FINAL
Preliminary Assessment Report
Springfield Aviation Classification Repair Activity Depot
Springfield, Missouri

Perfluorooctane-Sulfonic Acid (PFOS) and Perfluorooctanoic Acid (PFOA) Impacted Sites
ARNG Installations, Nationwide

March 2020

Prepared for:

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Acronyms and Abbreviations

°F	degrees Fahrenheit
AECOM	AECOM Technical Services, Inc.
AFFF	aqueous film forming foam
AOI	area of interest
ARNG	Army National Guard
AVCRAD	Aviation Classification Repair Activity Depot
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSM	conceptual site model
FTA	fire training area
gpm	gallons per minute
GSE	Ground Support Equipment
MOARNG	Missouri Army National Guard
PA	Preliminary Assessment
PFAS	per- and poly-fluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
SI	Site inspection
US	United States
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
WWTP	waste water treatment plant

Executive Summary

The United States Army Corps of Engineers Baltimore District on behalf of the Army National Guard (ARNG) Installations & Environment Division, Cleanup Branch contracted AECOM Technical Services, Inc. to perform *Preliminary Assessments (PAs) and Site Inspections (SIs) for Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) Impacted Sites at ARNG Facilities Nationwide*. The ARNG is assessing potential effects on human health related to processes at facilities that used per- and poly-fluoroalkyl substances (PFAS), primarily in the form of aqueous film forming foam released during firefighting activities or training, although other PFAS sources are possible.

AECOM completed a PA for PFAS at Springfield Aviation Classification Repair Activity Depot (AVCRAD) in Springfield, Missouri, to assess potential PFAS release areas and exposure pathways to receptors. The Springfield AVCRAD (also referred to as the "facility") is constructed on a parcel of land owned by the City of Springfield and leased to the State of Missouri for the use by the Missouri ARNG (MOARNG). The original lease began in 1977 for Hangar 1, while the lease for Hangar 27 and the expansion was issued in 2002 and is valid for a term of 50 years. The performance of this PA included the following tasks:

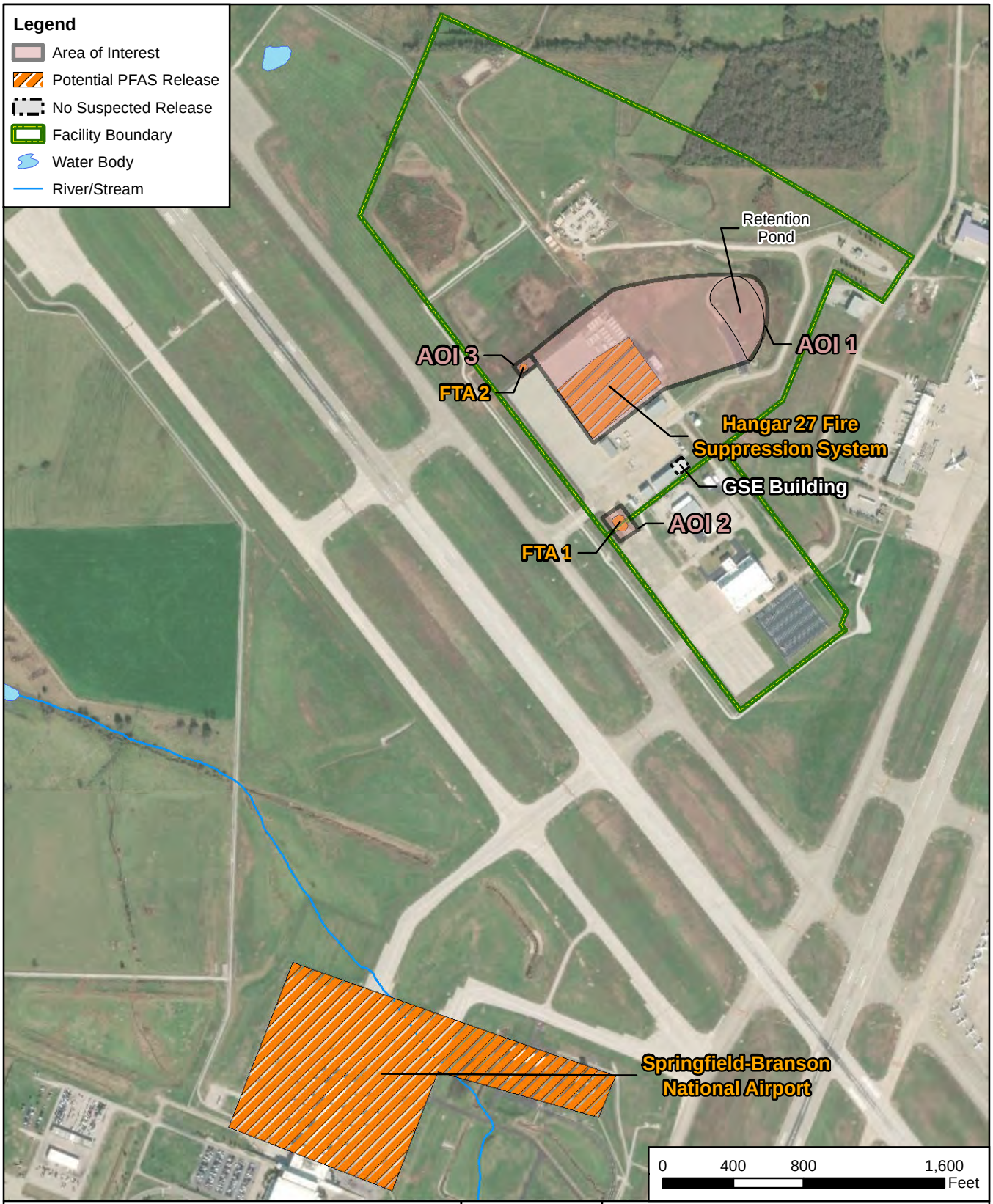
- Reviewed data resources to obtain information relevant to suspected PFAS releases
- Conducted a site visit on 11 July 2019
- Interviewed current MOARNG personnel, MOARNG environmental managers, and operations staff
- Completed visual SI at known or suspected PFAS release locations and documented with photographs
- Developed a conceptual site model (CSM) to outline the potential release and pathway of PFAS for the Areas of Interest (AOIs) and the facility

Three AOIs related to potential PFAS releases were identified at the Springfield AVCRAD during the PA. The AOIs are shown on **Figure ES-1** and described below:

Table ES-1: AOIs at Springfield AVCRAD

Area of Interest	Name	Used by	Potential Release Dates
AOI 1	Hangar 27	MOARNG	2011
AOI 2	Fire Training Area (FTA) 1	MOARNG	2007
AOI 3	FTA 2	MOARNG	2014

Based on potential PFAS release at this AOI, there is potential for exposure to PFAS contamination in media at or near the facility. The preliminary CSM for the AVCRAD is shown on **Figure ES-2**, which presents the potential receptors and media impacted. Based on the United States Environmental Protection Agency (USEPA) Unregulated Contaminant Monitoring Rule 3 data, it was indicated that no PFAS were detected in a public water system above the USEPA Health Advisory within 20 miles of the facility.



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Summary of Findings

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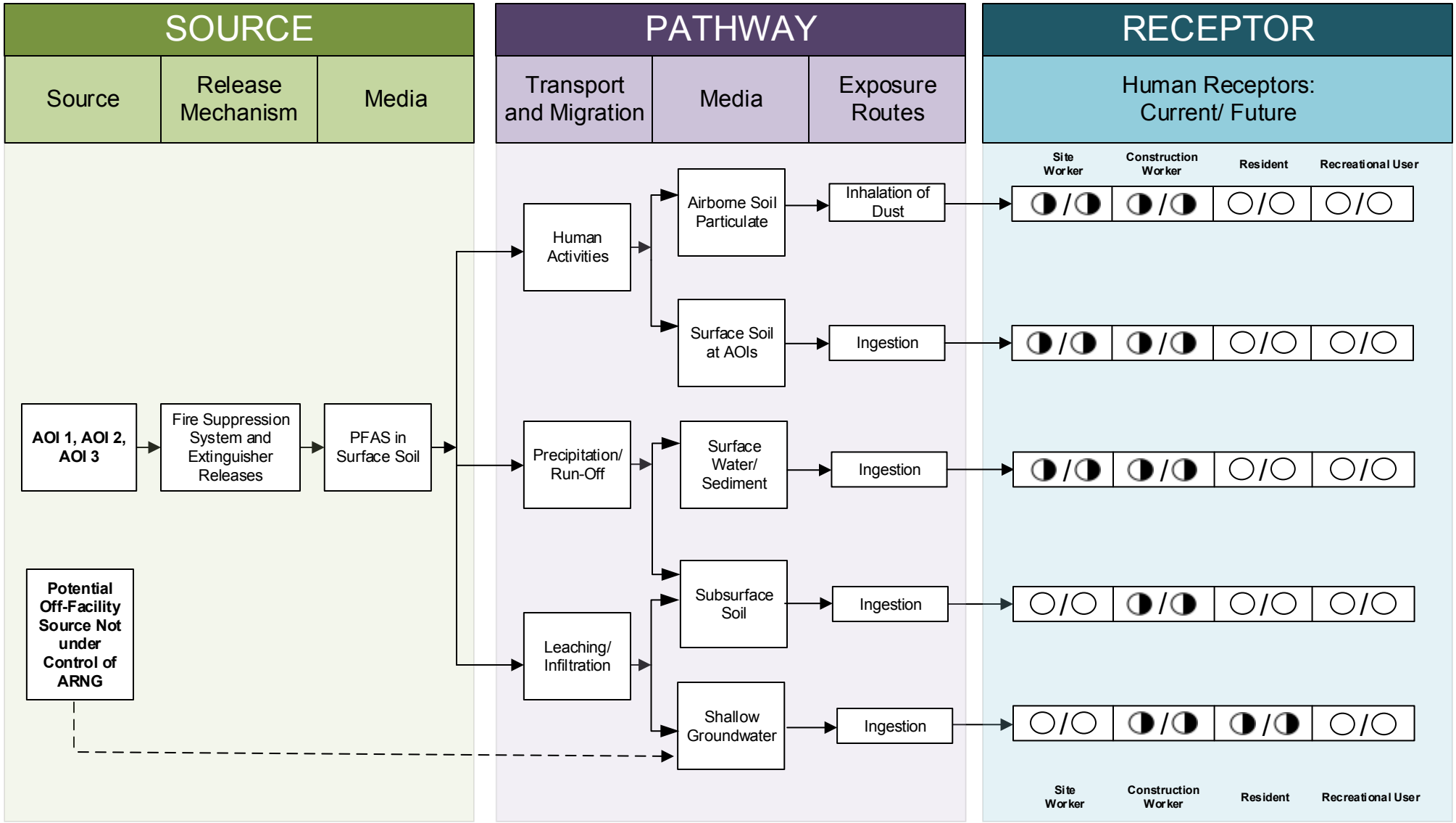
Figure ES-1



