FINAL

88TH REGIONAL SUPPORT COMMAND

STORMWATER MANAGEMENT PLAN

WI049/55985 William F. Fale USARC

2913 Erie Avenue

Sheboygan, Wisconsin 53081-3655

August 2014

Prepared by:

PARSONS

DEPARTMENT OF THE ARMY
HEADQUARTERS, 88TH READINESS DIVISION
506 ROEDER CIRCLE
FORT SNELLING, MINNESOTA 55111-4017

AFRC-SWI-EN-E 08APRIL2022

SUBJECT: Storm Water Management Plan (SWMP) Determination of Applicability

All Storm Water Management Plans (SWMP) have been drafted or updated at the request of the 88TH Readiness Division (RD), Department of Public Works (DPW) Environmental Division to serve as documented Best Management Practice (BMP) recommendations to reduce the potential for contamination of storm water discharges from onsite activities. However, after reviewing the appropriate State General Permit provisions, the 88TH RD has determined that this facility does not meet the requirements necessary for obtaining coverage under State General Permit regulations. Therefore, this SWMP is being prepared as a voluntary BMP.

This determination supersedes all previous legacy “directions” provided within legacy SWMPs. All SWMPs are now downgraded to voluntary BMPs and do not require immediate revision. Legacy SWMPs will be updated as time and funds allow.

POC for this is Mr. Craig Peters, contracted Storm Water Program Manager, 608-388-0706, craig.r.peters.ctr@army.mil.

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Prepared for:

WI049/55985 William F. Fale USARC
2913 Erie Avenue
Sheboygan, Wisconsin 53081-3655

Prepared By:
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PARSONS

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ACRONYMS AND ABBREVIATIONS

aEPS	Area Environmental Protection Specialist
aFOS	Area Facility Operations Specialist
AFSI	Annual Facility Site Inspection
APC	Armored Personnel Carrier
AR	Army Regulations
AST	Aboveground Storage Tank
BMP	Best Management Practice
CFR	Code of Federal Regulations
CONEX	Container, Express
CWA	Clean Water Act
EPM	Environmental Program Manager
EPS	Environmental Protection Specialist
FC	Facility Coordinator
FSCP	Facility Spill Contingency Plan
HAZMAT	Hazardous Materials
HEMTT	Heavy Expanded Mobility Tactical Truck
HMMWV	High Mobility Multipurpose Wheeled Vehicle
LMTV	Light Medium Tactical Vehicle
MEP	Military Equipment Parking
MTV	Medium Tactical Vehicle
NAICS	North American Industry Classification System
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NSWD	Non-Stormwater Discharge
OMS	Organizational Maintenance Shop
OWS	Oil/Water Separator
%	Percent
PCB	Polychlorinated Biphenyl
PGS	Parsons Government Services, Inc.
POL	Petroleum, Oil, and Lubricants
POV	Privately Owned Vehicle
RSC	Regional Support Command
SAV	Staff Assistance Visit
SIC	Standard Industrial Classification
SWMP	Stormwater Management Plan
SWPPP	Stormwater Pollution Prevention Plan
U.S.	United States
USARC	United States Army Reserve Center
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
WDNR	Wisconsin Department of Natural Resources

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EXECUTIVE SUMMARY

This Stormwater Management Plan (SWMP) for the William F. Fale United States Army Reserve Center (USARC) (WI092/55864) has been tailored to complement the requirements of the National Pollutant Discharge Elimination System (NPDES) General Permit Number WI-S067849-3, issued by the State of Wisconsin Department of Natural Resources (WDNR) and the City of Sheboygan stormwater management requirements. The William F. Fale USARC facility is not required to comply with the General Permit; therefore, this SWMP is being prepared as a voluntary Best Management Practice (BMP).

This document was prepared by Parsons Government Services, Inc. (PGS) in accordance with guidance provided by the United States Environmental Protection Agency (USEPA). Data, information, and illustrations included in this SWMP were obtained from facility plans, interviews of facility personnel, and a staff assistance visit (SAV) conducted on May 20, 2014. Stormwater drainage, outfalls, and potential non-stormwater contributions were evaluated by PGS.

On May 20, 2014, Katie Astroth, Environmental Scientist from PGS, visited the William F. Fale USARC (WI049/55985) facility. Kevin Devenport, Area Environmental Protection Specialist (aEPS) and SSG Katey Tess, Motor Pool Sergeant accompanied PGS personnel.

The facility is located at 2913 Erie Avenue, Sheboygan in Sheboygan County, Wisconsin (Figure 1). The William F. Fale USARC facility includes approximately 3.8 acres of land and consists of a USARC building, a two-bay OMS building, one military equipment parking (MEP) area, and one privately owned vehicle (POV) parking area (Figure 2).

The USARC building is a one-story, concrete block building with a brick veneer. The building contains offices, classrooms, a kitchen, a drill hall, and storage areas. Activities that take place within the USARC building include administrative operations and classroom training.

The OMS building is a one-story, concrete block building with a brick exterior that contains two maintenance bays and a caged storage area. The OMS building is used for vehicle and equipment maintenance and general storage. There are no floor drains within the OMS building.

The present and recent historical (2011, 2012, and 2013) activities conducted at the facility include administrative, training, and educational tasks, and maintenance of vehicles and equipment. There have been no leaks or spills at the facility in the last 3 years (2011, 2012, and 2013).

Two drainage areas were identified on the property during the SAV (Figure 3).

Drainage Area 1 consists of a portion of the USARC building, the grassy area north of the USARC building, the POV parking area, and the entrance drive to the property. It encompasses approximately 1 acre with approximately 20 percent impervious surface.

The topography of Drainage Area 1 slopes down to the north. Stormwater within the grassy area primarily infiltrates into the ground or evaporates. In the event of heavy

precipitation stormwater within the grassy area flows overland to the north and onto Erie Avenue. Stormwater within the POV parking area and entrance drive also flows overland to the north and onto Erie Avenue.

Drainage Area 2 consists of a portion of the USARC building, the OMS building, the MEP area, and the grassy areas east, south, and west of the MEP area. It encompasses approximately 2.5 acres with approximately 30 percent impervious surface.

The topography of Drainage Area 2 has a slight downward slope to the south. Stormwater within the grassy areas primarily infiltrates into the ground or evaporates. Within the MEP area and in the event of heavy precipitation within the grassy areas, stormwater flows overland towards the property's southern boundary. Stormwater that reaches the property's southern boundary primarily drains off the property near the property's southwest and southeast corners.

The most southern edge of the USARC property is a steep slope with overgrown vegetation. The USARC property is at a significantly higher elevation than the commercial property just to the south. Due to this there is a large retention wall along the USARC property's southern boundary. Stormwater that drains off the property in this location infiltrates into the ground, evaporates, or drains into several stormwater inlets within the commercial property's parking area.

Additionally, the USARC and OMS buildings' roof drains are connected to underground conveyance pipes that discharge into the city-owned storm sewer system.

For the purpose of this SWMP, a stormwater outfall is identified as an area where stormwater leaves the property and could be intercepted in the event of a spill. Stormwater on the USARC property infiltrates into the ground, evaporates, or flows overland and off the property. Stormwater that flows off the property does not do so at a single point location. Therefore, no stormwater outfalls were identified by PGS during the SAV.

However, the USARC and OMS buildings' roof drains are connected to an underground conveyance pipe that discharges into the city-owned storm sewer system. Despite this pipe directing rainwater from the buildings' roof drains off the property, this is not considered an outfall as only stormwater from the buildings' roofs discharge through this means. Stormwater from the rest of the property, including the areas on the property that have the potential to contribute pollutants to stormwater runoff, cannot enter into this pipe.

All HAZMAT, wastes, and POL products are stored in designated areas inside flammable materials lockers within the OMS building or within the HAZMAT storage shed in the MEP area. The facility does not store chemicals outdoors where they could be directly exposed to stormwater. No ASTs, USTs, vehicle wash racks, or OWSs are located on the USARC property. Additionally, vehicle washing take place off-site.

Military equipment and vehicles are stored in the MEP area at the facility. There is one POV parking area located at the facility. As such, potential sources from ancillary activities may include POL associated with vehicle/equipment storage and operation. At the time of the SAV, no active leaks were observed. Military vehicles are fueled off-site.

Two waste dumpsters are located at the facility. At the time of the SAV, the dumpster were closed and in good condition. The area around the dumpsters was clean and orderly.

There are five CONEXs and one HAZMAT storage shed located at the facility. The CONEXs and HAZMAT storage shed provide adequate protection from stormwater. The CONEXs were in good condition and the HAZMAT shed was in fair condition as rust was evident. The area around the CONEXs and HAZMAT storage shed was orderly with no evidence of leaks or spills observed at the time of the SAV. However, there were several wood pallets and an open wood box stacked and being stored next to the HAZMAT storage shed.

Three pole-mounted transformers are located along the north edge of the property. Two of the transformers are on one pole in the property's northeast corner and the third transformer is in the property's northwest corner. The transformers did not carry labels indicating whether or not they contained PCBs. The transformers were observed to be in good condition, with no signs of leaking.

Non-structural BMPs in use at the facility include good housekeeping and preventive maintenance. Structural BMPs in use at the facility include the use of flammable materials lockers, CONEXs, and the HAZMAT storage shed.

