other	1	Vehicle/Equipment Storage (Snow Barn Parking)	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B0446	1	Vehicle/Equipment Storage Vehicle/Equipment Washing	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B1314	7	Vehicle/Equipment Storage Vehicle/Equipment Washing	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
Other	1	Vehicle/Equipment Storage Vehicle/Equipment Washing	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B2116	1	Vehicle/Equipment Washing	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B2320	1	Vehicle/Equipment Washing	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;
B4406	1	Vehicle/Equipment Washing	1; 2; 3; 4; 5; 6; 7; 8; 9; 10; 11; 13; 14; 15; 16; 17; 18; 19; 20; 21;

Evaluations for Unauthorized Non-Storm Water Discharges

In accordance with the USEPA storm water permitting requirements, the description and evaluation herein serve to certify that all storm water outfalls have been evaluated for the presence of non-storm water discharges.

Installation Supplement – Description of Past Spills/Leaks

Description of Past Spills/Leaks

Date	Description	Discharge Points
March 2005	The approximate 24,000-gallon spill occurred at a fuel vault located on the flight-line near Hangar 1012 in Drainage Basin 1. A pipe joint connecting two JP-8 fuel lines broke allowing fuel to fill the vault and spillover to the ground. Once on the ground, the fuel flowed into a nearby storm water sewer drain. The fuel flowed through the underground storm water sewer system to an open storm water overflow conveyance located near the Fire Department Training Area. The open conveyance is directly connected to the collection ponds located in Drainage Basin 1. A local contractor was hired to clean up the spill. The contractor was able to vacuum a significant volume and contain the spill in the open conveyance using absorbent booms. The booms were disposed of off-site using approved USEPA methods.	Drainage Basin 1
May 2018	On 5 May 2018, an aircraft was defueled using a fueling system that is temporarily out of commission due to issues at a fuel pit. The aircraft had 13,539 gallons of Jet A fuel defueled. On 6 May 2018, personnel aware that the system shouldn't be used were alerted to the defueling that occurred the day prior. The system was inspected and a spill was discovered at the fuel pit. The base fire department was called. Fuels, operations, and environmental personnel were contacted to contain the situation. 4,575 gallons of fuel was in the system and recovered. Due to the system leak in the fuel pit, 8,964 gallons of fuel was released to the environment. The 8,964 gallons of fuel reached soil that surrounded the fuel pit. The fuel was absorbed into the ground, the area impacted was 6,500 square feet. No fuel reached waterways.	No fuel reached waterways.

7.2 Storm Water Control Measures

The installation implements control measures to meet all applicable permit effluent limits. The categories of control measures include:

- Minimize exposure
- Good housekeeping
- Maintenance
- Spill prevention and response
- Erosion and sediment controls
- Management of runoff
- Salt piles
- MSGP sector-specific non-numeric effluent limits
- Employee training
- Waste, garbage, and floatable debris

- Dust generation and vehicle tracking of industrial materials

Installation-specific control measures are further described in the Installation Supplement below, along with applicable additional state or local sector-specific measures.

Installation Supplement – Storm Water Control Measures

FAFB combats pollution sources by eliminating and minimizing exposure at the source with effective Storm Water Control Measures (SCM) and Best Management Practices (BMP) as shown in the following tables.

The control measures below cover requirements in the 2021 MSGP.

Minimize Exposure

1	Use grading, berming or curbing to prevent discharges of contaminated flows and divert run-on away from these areas;
2	Locate materials, equipment, and activities so that potential leaks and spills are contained or able to be contained or diverted before discharge;
3	Store leaky vehicles and equipment indoors;
4	Perform all vehicle and/or equipment cleaning operations indoors, under cover, or in bermed areas that prevent discharges and run-on and that capture any overspray; and
5	Drain fluids from equipment and vehicles that will be decommissioned, and, for any equipment and vehicles that will remain unused for extended periods of time, inspect at least monthly for leaks.

Good Housekeeping

6	Sweep or vacuum at regular intervals or, alternatively, wash down the area and collect and/or treat, and properly dispose of the washdown water;
7	Store materials in appropriate containers;
8	Keep all dumpster lids closed when not in use. For dumpsters and roll off boxes that do not have lids and could leak, ensure that discharges have a control (e.g., secondary containment, treatment). Consistent with Part 1.2.2 above, this permit does not authorize dry weather discharges from dumpsters or roll off boxes;
9	Minimize the potential for waste, garbage and floatable debris to be discharged by keeping exposed areas free of such materials, or by intercepting them before they are discharged.

Maintenance

10	Performing inspections and preventive maintenance of storm water drainage, source controls, treatment systems, and plant equipment and systems that could fail and result in discharges of pollutants via storm water.
11	Maintaining non-structural control measures (e.g., keep spill response supplies available, personnel appropriately trained).
12	Inspecting and maintaining baghouses at least quarterly to prevent the escape of dust from the system and immediately removing any accumulated dust at the base of the exterior baghouse.
13	Cleaning catch basins when the depth of debris reaches two-thirds (2/3) of the sump depth, or in line with manufacturer specifications, whichever is lower, and keeping the debris surface at least six inches below the lowest outlet pipe.

Spill Prevention and Response

FAFB implements a Hazardous Materials Management Plan (HAZMAT Plan) and Comprehensive Emergency Management Plan (CEMP 10-2) that includes spill prevention and response procedures that complies with federal, state, local and USAF regulatory requirements for spill prevention. Appropriate equipment is required in order to effectively handle hazardous spills. FAFB strategically places spill kits throughout the base in shops, near storm outfalls and on board refueler trucks in order to combat spill events. These absorbent booms help to protect storm inlets by removing floating oil and grease. Spill prevention and response SCMs include:

14	Clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants;
15	Use drip pans and absorbents if leaky vehicles and/or equipment are stored outdoors;
16	Use spill/overflow protection equipment;
17	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;
18	Implement procedures for material storage and handling, including the use of secondary containment and barriers between material storage and traffic areas, or a similarly effective means designed to prevent the discharge of pollutants from these areas;
19	Develop training on the procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. As appropriate, execute such procedures as soon as possible;
20	Keep spill kits onsite, located near areas where spills may occur or where a rapid response can be made; and
21	Notify appropriate facility personnel when a leak, spill, or other release occurs.

Erosion and Sediment Controls

To minimize pollutant discharges in storm water, FAFB minimizes erosion by stabilizing exposed soils at the facility and places flow velocity dissipation devices at discharge locations to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points. FAFB also use structural and non-structural control measures to minimize the discharge of sediment.
Generally, areas of the base that have a high potential for significant soil erosion include those areas disturbed by construction projects and by base-wide landscaping. FAFB has an extensive landscaping program that maintains plant cover (e.g., grass, trees, and shrubs) throughout the base. During landscaping development, there is an increased potential for erosion and sedimentation until the ground cover is established.

Permit coverage under the CGP must be obtained when construction projects disturb more than one acre of land, including staging areas and laydown yards. This permit requires the development of a construction SWPPP. The SWPPP should contain the following sections:

- Site evaluation, Assessment, and Planning;
- Erosion and Sediment Control BMPs;
- Good Housekeeping BMPs;
- Selecting Post-Construction BMPs;

- Inspections;
- Recordkeeping and Training;
- Final Stabilization; and Certification and Notification.

Once the construction SWPPP has been coordinated through 92 CES/CEIE, an NOI (notice of intent) must be applied for through USEPA. Once the project is complete and final stabilization has been achieved, a NOT (notice of termination) must be applied for through the USEPA.

Management of Runoff

Storm water diversion BMPs/SCMs are used at the base to prevent storm water contamination by directing storm water away from areas with hazardous materials. Examples include surface grading to prevent storm water run-off, covering industrial area with a roof, or providing secondary containment for fuel tanks.

Salt Piles

FAFB does not stockpile salt for deicing or other commercial or industrial purposes.

MSGP Sector-Specific SCMs

The release of aircraft de-icing fluid into the stormwater conveyance system is not permitted during non-precipitation deicing events. FAFB has established preventive maintenance BMPs/SCMs as shown below with use of general common-sense housekeeping measures to protect from stormwater pollution.

22	Test pumps and piping at the tank farms and pump houses regularly for leaks or deterioration. Furthermore, replace seals in POL pumps periodically to prevent sudden leaks
23	Perform integrity testing of POL tanks and piping to prevent ruptures and leaks
24	Inspect all secondary containment structures at least quarterly for cracks, breaks, holes, and deterioration. Repair or replace as needed
25	Ensure all emergency shut-off switches, high-level alarms, and other fuel storage and transfer-monitoring equipment are functioning properly by testing at least monthly
26	Inspect butterfly valves on all storm water drains near the aircraft parking stubs on the flight line at least annually
27	Inspect vehicle and equipment parking areas for leaks randomly on a monthly basis
28	Inspect drainage ditches, culverts, and other drainage areas for overgrowth and debris

Employee Training

See section 5.0 for Training information.

Waste, Garbage and Floatable Debris

~~FAFB does not produce waste, garbage or floatable debris for commercial or industrial purposes.~~ NWS January 31, 2022

DUMPSTER lids will remain closed except when actively adding/removing garbage. NWS February 1, 2022

Dust Generation and Vehicle Tracking of Industrial Materials

Dust generation and vehicle tracking are not a typical day-to-day concern on FAFB installation. However, they are considered during earth moving, exterior construction or any activity that may result in exposed soils.

7.3 Schedules and Procedures for Monitoring

This permit includes six types of required analytical monitoring, one or more of which may apply to stormwater discharge:

- Indicator monitoring (MSGP Part 4.2.1);
- Benchmark monitoring (MSGP Part 4.2.2);
- Annual effluent limitations guidelines monitoring (MSGP Part 4.2.3);
- State- or tribal-specific monitoring (MSGP Part 4.2.4);
- Impaired waters monitoring (MSGP Part 4.2.5); and
- Other monitoring as required by EPA (MSGP Part 4.2.6).

Unless otherwise specified, samples must be analyzed consistent with 40 CFR Part 136 analytical methods that are sufficiently sensitive for the monitored parameter. When more than one type of monitoring for the same pollutant at the same discharge point applies (e.g., total suspended solids once per year for an effluent limitation and once per quarter for benchmark monitoring at a given discharge point), you may use a single sample to satisfy both monitoring requirements (i.e., one sample satisfying both the annual effluent limitation sample and one of the four quarterly benchmark monitoring samples). Similarly, when the same type of monitoring is required for the same pollutant but for different activities, you may use a single sample to satisfy both monitoring requirements.

At a minimum, procedures describe:

- Locations where samples are collected
- Pollutant parameters sampled
- Monitoring schedules
- Numeric limits, where applicable
- Sample collection and analysis
- Sampling and Analysis reporting requirements such as a Discharge Monitoring Report (DMR)

Monitoring procedures are documented in the installation supplement below.

Installation Supplement – Schedules and Procedures for Monitoring

Indicator Monitoring

Stormwater samples are collected with a grab sample from a site's discharge point(s) for analysis and results are used to provide a baseline and comparable understanding of industrial stormwater discharge quality and potential water quality problems. The 2021 MSGP requires indicator monitoring of stormwater discharges for Sector S for polycyclic aromatic hydrocarbons (PAHs). This type of monitoring differs from "benchmark monitoring" in that the monitoring is "report only" and does not include thresholds or baseline values for comparison, therefore no follow-up action is triggered or required. It is so that operators may find it useful to evaluate and compare indicator monitoring data over time to identify any fluctuating values and why they may be occurring.

Benchmark Monitoring

Stormwater samples are collected, either as a composite or with a grab sampling method, from a site's discharge point(s) for laboratory analysis and the results are compared with benchmark thresholds as an indicator of the overall effectiveness of SCMs. Facilities that use more than 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis must monitor for benchmark parameters. Currently, FAFB utilizes 40,000 –50,000 gallons of deicing/anti-

icing chemicals on an annual basis. FAFB does not meet the criteria for benchmark monitoring for Sector L and Sector S. Therefore, FAFB is not required to monitor for any benchmark parameters specified for industrial sectors identified in the 2021 MSGP.

Effluent Limitations Guidelines Monitoring

FAFB is not required to monitor for effluent limitation parameters because FAFB does not meet the criteria for Sector L and Sector S.

State or Tribal Specific Monitoring

There are no State or Tribal specific monitoring requirements for FAFB.

Impaired Waters Monitoring

There are no impaired water monitoring requirements for FAFB.

7.4 Inspections

The installation implements procedures for conducting the following types of inspections, as necessary:

- Routine facility inspections
- Quarterly visual assessment of storm water discharges

At a minimum, procedures include:

- Person(s) or position(s) responsible for inspection
- Schedules for conducting inspections
- Specific items to be covered by the inspection

All other inspections are conducted IAW AFI 90-201, *Air Force Inspection System*, and the Commander's Self Inspection Program. Inspection procedures are documented in the Installation Supplement below.

Installation Supplement – Inspections

Routine Facility Inspections

FAFB conducts Routine Facility Inspections on an annual basis. Inspections are done around facility exteriors, parking and storage areas, catch basins, swales, ponds and dumpsters. Routine inspections also occur at the following areas:

- Fuel Storage Areas, Aircraft Storage Areas
- Vehicle and Mechanical Equipment Storage Areas
- Construction Sites (during construction)
- Deicing/Anti-Icing Areas
- Landfill SW-1.