LEGEND

- Flow-Chart Stops
- Flow-Chart Continues
- Partial / Possible Flow
- Incomplete Pathway
- Potentially Complete Pathway
- Complete Pathway

Notes:

1. The resident receptors refer to an off-facility resident.
2. Dermal contact exposure pathway is incomplete for PFAS.

Figure ES-2
Preliminary Conceptual Site Model
Springfield AVCRAD

1. Introduction

1.1 Authority and Purpose

The United States (US) Army Corps of Engineers (USACE) Baltimore District on behalf of the Army National Guard (ARNG) Installations & Environment Division, Cleanup Branch contracted AECOM Technical Services, Inc. (AECOM) to perform *Preliminary Assessments (PAs) and Site Inspections (SIs) for Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) Impacted Sites at ARNG Facilities Nationwide* under Contract Number W912DR-12-D-0014, Task Order W912DR17F0192, issued 11 August 2017. The ARNG is assessing potential effects on human health related to processes at their facilities that used per- and poly-fluoroalkyl substances (PFAS), primarily releases of aqueous film forming foam (AFFF) although other sources of PFAS are possible. In addition, the ARNG is assessing businesses or operations adjacent to the ARNG facility (not under the control of ARNG) that could potentially be responsible for a PFAS release.

PFAS are classified as emerging environmental contaminants that are garnering increasing regulatory interest due to their potential risks to human health and the environment. PFAS formulations contain highly diverse mixtures of compounds. Thus, the fate of these PFAS compounds in the environment will vary. The regulatory framework at both federal and state levels continues to evolve. The US Environmental Protection Agency (USEPA) issued Drinking Water Health Advisories for PFOA and PFOS in May 2016, but there are currently no promulgated national standards regulating PFAS in drinking water. In the absence of federal maximum contaminant levels, some states have adopted their own drinking water standards for PFAS. The State of Missouri does not currently have drinking water or soil standards for PFAS.

This report presents findings of a PA for PFAS at Springfield Aviation Classification Repair Activity Depot (AVCRAD) in Springfield, Missouri in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, the National Oil and Hazardous Substances Pollution Contingency Plan (40 Code of Federal Regulations Part 300), and USACE requirements and guidance.

This PA documents the known fire training areas (FTAs) as well as additional locations where PFAS may have been released into the environment at Springfield AVCRAD. The term PFAS will be used throughout this report to encompass all PFAS chemicals being evaluated, including PFOS and PFOA, which are key components of AFFF.

1.2 Preliminary Assessment Methods

The performance of this PA included the following tasks:

- Reviewed data resources to obtain information relevant to suspected PFAS releases
- Conducted a site visit on 11 July 2019
- Interviewed current Missouri ARNG (MOARNG) personnel, MOARNG environmental managers, and operations staff
- Completed visual site inspections at known or suspected PFAS release locations and documented with photographs
- Developed a conceptual site model (CSM) to outline the potential release and pathway of PFAS for the Areas of Interest (AOIs) and the facility

1.3 Report Organization

This report has been prepared in accordance with the USEPA *Guidance for Performing Preliminary Assessments under CERCLA* (USEPA, 1991). The report sections and descriptions of each are:

- **Section 1** – **Introduction:** identifies the project purpose and authority and describes the facility location, environmental setting, and methods used to complete the PA.
- **Section 2** – **Fire Training Areas:** describes the FTAs at the facility identified during the site visit.
- **Section 3** – **Non-Fire Training Areas:** describes other locations of potential PFAS releases at the facility identified during the site visit.
- **Section 4** – **Emergency Response Areas:** describes areas of potential PFAS release at the facility, specifically in response to emergency situations.
- **Section 5** – **Adjacent Sources:** describes sources of potential PFAS release adjacent to the facility that are not under the control of ARNG.
- **Section 6** – **Conceptual Site Model:** describes the pathways of PFAS transport and receptors at each AOI.
- **Section 7** – **Conclusions:** summarizes the data findings and presents the conclusions of the PA.
- **Section 8** – **References:** provides the references used to develop this document.
- **Appendix A** – Data Resources
- **Appendix B** – Preliminary Assessment Documentation
- **Appendix C** – Photographic Log

1.4 Facility Location and Description

The AVCRAD is in Greene County in southwestern Missouri (**Figure 1-1**). The cities of Willard, Ash Grove Strafford, Republic and Rogersville are within 15 miles of the AVCRAD. The AVCRAD is adjacent to the Springfield-Branson National Airport. The AVCRAD is accessible from the north via North Farm Road 115, then Radar Road or North Lester Jones Avenue. The facility can also be accessed from the north via West Farm Road 104, then Radar Road.

At present, the AVCRAD has a total land area of approximately 107.18 acres. This land is owned by the City of Springfield and is leased to the State of Missouri for the use by the MOARNG. The original lease began in 1977 for Hangar 1, while the lease for Hangar 27 and the expansion was issued in 2002 and is valid for a term of 50 years (Springfield-Branson National Airport, 2006).

1.5 Facility Environmental Setting

Greene County is in Southwest Missouri located in the Interior Highlands physiographic province, a province characterized by a generally high altitude surrounded by lowlands (Fenneman, 1917). The highlands are separated into the Ozark Plateau, in which the Springfield AVCRAD resides, and the Ouachita Plateau to the south (Fenneman, 1928). Structurally, the Ozarks are an uplift, reaching a maximum altitude of 1,772 feet with an asymmetrical dip about its north-south trending axis. The AVCRAD lies on the gentler sloping western side of the axis,

which exhibits a regional dip of 15 to 20 feet per mile to the south-southwest (Waite & Thomson, 1993).

1.5.1 Geology

The Springfield Plateau, a small section in the southwest of the Ozark Uplift encompasses the City of Springfield, northern Arkansas, western Kansas, and Oklahoma, is composed primarily of Lower to Middle Mississippian carbonates of the Osage Group, including the Lower Warsaw Formation, Keokuk Limestone, Burlington Limestone, Elsey Formation, Reeds Spring Formation, Pierson Limestone, and Fern Glen Formation (Starbuck, 2017). The Springfield Plateau Aquifer and all of its formations can be up to 380 feet thick (Waite & Thomson, 1993).

Underlying the Springfield Plateau is the Ozark Confining Unit, which separates the Springfield Plateau Aquifer from the underlying Ozark Aquifer. It consists of shale, siltstone, limestone, and sandstone within the Northview, Compton, and Bachelor Formations. The Northview formation consists of siltstone and shale and thins to approximately 5 feet in the southwest of the county. The Compton Limestone, averaging 20 feet thick, is composed of greenish to bluish, finely crystalline limestone, and is identifiable by the green shale partings it contains. The Bachelor Formation is a very thin (2 inches to 2 feet), poorly sorted, green quartz sandstone with rounded black phosphate nodules (Waite & Thomson, 1993).

The Ozark Aquifer comprises the Cotter Dolomite, Jefferson City Formation, Roubidoux Formation, Gasconade Dolomite, Eminence Dolomite, and the Potosi Dolomite. These formations, known as the Canadian Series, consist of dolostone and sandstone and were laid down in the Lower Ordovician (Miller & Vandike, 1997).

The structural deformation of the carbonate layers in the Uplift introduced prevalent fractures and faulting within Greene County. These lineaments generally trend in a northwest-southeast and northeast-southwest orientation, with major faults trending northwest-southeast; they range in size from less than a mile to greater than fifteen miles across. These fractures allow the infiltration of rainwater giving rise to the karst topography of the region. The bedrock is covered by a thin veneer of residuum (Waite & Thomson, 1993).

1.5.2 Hydrogeology

Karst topography is characterized by sinkholes and cave systems due to dissolution of the carbonate rock layers (lime and dolostone) by the infiltration of slightly acidic rainwater. Formational efficacy as an aquifer is dependent on secondary porosity (dissolution and fracturing) due to the low primary porosity of carbonate rocks.

The bedrock northwest of Springfield near the AVCRAD has one of the highest densities of sinkholes in the county. Sinkholes range in diameter from 10 feet to 180 acres and 10 to 60 feet deep. The sinkholes and dissolution along structural fractures allow the communication of surface water with the groundwater system without the typical filtration of the surface water by slow percolation through the soil (Waite & Thomson, 1993). Groundwater recharge is achieved through three mechanisms; infiltration through sinkholes, infiltration in areas where dissolution has increased permeability, and through losing streambeds (Harvey, 1980).

Of the six United States Geological Survey (USGS) groundwater monitoring wells in the Springfield Area, five are set within the Canadian Series of the Ozark Aquifer and one is set within the Osagean Series of the Springfield Plateau. The wells set within the Ozark Aquifer typically reach a drilled depth of 400 to 600 feet with groundwater levels reaching between 180 to 360 ft bgs as of 2019. Groundwater depth in the Springfield Plateau Aquifer reaches 20 ft bgs (USGS, 2019). A typical well in the Springfield Plateau Aquifer yields between 5 and 30 gallons

per minute (gpm), while wells set in the Ozark Aquifer can reach yields of 500 to 1,200 gpm (Miller & Vandike, 1997). Groundwater within the Ozark underneath the City of Springfield generally flows north and south (Harvey, 1980).