There were a few areas that were noted as to needing maintenance on the USARC property during the SAV:

- Several of the covers for the cleanouts for the underground conveyance pipes that receive stormwater from the USARC building's roof drains were either missing or damaged. Debris was observed in the cleanout near the administration building's southeast corner.
- The POV parking area east of the USARC building is small and does not have adequate space to be park all POVs on the paved area. There was evidence that POVs parked in the grass area around the POV parking area and entrance drive. This has caused rutting and erosion.
- There was slight erosion along the MEP fence along the property's southern boundary.

Additionally, the retention wall along the property's southern boundary was observed to have areas starting to bulge away from the USARC property. There were also areas where vegetation is growing between the boards of the retention wall. The retention wall should potentially be inspected to ensure the integrity of the wall has not been compromised.

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SECTION 1 INTRODUCTION

This Stormwater Management Plan (SWMP) has been prepared at the request of the 88th Regional Support Command (RSC) Environmental Division to serve as a documented Best Management Practice (BMP) to reduce the potential for contamination of stormwater discharges from activities at the William F. Fale United States Army Reserve Center (USARC) (WI049/55985). The National Pollutant Discharge Elimination System (NPDES) General Permit Number WI-S067849-3, issued by the Wisconsin Department of Natural Resources (WDNR), authorizes discharges of stormwater (stormwater runoff, snowmelt runoff, and surface runoff and drainage) associated with industrial activity to surface water bodies within the State of Wisconsin (Appendix A1). The provisions of the NPDES require that many industrial facilities develop and implement a Stormwater Pollution Prevention Plan (SWPPP). However, the 88th RSC has determined that the William F. Fale USARC facility does not meet the requirements necessary for obtaining coverage under the General Permit. Therefore this SWMP is being prepared as a voluntary BMP.

This document was prepared by Parsons Government Services, Inc. (PGS) in accordance with guidance provided by the United States Environmental Protection Agency (USEPA) (1992a, b), Sheboygan County, and the City of Sheboygan. Data, information, and illustrations included in this SWMP were obtained from facility plans, interviews of facility personnel, and a staff assistance visit (SAV) conducted on May 20, 2014, by Katie Astroth, Environmental Scientist with PGS. Inspection of the facility included drainage areas, outfalls, potential stormwater polluting processes and materials, and potential non-stormwater contributions.

1.1 REGULATORY BACKGROUND

The 1972 amendments to the Clean Water Act (CWA) prohibit the discharge of any pollutant to waters of the United States (U.S.) from a point source unless the discharge is authorized by a NPDES permit. The CWA was amended in 1987 to establish phased NPDES requirements for stormwater discharges. Section 402(p) of the CWA of 1987 requires operators of facilities that discharge stormwater "associated with industrial activity" to obtain permits under the NPDES program. The purpose of the Act is to control pollution entering the surface waters of the U.S. and preserve, protect, and improve the nation's water resources. As directed by Congress, USEPA promulgated final stormwater regulations on November 16, 1990, outlining facilities subject to the regulations and the permit application process.

The main criterion determining if a facility is subject to stormwater requirements is whether or not the facility discharges stormwater associated with industrial activities as defined by the USEPA under Title 40 of the Code of Federal Regulations (CFR) Part 122.26(b)(12) (Appendix A2). For this facility, the 88th RSC has determined the primary Standard Industrial Code (SIC) is 9711 (National Security) and the primary North American Industry Classification System (NAICS) code is 928110 (National Security). However, these codes are not sufficiently descriptive to allow clarity to local municipalities as the 88th RSC complies with CWA provisions. To that end, the 88th

RSC has re-evaluated and determined the following more descriptive SICs for their activities:

- Equipment Concentration Sites are SIC 7538 General Automotive Repair shops and SIC 4225 General Warehousing [Note SIC 4225 is explicitly exempt in 40CFR122.26(b)(14)(viii)]
- Area Maintenance Support Activity shops are SIC 7538 General Automotive Repair shops
- Branch Maintenance Activity shops are SIC 7538 General Automotive Repair shops
- Organizational Maintenance Shops (OMS) are SIC 7538 General Automotive Repairs shops
- Main USARCs are SIC 8249 Vocational Training Centers with secondary SICs 8741 Management Services, 8744 Facility Support Management Services

A facility is subject to stormwater regulation if the facility discharges stormwater from its industrial areas to surface waters of the U.S. by a natural or artificial conveyance system (e.g., ditch, swale, pipe, or conduit). Stormwater that flows directly to groundwater or to a municipal sanitary sewer is not subject to regulation and does not require a permit.

The William F. Fale USARC has not submitted a Notice of Intent (NOI) to the USEPA to discharge stormwater. It is the position of the 88th RSC that the activities conducted at the William F. Fale USARC are not described by the NAICS or the SIC Codes under the General NPDES Permit and, therefore, the facility does not require coverage under this permit.

Although the facility may not be regulated strictly under the provisions of the CWA, federal and Army regulations require the facilities to manage their affairs with the environment in mind. These regulations are part of this SWMP and are considered non-structural control measures or BMPs because they aid in the prevention of stormwater pollution. Documents the facility has on hand that pertain to the management of environmental affairs include:

- **Army Regulation (AR) 200-1 - Environmental Protection and Enhancement** - The regulation is intended to serve as a manual to ensure installations follow federal and state environmental laws and act in a manner to prevent environmental degradation. AR 200-1 specifies environmental documents and reports installations are required to maintain, operating procedures for environmental engineering functions, procedures for emergency response and spill reporting, and procedures for conducting and maintaining environmental audits and building inspections.
- **32 CFR Part 651 - Environmental Effects of Army Actions** - This document provides guidance concerning National Environmental Policy Act (NEPA) requirements pertaining to Army facilities.

1.2 LOCAL AND COUNTY REGULATIONS

The Municipal Code of the City of Sheboygan, Appendix E – Post-Construction Stormwater Management Zoning Ordinance aims to protect and enhance water quality, control non-stormwater discharges (NSWDs), provide criteria to control stormwater runoff, and encourage the recharge of groundwater. The City of Sheboygan stormwater ordinance is included in Appendix A3. A list of exempted NSWDs is summarized in Appendix A4. This SWMP complies with the City of Sheboygan stormwater ordinance.

1.3 SWMP OBJECTIVES

The goal of the SWMP is to improve the quality of surface waters by eliminating or minimizing contact of stormwater with materials that may potentially pollute the stormwater runoff discharged from the facility. The SWMP is intended to:

- Identify potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges associated with activity from the facility.
- Describe practices to be used in reducing the potential for pollutants to be exposed to stormwater.
- Serve as an administrative BMP to describe the measures to be taken to reduce stormwater pollution and comply with the substantive requirements of the CWA and federal and Army regulations.

The SWMP contains a description of potential pollution sources at the facility. These sources may include material loading and unloading areas, outdoor material storage areas, and waste disposal practices. In describing these areas, a site map depicting stormwater drainage areas and flow patterns, paved areas, outdoor material storage locations, secondary containment structures, existing stormwater control mechanisms, oil/water separators (OWS), outfalls, drainage area boundaries, waste storage areas, wetlands, surface water bodies, underground storage tanks (UST), aboveground storage tanks (AST), and an estimate of impervious surface areas is provided.

The SWMP also provides a narrative description of activities conducted at the site and materials that are stored and exposed to precipitation. Other information presented in the SWMP includes a historical description of spills or leaks at the facility for the previous year, an estimate of the types of pollutants that could be present in stormwater discharged from the facility, a summary of existing stormwater test data, and a risk identification/assessment evaluating the potential for facility drainage areas to contribute pollutants to stormwater. In addition to identifying risks, the SWMP includes a description of management practices and equipment the facility may use to mitigate risks for stormwater pollution.

1.4 SWMP IMPLEMENTATION

Although a formal SWPPP is not required for the facility, the tenant units will be responsible for ensuring their personnel do not violate the guidelines presented in this SWMP. The 88th RSC may choose to offer the tenant units special training to better implement the plan. No state coordination concerning the implementation of this plan is

required at this time. The 88th RSC may contact the tenant units for a brief status summary concerning the BMPs and the SWMP in general.

The Area Environmental Protection Specialist (aEPS) will be responsible for performing the assessments, completing the Annual Facility Site Inspection (AFSI) checklist, and assisting the Facility Coordinator (FC), Shop Foreman, and/or tenant units in correcting any stormwater issues that may occur. The tenant units or FC will be responsible for informing the 88th RSC along with the aEPS and Area Facility Operations Specialist (aFOS) of any serious stormwater issues that may occur. If the facility receives any records relative to the SWMP, the FC or Shop Foreman will ensure they are given to the 88th RSC and a copy to the aEPS to keep in the environmental binder.

1.5 SWMP REVISION

This is the original SWMP for the William F. Fale USARC. It is the responsibility of the FC, Shop Foreman, and/or designee to implement this plan with assigned units. It is the responsibility of the aEPS to make suggestions for revisions to this SWMP to the Environmental Protection Specialist (EPS) when changes are identified at the facility.

The aEPS should perform an AFSI to determine whether the facility is following the guidelines set forth in this plan and has established practices to reduce stormwater pollution. The AFSI will allow the aEPS to verify the accuracy of the description of potential pollutant sources contained in the plan, update the site drainage map, and make sure that stormwater pollution controls are correctly identified and working. The AFSI will identify where new controls need to be implemented and incorporated into the facility plan. Appendix B contains checklists for conducting the AFSI. Appendix B1 contains checklists completed during the annual inspections. Appendix B2 contains a blank checklist for conducting future AFSIs.

The SWMP will be revised whenever a change in facility design, construction, or operation is planned that will result in significant increases in exposure of pollutants to stormwater. A change to the plan may also occur because routine visual inspections or comprehensive site evaluations have proven the plan to be ineffective at controlling stormwater contamination.