FAFB also inspect areas where spills and leaks have occurred in the past to ensure corrective measures are effective. FAFB will increase Routine Facility Inspections to at least quarterly and at least once

during a period when a storm water discharge is occurring. FAFB uses the Routine Facility Inspection form provided in Appendix D of this SWPPP to conduct inspections.

Quarterly visual inspections at the inactive landfill

FAFB conducts a quarterly inspection of the inactive landfill (SW-1) located in Drainage Basin 4. FAFB inspects landfill (or open dump) stabilization and structural erosion control measures. The current landfill continues to be inactive and under Sector L – Landfills, Land Application Suites, and Open Dumps, inactive landfills do not require quarterly monitoring, as long as there are no new industrial materials or activities exposed to storm water. FAFB issued an Exception for Inactive and Unstaffed Sites Memorandum on July 12, 2021. The Exception Letter can be found in Appendix G.

Quarterly visual assessment of storm water outfalls

FAFB performs and documents a quarterly visual examination of storm water discharges associated with industrial activity from each outfall (Appendix H) at Basins 1, 3, 6 and 7. FAFB collects samples at these outfalls after discharges from storm events for visual assessment. Sampling points can be found on the map in Appendix C. Outfalls 2, 4, 5 and 8 are not assessed because they do not discharge stormwater offsite. Visual inspections are accomplished by evaluating the storm water discharge for visual quality such as color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution) and probable sources of any observed storm water contamination. FAFB utilizes the Quarterly Visual Monitoring Form provided in Appendix E of this SWPPP to conduct and document visual storm water inspections.

7.5 Documentation to Support Eligibility Considerations Under Other Laws

Where applicable, the installation maintains documentation supporting determination of eligibility under other federal laws (Endangered and Threatened Species and Critical Habitat Protection, Historic Properties Preservation and/or National Environmental Policy Act [NEPA]) or host nation laws separately from this SWPPP. Such documentation is available through the References section or as appendices below.

Installation Supplement – Documentation to Support Eligibility

FAFB has conducted the environmental studies to ensure that the base's storm water discharges does not jeopardize endangered species or historic places. The two primary studies include the Integrated Natural Resources Management Plan (INRMP) and the Integrated Cultural Resource Management Plan (ICRMP). This certification for the endangered species and historic places may be found in Appendix J of this SWPPP.

8.0 REFERENCES

Standard References

(Applicable to all AF Installations)

- Federal Water Pollution Control Act (Clean Water Act)
- AFI 32-1067, *Water and Fuel Systems*
- AFI 32-1002, *Snow and Ice Control*
- AFI 32-7001, *Environmental Management*
- AFI 90-201, *Air force Inspections System*
- Water Quality Program Management Playbook
- eDASH AFLOA Water Quality Legal and Other Requirements
- eDASH Water Quality Program Page
- eDASH Training Matrix
- ADLS
- EASI
- Water Enterprise Tracker (WET)

9.0 ACRONYMS

Standard Acronyms

(Applicable to all AF Installations)

- eDASH Acronym Library
- Water Quality Playbook Acronym Section
- U.S. EPA Terms and Acronyms

Installation Acronyms

1.	*ACES-FD*	*Automated Civil Engineer System - Fire Department*
2.	*AFB*	*Air Force Base*
3.	*AFI*	*Air Force Instruction*
4.	*AFPD*	*Air Force Policy Directive*
5.	*AGE*	*Aerospace Ground Equipment*
6.	*AMC*	*Air Mobility Command*
7.	*ARW*	*Air Refueling Wing*
8.	*AST*	*Aboveground Storage Tank*
9.	*BMP*	*Best Management Practice*
10.	*CEIE*	*Environmental Element (formerly CES/CEV)*
11.	*CEF*	*Fire Emergency Services*
12.	*CEMP*	*Comprehensive Emergency Management Plan*
13.	*CERCLA*	*Comprehensive Environmental Response, Compensation and Liability Act*
14.	*CEX*	*Readiness and Emergency Management*
15.	*CFR*	*Code of Federal Regulations*
16.	*CGP*	*Construction General Permit (USEPA NPDES)*
17.	*HAZMAT*	*Hazardous Material*
18.	*IAW*	*In Accordance With*
19.	*JP*	*Jet Petroleum*
20.	*MDG*	*Medical Group*
21.	*SGPB*	*Bioenvironmental Engineering*
22.	*MS4*	*Municipal Separate Sanitary Sewer System*
23.	*MSG*	*Mission Support Group*
24.	*MSGP*	*Multi-Sector General Permit*
25.	*MXG*	*Maintenance Group*
26.	*NFIRS*	*National Fire Incident Reporting System*
27.	*NOI*	*Notice of Intent*
28.	*NOT*	*Notice of Termination*
29.	*NPDES*	*National Pollution Discharge Elimination System*
30.	*OG*	*Operations Group*
31.	*O/W*	*Oil/Water*
32.	*POL*	*Petroleum, Oils, and Lubricants*
33.	*SCAT*	*Secondarily Contained Above Ground Storage Tank*
34.	*SIC*	*Standard Industrial Classification*
35.	*SUPS/LGSDH*	*HAZMAT Pharmacy*
36.	*SWGM*	*Storm Water Guidance Manual*
37.	*SWPPT*	*Storm Water Pollution Prevention Team*
38.	*SWPPP*	*Storm Water Pollution Prevention Plan*
39.	*UIC*	*Underground Injection Well*
40.	*USAF*	*United States Air Force*
41.	*USEPA*	*United States Environmental Protection Agency*

42. *USGS* *United States Geological Survey*
43. *WAC* *Washington Administrative Code*

10.0 DEFINITIONS

Standard Definitions

(Applicable to all AF Installations)

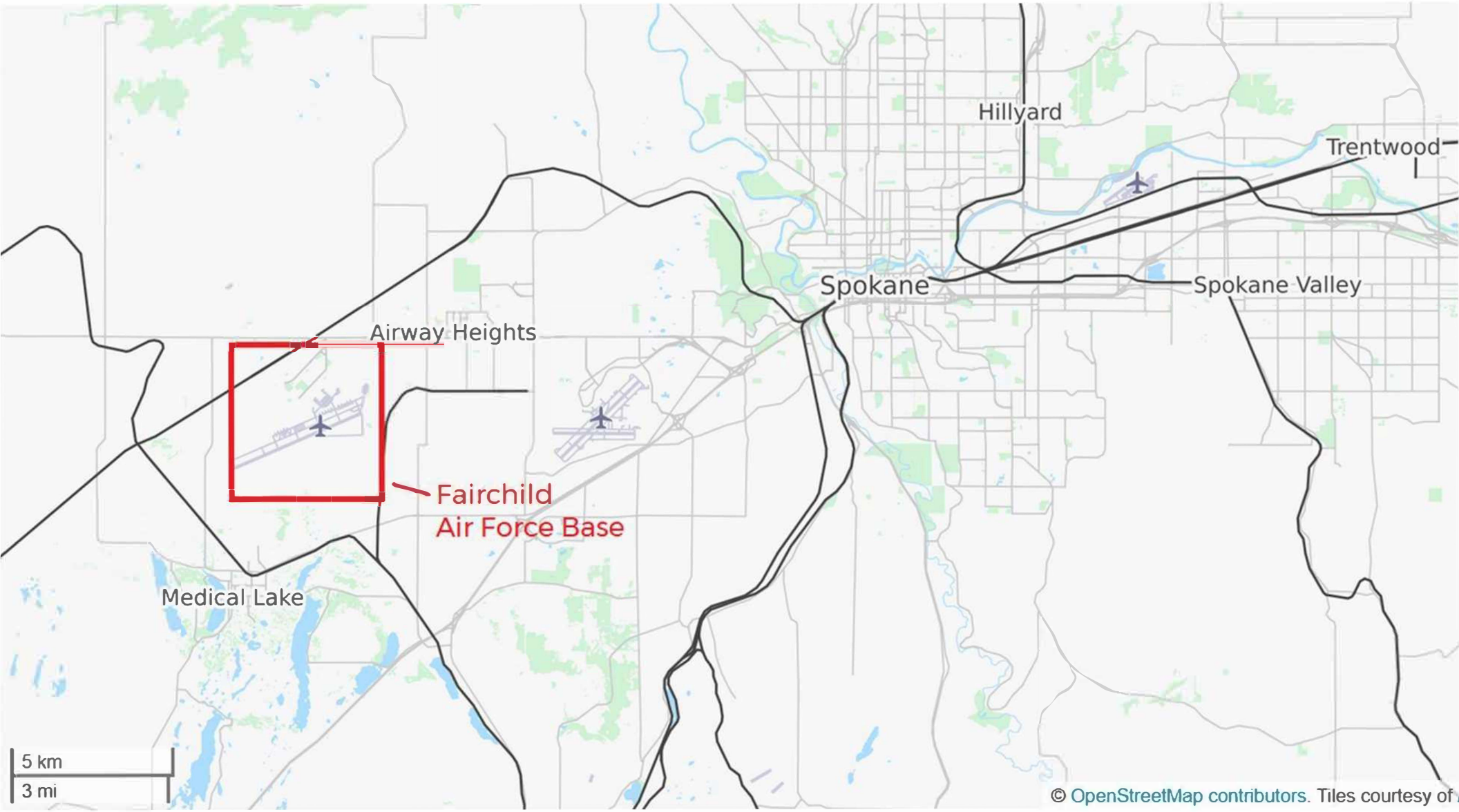
- Water Quality Playbook Definition Section

11.0 INSTALLATION – SPECIFIC CONTENT

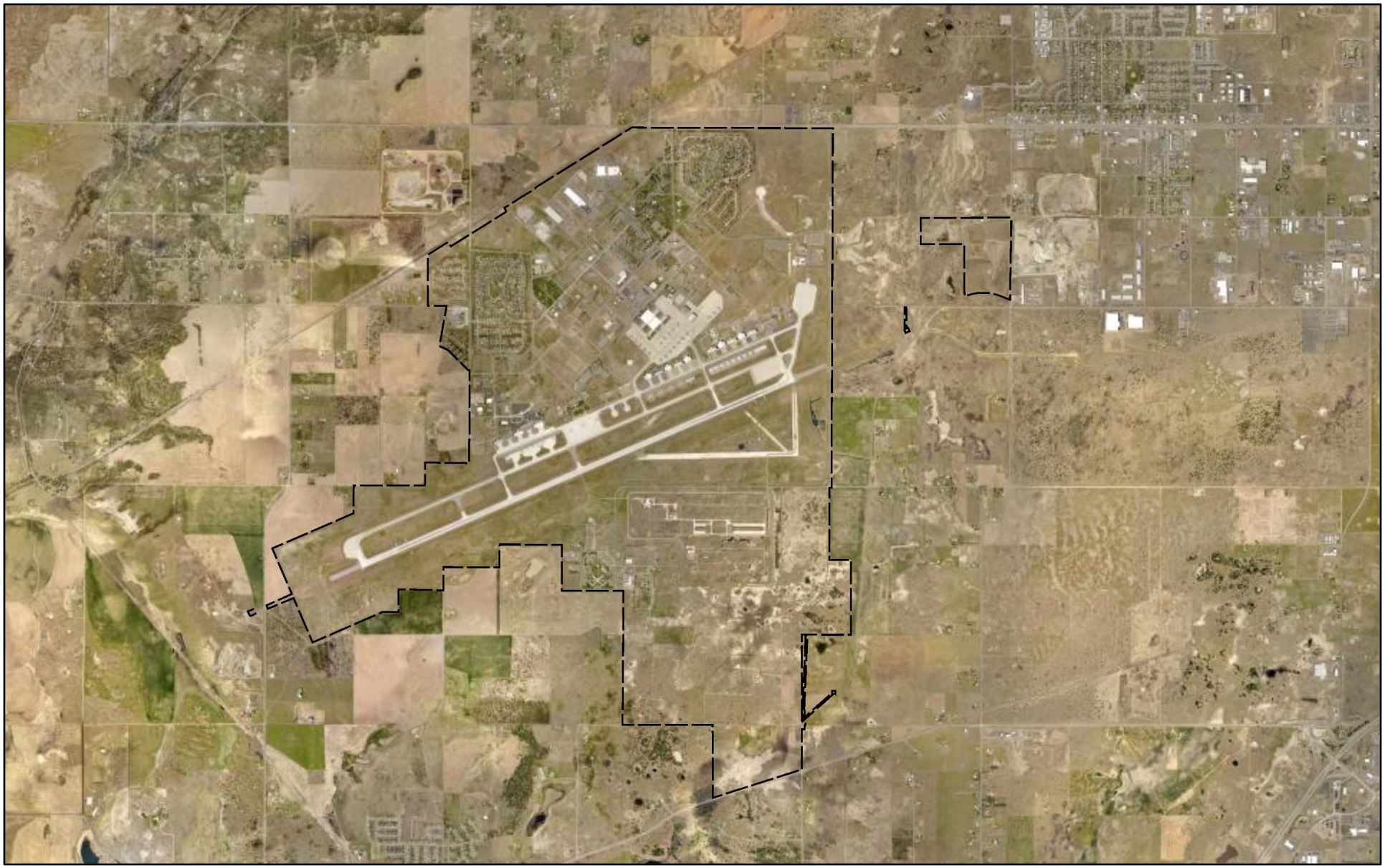
FAFB uses Class V underground injection (UIC) wells throughout the base as part of the storm water system. Unlike storm water, the State of Washington has primacy over UIC wells. WAC 173-218-090 states that all UIC wells must be inventoried, registered, and assessed. A complete inventory and assessment of UIC wells on FAFB and FAFB controlled outlying areas was completed in June 2011. A total of 96 UIC wells were identified, assessed, and registered. It was determined that most of the wells on FAFB fall within a Critical Aquifer Recharge Area (CARA). All of the UIC wells meet the requirements in the State of Washington CARA Guidance Document and the Spokane County Critical Areas Ordinance. All of the wells identified for registration meet the assessment standard and do not pose a high threat to groundwater.