There is one domestic well located within the boundary of the AVCRAD, and several other domestic, and monitoring wells immediately surrounding the facility (**Figure 1-2**). There is one public well that is side gradient to the AVCRAD. Drinking water for the AASF is supplied by the City of Springfield, which sources most of the water from the surface water in surrounding lakes and rivers, and the rest from groundwater wells. (Watershed Committee of the Ozarks, 2016).

1.5.3 Hydrology

The AVCRAD is very close to the hydrological divide which splits Greene County and lies within the Headwaters Clear Creek watershed (MOARNG, 2019), which drains to Clear Creek, Little Sac River, and the Sac River (**Figure 1-3**). These rivers eventually flow into the Osage River to the north, and finally into the Missouri River (Waite & Thomson, 1993). This hydrological framework follows the flow of water from the Springfield Plateau of the Ozark Uplift down into the surrounding lowlands.

The site is generally impermeable, with the hangars, buildings, aircraft apron, roads, driveways, and parking areas paved with concrete or asphalt. The AVCRAD is connected to the City of Springfield municipal sewer system and all wastewater is conveyed to the Northwest Wastewater Treatment Plant.

Springs, an expulsion of shallow groundwater to the surface due to pressure within an underlying aquifer, are common within Greene County. Although springs generally have a flow of less than 20 cubic feet per day, they can discharge a considerable amount of water because they are continuously flowing (Waite & Thomson, 1993).

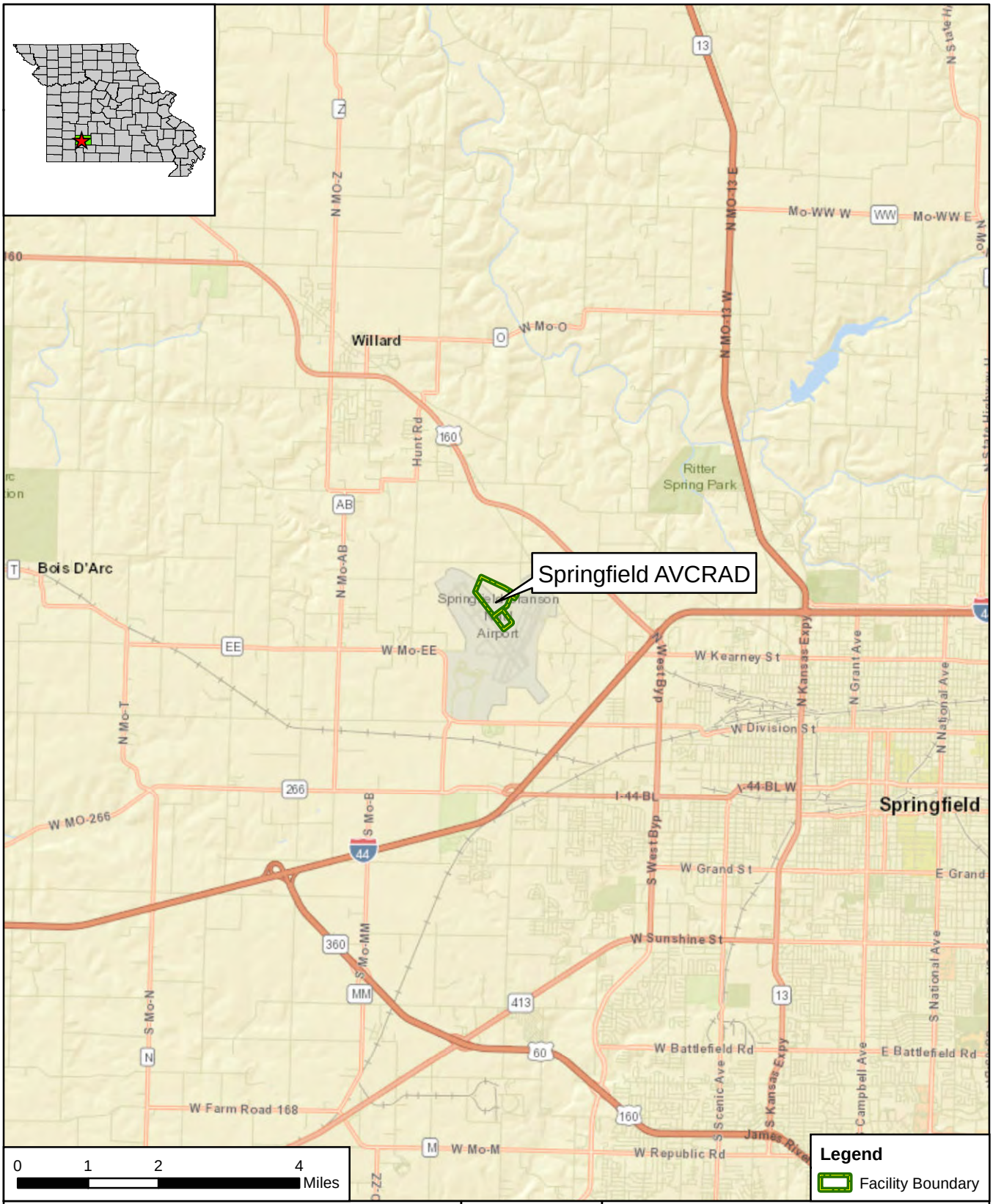
Groundwater and surface water within Greene County are hydraulically connected due to the downward infiltration of surface water into sinkholes and dissolution fractures and the upward movement of shallow groundwater from springs.

1.5.4 Climate

Climate data was available from NOAA, located 1.15 miles to the southwest of the AVCRAD at Springfield-Branson National Airport. Missouri has a temperate continental climate. Precipitation in the form of rainfall was recorded at an annual average of 51.6 inches per year, with April being the rainiest month with over 7.5 inches. Snowfall precipitation is mild with an annual average of 6.6 inches, with February being the snowiest with 2.76 inches. Summer temperatures reach an average temperature of 57.4°F having an average maximum of 67.6°F, with July being the hottest month. Winter months reach an average temperature of 36.6°F, slightly above freezing. Winter minimum temperatures reach an average low of 26.7°F with January being the coldest (NOAA, 2019).

1.5.5 Current and Future Land Use

Springfield AVCRAD is a controlled access facility and is adjacent to the Springfield Branson National Airport. Reasonably anticipated future land use is not expected to change from the current land use; however, future infrastructure improvements, land acquisitions, and land use controls at the Springfield Branson National Airport and surrounding areas are unknown. New construction of another maintenance hangar is underway at the Springfield AVCRAD. The anticipated completion data is unknown.



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Facility Location

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Figure 1-1

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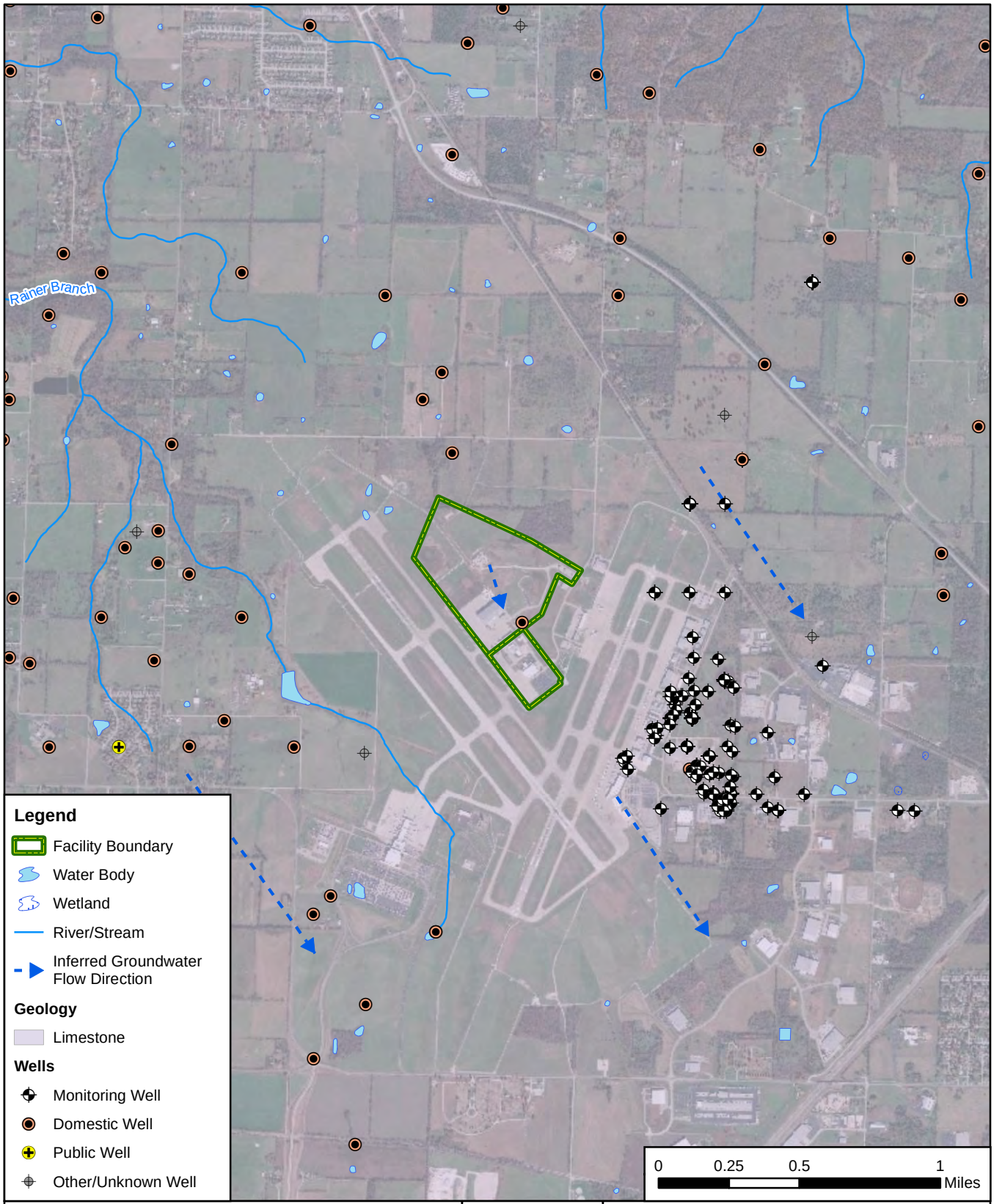