1.6 SWMP OVERVIEW

The SWMP includes the following sections:

- **Facility Description** - A description of the facility, drainage areas, and material exposed to stormwater, spill history, stormwater outfalls, receiving water bodies, and potential sources of stormwater pollution are provided in Section 2. Topographic and site maps depicting receiving water bodies, stormwater outfalls, and exposed material locations are also included.
- **BMPs** - The BMPs to mitigate potential stormwater pollution are identified and described in Section 3. The BMP description provides the SWMP team with a summary of what is involved with implementing the BMPs at their facility.

- **Plan Updating and Reporting** - Plan updates and reporting recommendations to be followed as voluntary BMPs are identified in Section 4. Currently no reports or other submittals are required to be submitted to state authorities.

1.7 SWMP AVAILABILITY

The SWMP will be maintained at the facility. Because the William F. Fale USARC is not covered under the Multi-Sector General Permit, it does not need to make the SWMP available to the USEPA, municipality, or public. However, the facility must make plans available to the aEPS and aFOS.

1.8 SWMP CONTACTS

Personnel that may be contacted for questions and/or comments to meet the requirements are listed in Table 1-1.

TABLE 1-1 SWMP CONTACTS

Title	Phone Number	Point of Contact
88th RSC Area Environmental Protection Specialist (aEPS)	262-685-7727	Kevin Devenport
Area Facility Operations Specialist (aFOS)	906-235-8202	Ray Lane
88th RSC Environmental Protection Specialist (EPS)	612-713-3820	Dave Torgersen
88th RSC Facility Coordinator (FC)	920-208-2658	Taylor Tautges

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SECTION 2 FACILITY DESCRIPTION

2.1 SITE HISTORY AND IDENTIFICATION

The William F. Fale USARC (WI049/55985) was built in 1958 and is owned by the federal government. The surrounding properties include Sunny Ridge Health and Rehabilitation Center and a residential area to the north, a residential area to the east, Festival Foods to the south, and a commercial shopping center to the south and west (Figure 1). The 330th Military Police is the only unit located at the facility.

Key facility information for the William F. Fale USARC is listed in Table 2-1.

TABLE 2-1 KEY FACILITY INFORMATION

Facility Name	William F. Fale USARC
Owner/Operator	United States Army Reserve
Physical Location	2913 Erie Avenue Sheboygan, Wisconsin 53081-3655
County	Sheboygan County
Latitude	43°45'8.10"N
Longitude	87°44'43.53"W
Township	15N
Range	23E
Section	21
Other Identifying Information	
SIC Code	9711 National Security
NAICS Code	928110 National Security
Key Contact for Plan Development and Maintenance	Taylor Tautges, Facility Coordinator (FC)
Facility Phone No.	920-208-2658

2.2 GENERAL FACILITY DESCRIPTION

The William F. Fale USARC includes approximately 3.8 acres of land. It consists of a USARC building, a two-bay OMS building, one military equipment parking (MEP) area, and one privately owned vehicle (POV) parking area. Activities that take place at the William F. Fale USARC include administrative, training, and educational tasks, and

maintenance of vehicles and equipment. A site layout and land use map (Figure 2) shows the overall configuration of the site.

The USARC building is a one-story, concrete block building with a brick veneer. The building contains offices, classrooms, a kitchen, a drill hall, and storage areas. Activities that take place within the USARC building include administrative operations and classroom training.

The OMS building is a one-story, concrete block building with a brick exterior that contains two maintenance bays and a caged storage area. The OMS building is used for vehicle and equipment maintenance and general storage. There are no floor drains within the OMS building.

One asphalt-paved POV parking area and one concrete MEP area are located on the USARC property. The POV parking area is a small parking area located just northeast of the USARC building. The MEP area is located south of the USARC building and is secured by chain link fence topped with barb wire. Approximately 45 military vehicles and equipment were stored within the MEP area during the SAV. These included six armored personnel carriers (APCs), 19 high mobility multipurpose wheeled vehicles (HMMWVs), one heavy expanded mobility tactical truck (HEMTT), two light medium tactical vehicles (LMTVs), and three medium tactical vehicles (MTVs). Twelve trailers of various sizes and uses were also stored within the MEP area at the time of the SAV.

No ASTs, USTs, vehicle wash racks, or OWSs are located on the USARC property. Additionally, vehicle fueling and vehicle washing take place off-site.

At the time of the SAV, items stored outdoors at the William F. Fale USARC included:

- Five CONEXs,
- One hazardous materials (HAZMAT) storage shed,
- Two waste dumpsters,
- Three pole-mounted transformers (two on one pole in northeast corner of property and one on one pole in northwest corner of property),
- Wood pallets, and
- Military vehicles and equipment.

Three pole-mounted transformers are located along the north edge of the property. Two of the transformers are on one pole in the property's northeast corner and the third transformer is in the property's northwest corner. The transformers did not carry labels indicating whether or not they contained polychlorinated biphenyls (PCBs). The transformers were observed to be in good condition, with no signs of leaking.

2.3 SITE DRAINAGE AREAS

Based on observations made by PGS during the SAV, the William F. Fale USARC can be divided into two distinct drainage areas (Drainage Areas 1 and 2). Figure 3 shows the drainage areas observed at the site, the general stormwater runoff drainage patterns, and the conveyances that accept stormwater runoff from each area.

2.3.1 Drainage Area 1

Drainage Area 1 consists of a portion of the USARC building, the grassy area north of the USARC building, the POV parking area, and the entrance drive to the property. It encompasses approximately 1.0 acre with approximately 20 percent impervious surface. Items stored outdoors within Drainage Area 1 included:

- POVs and
- Three pole-mounted transformers (two on one pole in northeast corner of property and one on one pole in northwest corner of property).

The topography of Drainage Area 1 slopes down to the north. Stormwater within the grassy area primarily infiltrates into the ground or evaporates. In the event of heavy precipitation stormwater within the grassy area flows overland to the north and onto Erie Avenue. Stormwater within the POV parking area and entrance drive also flows overland to the north and onto Erie Avenue.

Additionally, the USARC building's roof drains are connected to underground conveyance pipes that discharge into the city-owned storm sewer system.

Parked vehicles within small POV parking area and the loading, shipping, receiving, and storage of petroleum, oil, and lubricants (POLs) and HAZMAT have the potential to contribute pollutants to stormwater runoff within Drainage Area 1.

2.3.2 Drainage Area 2

Drainage Area 2 consists of a portion of the USARC building, the OMS building, the MEP area, and the grassy areas east, south, and west of the MEP area. It encompasses approximately 2.5 acres with approximately 30 percent impervious surface. Items stored outdoors within Drainage Area 2 included:

- Military vehicles and equipment,
- Five CONEXs,
- One HAZMAT storage shed,
- Two waste dumpsters, and
- Wood pallets.

The topography of Drainage Area 2 has a slight downward slope to the south. Stormwater within the grassy areas primarily infiltrates into the ground or evaporates. Within the MEP area and in the event of heavy precipitation within the grassy areas, stormwater flows overland towards the property's southern boundary. Stormwater that reaches the property's southern boundary primarily drains off the property near the property's southwest and southeast corners.

The most southern edge of the USARC property is a steep slope with overgrown vegetation. The USARC property is at a significantly higher elevation than the commercial property just to the south. Due to this there is a large retention wall along the USARC property's southern boundary. Stormwater that drains off the property in

this location infiltrates into the ground, evaporates, or drains into several stormwater inlets within the commercial property's parking area.

Additionally, the USARC and OMS buildings' roof drains are connected to underground conveyance pipes that discharge into the city-owned storm sewer system.

Parked military vehicles and equipment in the MEP area and vehicle maintenance activities carried out within the OMS have the potential to contribute pollutants to stormwater runoff within Drainage Area 2. No active leaks or evidence of previous leaks from vehicles were observed.

2.4 STORMWATER OUTFALLS

An outfall is defined by the USEPA as "the point, location, or structure where wastewater or drainage discharges from a sewer pipe, ditch, or other conveyance to a receiving body of water." For the purpose of this SWMP, a stormwater outfall is identified as an area where stormwater leaves the property and could be intercepted in the event of a spill. Stormwater on the USARC property infiltrates into the ground, evaporates, or flows overland and off the property. Stormwater that flows off the property does not do so at a single point location. Therefore, no stormwater outfalls were identified by PGS during the SAV.

However, the USARC and OMS buildings' roof drains are connected to an underground conveyance pipe that discharges into the city-owned storm sewer system. Despite this pipe directing rainwater from the buildings' roof drains off the property, this is not considered an outfall as only stormwater from the buildings' roofs discharge through this means. Stormwater from the rest of the property, including the areas on the property that have the potential to contribute pollutants to stormwater runoff, cannot enter into this pipe.

2.5 WATER BODIES

No stormwater outfalls are located at the William F. Fale USARC facility. Stormwater north of the USARC building flows overland onto Erie Avenue where stormwater is directed to curb inlets that discharge to the city-owned storm sewer system. Stormwater that reaches the property's southern boundary primarily drains off the property near the property's southwest and southeast corners. Stormwater that drains off the property in these locations drains into several stormwater inlets within the commercial property's parking area that is located just south of the USARC property. These stormwater inlets also discharge into the city-owned storm sewer system.

Based on the review of the topographic map (Figure 1), there are no other streams or surface water bodies (lakes, ponds, or wetlands) that could receive contaminants in stormwater discharged from activities at the site.