APPENDICES

Appendix A. General Location Map and Site Maps


Hillyard
Trentwood
Spokane
Spokane Valley
Airway Heights
Fairchild
Air Force Base
Medical Lake
5 km
3 mi
© OpenStreetMap contributors. Tiles courtesy of

GeoBase Web Mapping



December 9, 2021

Base Boundary

1:72,224

0 0.4 0.8 1.6 mi

0 0.5 1 2 km

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Appendix B. Significant Spills

RECORD OF SIGNIFICANT SPILL OR LEAK

Completed By	Bill Shelton
Title	Water Quality and Tanks Program Manager
Date of Release	May 5, 2018

Directions: Record below all significant spills and significant leaks of toxic or hazardous pollutant that have occurred at Fairchild AFB in the three years prior to the effective date of the permit.

Definitions: Significant spills include, but not limited to, releases of oil or hazardous substances in excess of reportable quantities.

	Location Description:	Type of Material and Quantity Spilled/Leaked:	Source (if known) and Reason for Spill/Leak:
Spill or (Leak) (circle one)	Aircraft fuel hydrant system. Adjacent to Hangar 1009	Jet-A fuel / 8,964 gallons	Defueled aircraft / aircraft fuel hydrant system. Lack of communication prior to and during aircraft defueling operations.

Preventative Measures Taken to Prevent Reoccurrence:

Improved communications between the MOC, Airfield Management, 92 LRS/Fuels, and 92 CES/Water and Fuels Maintenance

Amount of Material Recovered:	Material No Longer Exposed to Stormwater:	Briefed to the SWPPT:	Reported to Regulating Agency (if yes, describe)
4,575 gallons	(True) False (circle one)	True / False (circle one)	Yes. Washington State Department of Ecology

Additional Information:

On 5 May 2018, an aircraft was defueled using a fueling system that is temporarily out of commission due to issues at a fuel pit. The aircraft had 13,539 gallons of Jet A fuel defueled. On 6 May 2018, personnel aware that the system shouldn't be used were alerted to the defueling that occurred the day prior. The system was inspected and a spill was discovered at the fuel pit. The base fire department was called. Fuels, operations, and environmental personnel were contacted to contain the situation. 4,575 gallons of fuel was in the system and recovered. Due to the system leak in the fuel pit, 8,964 gallons of fuel was released to the environment. The 8,964 gallons of fuel reached soil that surrounded the fuel pit. The fuel was absorbed into the ground, the area impacted was 6,500 square feet. No fuel reached waterways.

RECORD OF SIGNIFICANT SPILL OR LEAK

Completed By	
Title	
Date of Release	

Directions: Record below all significant spills and significant leaks of toxic or hazardous pollutant that have occurred at Fairchild AFB in the three years prior to the effective date of the permit.

Definitions: Significant spills include, but not limited to, releases of oil or hazardous substances in excess of reportable quantities.

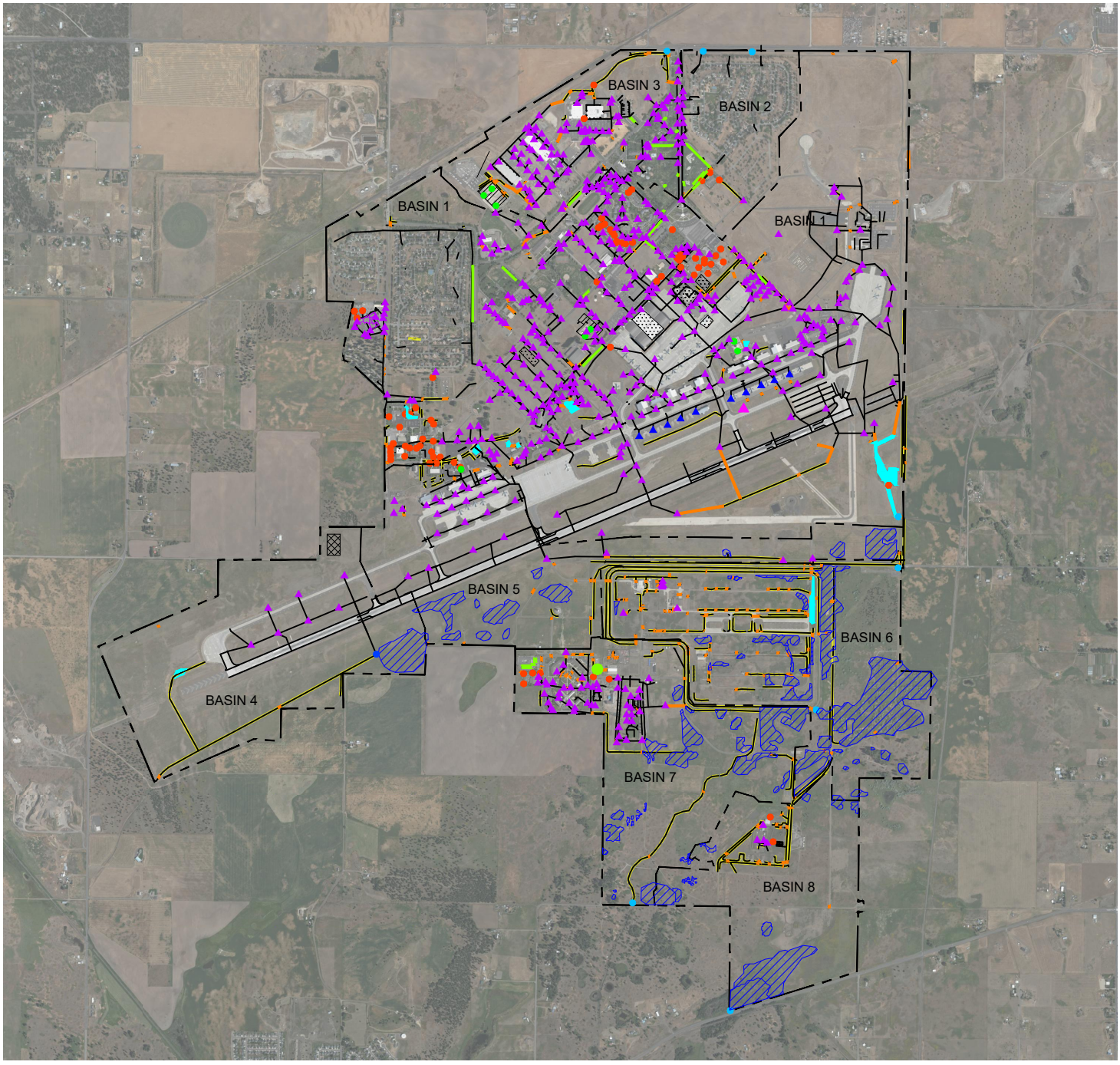
Spill or Leak (circle one)	Location Description:	Type of Material and Quantity Spilled/Leaked:	Source (If known) and Reason for Spill/Leak:

Preventative Measures Taken to Prevent Reoccurrence:

Amount of Material Recovered:	Material No Longer Exposed to Stormwater:	Briefed to the SWPPT:	Reported to Regulating Agency (if yes, describe)
	True / False (circle one)	True / False (circle one)	

Additional Information:

Appendix C. Drainage Maps



LEGEND:

- SITE BOUNDARY
- DRAINAGE BASIN BOUNDARY
- STORM PIPE
- CULVERT
- OPEN CHANNEL/DITCH
- GRASS PERCOLATION AREAS

- STORM SEWER DRAINAGE BASIN
- WETLAND AREA
- EQUIPMENT STORAGE
- LOADING/UNLOADING
- LANDFILL
- HOSPITAL FOUNDATION DEWATERING

- UIC WELL
- STORM STRUCTURE
- DISCHARGE POINT
- AM1 SAMPLING POINT
- LIQUID STORAGE
- SIGNIFICANT SPILL
- STORM VALVE

N

1" = 1500' scale 1500 0 1500 3000 feet

WSP USA Inc.
33301 9th Avenue South
Suite 300
Federal Way, WA 98003-2600
TEL: (206) 431-2300
FAX: (206) 431-2250

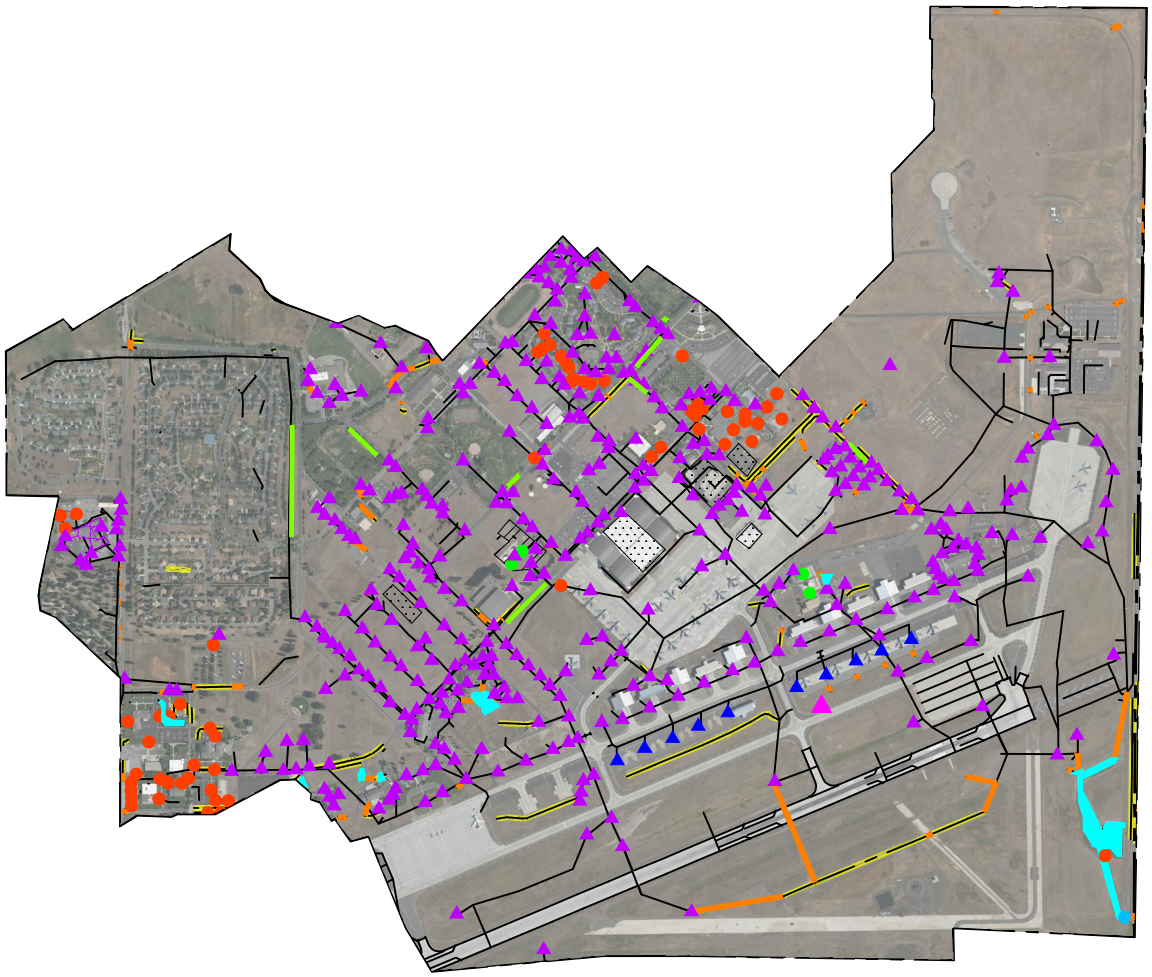
DRAWN BY _____
DESIGN BY _____
CHECK BY _____
PROJ MGR _____

FAIRCHILD AIR FORCE BASE

SWPPP UPDATE

STORMWATER SITE MAP - OVERALL

DRAWING NO. _____
PROJECT NO. _____
DATE: _____
SHEET NO. _____



LEGEND:

- SITE BOUNDARY
- DRAINAGE BASIN BOUNDARY
- STORM PIPE
- CULVERT
- OPEN CHANNEL/DITCH
- GRASS PERCOLATION AREAS
- STORM SEWER DRAINAGE BASIN
- WETLAND AREA
- EQUIPMENT STORAGE
- LOADING/UNLOADING
- LANDFILL
- HOSPITAL FOUNDATION DEWATERING
- UIC WELL
- STORM STRUCTURE
- DISCHARGE POINT
- AM1 SAMPLING POINT
- LIQUID STORAGE
- SIGNIFICANT SPILL
- STORM VALVE

N

1" = 1000' scale

1000 0 1000 2000 feet

WSP USA Inc.
33301 9th Avenue South
Suite 300
Federal Way, WA 98003-2600
TEL: (206) 431-2300
FAX: (206) 431-2250

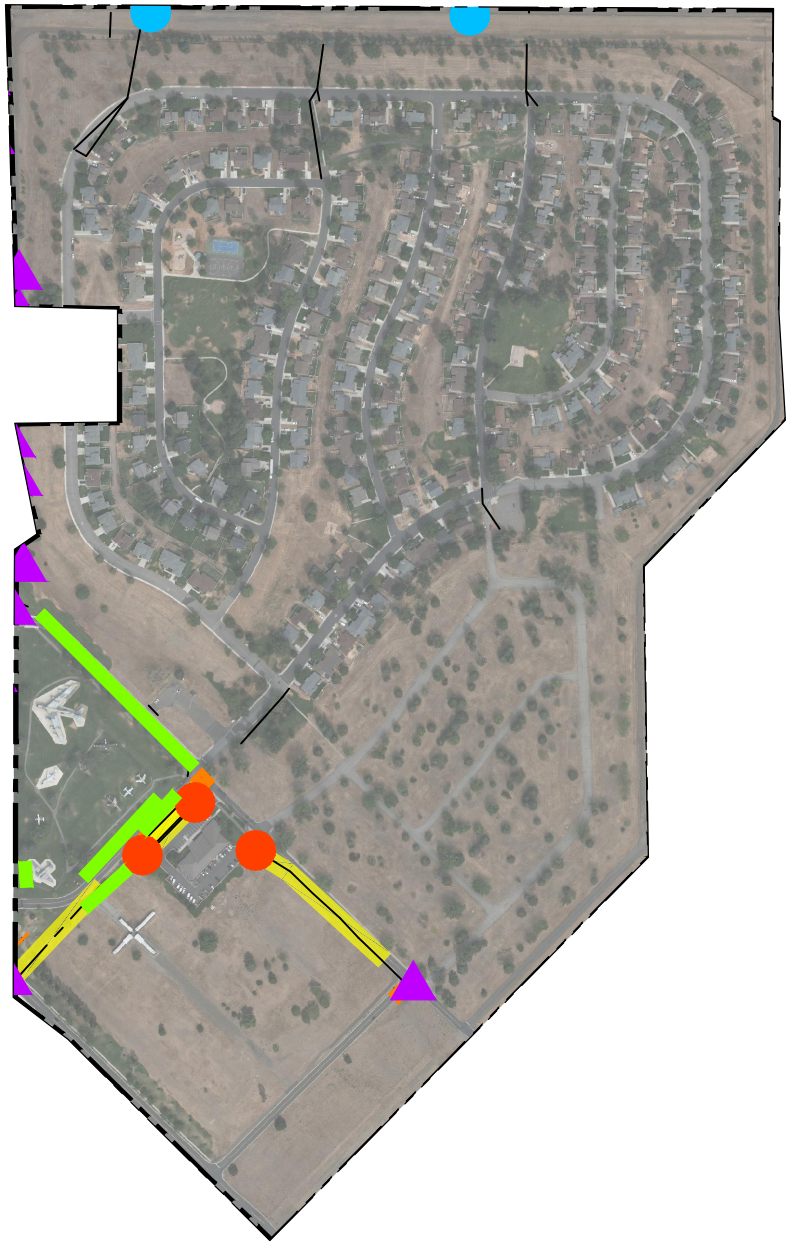
DRAWN BY _____
DESIGN BY _____
CHECK BY _____
PROJ MGR _____

FAIRCHILD AIR FORCE BASE

SWPPP UPDATE

STORMWATER SITE MAP - BASIN 1

DRAWING NO. _____
PROJECT NO. _____
DATE: _____
SHEET NO. _____



LEGEND:

- SITE BOUNDARY
- DRAINAGE BASIN BOUNDARY
- STORM PIPE
- CULVERT
- OPEN CHANNEL/DITCH
- GRASS PERCOLATION AREAS
- STORM SEWER DRAINAGE BASIN
- WETLAND AREA
- EQUIPMENT STORAGE
- LOADING/UNLOADING
- LANDFILL
- HOSPITAL FOUNDATION DEWATERING
- UIC WELL
- STORM STRUCTURE
- DISCHARGE POINT
- AM1 SAMPLING POINT
- LIQUID STORAGE
- SIGNIFICANT SPILL
- STORM VALVE

N

1" = 300'

300 0 300 600

scale feet

WSP USA Inc.
33301 9th Avenue South
Suite 300
Federal Way, WA 98003-2600
TEL: (206) 431-2300
FAX: (206) 431-2250

DRAWN BY _____

DESIGN BY _____

CHECK BY _____

PROJ MGR _____

FAIRCHILD AIR FORCE BASE

SWPPP UPDATE

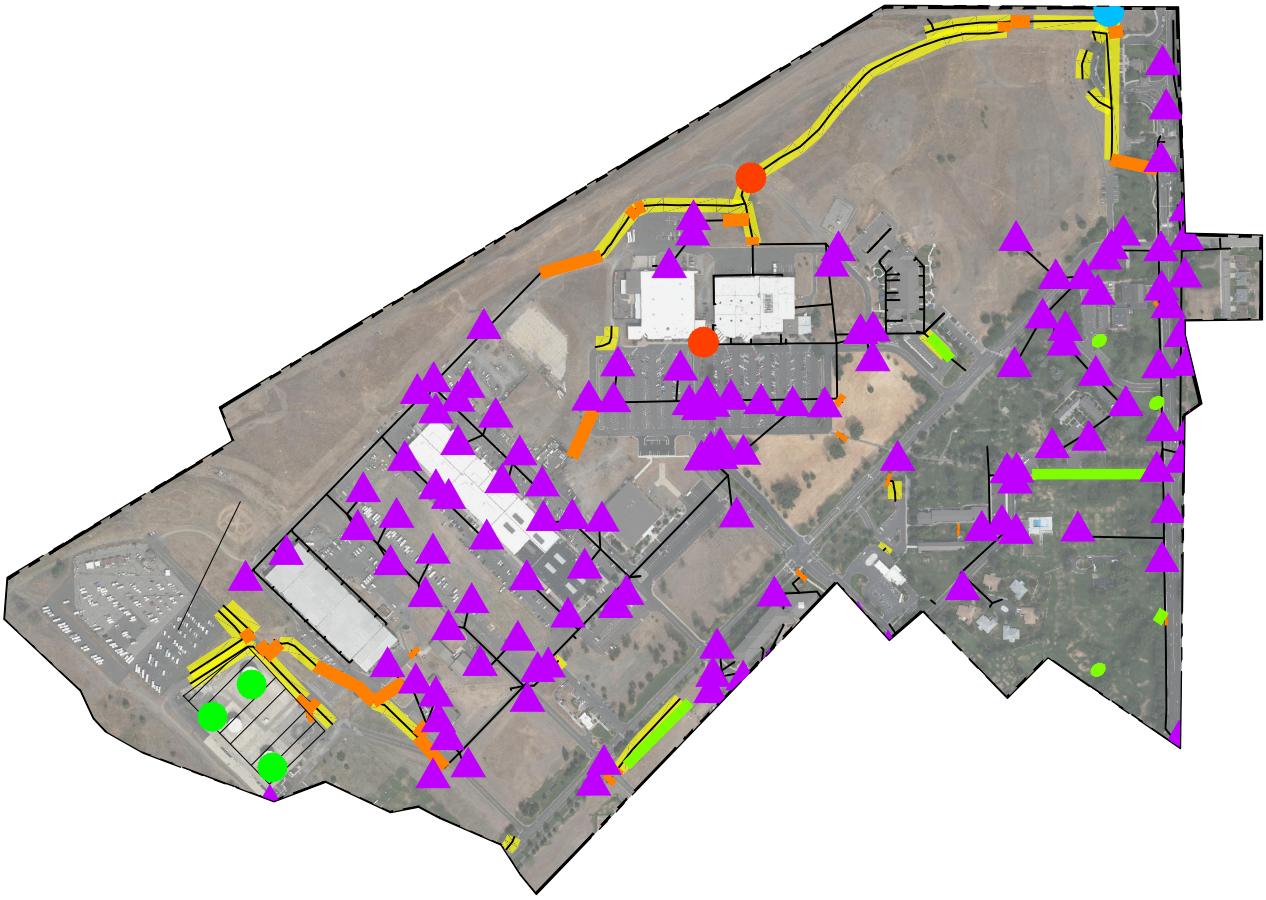
STORMWATER SITE MAP - BASIN 2

DRAWING NO. _____

PROJECT NO. _____

DATE: _____

SHEET NO. _____



LEGEND:

- SITE BOUNDARY
- DRAINAGE BASIN BOUNDARY
- STORM PIPE
- CULVERT
- OPEN CHANNEL/DITCH
- GRASS PERCOLATION AREAS
- STORM SEWER DRAINAGE BASIN
- WETLAND AREA
- EQUIPMENT STORAGE
- LOADING/UNLOADING
- LANDFILL
- HOSPITAL FOUNDATION DEWATERING
- UIC WELL
- STORM STRUCTURE
- DISCHARGE POINT
- AM1 SAMPLING POINT
- LIQUID STORAGE
- SIGNIFICANT SPILL
- STORM VALVE

N

1" = 400' scale

400 0 400 800 feet

WSP USA Inc.
33301 9th Avenue South
Suite 300
Federal Way, WA 98003-2600
TEL: (206) 431-2300
FAX: (206) 431-2250

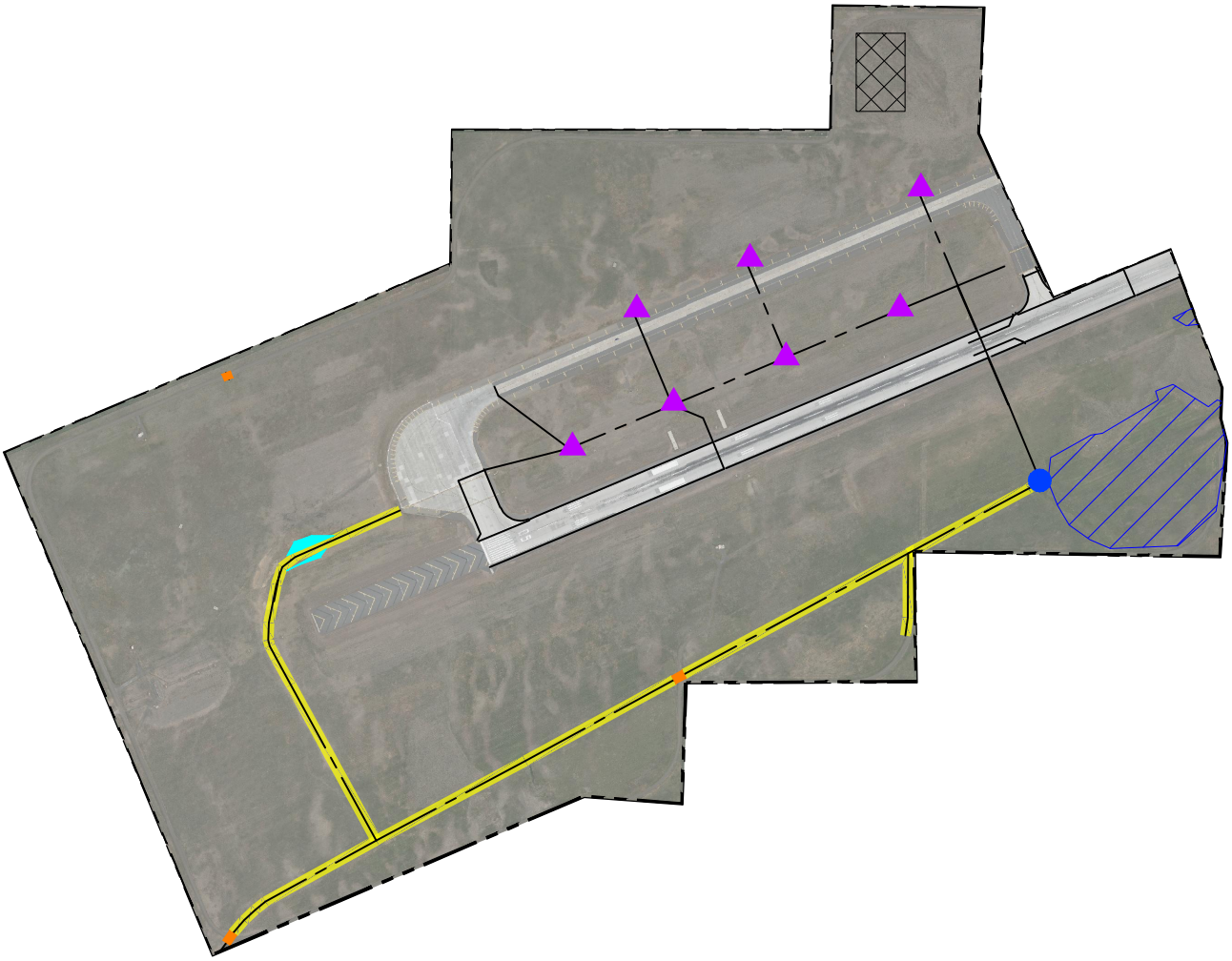
DRAWN BY _____
DESIGN BY _____
CHECK BY _____
PROJ MGR _____