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Groundwater Features

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Figure 1-2

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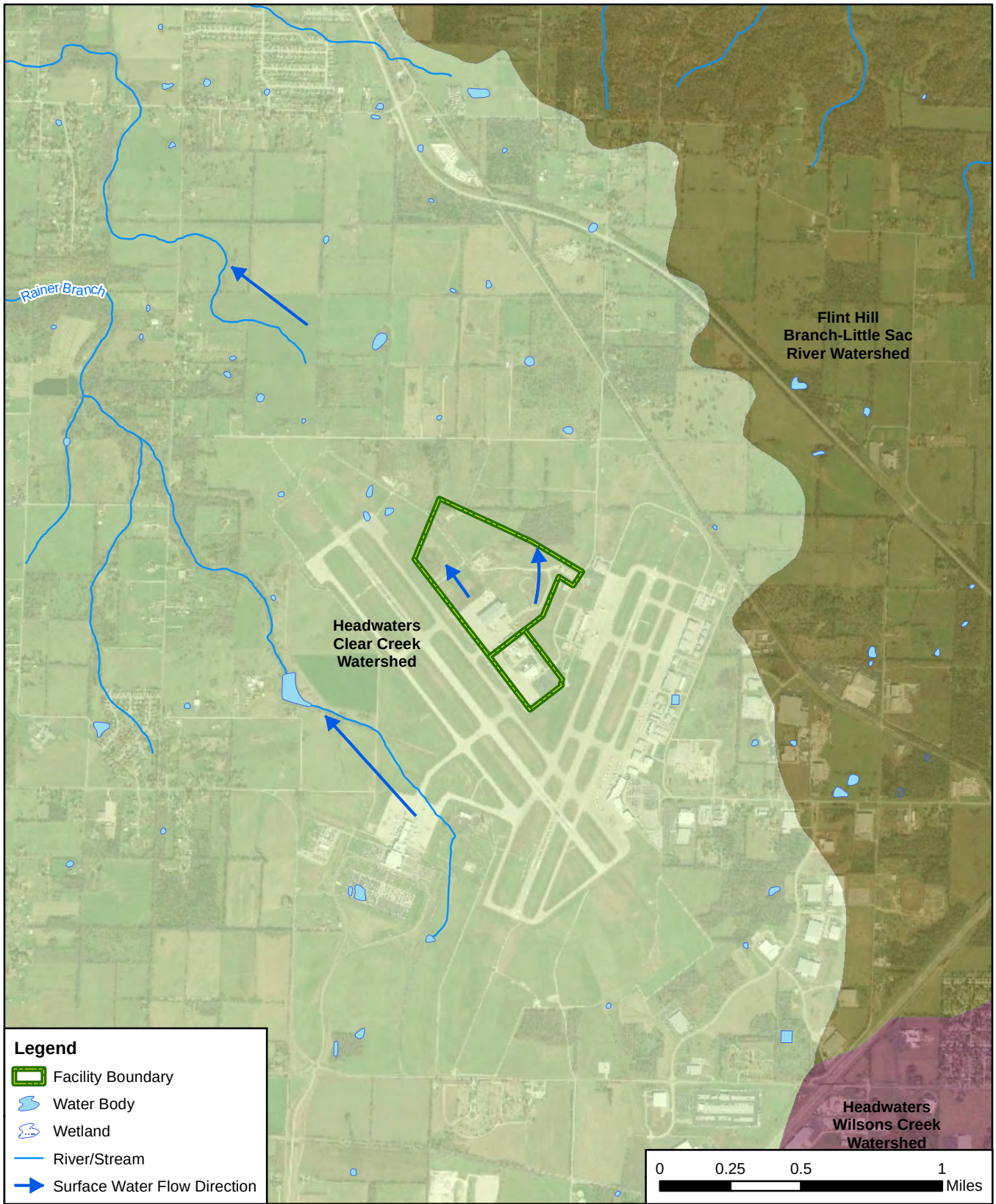

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Surface Water Features

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Figure 1-3

2. Fire Training Areas

Two FTAs where PFAS was potentially released were identified during the PA. A description of each FTA is presented below, and the FTAs are shown on **Figure 2-1.** Interview records appear in **Appendix B**. Photographs appear in **Appendix C**.

2.1 FTA 1

FTA 1 is located immediately south of the fuel farm on the concrete ramp area (**Figure 2-1**). The geographic coordinates are 37°14'57.21"N and 93°23'26.31"W. In 2007, a one-time fire training event occurred on the concrete where one 30-gallon TriMax™ fire extinguisher was fully dispensed on the ramp area. The 3 percent AFFF was then allowed run off the concrete and into the adjacent grass. No remediation activities have occurred at this location. Every five years, the TriMax™ fire extinguishers undergo hydrostatic testing off-facility by a contractor. There is no information on the type of fire training that occurred. Surface water around FTA 1 flows onto the adjacent grass area then south via a channelized pathway.

2.2 FTA 2

FTA 2 is located on the grass immediately off the ramp area to the west of Hangar 27 (**Figure 2-1**). The geographic coordinates are 37°15'5.93"N and 93°23'33.11"W. In 2014, a one-time fire training event occurred with one 30-gallon TriMax™ fire extinguisher with approximately 20 gallons of 3 percent AFFF was released. The AFFF was then allowed to dissipate in the grass. Since 2015, soap and water are used for fire training that occurs at the AVCRAD. No remediation activities have occurred at this location. Surface water from north of Hangar 27 and the ramp drain to a retention pond on the northeast side of the facility. The retention pond discharges to north and off the facility when it overflows.

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Fire Training Areas

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Figure 2-1

3. Non-Fire Training Areas

Two non-FTAs where PFAS was potentially released were also identified during the PA. A description of each non-FTA is presented below, and the non-FTAs are shown on **Figure 3-1**. Interview records appear in **Appendix B**. Photographs appear in **Appendix C**.

3.1 Hangar 27

In 2011, Hangar 27 was built which contains a fire suppression system supplied by an 800-gallon tank filled with 3 percent AFFF. The geographic coordinates are 37°15'3.41"N and 93°23'29.13"W. The fire suppression system was tested after installation. Based on the contractor report, the system dispensing nozzles in the hangar were bypassed, and the AFFF was captured by a vacuum truck to prevent release of AFFF to the environment (**Appendix A**). Any routine maintenance of the fire suppression system is unknown.

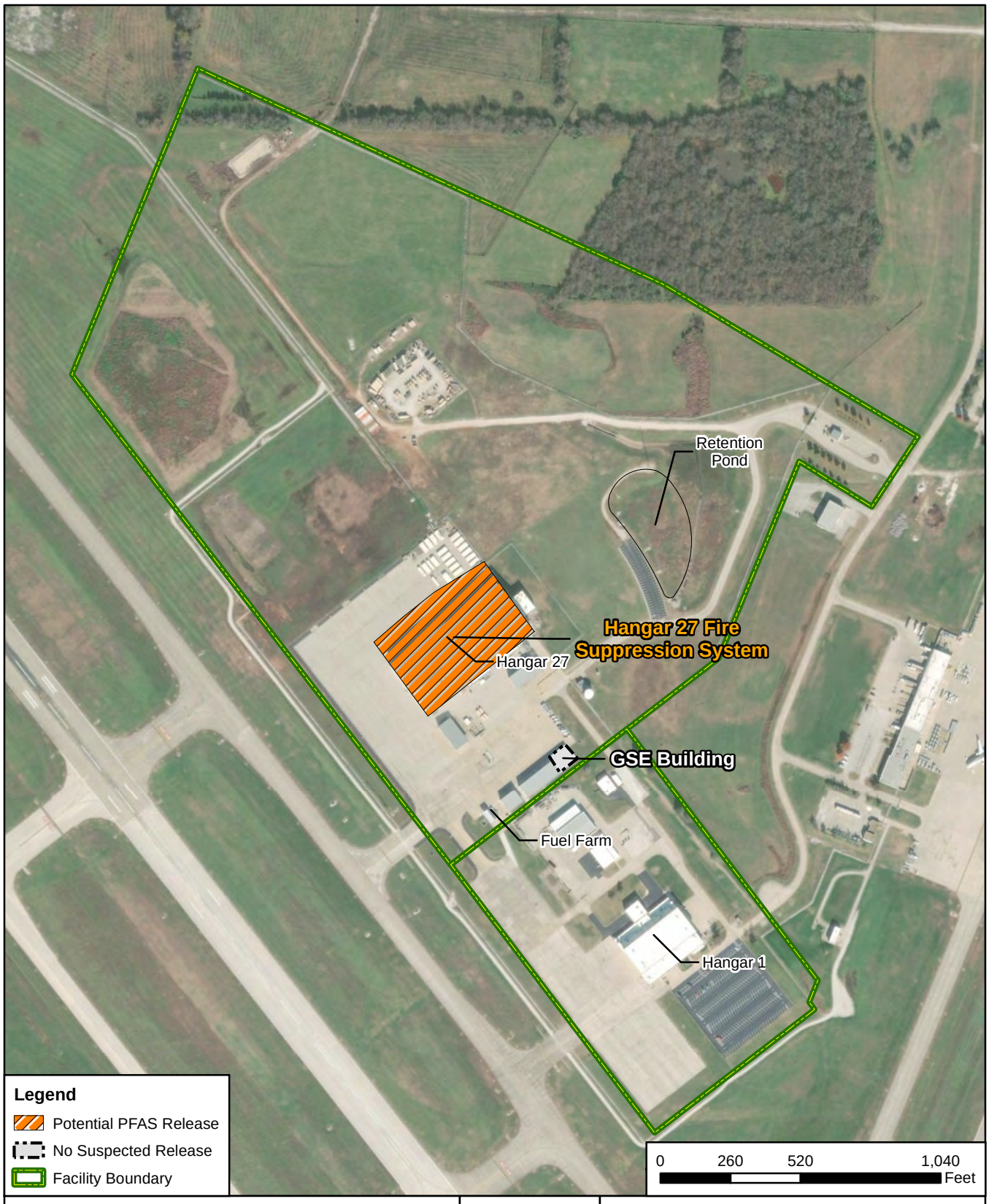
In the southwest corner of the hangar, there are 26, 55-gallon drums of 3 percent AFFF in storage for the fire suppression system recharge (**Figure 3-1**). It is unknown how long the 55-gallon drums have been stored in the hangar. There were no reports of any leaking or spills of AFFF from the 55-gallon drums or the AFFF fire suppression tanks. The trench drains within the hangar lead to an oil/water separator, then to the sanitary Waste Water Treatment Plant (WWTP). The ramp drains lead to the retention ponds northeast of Hangar 27.