2.6 SUMMARY OF POTENTIAL SOURCES OF STORMWATER POLLUTION

All HAZMAT, wastes, and POL products are stored in designated areas inside flammable materials lockers within the OMS building or within the HAZMAT storage shed in the MEP area. The facility does not store chemicals outdoors where they could

be directly exposed to stormwater. No ASTs, USTs, vehicle wash racks, or OWSs are located on the USARC property. Additionally, vehicle washing take place off-site.

Military equipment and vehicles are stored in the MEP area at the facility. There is one POV parking area located at the facility. As such, potential sources from ancillary activities may include POL associated with vehicle/equipment storage and operation. Drip pans are anticipated to be placed under all military vehicles that have a Class 3 leak until maintenance can be performed. A Class 3 leak is defined as at least one drop of fluid over 24 hours (e.g. an actively dripping leak). At the time of the SAV, no active leaks were observed. Military vehicles are fueled off-site.

Two waste dumpsters are located at the facility. At the time of the SAV, the dumpster were closed and in good condition. The area around the dumpsters was clean and orderly.

There are five CONEXs and one HAZMAT storage shed located at the facility. The CONEXs and HAZMAT storage shed provide adequate protection from stormwater. The CONEXs were in good condition and the HAZMAT shed was in fair condition as rust was evident. The area around the CONEXs and HAZMAT storage shed was orderly with no evidence of leaks or spills observed at the time of the SAV. However, there were several wood pallets and an open wood box stacked and being stored next to the HAZMAT storage shed.

Three pole-mounted transformers are located along the north edge of the property. Two of the transformers are on one pole in the property's northeast corner and the third transformer is in the property's northwest corner. The transformers did not carry labels indicating whether or not they contained PCBs. The transformers were observed to be in good condition, with no signs of leaking.

There were a few areas that were noted as to needing maintenance on the USARC property during the SAV:

- Several of the covers for the cleanouts for the underground conveyance pipes that receive stormwater from the USARC building's roof drains were either missing or damaged. Debris was observed in the cleanout near the administration building's southeast corner.
- The POV parking area east of the USARC building is small and does not have adequate space to be park all POVs on the paved area. There was evidence that POVs parked in the grass area around the POV parking area and entrance drive. This has caused rutting and erosion.
- There was slight erosion along the MEP fence along the property's southern boundary.

Table 2-2 provides an inventory of materials exposed to precipitation and/or stormwater runoff and the drainage area within which they are located. Table 2-3 provides a listing of possible pollutants in the exposed material. A Facility Spill Contingency Plan (FSCP) is a separate document that provides additional information on HAZMAT use, POL storage, and identifies procedures for preventing and responding to releases of those materials.

TABLE 2-2 MATERIALS EXPOSED TO STORMWATER WITH POTENTIAL FOR TRANSFERRING POLLUTANTS		
Exposed Material/Activity	**Drainage Areas**	
	Area 1	**Area 2**
CONEXs		X
HAZMAT storage shed		X
Military vehicles and equipment		X
Pole-mounted transformers	X	
Privately owned vehicles	X	
Scrap wood/pallets		X
Waste dumpsters		X

TABLE 2-3 POSSIBLE POLLUTANTS IN EXPOSED MATERIAL		
Exposed Material	**Potential Problem**	**Potential Pollutant**
CONEXs	Repeated exposure to stormwater may degrade CONEXs and discharge rust and metal particles into the stormwater drainage system.	Rust, metal particles
HAZMAT storage sheds	Spills and leaks could occur during loading and transporting activities and could be discharged into the stormwater drainage system.	Oil, fuel, hydraulic fluids, transmission fluids, antifreeze
Military vehicles and equipment	Leaks from parked vehicles and equipment could be discharged into the stormwater drainage system.	Oil, fuel, hydraulic fluids, transmission fluids, antifreeze
Pole-mounted transformers	Leaks from transformers could be washed by rain into the stormwater drainage system.	PCBs (content undetermined), Transformer oils
Privately owned vehicles	Leaks from parked vehicles could be washed by rain into the stormwater drainage system.	Oil, fuel, hydraulic fluids, transmission fluids, antifreeze
Scrap wood/pallets	If dirty (i.e., POL marks), pollutants could be washed by rain into the stormwater drainage system.	POL products or other pollutants

TABLE 2-3 POSSIBLE POLLUTANTS IN EXPOSED MATERIAL		
Waste dumpsters	General refuse can be blown out of the dumpsters and land on the ground or in the stormwater system if dumpsters are overloaded or left uncovered.	General refuse, cardboard, paper products, absorbents

2.7 SIGNIFICANT SPILLS

There have been no leaks or spills at the facility in the last 3 years (2011, 2012, and 2013). If future significant spills and/or leaks of hazardous or toxic material occur at the facility, they will be listed in Table 2-4.

2.8 IDENTIFICATION OF NON-STORMWATER DISCHARGES

NSWDs are discharges of water used in manufacturing-industrial processes (i.e., vehicle washing wastewater) that are discharged through a stormwater system, overland, or by some other conduit to waters of the U.S. or the state. Facilities should be inspected for NSWDs and certification of the inspection should be included in the SWMP. Some NSWDs are exempted to flow through the stormwater system provided that their pollution controls are identified and conform to the stormwater pollution controls. A list of exempted NSWDs is provided in Appendix A4.

The attached certification (Table 2-5) documents that no stormwater outfalls were observed during the SAV on May 20, 2014. Visual inspection reports should be kept in Appendix B.

TABLE 2-4 LIST OF SIGNIFICANT SPILLS AND LEAKS (LAST 3 YEARS)										
Date (Month/Day/Year)	**Spill**	**Leak**	**Location (As Indicated On Site Map)**	**Type of Material**	**Quantity**	**Source, If Known**	**Reason**	**Amount of Material Recovered**	**Material No Longer Exposed to Stormwater (True/False)**	**Preventive Measures Taken**
2011	None	None								
2012	None	None								
2013	None	None								

TABLE 2-5 WATER QUALITY DATA FOR NSWDS					
Non-Stormwater Discharge Assessment and Certifications					
Date of Test or Evaluation	**Outfall Directly Observed During Test**	**Method Used to Test or Evaluate Discharge**	**Describe Results from Test for the Presence of Non-Stormwater Discharge**	**Identify Potential Significant Sources**	**Name of Person Conducting Test**
5/20/2014	No outfall identified.	N/A	N/A	N/A	K. Astroth

Notes:

N/A – not applicable

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SECTION 3 BEST MANAGEMENT PRACTICES IDENTIFICATION

The BMPs that reduce or eliminate stormwater pollution are described in this SWMP. The following section describes each of the BMPs identified to reduce stormwater pollution from the William F. Fale USARC facility. The aFOS/aEPS should oversee the implementation of the SWMP and routinely inspect the facility according to the inspection checklists located in Appendix B. At a minimum, the inspection should be performed annually. Results of the inspection should be kept on file, and copies of the checklist and plan modifications should be submitted to the 88th RSC aEPS. If issues are found during the routine inspection, the checklist with comments should be promptly submitted to the aFOS and aEPS.

3.1 DEFINITION OF BMP

BMPs are measures that may be implemented to prevent or mitigate pollution of stormwater from activities performed at the William F. Fale USARC. BMPs include processes, procedures, schedules of activities, prohibitions on practices, and other management procedures that prevent or reduce stormwater pollution. BMPs may range from inexpensive changes in procedures or practices to more costly facility improvement projects such as installing sediment traps, detention ponds, etc.

3.2 NON-STRUCTURAL BMP

Non-structural BMPs are inexpensive and relatively simple management practices applicable to a majority of the activities performed at the William F. Fale USARC facility. Stormwater regulations require implementation of these BMPs. Activities such as good housekeeping, preventive maintenance, and visual inspections should be performed routinely at the facility.

3.2.1 Good Housekeeping

Good housekeeping refers to cleaning, maintenance, and storage practices conducted at the facility. Many potential stormwater pollution sources may be eliminated or reduced through simple housekeeping practices. Implementing good housekeeping practices should involve all personnel. Examples of good housekeeping practices that should be implemented and continued include:

- Clean HAZMAT and POL containers of drips or spills prior to returning item to POL rooms, HAZMAT rooms, HAZMAT storage cabinets, HAZMAT storage sheds, or secondary containment areas.
- If lids crack or break on a dumpster, use a tarp to cover content until the lid has been replaced.
- Regularly pick up and dispose of garbage, used absorbent, and waste material. Items not needed for facility operation or items no longer used will be immediately disposed of or sent off-site for recycling.
- Maintain an orderly garbage disposal area. For example, pick up materials around the garbage disposal area that have not been properly disposed of in the garbage dumpster. Make sure that the lid on the garbage dumpster

is properly closed and in good working order to keep stormwater out of the garbage dumpster.

- Store chemicals and POL materials at approved storage locations and out of precipitation and stormwater flow paths.
- Move all exposed material, used tires, scrap metal, trash, and wood pallets from areas exposed to stormwater into buildings or cover with a tarp. Items no longer needed should be discarded.
- Designate a central location for scrap material (scrap metal, wooden pallets, etc.) and cover, if feasible.
- Ensure that all spill cleanup procedures listed in the FSCP are understood and implemented by all employees.
- Regularly sweep floors in shops and ensure storm drains are free of debris.