FAIRCHILD AIR FORCE BASE

SWPPP UPDATE

STORMWATER SITE MAP - BASIN 3

DRAWING NO. _____
PROJECT NO. _____
DATE: _____
SHEET NO. _____



LEGEND:

- SITE BOUNDARY
- DRAINAGE BASIN BOUNDARY
- STORM PIPE
- CULVERT
- OPEN CHANNEL/DITCH
- GRASS PERCOLATION AREAS
- STORM SEWER DRAINAGE BASIN
- WETLAND AREA
- EQUIPMENT STORAGE
- LOADING/UNLOADING
- LANDFILL
- HOSPITAL FOUNDATION DEWATERING
- UIC WELL
- STORM STRUCTURE
- DISCHARGE POINT
- AM1 SAMPLING POINT
- LIQUID STORAGE
- SIGNIFICANT SPILL
- STORM VALVE

1" = 500' scale

500 0 500 1000 feet

WSP USA Inc.
33301 9th Avenue South
Suite 300
Federal Way, WA 98003-2600
TEL: (206) 431-2300
FAX: (206) 431-2250

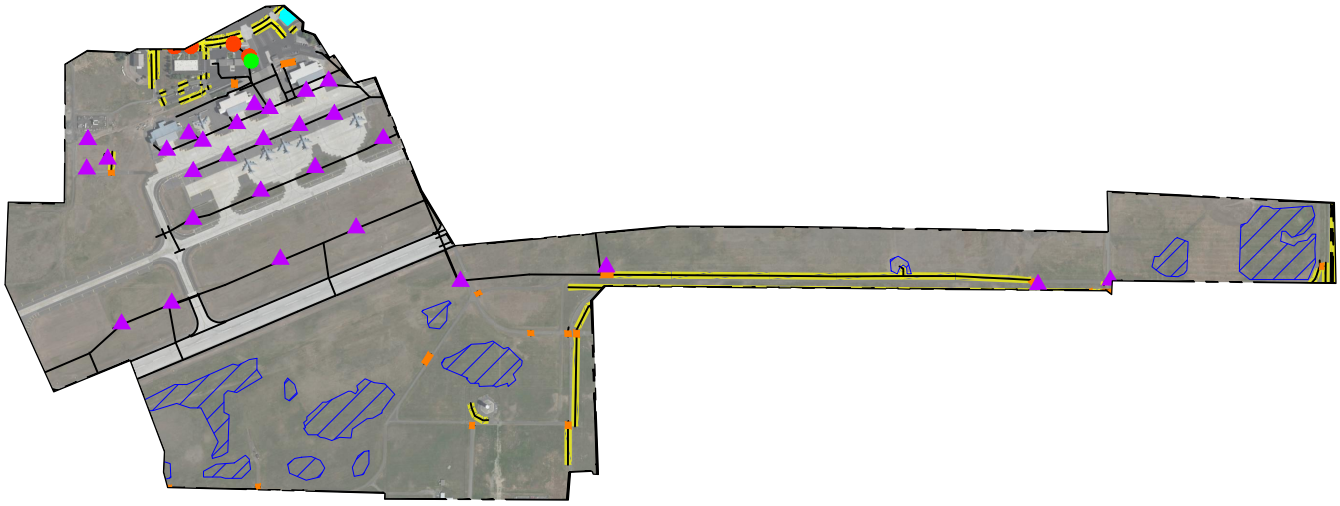
DRAWN BY _____
DESIGN BY _____
CHECK BY _____
PROJ MGR _____

FAIRCHILD AIR FORCE BASE

SWPPP UPDATE

STORMWATER SITE MAP - BASIN 4

DRAWING NO. _____
PROJECT NO. _____
DATE: _____
SHEET NO. _____



LEGEND:

- SITE BOUNDARY
- DRAINAGE BASIN BOUNDARY
- STORM PIPE
- CULVERT
- OPEN CHANNEL/DITCH
- GRASS PERCOLATION AREAS
- STORM SEWER DRAINAGE BASIN
- WETLAND AREA
- EQUIPMENT STORAGE
- LOADING/UNLOADING
- LANDFILL
- HOSPITAL FOUNDATION DEWATERING
- UIC WELL
- STORM STRUCTURE
- DISCHARGE POINT
- AM1 SAMPLING POINT
- LIQUID STORAGE
- SIGNIFICANT SPILL
- STORM VALVE

N

1" = 800' scale

800 0 800 1600 feet

WSP USA Inc.
33301 9th Avenue South
Suite 300
Federal Way, WA 98003-2600
TEL: (206) 431-2300
FAX: (206) 431-2250

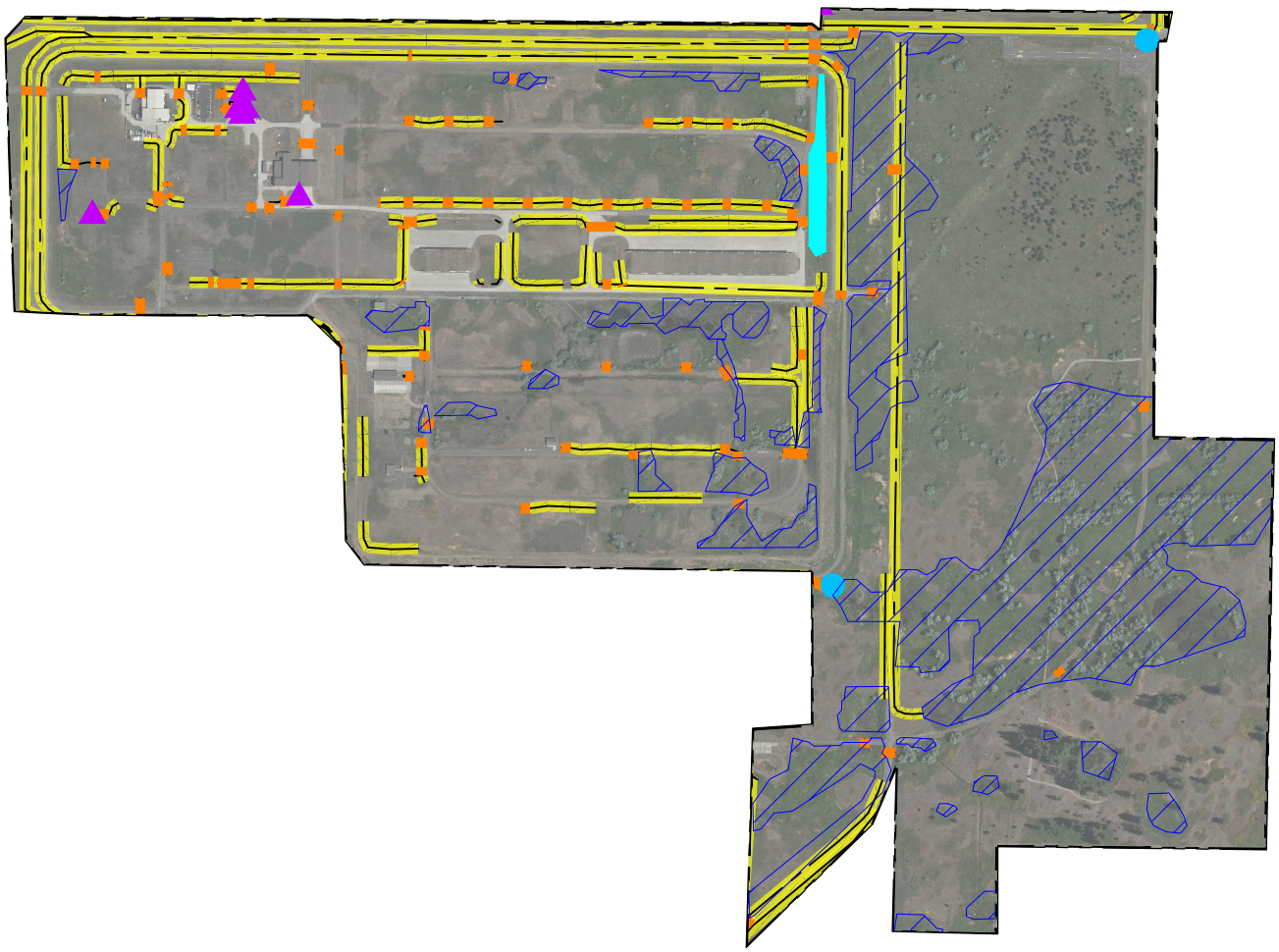
DRAWN BY _____
DESIGN BY _____
CHECK BY _____
PROJ MGR _____

FAIRCHILD AIR FORCE BASE

SWPPP UPDATE

STORMWATER SITE MAP - BASIN 5

DRAWING NO. _____
PROJECT NO. _____
DATE: _____
SHEET NO. _____



LEGEND:

- SITE BOUNDARY
- DRAINAGE BASIN BOUNDARY
- STORM PIPE
- CULVERT
- OPEN CHANNEL/DITCH
- GRASS PERCOLATION AREAS
- STORM SEWER DRAINAGE BASIN
- WETLAND AREA
- EQUIPMENT STORAGE
- LOADING/UNLOADING
- LANDFILL
- HOSPITAL FOUNDATION DEWATERING
- UIC WELL
- STORM STRUCTURE
- DISCHARGE POINT
- AM1 SAMPLING POINT
- LIQUID STORAGE
- SIGNIFICANT SPILL
- STORM VALVE

N

1" = 500' scale

500 0 500 1000 feet

WSP USA Inc.
33301 9th Avenue South
Suite 300
Federal Way, WA 98003-2600
TEL: (206) 431-2300
FAX: (206) 431-2250

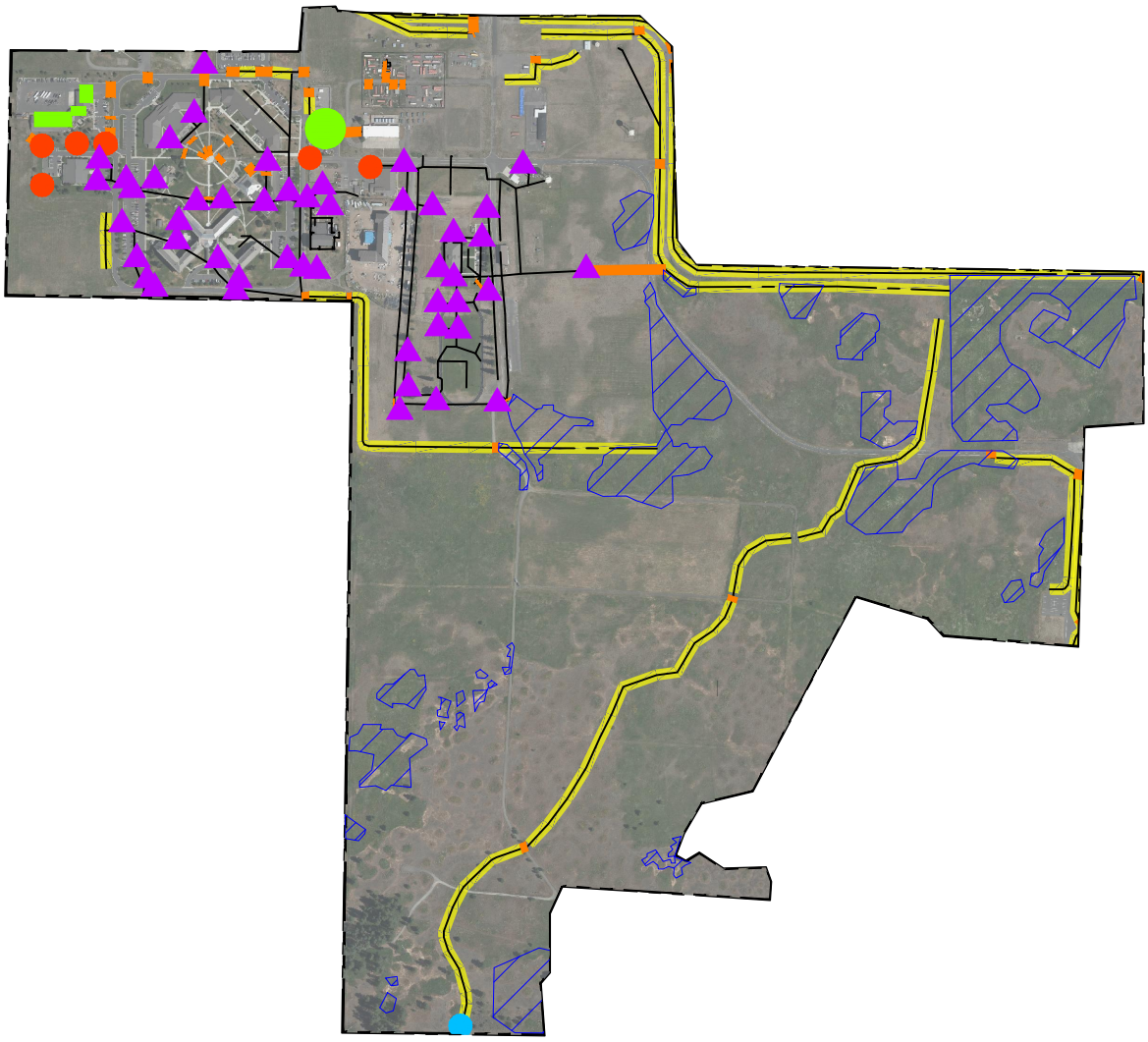
DRAWN BY _____
DESIGN BY _____
CHECK BY _____
PROJ MGR _____