3.2 Hangar 1

Hangar 1 was built in 1982, but does not have a fire suppression system, firetruck or AFFF fire extinguishers.

3.3 Ground Support Equipment (GSE) Building

The GSE building is located south of hangar 27 and north of the fuel farm (**Figure 3-1**). The geographic coordinates are 37°15'0.51"N and 93°23'21.96"W. To prepare for freezing temperatures in winter, some years the AFFF solution in the TriMax™ fire extinguishers were exchanged for a 3 percent AFFF Chemguard Low Temperature solution in the GSE building. The removed AFFF solution was containerized in 55-gallon drums and stored in the GSE building. During the warm months, the 3 percent AFFF Chemguard Low Temperature solution was removed, and the TriMax™ fire extinguishers were replaced with the original AFFF solution. There were never spills or leaks that occurred when switching the solutions. It is unknown how many years and how many TriMax™ fire extinguishers were exchanged. During the visual site inspection, there was one 55-gallon drum of 3 percent AFFF Chemguard Low Temperature solution present. The GSE building is outfitted with drains that lead to an oil/water separator, then to the sanitary WWTP.



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Non-Fire Training Areas

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Figure 3-1

4. Emergency Response Areas

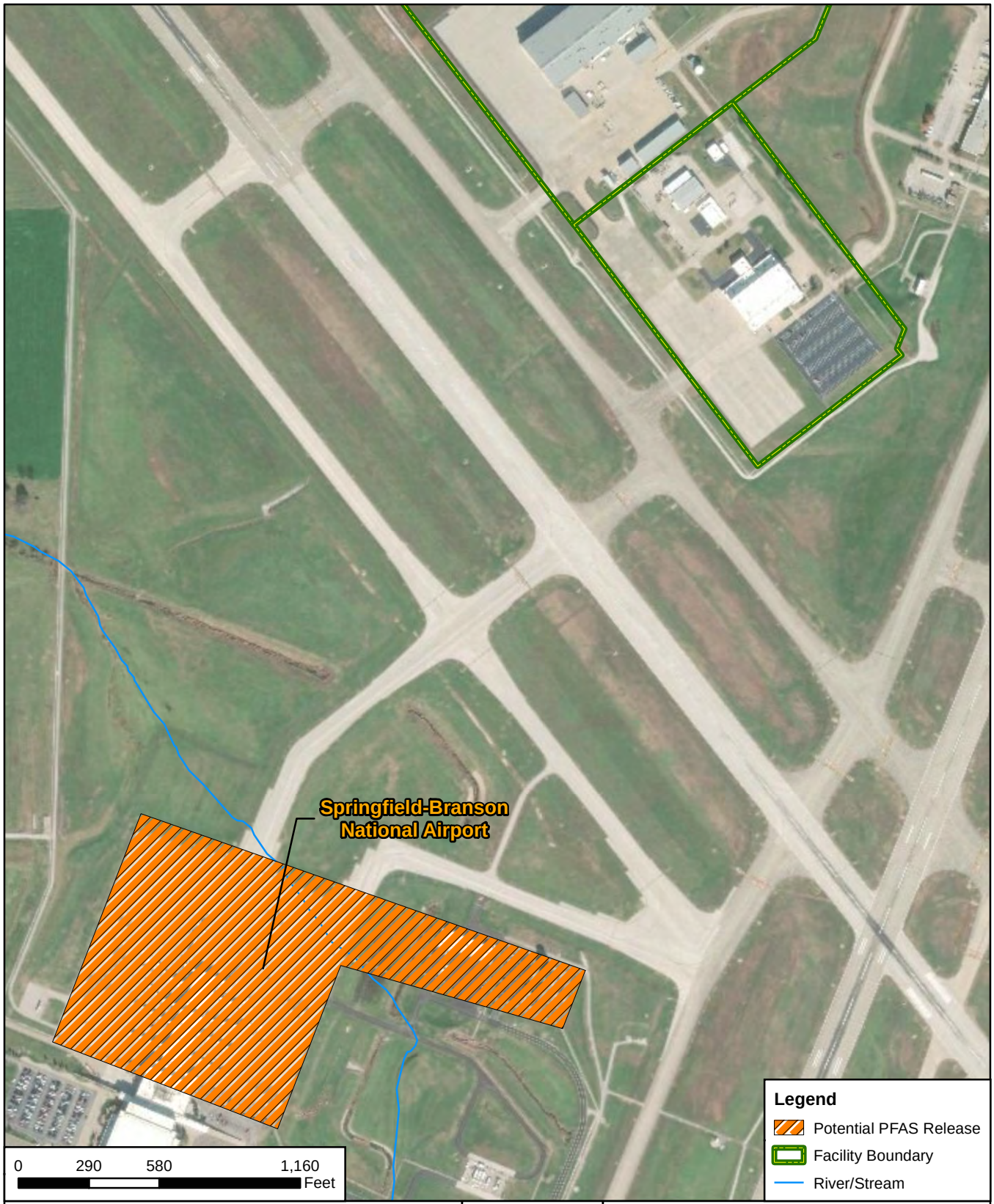
No emergency response areas or incidents were identified within the AVCRAD during the PA through interviews (**Appendix B**), historical document review, or the Environmental Data Resource Report. The Springfield-Branson Airport Fire Department responds to all emergency incidents at the AVCRAD.

5. Adjacent Sources

One potential off-facility source of PFAS adjacent to the AVCRAD, not under the control of the ARNG, was identified during the PA. Based on interviews with MOARNG personnel (**Appendix B**) and historical document review, the identified adjacent area with potential AFFF releases are outside the AVCRAD boundaries. The description of the adjacent source is presented below and are shown on **Figure 5-1**.

5.1 Springfield-Branson National Airport

The Springfield-Branson National Airport geographic coordinates are 37°14'27.41"N and 93°23'33.30"W. The current Springfield-Branson Airport was constructed in 1944 and is owned and operated by the City of Springfield. The AVCRAD is adjacent to the Springfield-Branson National Airport. The airport has a fire department that responds to emergencies at the airport and the AVCRAD. Springfield-Branson National Airport Fire Department requires response testing and equipment testing by the Federal Aviation Administration. Due to the mandatory requirements, the Springfield-Branson National Airport Fire Department has been identified as an adjacent source to the AVCRAD.



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Adjacent Source

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Figure 5-1

6. Preliminary Conceptual Site Model

Based on the PA findings, three AOIs were identified at the AVCRAD: AOI 1 Hangar 27, AOI 2 FTA 1, and AOI 3 FTA 2. The AOI locations are shown on **Figure 6-1**. The following sections describe the CSM components and the specific CSMs developed for each AOI. The CSM identifies the three components necessary for a potentially complete exposure pathway: (1) source, (2) pathway, (3) receptor. If any of these elements are missing, the pathway is considered incomplete.

6.1 Pathways

In general, the potential PFAS exposure pathways are ingestion and inhalation. Human exposure via the dermal contact pathway may occur, and current risk practice suggests it is an insignificant pathway compared to ingestion; however, exposure data for dermal pathways is sparse and continues to be the subject of PFAS toxicological study (National Ground Water Association, 2018).

AFFF releases identified at AVCRAD occurred on both surface soil and paved surfaces. Releases to the paved surfaces could have migrated a short distance onto the surrounding surface soil. Ground-disturbing activities in these grassy areas as well as, beneath the paved surfaces may result in potential exposure to surface soils via ingestion and inhalation of dust particles. AFFF releases to the paved surfaces could have infiltrated the subsurface via cracks in the pavement or joints between areas that are paved with different materials. Ground-disturbing activities may result in potential exposure to subsurface soils and groundwater via ingestion.

PFAS are water soluble and can migrate readily from soil to groundwater via leaching; however, drinking water at AVCRAD is resourced from the City of Springfield. A domestic water well exists on the facility and downgradient within 4 miles to the southeast. One public water supply well is located side gradient of the AOIs. It is possible unregistered, private, domestic wells exist southeast of the identified AOIs which may result in potential exposure via ingestion of groundwater.

Based on the inferred surface water flow direction, potential releases may have ultimately drained to the retention pond northeast of Hangar 27. The retention pond discharges to north and off the facility when it overflows. As a result, it is possible PFAS migrated to the retention pond which may result in potential exposure via ingestion of surface water and sediment.

6.2 Receptors

Receptors include site workers, construction workers, and off-facility residents. These receptors as they pertain to the facility are described below:

- Site workers typically work at or use the site and may come into contact with the surface soils, sediment, and surface water (retention pond).
- Construction workers are *considered workers who represent a utility worker or other worker* who would be exposed to surface and/or subsurface conditions through ground-disturbing activities.
- Off-facility residents identify receptors who occupy properties outside of the AVCRAD. Off-facility residents may come into contact with groundwater using unregistered, private, domestic wells.

The preliminary CSM for the AVCRAD indicates which specific receptors could potentially be exposed to PFAS. The preliminary CSM for all AOIs at the AVCRAD are shown on **Figure 6-2**.