3.2.2 Visual Inspections

A visual inspection program should be implemented to inspect regularly all areas that could contaminate stormwater. The AFSI checklist described in Section 4.2 is included in Appendix B. The inspection checklist is intended to ensure all elements of the SWMP are in place and working properly. Areas of secondary containment such as buildings, CONEXs, HAZMAT cabinets, and HAZMAT sheds should be inspected to make sure they are not corroded or damaged in such a manner that they do not control potential spills or leaks resulting from storage of potential stormwater contaminants. Additionally, the following should be inspected:

- **Material storage, handling, and transfer areas** – These areas include the HAZMAT cabinets, HAZMAT storage rooms, and POL rooms, which should be inspected for spills and leaks.
- **General stormwater drainage area** – This area should be inspected to identify any NSWDs. If a water flow is present and rain has not occurred within the past 72 hours, further investigation is warranted unless the source is known to be non-polluting. Further investigation should note the odor of the water, clarity of the water, staining of the ground or drainage ditches, the presence of floating debris in drainage ditches, or exceptionally lush vegetation.
- **Storm drains and catch basins** – All storm drains and catch basins on-site should be inspected regularly to identify any NSWDs or accumulation of leaves, silt, debris, or garbage.
- **Garbage collection areas** – Areas around all dumpsters should be inspected for debris. Dumpsters should be inspected to ensure covers are kept closed and they are not leaking any fluids.
- **MEP and POV lots** – Vehicles, equipment, and storage areas in the MEP area should be inspected to identify any leaks or conditions that could lead

to discharges of chemicals or lubricants. Staining on the ground or any NSWDs should be noted.

- **Landscaped areas –** Grass and landscaped areas should be examined for areas of potential soil erosion.
- **Loading dock areas** – The area around loading docks should be inspected after every delivery noting any spills that occurred during unloading/loading and transfer activities.

All inspections should be documented, including signatures and dates, and kept within this SWMP. Any required maintenance and repairs should be documented and filed with the SWMP after corrective action has taken place. Contact names and numbers should be kept current and kept with this SWMP.

3.2.3 Preventive Maintenance

Preventive maintenance testing and inspection should be conducted on all equipment and systems listed in Table 3-1 to uncover conditions that could cause breakdowns or failures resulting in a discharge of pollutants. Any issues identified through regular visual inspection should be immediately remedied through adjustment, repair, or replacement. Preventive maintenance should include the following items:

- Clean all storm drains identified during visual inspection to remove leaves, silt, sand, and any garbage that has accumulated in these structures.
- Assess the integrity of all secondary containment associated with POL rooms, HAZMAT rooms, and HAZMAT cabinets.
- Provide drip pans for vehicles identified during visual inspection as leaking oil, transmission fluid, brake fluid, etc.
- Drain fuel and fluid from small equipment stored for extended periods of time.
- Ensure that personnel trained in spill response procedures are present and spill prevention measures are followed during HAZMAT delivery, transport, and removal of liquid wastes.
- Ensure that spill response kits are available for areas that would potentially require them. Order replacements or additional supplies when necessary.
- Maintain grassy areas so as to prevent erosion.

TABLE 3-1 EQUIPMENT TO INSPECT AS PART OF A PREVENTIVE MAINTENANCE PROGRAM	
HAZMAT storage containers	Storm drains, catch basins, and outfalls
Process and material handling equipment	Drainage systems
Vehicles and equipment (i.e., military vehicles, compressors, and generators)	Stormwater management devices (structural BMPs)
Electric transformers	CONEXs

3.2.4 Spill Response

Each maintenance shop or facility handling HAZMAT should have adequate spill response materials on hand. The aEPS will assist the FC by assessing their spill kit needs and procure spill response materials for facilities with a high release potential. Spill response resources are not to be used for housekeeping or daily operations. Spill response kits must be kept stocked with the appropriate spill response material. Once an item has been used, the FC must contact the aEPS to request replacement items.

An FSCP is a separate document that provides additional information on HAZMAT use, POL storage, and identifies procedures for preventing and responding to releases of those materials.

Persons who cause the discharge to the environment of a hazardous substance or who possess or control a hazardous substance that is discharged to the environment are required to immediately notify the aEPS or the 88th RSC Environmental Division as detailed in the emergency contact list provided as Table 3-2.

TABLE 3-2 EMERGENCY CONTACT LIST	
Organization	**Telephone Number**
Fire Department	911
Police	911
Hospital/Ambulance Service	911
88th RSC Area Environmental Protection Specialist	262-685-7727
88th RSC Environmental Office	612-713-3820
William F. Fale USARC	920-208-2658
88th RSC Emergency Operations Center	608-556-1206

Persons will need to provide information such as:

- Name, address, and location of discharge,
- Physical state, quantity, chemical characteristics of the discharge,
- Cause of the discharge,
- Destination of the discharged substance,
- Actions taken to stop the release/minimize the impacts to the environment,
- Actual or potential impacts to human health or the environment.

This information must be summarized and included with the facility inspection report.

3.3 STRUCTURAL BMP

Structural BMPs are measures to help control excess sheet flow and require investing funds to alleviate stormwater pollution. They are generally designed and constructed to restrict and control specific pollution activities and sources at the facility. Structural BMPs in use at the facility include the use of flammable materials lockers, CONEXs, and the HAZMAT storage shed.

There were a few areas that were noted as to needing maintenance on the USARC property during the SAV:

- Several of the covers for the cleanouts for the underground conveyance pipes that receive stormwater from the USARC building's roof drains were either missing or damaged. Debris was observed in the cleanout near the administration building's southeast corner.
- The POV parking area east of the USARC building is small and does not have adequate space to be park all POVs on the paved area. There was evidence that POVs parked in the grass area around the POV parking area and entrance drive. This has caused rutting and erosion.
- There was slight erosion along the MEP fence along the property's southern boundary.

Additionally, the retention wall along the property's southern boundary was observed to have areas starting to bulge away from the USARC property. There were also areas where vegetation is growing between the boards of the retention wall. The retention wall should potentially be inspected to ensure the integrity of the wall has not been compromised.

3.4 EMPLOYEE TRAINING

The success and effectiveness of this SWMP depends on the interest of employees responsible for implementing and maintaining the stormwater management program. Personnel need to understand the importance of SWMP goals and must be trained in techniques of spill prevention, response, cleanup, and documentation. When properly trained, personnel are more capable of preventing spills, responding safely and

effectively to an accident, and recognizing situations that could lead to stormwater contamination.

Annual training for the SWMP should be conducted for all full-time facility personnel. A list of personnel receiving this training should be maintained as part of the SWMP. Updates to the SWMP should be discussed in detail during the annual training review. Training should address each component of this SWMP including how and why tasks are to be implemented. Topics should include:

- Stormwater awareness,
- Spill prevention and response,
- Good housekeeping practices,
- Material management practices.

SECTION 4 PLAN UPDATE AND REPORTING

4.1 PLAN UPDATE

This SWMP should be updated whenever there are changes in design, construction, operation, or maintenance of the facility that impact the discharge of pollutants to stormwater. A change to the plan may also occur because routine visual inspections or comprehensive site evaluations have proven the plan to be ineffective at controlling stormwater contamination. An annual evaluation should be performed of the facility to ensure the SWMP has been implemented, is up-to-date, and is effective.

Analysis of past incidents can help detect problems and prevent similar incidents. The aFOS and aEPS will be responsible for keeping all records relative to this SWMP, its implementation, compliance, reviews, updates, and reports. All records should be retained for at least 3 years. This SWMP shall be kept in the Environmental Folder at the facility and a copy shall be provided to the aEPS.

The management of the SWMP will require detailed documentation. Key items include:

- Updated copies of the SWMP,
- Supporting documents to the plan, including field notebooks, drawings, and maps,
- NSWD inspections and analysis,
- Records of stormwater outfall monitoring data, if conducted,
- Records of annual reviews, inspections, training, and updates,
- All documents referenced in the plan including FSCP, HAZMAT inventory, spill records, etc.,
- BMPs implementation schedules.

4.2 REPORTING

The AFSI reports should be completed by the aEPS with the AFSI checklist. Each report should include results of the annual inspection along with results of any other inspections that may have been conducted. The report should also include documentation of any event (e.g., spill, treatment unit malfunction) that would require an inspection, results of the inspection, and any subsequent corrective maintenance activity.

The annual inspection will allow the aEPS to verify the accuracy of the description of potential pollutant sources contained in the plan, ensure the plan drainage map is accurate and up-to-date, and stormwater pollution controls are correctly identified, in place, and working. The inspection will identify where new controls need to be implemented and incorporated into the facility plan. The AFSI checklist is provided in Appendix B. The process for conducting the inspection is outlined below:

- Review the SWMP and prepare a list of items that are located in the material handling, storage, and transfer areas.

- List all equipment and containment measures in these areas.
- Review facility operations for the past year to determine additional areas and modifications that require inclusion in the plan.
- Conduct inspection to determine if: (1) all stormwater pollution prevention measures are accurately identified in the plan; (2) all measures are in place and working properly; and (3) NSWDs are evident – see Table 2-5.
- Document findings.
- Revise the SWMP, as needed. Include descriptions of potential pollutant sources and controls that have changed since the previous plan update.
- Implement necessary changes in a timely manner.
- Once the site compliance evaluation is completed, the aFOS will work with the FC to begin implementing any necessary changes in BMPs or other pollution prevention measures resulting from the inspection and changes to the SWMP, with assistance from the aEPS as necessary.
- Sign the report and file it with the plan.