FAIRCHILD AIR FORCE BASE

SWPPP UPDATE

STORMWATER SITE MAP - BASIN 6

DRAWING NO. _____
PROJECT NO. _____
DATE: _____
SHEET NO. _____



LEGEND:

- SITE BOUNDARY
- DRAINAGE BASIN BOUNDARY
- STORM PIPE
- CULVERT
- OPEN CHANNEL/DITCH
- GRASS PERCOLATION AREAS
- STORM SEWER DRAINAGE BASIN
- WETLAND AREA
- EQUIPMENT STORAGE
- LOADING/UNLOADING
- LANDFILL
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- UIC WELL
- STORM STRUCTURE
- DISCHARGE POINT
- AM1 SAMPLING POINT
- LIQUID STORAGE
- SIGNIFICANT SPILL
- STORM VALVE

N

1" = 500' scale

500 0 500 1000 feet

WSP USA Inc.
33301 9th Avenue South
Suite 300
Federal Way, WA 98003-2600
TEL: (206) 431-2300
FAX: (206) 431-2250

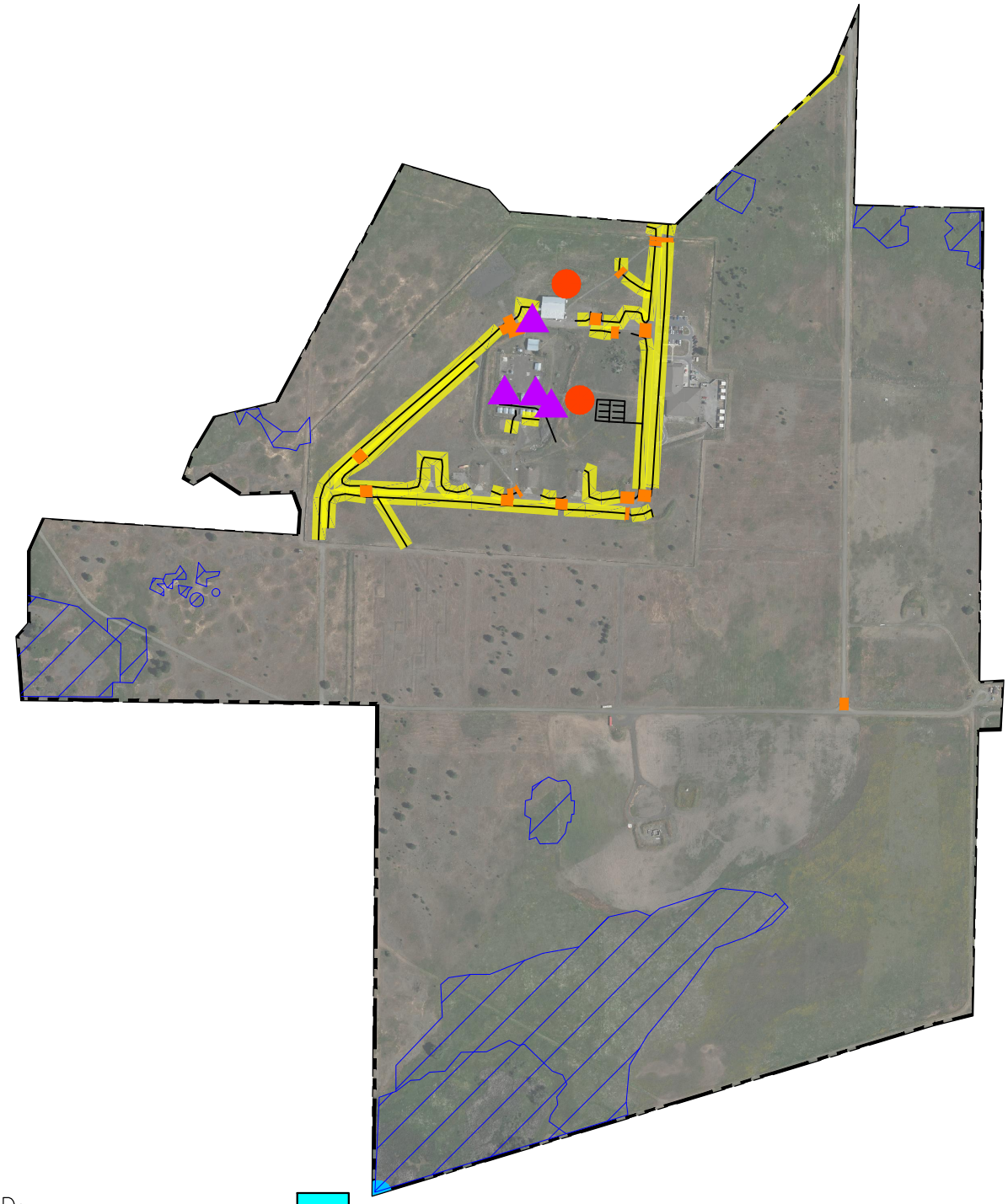
DRAWN BY _____
DESIGN BY _____
CHECK BY _____
PROJ MGR _____

FAIRCHILD AIR FORCE BASE

SWPPP UPDATE

STORMWATER SITE MAP - BASIN 7

DRAWING NO. _____
PROJECT NO. _____
DATE: _____
SHEET NO. _____



LEGEND:

- SITE BOUNDARY
- DRAINAGE BASIN BOUNDARY
- STORM PIPE
- CULVERT
- OPEN CHANNEL/DITCH
- GRASS PERCOLATION AREAS
- STORM SEWER DRAINAGE BASIN
- WETLAND AREA
- EQUIPMENT STORAGE
- LOADING/UNLOADING
- LANDFILL
- HOSPITAL FOUNDATION DEWATERING
- UIC WELL
- STORM STRUCTURE
- DISCHARGE POINT
- AM1 SAMPLING POINT
- LIQUID STORAGE
- SIGNIFICANT SPILL
- STORM VALVE

N

1" = 350'

350 0 350 700

scale feet

WSP USA Inc.
33301 9th Avenue South
Suite 300
Federal Way, WA 98003-2600
TEL: (206) 431-2300
FAX: (206) 431-2250

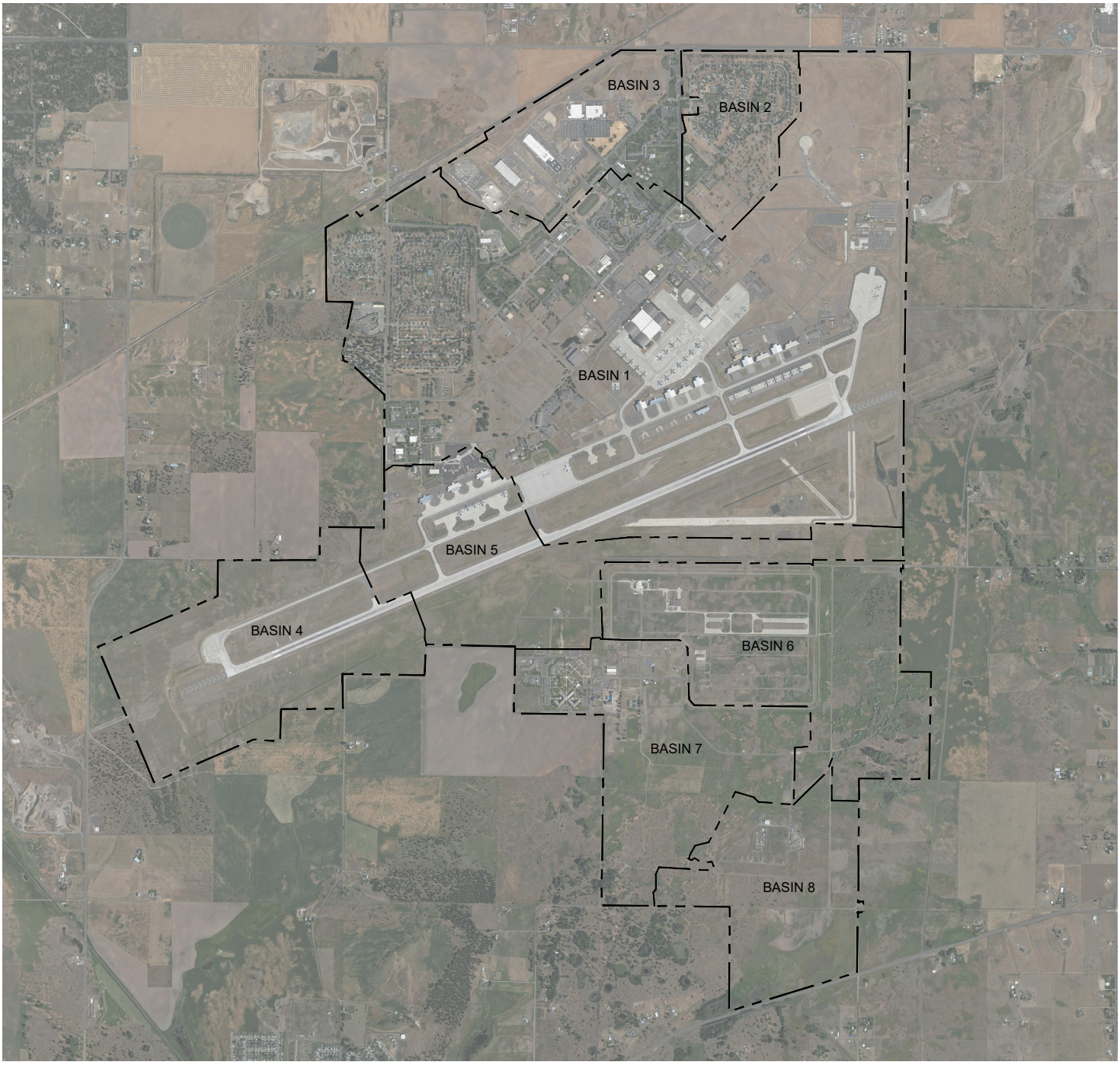
DRAWN BY _____
DESIGN BY _____
CHECK BY _____
PROJ MGR _____

FAIRCHILD AIR FORCE BASE

SWPPP UPDATE

STORMWATER SITE MAP - BASIN 8

DRAWING NO. _____
PROJECT NO. _____
DATE: _____
SHEET NO. _____



LEGEND:

SITE BOUNDARY

DRAINAGE BASIN BOUNDARY

1" = 1500'

1500 0 1500 3000

scale feet

WSP USA Inc.
33301 9th Avenue South
Suite 300
Federal Way, WA 98003-2600
TEL: (206) 431-2300
FAX: (206) 431-2250

DRAWN BY _____

DESIGN BY _____

CHECK BY _____

PROJ MGR _____

FAIRCHILD AIR FORCE BASE

SWPPP UPDATE

STORMWATER SITE MAP - OVERALL

DRAWING NO. _____

PROJECT NO. _____

DATE: _____

SHEET NO. _____

Appendix D. Inspection Reports

QUARTERLY SW-1 LANDFILL INSPECTION

92 CES/CEIE, ENVIRONMENTAL ELEMENT

FAIRCHILD AFB

Quarter and Year:	___ Qtr / 20__	**Date and Time:**	_____ / ____	**Weather:**	__° _____

Item		**Yes**	**No**	**Comments**
1.	Are there any areas on the landfill surface that indicate signs of subsidence?			
1a.	Are there visible low areas on the landfill surface where significant amounts of standing water can accumulate during significant precipitation events?			
1b.	Are there any obvious large cracks on the surface of the landfill?			
2.	Are there any signs of erosion on the landfill surface?			
2a.	Is there evidence of dust blowing off the landfill surface during windy conditions?			
2b.	Is there any evidence of erosion caused by storm water runoff?			
3.	Does the landfill surface support a continuous vegetative cover?			
3a.	Are there any bare spots in the vegetative cover?			
3b.	Are there any areas of abnormal weed growth crowding out natural vegetation?			
4.	Does the outfall show any signs or indicators of storm water pollution (sheen, color, odor, foam, solids, etc)?			