6.3 AOI 1 Hangar 27

In 2011, Hangar 27 was built with a fire suppression system supplied by an 800-gallon tank filled with 3 percent AFFF. The fire suppression system was tested after installation. Based on the contactor report, the system dispensing nozzles in the hangar were bypassed, and the AFFF was captured by a vacuum truck to prevent release of AFFF to the environment (Appendix A). In the south west corner of the hangar, there are 26 55-gallon drums of 3 percent AFFF in storage for fire suppression system recharge.

PFAS are water soluble and can migrate readily from soil to surface water. Based on the inferred surface water flow direction, any potential releases or leaking may have ultimately drained to the retention pond northeast of the main hangar.

Potential PFAS exposure pathways resulting from releases at AOI 1 are described in **Table 6-1**.

Table 6-1: Exposure Pathways at AOI 1

Pathway	Receptor
Surface Soil	Considered a potentially complete pathway to site workers and construction workers via ingestion or inhalation of dust
Subsurface Soil	Considered a potentially complete pathway to construction workers via ingestion or inhalation of dust
Surface Water and Sediment	Considered a potentially complete pathway to site workers and construction workers via ingestion
Groundwater	Considered a potentially complete pathway to construction workers and off-facility residents via ingestion

6.4 AOI 2 FTA 1

FTA 1 is located immediately south of the fuel farm on the concrete ramp area. In 2007, a one-time fire training event occurred on the concrete where one 30-gallon TriMax™ fire extinguisher was fully dispensed on the ramp area. The 3 percent AFFF was then allowed run off the concrete and into the adjacent grass.

Releases at AOI 1 that have occurred on both paved areas and grassy surfaces. Some AFFF releases may occurred directly onto surface soil but may also have infiltrated subsurface soil via cracks in pavement or joints between areas that are paved with different materials. Surface water around FTA 1 flows onto the adjacent grass area then south via a channelized pathway.

Potential PFAS exposure pathways resulting from releases at AOI 2 are described in **Table 6-2**.

Table 6-2: Exposure Pathways at AOI 2

Pathway	Receptor
Surface Soil	Considered a potentially complete pathway to site workers and construction workers via ingestion or inhalation of dust
Subsurface Soil	Considered a potentially complete pathway to construction workers via ingestion or inhalation of dust

Pathway	Receptor
Surface Water and Sediment	Considered a potentially complete pathway to site workers and construction workers via ingestion
Groundwater	Considered a potentially complete pathway to construction workers and off-facility residents via ingestion

6.5 AOI 3 FTA 2

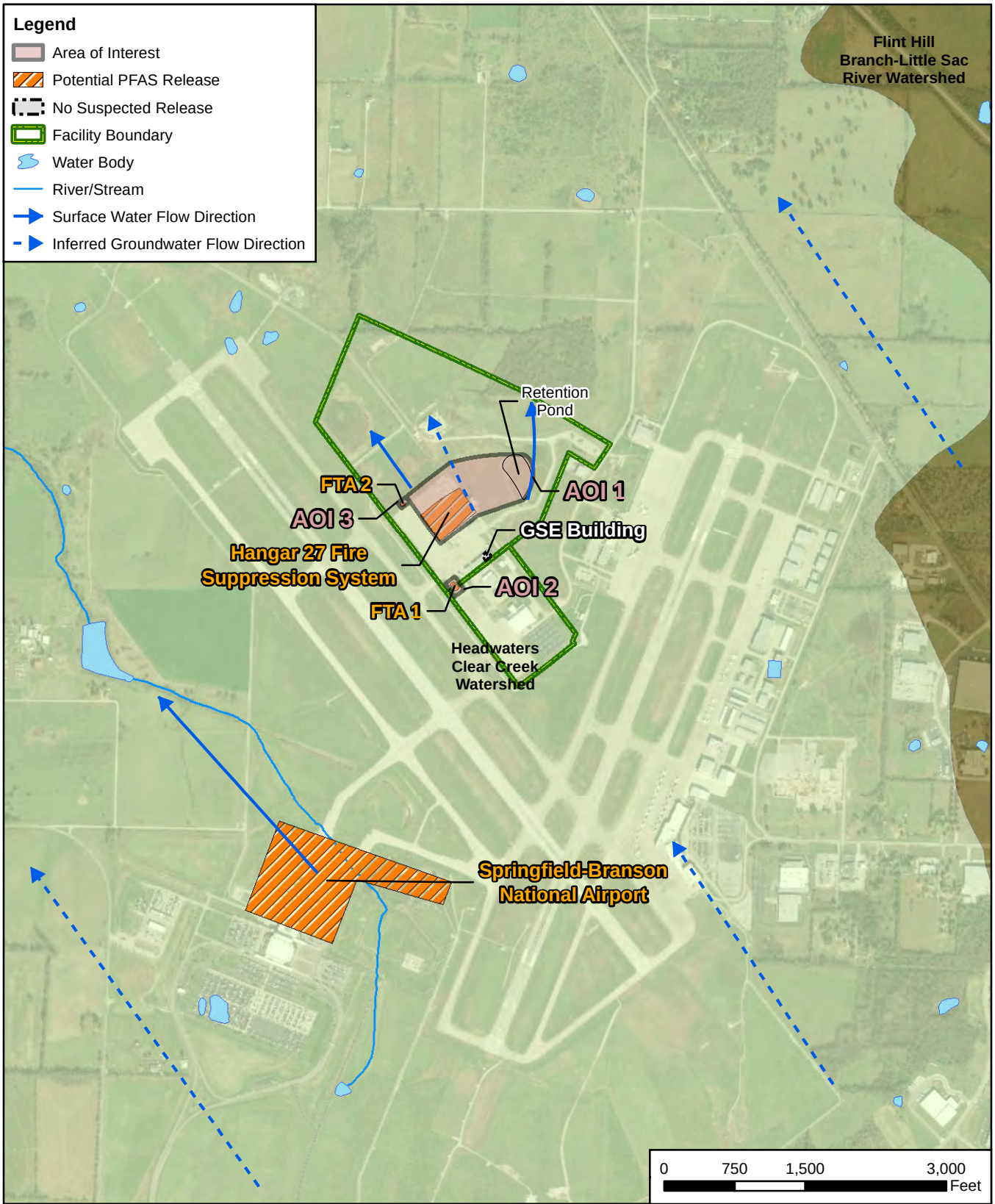
In 2014, a one-time fire training event occurred with one 30-gallon TriMax™ fire extinguisher and approximately 20 gallons of 3 percent AFFF was released. The AFFF was then allowed to dissipate in the grass. Since 2015, soap and water are used for fire training that occurs at the AVCRAD. No remediation activities have occurred at this location. There is a retention pond on the east side of the facility where all the surface water from north of Hangar 27 and ramp drains to. The retention pond discharges north off-facility when it overflows.

PFAS are water soluble and can migrate readily from soil to surface water. Based on the inferred surface water flow direction, potential releases may have ultimately drained to the retention pond northeast of the main hangar.

Potential PFAS exposure pathways resulting from releases at AOI 3 are described in **Table 6-3**.

Table 6-3: Exposure Pathways at AOI 3

Pathway	Receptor
Surface Soil	Considered a potentially complete pathway to site workers and construction workers via ingestion or inhalation of dust
Subsurface Soil	Considered a potentially complete pathway to construction workers via ingestion or inhalation of dust
Surface Water and Sediment	Considered a potentially complete pathway to site workers and construction workers via ingestion
Groundwater	Considered a potentially complete pathway to construction workers and off-facility residents via ingestion



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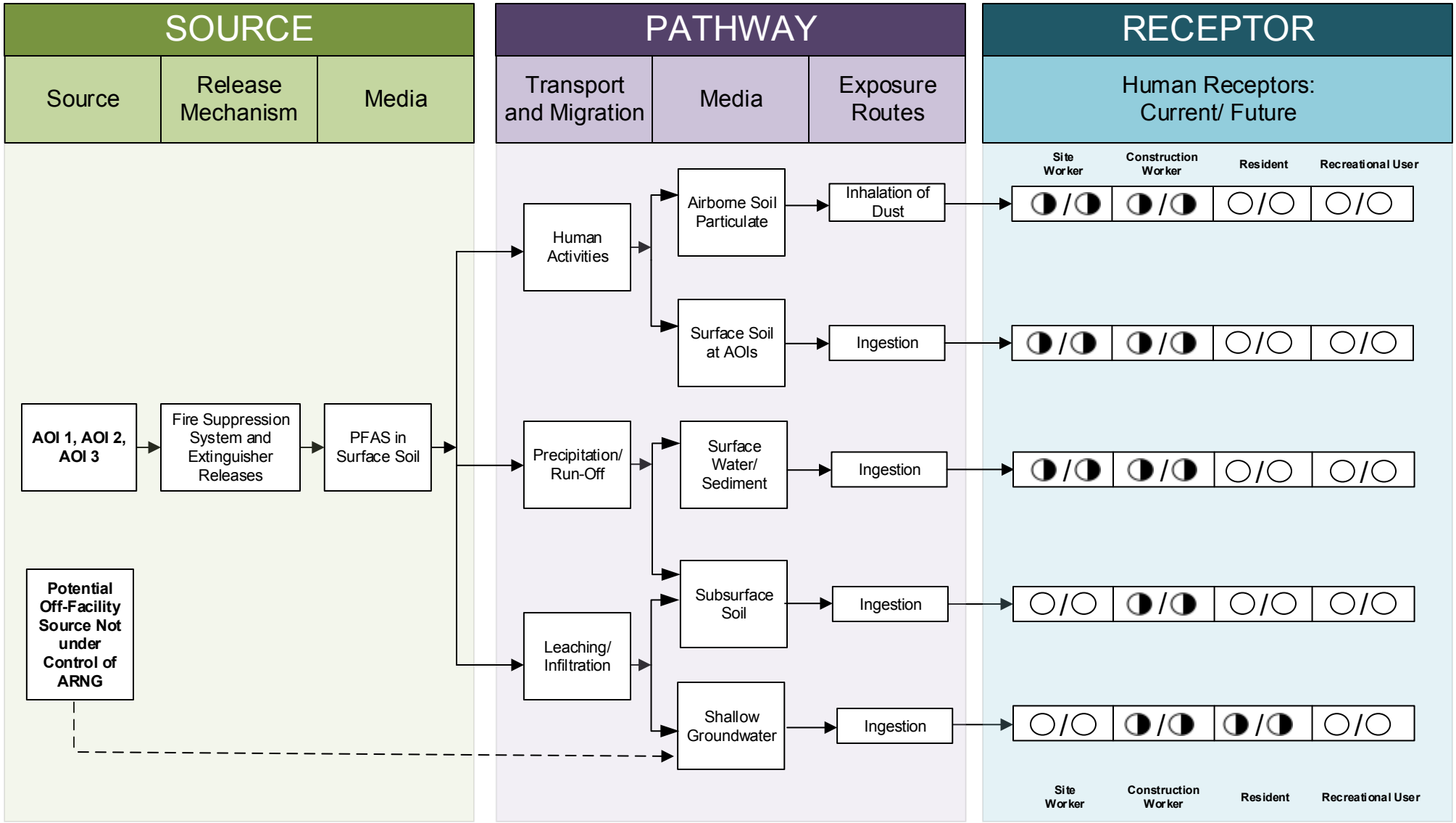
PROJECT	Preliminary Assessment for PFAS at Springfield AVCRAD, MO			
REVISED	1/30/2020	GIS BY	MS	1/30/2020
SCALE	1:18,000	CHK BY	SI	1/30/2020
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	1/30/2020