SECTION 5 STORMWATER LONG-TERM MAINTENANCE PLAN

Regular maintenance activities are required to ensure the function of a stormwater system and to prevent potential nuisances such as odors, mosquitoes, and weeds. Maintenance activities may also be required after storm events greater than 1 inch of rain per 24 hours. Other actions may also be necessary after such storm events including those identified through facility assessments as described in Section 5.7. Maintenance activities will be managed by the aFOS. If facility staff observes a condition in need of maintenance, they will notify the FC who will coordinate with the aFOS to address the maintenance need. Maintenance activities are summarized in Appendix C with recommended frequencies. A stormwater system assessment schedule and checklist are included in Appendix D. Analytical results from the sampling of stormwater or sediment should be placed in Appendix E.

5.1 ROOF DRAINS

Roof drains must be cleaned on a regular basis to maintain their ability to direct stormwater flow toward the stormwater system, and consequently prevent flooding. The removal of sediment and decaying debris from the drains has both aesthetic and water quality benefits, including: reducing foul odors, reducing suspended solids, and reducing the load of oxygen-demanding substances that eventually reach receiving waters. Dissolved oxygen in receiving waters is utilized by oxygen-demanding substances that come from any organic sources of material that decompose, such as leaves and other tree debris. Check roof drain openings after trees have shed their leaves for the season to remove debris.

5.2 CATCH BASINS, MANHOLES, AND TRENCH DRAINS

Catch basins, manholes, and trench drains must be cleaned regularly as needed to maintain their ability to collect water, trap sediment, and consequently prevent flooding. The removal of sediment and decaying debris from the catch basins, manholes, and trench drains has both aesthetic and water quality benefits, including; reducing foul odors, reducing suspended solids, and reducing the load of oxygen-demanding substances that eventually reach receiving waters, such as leaves and grass clippings. Check grate openings after significant precipitation events and remove debris. Debris should be removed from the structure if the depth of deposits exceeds 60 percent of sump depth or if clearance from the top of the debris to the pipe invert is less than 6 inches. The catch basins, manholes, and trench drains can be cleaned out manually if the necessary tools and equipment are available on-site.

5.3 STORM SEWER PIPES

Localized flooding at a catch basin, manhole, or trench drain may indicate the existence of a problem in the storm sewer pipe such as sediment accumulation, entry of roots, and infiltration of water. Storm sewer pipes must be cleaned periodically to remove built-up sediment. Various methods can be used to remove sediments from pipes including jet cleaning, use of sewer balls, and rodding. Jet cleaning is generally the least expensive method and involves flushing the sewer with water and

collecting the material flushed from the pipe at the end. Contact your aFOS for maintenance support on large jobs.

5.4 DITCHES AND SWALES

Drainage ditches and swales are structures used to collect and convey stormwater. Localized flooding within or around a ditch and/or erosion may indicate the existence of a problem with ditch functions. Annual inspection of the ditches is recommended and a visual inspection of each ditch, as well as culverts, if applicable, after significant rainfall events or quarterly is required.

5.5 SEDIMENT REMOVAL

Any sediment and other accumulated materials removed from the stormwater system will be disposed of at an approved landfill if test results indicate materials are non-hazardous. The sediment and other accumulated materials removed may be adversely impacted by the activities conducted on-site such as maintenance of vehicles thus requiring analytical sampling. Contact the aEPS to make the determination on sampling. If the sediment removed is determined to be non-hazardous waste, based on analytical results, future sediment removed can be assumed to be non-hazardous waste based on generator's knowledge. This assumption can only be made if there have been no changes in activities performed at the facility and no known spills that may have reached the storm sewer system.

5.6 ASSESSMENTS

Assessment activities are summarized in Appendix D with recommended frequencies and a checklist. Most assessment items can be completed by walking around the facility and performing a visual assessment of the storm sewer system components. If during the course of daily business activities the FC notices any discrepancies with the stormwater system they should contact the aFOS immediately. A list of typical problems that may be encountered include:

- Broken or damaged structural control measures (catch basins, manholes, pipes),
- Significant erosion by downspouts/roof drains or drainage equipment,
- Visible signs of chemical or POL spills,
- Buildup of leaves, silt, sand or garbage/debris in catch basins,
- Blockage of stormwater inlets, grate openings or outfalls, or
- Localized flooding at catch basins or other inlets/outfalls.

The aFOS can use Appendix D in this SWMP as a guide.

If stormwater sampling occurs at the facility during the assessments, analytical results will be found in Appendix E.

SECTION 6 REFERENCES

Clean Water Act of 1972, 33 U.S.C. § 1251 et seq. 2002.

United States Environmental Protection Agency. 2011. 40 CFR Part 122.26(b)(12). Storm Water Discharges. July 1, 2011.

United States Environmental Protection Agency. 1992a. Storm Water Management for Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices (EPA 832-R-92-006).

United States Environmental Protection Agency. 1992b. Storm Water Management for Industrial Activities, Developing Pollution Prevention Plans and Best Management Practices - Summary Guidance (EPA 833-R-92-002).

United States Environmental Protection Agency. 1990. 40 CFR Parts 122, 123, and 124. National Pollutant Discharge Elimination System Permit Application Regulations for Storm Water Discharges. November 16, 1990.

Wisconsin Department of Natural Resources. 2011. General Permit to Discharge under the Wisconsin Pollutant Discharge Elimination System Permit No. WI-S067849-3. Effective May 13, 2011 through April 30, 2016.

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FIGURES

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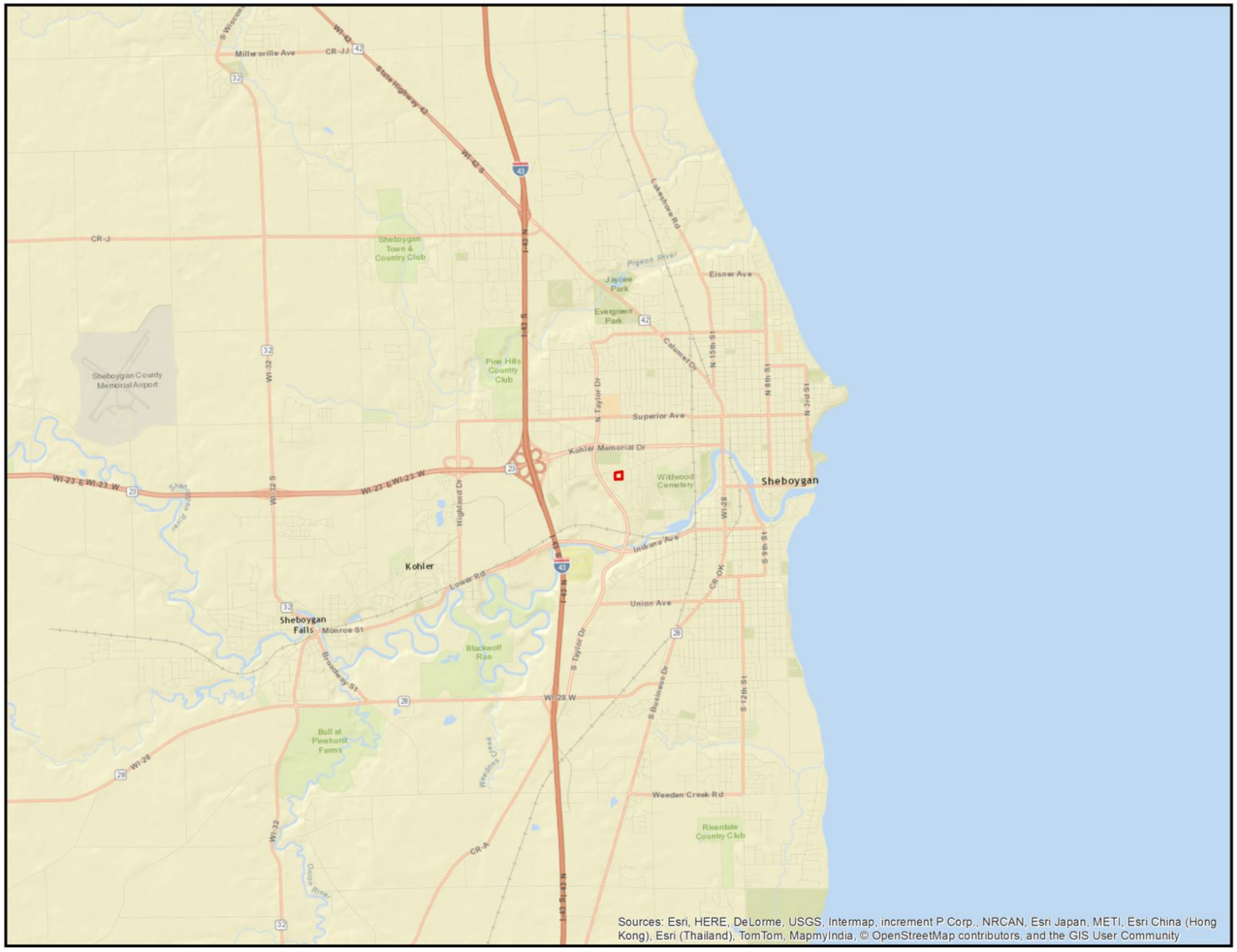
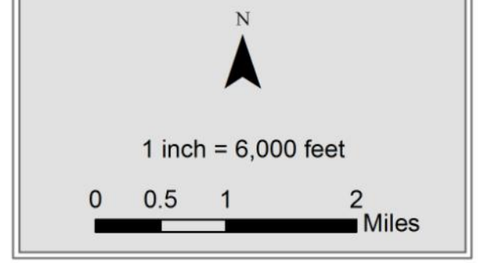