NOTE: Landfill SW-1 does not have an engineered cover

Signature:

Inspector:

Date:

QUARTERLY VISUAL MONITORING FORM

Fairchild AFB Storm Water

Fill out a separate form for each sample collected (one form per outfall)

Drainage Basin:	**1 - F/L Ponds**	**Quarter and Year:**	**__ Qtr / 20__**	**Qualifying Event:**	**Yes**		**No**		**Rainfall:**		
Weather:	**__° _____**	**Date and Time of Collection/Examination:**		**_____ / ____**							
Person Collecting/Examining Sample:				**Runoff Source:**	Storm water						

This outfall could not be evaluated during this quarter due to the following reason(s):	(N/A) / Drought Conditions / Rainfall Occurred During Night / Dangerous Conditions Exist Other: No available qualifing event

Signature:

Inspector:

Date:

Parameter	Description	Yes	No	Characteristics					
Color	Does the water appear to be colored?			Describe:					
Odor	Does the water have an odor?			Describe:					
Clarity	Is the water clear or transparent?			Which of the following best describes the clarity of the sample?					
				Discolored		Clear		Opaque	
Floating Solids	Are there any objects floating on the surface of the sample?			Describe:					
Settled Solids	Are there any solids settled on the bottom of the sample?			Describe:					
Suspended Solids	Are there any objects suspended in the water column or sample?			Describe:					
Foam	Is there foam forming on the top of the water?			Describe:					

Parameter (cont.)	Description (cont.)	Yes	No	Characteristics (cont.)					
Oil Sheen	Can you see a rainbow effect of sheen on the water surface?			Iridescent		Oily		Silver	
				N/A		Other:			
Other Indicators of storm water pollution	Can you see any other obvious indications of pollution in the sample?			Describe:					

Signature:

Inspector:
Date:

QUARTERLY VISUAL MONITORING FORM

Fairchild AFB Storm Water

Fill out a separate form for each sample collected (one form per outfall)

Drainage Basin:	**3 - Main Gate**	**Quarter and Year:**	**__ Qtr / 20__**	**Qualifying Event:**	**Yes**		**No**		**Rainfall:**		
Weather:	**__ ° _____**	**Date and Time of Collection/Examination:**		**_____ / ____**							
Person Collecting/Examining Sample:				**Runoff Source:**	Storm water						

This outfall could not be evaluated during this quarter due to the following reason(s):	(N/A) / Drought Conditions / Rainfall Occurred During Night / Dangerous Conditions Exist Other: No available qualifing event

Signature:

Inspector:

Date:

Parameter	Description	Yes	No	Characteristics					
Color	Does the water appear to be colored?			Describe:					
Odor	Does the water have an odor?			Describe:					
Clarity	Is the water clear or transparent?			Which of the following best describes the clarity of the sample?					
				Discolored		Clear		Opaque	
Floating Solids	Are there any objects floating on the surface of the sample?			Describe:					
Settled Solids	Are there any solids settled on the bottom of the sample?			Describe:					
Suspended Solids	Are there any objects suspended in the water column or sample?			Describe:					
Foam	Is there foam forming on the top of the water?			Describe:					

Parameter (cont.)	Description (cont.)	Yes	No	Characteristics (cont.)					
Oil Sheen	Can you see a rainbow effect of sheen on the water surface?			Iridescent		Oily		Silver	
				N/A		Other:			
Other Indicators of storm water pollution	Can you see any other obvious indications of pollution in the sample?			Describe:					

Signature:

Inspector:
Date:

QUARTERLY VISUAL MONITORING FORM

Fairchild AFB Storm Water

Fill out a separate form for each sample collected (one form per outfall)

Drainage Basin:	**6 - Nature Trail**	**Quarter and Year:**	**__ Qtr / 20__**	**Qualifying Event:**	**Yes**		**No**		**Rainfall:**		
Weather:	**__ ° _____**	**Date and Time of Collection/Examination:**		**_____ / ____**							
Person Collecting/Examining Sample:				**Runoff Source:**	Storm water						

This outfall could not be evaluated during this quarter due to the following reason(s):	(N/A) / Drought Conditions / Rainfall Occurred During Night / Dangerous Conditions Exist Other: No available qualifing event

Signature:

Inspector:

Date:

Parameter	Description	Yes	No	Characteristics					
Color	Does the water appear to be colored?			Describe:					
Odor	Does the water have an odor?			Describe:					
Clarity	Is the water clear or transparent?			Which of the following best describes the clarity of the sample?					
				Discolored		Clear		Opaque	
Floating Solids	Are there any objects floating on the surface of the sample?			Describe:					
Settled Solids	Are there any solids settled on the bottom of the sample?			Describe:					
Suspended Solids	Are there any objects suspended in the water column or sample?			Describe:					
Foam	Is there foam forming on the top of the water?			Describe:					

Parameter (cont.)	Description (cont.)	Yes	No	Characteristics (cont.)					
Oil Sheen	Can you see a rainbow effect of sheen on the water surface?			Iridescent		Oily		Silver	
				N/A		Other:			
Other Indicators of storm water pollution	Can you see any other obvious indications of pollution in the sample?			Describe:					

Signature:

Inspector:
Date:

QUARTERLY VISUAL MONITORING FORM

Fairchild AFB Storm Water

Fill out a separate form for each sample collected (one form per outfall)

Drainage Basin:	**7 - WSA**	**Quarter and Year:**	**__ Qtr / 20__**	**Qualifying Event:**	**Yes**		**No**		**Rainfall:**		
Weather:	**__ ° _____**	**Date and Time of Collection/Examination:**		**_____ / ____**							
Person Collecting/Examining Sample:				**Runoff Source:**	Storm water						

This outfall could not be evaluated during this quarter due to the following reason(s):	(N/A) / Drought Conditions / Rainfall Occurred During Night / Dangerous Conditions Exist Other: No available qualifing event

Signature: N/A

Inspector: William W. Shelton, CIV, USAF

Date:

Parameter	Description	Yes	No	Characteristics					
Color	Does the water appear to be colored?			Describe:					
Odor	Does the water have an odor?			Describe:					
Clarity	Is the water clear or transparent?			Which of the following best describes the clarity of the sample?					
				Discolored		Clear		Opaque	
Floating Solids	Are there any objects floating on the surface of the sample?			Describe:					
Settled Solids	Are there any solids settled on the bottom of the sample?			Describe:					
Suspended Solids	Are there any objects suspended in the water column or sample?			Describe:					
Foam	Is there foam forming on the top of the water?			Describe:					

Parameter (cont.)	Description (cont.)	Yes	No	Characteristics (cont.)					
Oil Sheen	Can you see a rainbow effect of sheen on the water surface?			Iridescent		Oily		Silver	
				N/A		Other:			
Other Indicators of storm water pollution	Can you see any other obvious indications of pollution in the sample?			Describe:					

Signature:

Inspector:
Date:

ROUTINE FACILITY INSPECTION

Fairchild AFB - Storm Water

Facility Number: BXXXX

Drainage Basin:	_	**Occupant Information:**			
Weather:	__° _____	**Date and Time:**	/	**Quarter / Year:**	_____ / 20__
		Activity:			
	Non-Storm Water Discharge/Illicit Connection:		Yes / No	**Criteria ID Number:**	
	Storm Water Qualifying Event:		Yes / No	**Precipitation:**	"

OBSERVATIONS

Description of Discharges Occurring:	
Previously Unidentified Discharges and/or Pollutants from the Site:	
Evidence of or Potential for Pollutants Entering the Drainage System:	
Physical Condition of and around all Outfalls Including Evidence of Pollutants in Discharges and/or the Receiving Waters:	
Control Measures Needing Maintenance, Repairs, or Replacement:	

RECOMMENDATIONS

Additional Control Measures Needed to Comply with Permit Requirements:	

FINDINGS

Incidents of Noncompliance Observed:	

Signature:

Inspector:

Date:

Appendix E. Discharge Monitoring Reports

QUARTERLY VISUAL MONITORING FORM

Fairchild AFB Storm Water

Fill out a separate form for each sample collected (one form per outfall)

Drainage Basin:	**1 - F/L Ponds**	**Quarter and Year:**		**Qualifying Event:**	**Yes**		**No**		**Rainfall:**		
Weather:		**Date and Time of Collection/Examination:**									
Person Collecting/Examining Sample:				**Runoff Source:**							

This outfall could not be evaluated during this quarter due to the following reason(s):	N/A / Drought Conditions / Rainfall Occurred During Night / Dangerous Conditions Exist Other: No available qualifing event

Signature:

Inspector:

Date:

Parameter	Description	Yes	No	Characteristics					
Color	Does the water appear to be colored?			Describe:					
Odor	Does the water have an odor?			Describe:					
Clarity	Is the water clear or transparent?			Which of the following best describes the clarity of the sample?					
				Discolored		Clear		Opaque	
Floating Solids	Are there any objects floating on the surface of the sample?			Describe:					
Settled Solids	Are there any solids settled on the bottom of the sample?			Describe:					
Suspended Solids	Are there any objects suspended in the water column or sample?			Describe:					
Foam	Is there foam forming on the top of the water?			Describe:					

Parameter (cont.)	Description (cont.)	Yes	No	Characteristics (cont.)					
Oil Sheen	Can you see a rainbow effect of sheen on the water surface?			Iridescent		Oily		Silver	
				N/A		Other:			
Other Indicators of storm water pollution	Can you see any other obvious indications of pollution in the sample?			Describe:					

Storm Water Pollution Prevention Team Review:

Signature:

Inspector:

Date:

Appendix F. Training Materials

92d Air Refueling Wing

Aircraft Deicing Environmental Training

Bill Shelton
Environmental Compliance Manager
92 CES/CEIE, Environmental Element
(509) 247-8163 DSN: 657-8163

Agenda

- Definitions
- Regulatory Requirements
- Roles and Responsibilities
  - 92 CES/CEIE, Environmental Element
  - 92/141 AMXS and Aircraft Services Contractor
- Restricted Areas for Aircraft Deicing
- Weekly Inspection Checklist

Definitions

- **Aircraft Deicing**
  - Includes Deicing and Anti-Icing Activities
- **Dry Weather Conditions**
  - The Absence of Precipitation (i.e., rain, snow, or sleet) Occurring at the Time of the Deicing Process
- **Wet Weather Conditions**
  - The Presence of Precipitation Occurring at the Time of the Deicing/Anti-icing Process (snow/rain)
  - Conditions NOT Considered a Wet Weather Event:
    - Snowmelt
    - Accumulated Snow and Ice
    - Fog

Regulatory Requirements

- Clean Water Act
  - Increased Emphasis on U.S. Water Quality
    - Lead, PFAS, Infrastructure, etc.
- U.S. EPA National Pollutant Discharge Elimination System (NPDES) Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activities (MSGP)
  - Protects Waters of the U.S.
  - Specifically Targets A/C Deicing Operations During Dry Weather Conditions - ***Dry Weather Discharge Prohibited***
- FAFB Storm Water Pollution Prevention Plan (SWPPP)
  - A/C Deicing Application and Collection Program Management and Operational Processes of Documentation of Deicing Activities
  - Training Required for All Personnel Associated with Aircraft Deicing Operations

2020/21 Aircraft Deicing Study

1. Process Deficiency
   - Inadequate Spent A/C Deicing Fluid Collection Frequency
     - Recommendation
       - IAW Permit - Collect Spent A/C Deicing Fluid as *Soon as Practical* After A/C Departure
2. Infrastructure Deficiency
   - Stormwater Isolation Valves and Spent A/C Deicing Fluid Collection Tank/Pump System in Poor Condition
     - Recommendation
       - Replace/Upgrade Stormwater Isolation Valves and Collection Tank/Pump System

Roles/Responsibilities
92 CES/CEIE – Environmental Element

- Identify Applicable Environmental Regulations and Educate Organizations
- Advise Organizations on Best Management Practices (BMPs) to Prevent Contamination of Water Sources
- Conduct Periodic Reviews and Inspections
  - Records and documentation
  - Deicing operations
- Ensure Correct Disposal of Unused and Spent Deicer