N

Areas of Interest

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure 6-1



LEGEND

- Flow-Chart Stops
- Flow-Chart Continues
- Partial / Possible Flow
- Incomplete Pathway
- Potentially Complete Pathway
- Complete Pathway

Notes:

1. The resident receptors refer to an off-facility resident.
2. Dermal contact exposure pathway is incomplete for PFAS.

Figure 6-2
Preliminary Conceptual Site Model
AOI 1 Hangar 27, AOI 2 FTA 1, AOI 3 FTA 2

7. Conclusions

This report presents a summary of available information gathered during the PA on the use and storage of AFFF and other PFAS-related activities at the AVCRAD. The PA findings are based on the information presented in **Appendix A** and **Appendix B**.

7.1 Findings

Three AOIs related to potential PFAS release were identified (**Table 7-1**) at the AVCRAD during the PA (**Figure 7-1**).

Table 7-1: AOIs at Springfield AVCRAD

Area of Interest	Name	Used by	Potential Release Dates
AOI 1	Hangar 27	MOARNG	2011
AOI 2	FTA 1	MOARNG	2007
AOI 3	FTA 2	MOARNG	2014

Based on potential PFAS release at this AOI, there is potential for exposure to PFAS contamination in media at or near the facility. The preliminary CSM for the AVCRAD is shown on **Figure 6-2**, which presents the potential receptors and media impacted.

The following areas discussed in **Section 2** through **Section 5** were determined to have no suspected PFAS releases (**Table 7-2**).

Table 7-2: No Suspected Release Areas

No Suspected Release Area	Used by	Rationale for No Suspected Release Determination
GSE Building	MOARNG	This building was only used for switching and storing AFFF concentrate. There were never spills or leaks that occurred when switching the solutions.
Fuel Farm	MOARNG	Only ABC fire extinguishers have always been present at the Fuel Farm.

7.2 Uncertainties

A number of information sources were investigated during this PA to determine the potential for PFAS-containing materials to have been present, used, or released at the facility. Historically, documentation of PFAS use was not required because PFAS were considered benign. Therefore, records were not typically kept by the facility or available during the PA on the use of PFAS in training, firefighting, or other non-traditional activities, or on its disposition.

The conclusions of this PA are predominantly based on the information provided during interviews with personnel who had direct knowledge of PFAS use at the facility. Sometimes the provided information was vague or conflicted with other sources. Gathered information has a degree of uncertainty due to the absence of written documentation, the limited number of personnel with direct knowledge due to staffing changes, the time passed since PFAS was first used (1969 to present), and a reliance on personal recollection. Inaccuracies may arise in potential PFAS release locations, dates of release, volume of releases, and the concentration of AFFF used. There is also a possibility the PA has missed a source of PFAS, as the science of how PFAS may enter the environment continually evolves.

In order to minimize the level of uncertainty, readily available data regarding the use and storage of PFAS were reviewed, retired and current personnel were interviewed, multiple persons were interviewed for the same potential source area, and potential source areas were visually inspected. **Table 7-3** summarizes the uncertainties associated with the PA.

Table 7-3: Uncertainties

Area of Interest	Source of Uncertainty
AOI 1	The volume of AFFF from the fire suppression system test that was released onto the ramp area is unknown.
Springfield AVCRAD	Direct interviewee knowledge is not available before 2002. Whether potential use, storage, or release of PFAS-containing materials occurred at this facility prior to 2002 is unknown.
GSE Building	There is no information on the ultimate disposal of the recycled AFFF that resulted from the changing of AFFF concentrates in the TriMax30™ fire extinguishers.

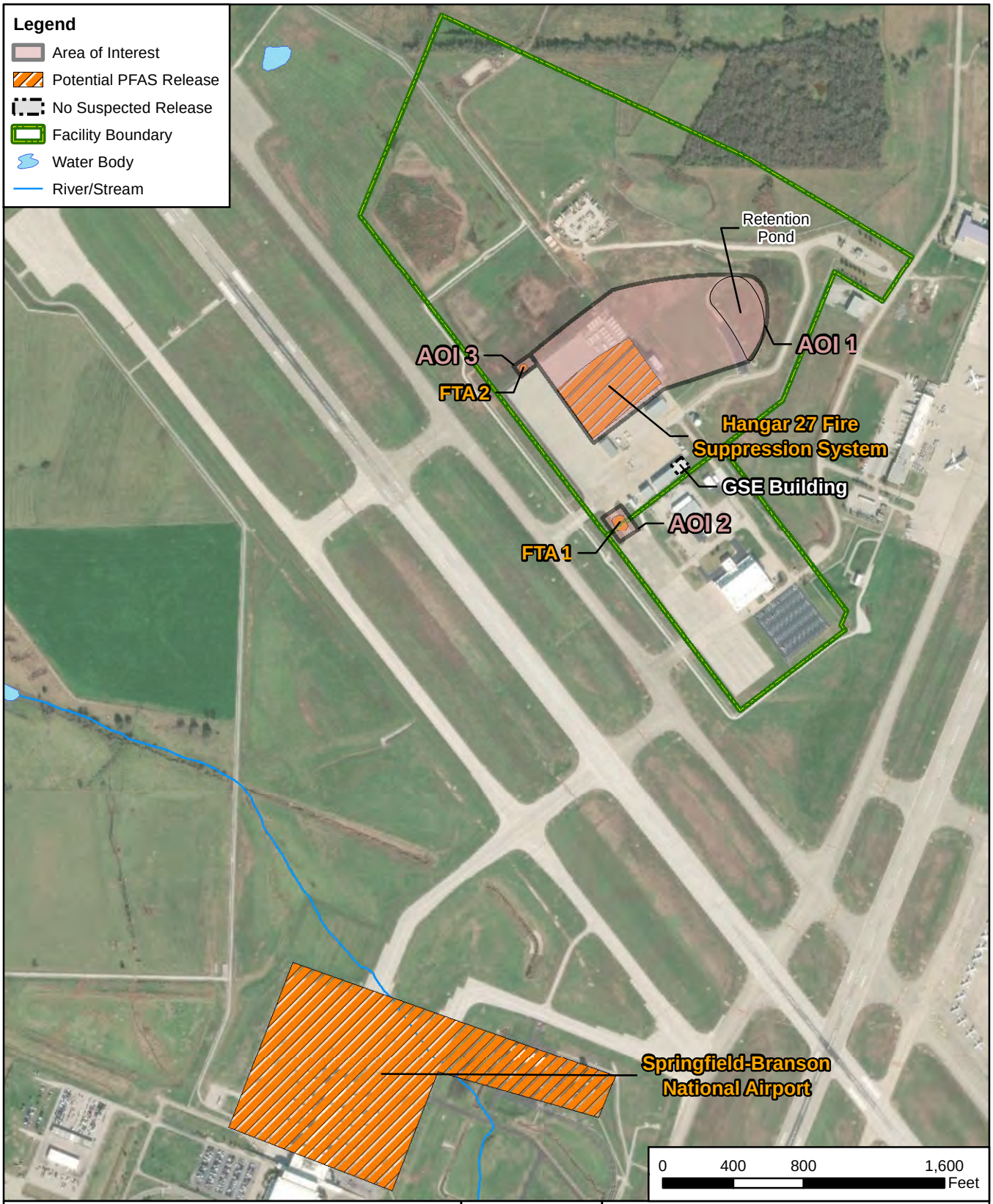
7.3 Potential Future Actions

Interviews and records (covering 2002 to present) indicate that current or former ARNG activities may have resulted in potential PFAS releases at the three AOIs identified during the PA. Based on the CSM developed for the AOIs, there is potential for receptors to be exposed to PFAS contamination in soil, groundwater, surface water, and sediment at these AOIs. **Table 7-4** summarizes the rationale used to determine if the AOIs should be considered for further investigation under the CERCLA process and undergo a SI.

ARNG evaluates the need for an SI at the AVCRAD based on the potential receptors, the potential migration of PFAS contamination off the facility, and the availability of resources.