Stormwater Management Plan

WI049/55985 William F. Fale USARC
2913 Erie Avenue
Sheboygan, Wisconsin 53081-3655

88th Regional Support Command (RSC)
United States Army Reserve

Figure 1
Site Location Map



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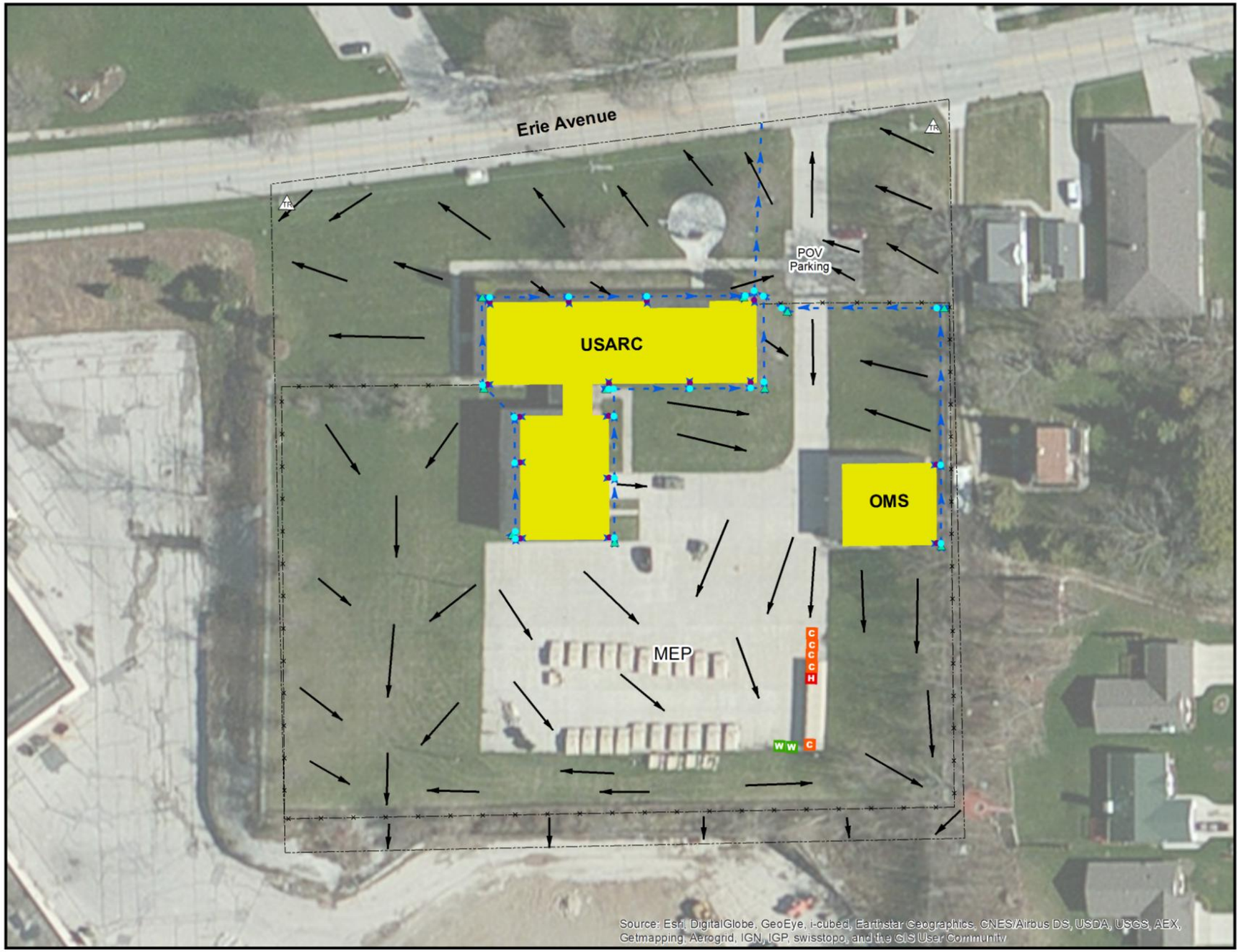

Stormwater Management Plan
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88th Regional Support Command (RSC)
United States Army Reserve

Figure 2
Site Layout and Land Use Map

Legend

- Transformer
- CONEX
- HAZMAT Storage Shed
- Waste Dumpster
- Cleanout
- Wye
- Roof Drain
- Underground Conveyance Pipe
- USARC Installation
- Buildings
- Drainage Area 1
- Drainage Area 2

N

1 inch = 62 feet

0 25 50 100 150 Feet

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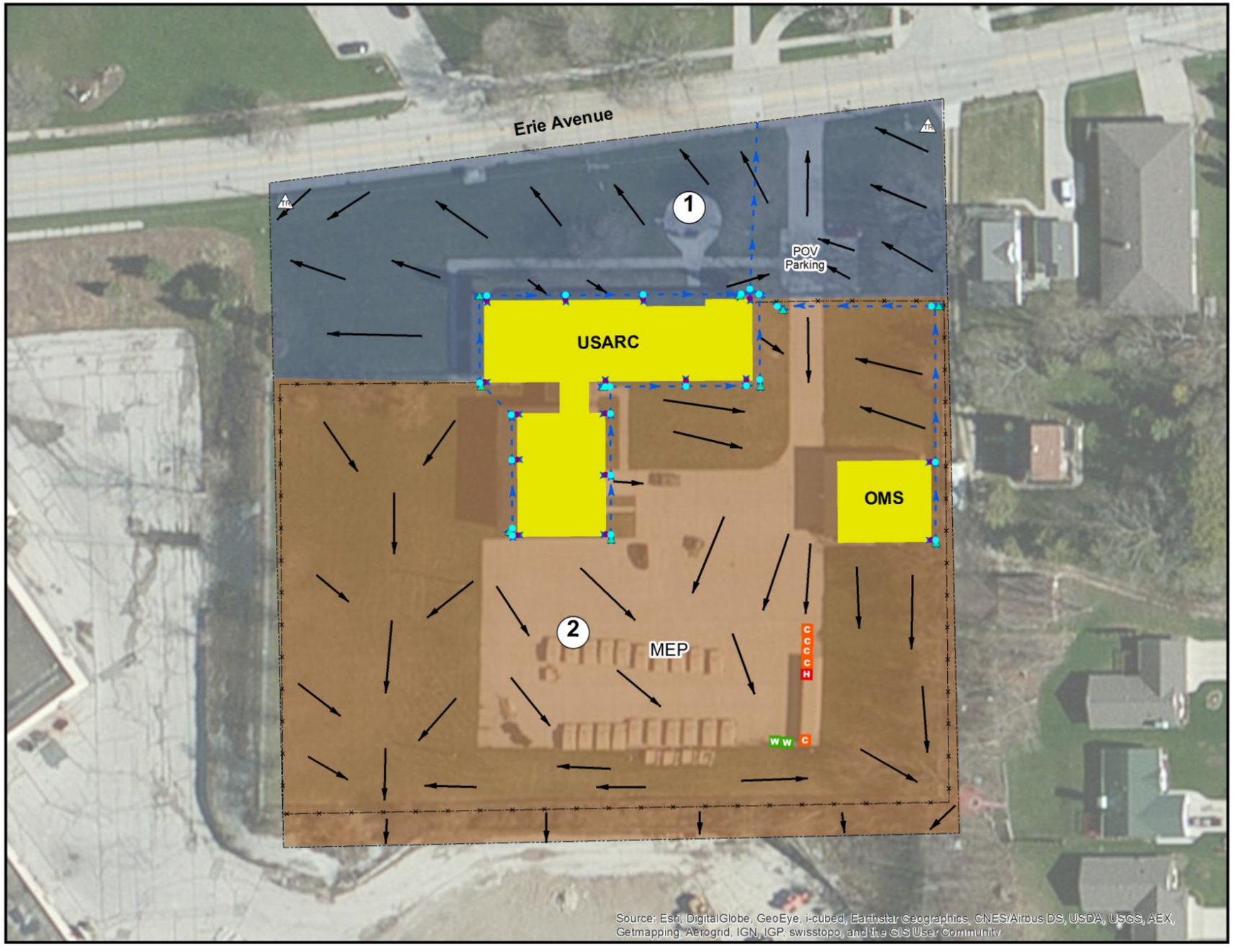

Stormwater Management Plan
WI049/55985 William F. Fale USARC
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88th Regional Support Command (RSC)
United States Army Reserve

Figure 3
Site Drainage Map

Legend

- Transformer
- CONEX
- HAZMAT Storage Shed
- Waste Dumpster
- Cleanout
- Wye
- Roof Drain
- Underground Conveyance Pipe
- USARC Installation
- Buildings
- Drainage Area 1
- Drainage Area 2

N

1 inch = 62 feet

0 25 50 100 150 Feet

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APPENDIX A
REGULATORY SUPPORTING INFORMATION

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APPENDIX A1
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT NO. WI-S067849-3
FOR STORMWATER DISCHARGES
EFFECTIVE DATE: MAY 13, 2011
EXPIRATION DATE: APRIL 30, 2016

The Wisconsin Department of Natural Resources General Permit can be found at this location: http://dnr.wi.gov/topic/stormwater/documents/S067849-3_Tier1_Permit.pdf

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APPENDIX A2
40 CFR § 122.26

The Code of Federal Regulations, Storm Water Discharges (40 CFR §122.26), can be found at this location:

http://www.gpo.gov/fdsys/pkg/CFR-2013-title40-vol23/xml/CFR-2013-title40-vol23-sec122-26.xml

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APPENDIX A3

MUNICIPAL CODE OF THE CITY OF SHEBOYGAN, WISCONSIN

APPENDIX E – POST-CONSTRUCTION STORMWATER MANAGEMENT ZONING ORDINANCE

The Municipal Code of the City of Sheboygan, Wisconsin can be found at this location: https://library.municode.com/index.aspx?clientId=14340&stateId=49&stateName=Wisconsin

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APPENDIX A4
EXEMPTED NON-STORMWATER DISCHARGES

Exempted non-stormwater discharges are listed within the Wisconsin Department of Natural Resources Permit at this location:
http://dnr.wi.gov/topic/stormwater/documents/S067849-3_Tier1_Permit.pdf

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APPENDIX B
ANNUAL FACILITY SITE INSPECTION CHECKLIST

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APPENDIX B1
ANNUAL FACILITY SITE INSPECTION COMPLETED CHECKLIST

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APPENDIX B2
ANNUAL FACILITY SITE INSPECTION BLANK CHECKLIST

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STORMWATER MANAGEMENT PLAN

ANNUAL FACILITY SITE INSPECTION CHECKLIST

Facility_____

Year_____

Review site maps (Section 2).