Roles/Responsibilities

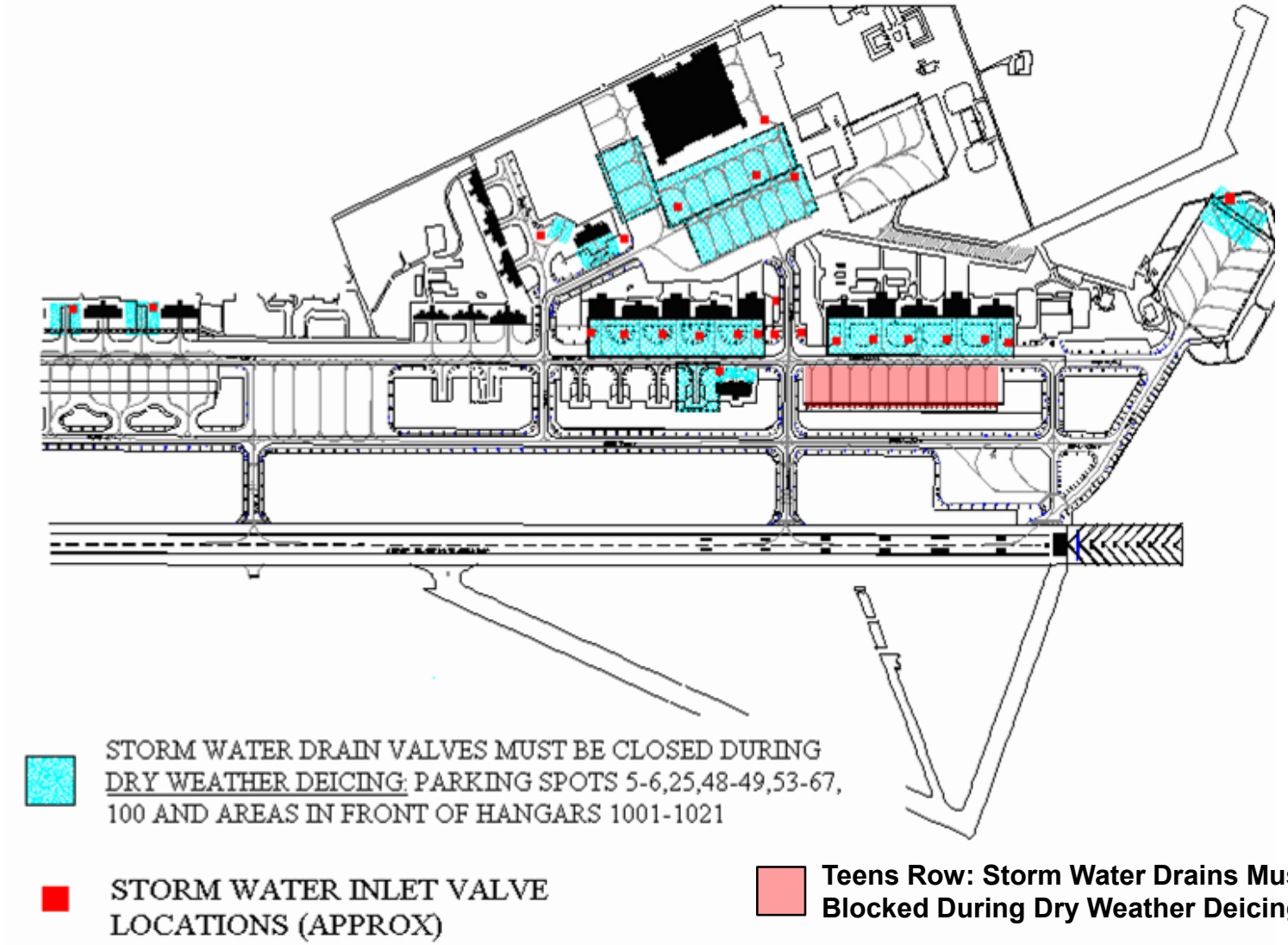
92/141 AMXS and Aircraft Services Contractor

- Ensure All Deicing Personnel are Trained for Aircraft Deicing Operations
- Evaluate Weather Conditions (Dry vs. Wet Weather)
  - Dry Weather Application
    - Ensure Storm Water Inlet Valves/Drains are Closed/Blocked Prior to Application
    - Document Quantities of Deicer Applied to Aircraft
      - Complete Deicing Vehicle Log Sheet
      - Annotate Application on On-Line *Deicing Log*
  - Wet Weather Application
    - Document quantities of deicer applied to aircraft
      - Complete Deicing Vehicle Log Sheet
      - Annotate Application on On-Line *Deicing Log*

Roles/Responsibilities
92/141 AMXS and Aircraft Services Contractor

- Ensure Expedient Collection of Spent Deicer
  - Transfer Spent Deicer to Holding Tank
- Document Quantities of Collected Spent Deicer
  - Complete Collection Vehicle Log Sheet
  - Annotate Collection on On-Line *Deicing Log*
- Open/Unblock Storm Water Inlet Valves
- Ensure MXG/AMXS Aircraft Deicing Operating Instructions (OI) are Updated and Current
- Perform Weekly Inspections of Deicing Areas
  - Maintain in Aircraft Deicing Team Files
- Retain *ALL* Deicing Records for 5 Years
  - May Be Longer for Aircraft Historical Records

Restricted Areas for A/C Deicing



Restricted Areas for A/C Deicing

Weekly Inspection Checklists

Area(s) Inspected :
50's, 60's, Teens Row, etc.
Parking Spots:
5-6, 25, 48-49, 53-67,100, H1001, H1021, etc.

2. Weekly Inspections Must Represent Season's Deicing Activities (Both "Wet" and "Dry" Conditions)

4.e. Untrained personnel are not authorized to applying deicer

Inspection Conducted By:
Management Responsibility. Do Not Delegate to Operators or Untrained Personnel

A/C DEICING/ANTI-ICING APPLICATION AND COLLECTION CHECKLIST

Weekly Inspection

Date_____ Time_____

1. Area(s) Inspected: _____ Parking Spot #s _____
2. Weather Conditions: Snow____ Rain____ Dry Weather____ Temp_____°F
3. Dry Weather Only:
   a. Are storm water drain valves closed if deicing on restricted spots? Yes_____ No_____
   b. Is recoverable deicing fluid runoff being collected immediately after aircraft taxi?
      Yes_____ No_____
4. All Weather:
   a. Is deicer fluid collecting on the pavement at the parking stub? Yes_____ No_____
   b. Is deicer fluid running off with precipitation? Yes_____ No_____
   c. Was an effort made to minimize deicing fluid use through the removal of snow and ice by
      mechanical means or use of a hot air blower? Yes_____ No_____
   d. Are the amounts of deicing fluid used being accurately recorded? Yes____ No____
   e. Are deicing application personnel adequately trained in proper application procedures and
      environmental concerns/restrictions? Yes_____ No_____

Inspection Conducted by: _____

Comments:

Recommended changes/improvements:

3.a. and 3.b - "No" requires explanation. "No" is a violation of the permit and must be reported to regulatory authorities

4.c. If "No" than what method is being used or why isn't it being removed?

4.d. Inspect Application and Collections Records and Logs

Comments:
Completely Describe or Explain the Issue or Non-Compliant Activities. Attach Any Documentation or Additional Comments as Necessary

Send Electronic Copies of Weekly Inspection Checklists and Support Documentation To:
william.Shelton.3@us.af.mil

QUESTIONS?

BILL SHELTON
92 CES/CEIE, Environmental
247-8163

william.shelton.3@us.af.mil

92 Air Refueling Wing

WATER QUALITY MANAGEMENT

Bill Shelton

92 CES/CEIE
Environmental Element

WATER QUALITY MANAGEMENT

- Storm Water
- Waste Water
- Other Issues

STORM WATER

- Environmental Protection Agency
  - Multi-Sector Discharge Permit Fairchild Permit
- Storm Water Pollution Prevention Plan SWPPP
  - Identifies Potential Sources of Pollution
  - Describes Best Management Practices
  - Outlines Compliance Issues

STORM WATER

STORM WATER COLLECTION

STORM WATER

- Best Management Practices
  - Operational - Work Practices
    - Good Housekeeping
    - Waste Management
    - Spill/Leak Prevention
    - Employee Training
  - Structural / Engineered Containment
    - Dikes, Berms And Curbing
    - Cover - Roofs, Tarps, etc.

STORM WATER

- Process Water is NOT Storm Water
  - If it doesn't fall from the sky…
- PROHIBITED
  - Washing Cars in Parking Lots
  - Using a Hose to Clean Spills
  - Maintaining or Cleaning Equipment Near Storm Drains
  - Storing Materials Near Storm Drain w/o Secondary Containment
  - Illicit Connections

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AREAS OF CONCERN


Maintenance Areas


Equipment Storage


Construction Runoff


Refueling Points

8

FUEL SPILL IN DRAINAGE DITCH

9

WASTE WATER

- City Of Spokane Pretreatment Requirements
  - Sampling Of Waste Streams
  - Maintenance Of Collection System
  - Approval Of Intermittent Waste Streams
  - Spill Notification
- Major Issues
  - Aircraft, Vehicle And Equipment Wash
  - Mechanical Floor Cleaner Waste Water
  - Fuel Contaminated Waste Water
  - Oil / Water Separators and Grease Traps / Interceptors

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WASTE WATER

- Oil/Water Separators
  - Primary purpose is to capture and contain small quantities of ***oil*** that aren't otherwise collected through good housekeeping procedures
    - Aircraft/Vehicle Washing Facilities
    - Aircraft/Vehicle Maintenance Facilities
  - Not intended to be a "catch all"
    - Not effective for fuel, solvents, paint, grass, debris, etc.
    - Ensure screens/grates are in-place

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OTHER ISSUES

- Zamboni Wastewater (mechanical floor sweeper)
  - Clean Up Spills Before Floor Cleaning
  - Testing/Sampling
  - Collect For Disposal
  - No Storm Drain Disposal

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OTHER ISSUES

- **Spill Management**
  - Become familiar with your shop specific spill plan
  - If a spill occurs:
    - #1 – Evacuate the area as needed and report spill to fire department at 911
    - #2 – Cordon off spill and take necessary actions to minimize release to the environment through the use of booms, pads, dirt berms, drain blocks, etc. (unless health and safety risk exists).
    - #3 – Manage hazardous waste disposal

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SUMMARY

- **Do What's Right**
  - Clean Up Your Mess
  - Report Spills
  - Think Before You Pour
  - Contain Hazardous Material Around Floor Drains
  - Don't Use O/W Separators As A "Catch-all"
  - Storm Drains Aren't Liquid Dumps
  - Become familiar with your shop specific spill plan
- **If Something Just Doesn't Look Right…**
  - Contact 92 CES/CEIE At 247-2313

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Appendix G. Exception for Inactive and Unstaffed Landfills Memorandum

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 92D AIR REFUELING WING (AMC)
FAIRCHILD AIR FORCE BASE WASHINGTON

12 July 2021

MEMORANDUM FOR WHOM IT MAY CONCERN

FROM: 92 CES/CD

SUBJECT: Exception for Inactive and Unstaffed Sites

1. I certify that I have read and understand the 2021 US EPA National Pollution Discharge Elimination System Multi-Sector General Permit (MSGP), part 4.2.2.5, Exception for Inactive and Unstaffed Facilities, requirements for exemption of the benchmark monitoring requirements of the Fairchild Air Force Base solid waste landfill SW-1. To the best of my knowledge, there are no industrial materials or activities exposed to storm water.

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

3. Finally, I understand that our continued MSGP coverage (WAR05F302) is contingent upon maintaining eligibility for this exception. In accordance with the 2021 MSGP, visual inspections are conducted quarterly on the SW-1 site to continually validate the exemption.

RONALD R. DANIELS, GS-14, DAF
Deputy Base Civil Engineer

Appendix H. Outfalls

FIGURE H-1 DRAINAGE BASIN 1 OUTFALL

FIGURE H-2 DRAINAGE BASIN 3 OUTFALL

FIGURE H-3 DRAINAGE BASIN 6 OUTFALL

FIGURE H-4 DRAINAGE BASIN 7 OUTFALL

Appendix I. FAFB Endangered Species and Historic Places Certification

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 92D AIR REFUELING WING (AMC)
FAIRCHILD AIR FORCE BASE WASHINGTON

2 February 2022

MEMORANDUM FOR WHOM IT MAY CONCERN

I certify under penalty of law that I have read and understand the 2021 Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activities (MSGP) part 1.1.4, Eligibility Related to Endangered Species Act (ESA) Listed Species and Critical Habitat Protection; the 2021 MSGP, Appendix E, Procedures Relating to Endangered Species Protection; and the Fairchild Air Force Base (FAFB) Notice of Intent (NOI) (WAR05F302), Determine ESA Eligibility Criterion. To the best of my knowledge, the stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities are not likely to adversely affect habitat that is designated as "critical habitat" under the ESA. This determination was reached by review of the FAFB Integrated Natural Resources Management Plan (FAFB INRMP-September 2021). The 2021 INRMP was reviewed by the U.S. Fish and Wildlife Service on January 30, 2019.

I further certify under penalty of law that I have read and understand the 2021 MSGP part 1.1.5, Eligibility Related to National Historic Preservation Act (NHPA)-Protected Properties; the 2021 MSGP, Appendix F, Procedures Relating to Historic Properties Preservation; and the Fairchild Air Force Base (FAFB) Notice of Intent (NOI) (WAR05F302), Determine ESA Eligibility Criterion. To the best of my knowledge, the stormwater discharges, allowable non-stormwater discharges, and stormwater discharge-related activities do not have the potential to have an effect on historic properties and we are not constructing or installing any new stormwater control devices on our site that cause subsurface disturbance. This determination was reached by review of the FAFB Integrated Cultural Resources Management Plan (FAFB ICRMP-January 2021).

Finally, I understand that continued permit coverage is contingent upon maintaining eligibility as provided for in 2021 MSGP part 2.3, Requirements Relating to Endangered Species, Historic Properties, and CERCLA Sites.

TYLER J. SMITH
Deputy Base Civil Engineer