- ☐ Inspect drainage areas to verify water flow paths and drainage area boundaries.
- ☐ Annotate the addition or removal of any structural control measures.
- ☐ Update location where materials are stored exposed to precipitation.
- ☐ Annotate location where significant spills or leaks have occurred during the past year.
- ☐ Note the removal, relocation, or installation of USTs, ASTs, or storage buildings.
- ☐ Note changes in permeable surface areas (e.g., paving projects).
- ☐ Note changes in stormwater conveyance systems.
- ☐ Annotate building additions, renovations, and demolitions.

☐ Review facility description text (Section 2).

- ☐ Revise text to describe changes in site maps.
- ☐ Describe changes in industrial activities (e.g., addition of vehicle washing or painting operations).

☐ Verify that plans referenced by the SWMP are up-to-date and maintained on site.

- ☐ AR 200-1
- ☐ AR 200-2
- ☐ Include new yearly Hazardous Material Inventory.
- ☐ Update Material Data Safety Sheet Files.
- ☐ 88th RSC Internal and External SOPs.
- ☐ Describe any new structural BMPs installed at the facilities.
- ☐ Describe significant spills that have occurred during the past year (complete Table 2-3).
- ☐ Inspect drainage areas and outfalls for evidence of non-stormwater discharges (NSWDs) (complete Table 2-4).
- ☐ Include any stormwater monitoring data in Appendix C of the SWMP.
- ☐ Describe any new chemicals, equipment, or materials that may be potential sources of stormwater pollution. Describe where these materials are stored and potential pollutants that may be discharged.

☐ Identify structural and non-structural BMPs to be implemented to mitigate new potential stormwater pollutant sources.

STORMWATER MANAGEMENT PLAN

ANNUAL FACILITY SITE INSPECTION CHECKLIST

Facility_____

Year_____

☐ Review BMPs (Section 3) and verify that BMPs are being followed:

- ☐ Clean hazardous material and POL containers of drips or spills prior to returning them to the hazardous material storage locker.
- ☐ Regularly pick up and dispose of garbage, used absorbent and waste material.
- ☐ Maintain an orderly garbage disposal area. For example, pick up materials around the garbage disposal area that have not been properly disposed of in the garbage dumpster. Make sure that lids on the garbage dumpster are properly closed and in good working order to keep stormwater out of the garbage dumpsters.
- ☐ Routinely inspect equipment and storage areas for leaks or conditions that could lead to discharges of chemicals or lubricants.
- ☐ Store chemicals and POL materials at approved storage locations and out of precipitation and stormwater flow paths.
- ☐ Remove all exposed material, trash, and pallets from the area or cover with a tarpaulin. Unneeded items should be discarded.
- ☐ Designate a central location for scrap material (scrap metal, wooden pallets, etc.) and cover if feasible.
- ☐ Cover with a tarpaulin the pallet used to store used tires.
- ☐ Clean all catch basins to remove leaves, silt, sand, and any garbage that accumulates in these structures.
- ☐ Inspect the vehicles that are stored on the property and provide drip pans for those that leak oil, transmission fluid, brake fluid, etc.
- ☐ Spill prevention measures are employed during hazardous material delivery and transport.
- ☐ Spill response kits are available for areas that would potentially require them.
- ☐ Grassed areas are in good condition to prevent erosion.
- ☐ Inspect the general stormwater drainage area for new sources of pollution.
- ☐ Inspect material storage, handling, and parking areas.
- ☐ Inspect and identify areas where erosion may occur.
- ☐ Inspect garbage collection areas.
- ☐ Inspect loading dock areas.
- ☐ Describe new BMPs to replace ineffective BMPs.
- ☐ Develop an implementation schedule for new BMPs.

STORMWATER MANAGEMENT PLAN

ANNUAL FACILITY SITE INSPECTION CHECKLIST

Facility_____

Year_____

☐ Review monitoring and reporting (Section 4) documentation and verify:
- ☐ Visual monitoring of stormwater discharges was completed annually.
- ☐ Visual observations of NSWDs completed annually, or detailed testing of storm sewer collection system (dye testing, smoke testing, or video camera observation) performed less than five years ago.
- ☐ All full-time facility personnel have received training on SWMP requirements.

Additional Comments:

_____

_____

_____

_____

_____

_____

Signature:_____ Date:_____

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APPENDIX C
STORMWATER SYSTEM MAINTENANCE SCHEDULE

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Stormwater System Maintenance Schedule

Maintenance Activity	Activity Frequency
Vegetative Cover	
Mow and trim vegetation to maintain a vegetation height of 6 inches or less	Season Dependent
Seed or sod to restore dead or damaged ground cover	Annually or as needed
Roof Drains, Catch Basins, Manholes, Trench Drains and Flared End Sections	
Remove debris** from grates and openings	Quarterly and as needed
Remove accumulated sediment and/or debris**	Annually** or when depth exceeds 60% of sump depth or if clearance from debris to pipe invert is less than 6 inches
Ditches	
Repair damaged or eroded areas	As needed
Repair cracked components	As needed
Remove accumulated sediment** within the trench and at discharge points	Annually** or when depth exceeds 6 inches or reaches inlet pipe invert
Stormwater Pipes	
Clean sewer pipes	Semi-Annual or Annually**
Stormwater Ponds	
Mow and trim vegetation in and adjacent to pond(s) to maintain a vegetation height of 6 inches or less	Season Dependent
Remove debris from pond(s) and the inlet structure(s)	Quarterly and as needed
Stabilize pond outfalls to prevent scouring using riprap	As needed
Repair side slopes of pond(s) that have eroded or cracked by filling with suitable material, if needed, and establishing vegetation	As needed
Repair low spots and preferential flow paths in pond bottom(s) by filling with suitable material and establishing vegetation	As needed
Remove sediment** from pond bottom(s) when sediment exceeds 10% of the design pond depth	As needed indicated by quarterly assessments validated by necessity of sediment quantity.

** Review Section 5.0 - Maintenance for information on proper disposal of these materials.
** Recommended activity frequency for first year after construction. If frequency is excessive due to limited sediment build-up, frequency may be extended.
Note – Quarterly and Annual assessments of the stormwater ponds will be performed by the aFOS.

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APPENDIX D
STORMWATER SYSTEM ASSESSMENT SCHEDULE

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Stormwater System Assessment Schedule and Checklist

Assessment Item		Assess-ment Frequency	Assessment Conducted? (Y/N)	Maintenance Needed? (Y/N)	Comments	Initial & Date
Vegetative Cover						
1.	Is vegetation greater than 6 inches high?	Q				
2.	Is vegetation healthy?	Q				
3.	Do bare spots exist over more than 10% of site?	Q				
Roof Drains, Catch Basins, Manholes, Trench Drains, and Flared End Sections						
4.	Is debris present at grates or openings?	Q				
5.	Is localized flooding present?	Q				
6.	Is debris visible at structure bottom?	A				
7.	Are drains and structures in good condition?	A				
Ditches						
8.	Is there erosion or cracking on side slopes?	Q				
9.	Is localized flooding present?	Q				
10.	Is sediment or debris present within the ditch?	A				
Stormwater Sewer Pipes						
11.	Are pipes in good condition based on camera inspection?*	Every 5 years				
12.	Is debris present at pipe openings?	Q				
Retention Pond(s)						
13.	Is vegetation in and around pond greater than 6 inches high?	Q				
14.	Is debris present at pond inlet structure?	Q				
15.	Is there scouring at pond inlet structure?	Q				
16.	Is there erosion or cracking on side slopes of pond?	Q				
17.	Is there standing water in the pond after sufficient time has passed?	Q				
18.	Is there low spot(s) or preferred flow path in pond bottom?	Q				
19.	Is sediment accumulated in pond greater than 10% of designed pond depth?	Q				

** Storm Sewer Pipes should be inspected by camera as needed, plan on every 5 years for budget purposes.*

Assessment Frequency during Nonfreezing Months: A = Annually Q = Quarterly

Note – Quarterly and Annual assessments of the stormwater ponds will be performed by the aFOS.

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APPENDIX E
STORMWATER OR SEDIMENT SAMPLING ANALYTICAL RESULTS

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No stormwater sampling data was available during the SAV performed on May 20, 2014.