Table 7-4: PA Findings Summary

Area of Interest	AOI Location	Rationale	Potential Future Action
AOI 1 Hangar 27	37°15'3.41"N 93°23'29.13"W	There is a fire suppression system supplied by an 800-gallon tank filled with 3 percent AFFF. Additionally, there are approximately 26, 55-gallon drums of bulk AFFF are stored within the hangar.	Proceed to an SI, focus on soil, groundwater, surface water, and sediment
AOI 2 FTA 1	37°14'57.21"N 93°23'26.31"W	A one-time fire training event occurred on the concrete where one 30-gallon TriMax™ with 3 percent AFFF fire extinguisher was fully dispensed on the ramp area.	Proceed to an SI, focus on soil, groundwater, surface water, and sediment
AOI 3 FTA 2	37°15'5.93"N 93°23'33.11"W	A one-time fire training event occurred with one 30-gallon TriMax™ fire extinguisher and approximately 20 gallons of 3 percent AFFF was released	Proceed to an SI, focus on soil, groundwater, surface water, and sediment



CLIENT	ARNG			
PROJECT	Preliminary Assessment for PFAS at Springfield AVCRAD, MO			
REVISED	1/30/2020	GIS BY	MS	1/30/2020
SCALE	1:9,600	CHK BY	SI	1/30/2020
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS,		PM	RG	1/30/2020

N

Summary of Findings

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure 7-1

8. References

National Oceanic and Atmospheric Administration (NOAA). 2019. Climate Data Online. https://www.ncdc.noaa.gov/cdo-web/. Accessed September 2019.

Waite, L.A.; Thomson, K.C. 1993. *Development, Description, and Application of a Geographic Information System Database for Water Resources in Karst Terrane in Greene County, Missouri.* USGS Water-Resources Investigations Report 93-4154

Fenneman, N.M. 1917. *Physiographic Subdivision of the United States*. Proceedings of the National Academy of Sciences of the United States of America, Vol. 3, No.1 (Jan. 15, 1917), pp. 17-22.

Fenneman, N.M. 1928. *Physiographic Divisions of the United States.* Annals of the Association of American Geographers, Vol. 18, No. 4 (Dec., 1928), pp. 261-353.

Starbuck, E.A. 2017. *Geologic Map of Missouri*. Missouri Geological Survey.

Harvey. E.J. 1980. *Ground Water in the Springfield-Salem Plateaus of Southern Missouri and Northern Arkansas.* USGS Water-Resources Investigations 80-101.

Miller, D.E.; Vandike, J.E. 1997. *Groundwater Resources of Missouri*. Missouri State Water Plan Series Volume II, Water Resources Report Number 46.

United States Geological Survey (USGS). 2019. *https://waterdata.usgs.gov/nwis/gw.* Accessed September 2019.

Missouri Army National Guard (MOARNG). 2019. *Stormwater Prevention Pollution Plan (SWPPP), Aviation Classification and Repair Activity Depot (AVCRAD), 5250 West Depot Road, Springfield, Missouri 65803*. NPDES Permit #MO-0134627

National Ground Water Association (NGWA). 2018. Groundwater and PFAS: State of Knowledge *and Practice*. January.

Springfield-Branson National Airport, 2006. *Industrial Airpark Site Lease*. June.

United States Environmental Protection Agency (USEPA). 1991. *Guidance for Performing Preliminary Assessments under CERCLA.* September.

Watershed Committee of the Ozarks. 2019. *City Utilities 2016 Water Quality Report.*

Appendix A
Data Resources

Data Resources will be provided separately on CD. Data Resources for Springfield AVCRAD, Missouri.

Springfield AVCRAD Leases, Licenses, and Permits

- 2006 Industrial Airpark Site Lease

Springfield AVCRAD Documentation

- 2013 Storm Water Pollution Prevention Plan for Springfield AVCRAD
- 2011 Field Service Report from Vector Fire Technology Inc.
- 2016 Springfield AVCRAD Surface Runoff Accumulation Analysis

EDR Report

- 2019 Springfield AVCRAD EDR Report

INDUSTRIAL AIRPARK SITE LEASE

THE STATE OF MISSOURI
BY
THE ADJUTANT GENERAL OF MISSOURI

SPRINGFIELD-BRANSON NATIONAL AIRPORT
5000 W. KEARNEY, SUITE 15
SPRINGFIELD, MISSOURI 65803

June 2006

Parties

Board: The Springfield-Branson-National-Airport Board

AG: State of Missouri, represented by the Adjutant General of Missouri.

Short-Hand References

Agreement: Agreement for Common-Area-Maintenance Service, Airport Use, and Accompanying Charges
Air Centre: Airport's industrial airpark
Airport: Springfield-Branson-National Airport
AVCRAD: Army Aviation Classification Repair Activity Depot
Director: Airport's Director of Aviation
FAA: Federal Aviation Administration

Conventions

Agreement's structural parts are numbered and indented like this:

1. PART

1.1 Section
(A) Paragraph
(1) Subparagraph
(a) Clause
(i) Sub clause

Background

Board is a City of Springfield, Missouri administrative board, created by the city's Charter.

Airport is located in the City of Springfield, Greene County, Missouri.

Board has the power and duty to administer Airport, i.e., to take charge of, and operate, its properties, institutions, and facilities. Board has the power to enter into transactional contracts that involve Airport.

The Division of Facilities Management, Design and Construction, within Missouri's Office of Administration, has the authority to enter into this lease on behalf of the Department of Public Safety, Office of Adjutant General, State of Missouri.

Board wants to lease AG some Air Centre land, grant AG certain rights in using that land, and charge AG for that land and those rights. AG is willing to maintain and improve the land, receive its land-use rights, and pay for both the land and those rights. Therefore, Board and AG agree as follows.

1. LAND AND RIGHTS

1.1 Land

Board leases AG the land mapped in Agreement's "Exhibit A" and legally described in Agreement's "Exhibit B," which land consists of 107.18 acres, more or less. AG may exclusively use and control this land.

1.2 Common Area

The "common area" is the Airport area Board designates for common use or benefit including, without limitation, the paved streets, street lighting facilities, storm drainage system, main drainage ditches, landscaped-open areas, but excluding recreational areas. Board may expand, contract, or change the common area from time to time as Board sees fit.

1.3 Public Roads

AG and personnel that AG authorizes may use public roads serving the Airport and the Air Centre.

1.4 Improvements

AG may, in any lawful manner, construct, , remove, and locate improvements on its leased land with Board's prior-written approval, and will maintain those improvements.

1.5 Declaration of Restrictions

AG must cooperate in fulfilling the intent of the "Declaration of Restrictions" in Agreement's "Exhibit C."

1.6 Legal Constructions

AG is a superior governmental agency to Board. Resolutions, ordinances, and laws may not be construed inconsistently with laws of the State of Missouri or of the United States.

2. BOARD'S OBLIGATIONS

2.1 Clear Title

The City of Springfield has clear title to Airport, free and clear of all liens and encumbrances having priority over Agreement. On the City's behalf, Board will maintain that clear title up to the time Agreement is effective and thereafter. Title is, however, subject to any agreements between Board and the United States.

2.2 Quiet Enjoyment

Board has done, and will continue to do, everything within its power to assure AG peaceful possession and quiet enjoyment of its leased property for Agreement term.

2.3 Operation As Public Airport

Board will operate and maintain the Airport as a public airport consistent with assurances Board made to the United States under:

(A) The Federal Airport Act;

(B) The Airport and Airways Development Act of 1970, with its 1976 Amendments; or,

(C) Succeeding legislation.

2.4 Common Area

Board will operate and maintain its section 1.2 common area in a reasonable and appropriate manner.

2.5 Utilities

AG already has paved access to AG's leased premises. AG must hookup to electricity, gas, sewer, and water at its own expense as AG finds necessary.

3. AG'S OBLIGATIONS

3.1 Net Lease

In every sense Agreement must be without cost to Board for the development, maintenance and improvement of AG's leased land. AG must maintain, repair, and operate all of its leased land and improvements:

(A) At AG's sole expense

(B) In a presentable condition; and,

(C) Consistent with other airport environmental conditions.

3.2 Utilities

AG must pay for all utility services AG receives. At its own expense, AG may connect to any and all:

(A) Storm and sanitary sewers; and,

(B) Water and utility outlets.

3.3 Electronic Emissions

AG may not install or operate any equipment that could produce electromagnetic radiation or radio signals and interfere with aircraft operations or communications.

4. TERM.

Agreement term is 50 years. It begins August 1, 2006 and ends July 31, 2056.

5. PAYMENT

5.1 Land

For AG's leased land, AG must pay Board $1.00 and build AVCRAD at a cost of approximately $100,000,000.00 in the approximate FY 2006 through FY 2010 Military Construction, Army National Guard Program.

5.2 Common-Area-Maintenance- Service & Airport-Use Charges

AG must pay Board separate charges for maintaining Airport's common areas and for Airport use according to "AGREEMENT FOR COMMON-AREA-MAINTENANCE SERVICE, AIRPORT USE, AND ACCOMPANYING CHARGES," a separate agreement.

6. TERMINATION AND CANCELLATION

6.1 Termination

Upon Agreement's termination, AG will have no further right or interest in any Airport property. Agreement termination—and rights upon termination under part 7—are subject to approval and authorization by the Missouri General Assembly, in accordance with Missouri Revised Statutes.

6.2 Cancellation

(A) AG may cancel Agreement if AG does not receive construction funding for the Army National Guard Aviation Operation and Maintenance Facility at a cost of approximately $100,000,000.00 in Fiscal Years 2005 through 2010 from the Military Construction, Army National Guard Program. Then, AG must immediately notify Board. Once Board receives AG's cancellation *notice*, Agreement will expire of its own terms and AG will have no further Agreement obligations. At that point, AG must vacate all Agreement premises no later than July 1 because the State of Missouri's fiscal year begins July 1 and ends June 30.

(B) Board may cancel Agreement if

(1) AG is unable to timely secure construction funding under the Army National Guard Military Construction Program to provide the necessary access and utilities to its leased land;

(2) AG does not pay Board under part 5 for 90 days or more after payment is due; or,

(3) AG abandons its leased land for use as an Army-National-Guard facility for aviation operation and maintenance. AG may abandon and assign its leased premises to another agency with Board's prior-written approval.

7. RIGHTS UPON TERMINATION

AG's leased land—including any permanent improvements added to it—will revert to the City of Springfield upon Agreement's termination. AG will then have 180 days to remove its equipment. Either party may terminate Agreement if the other party breaches Agreement.

8. GENERAL PROVISIONS

8.1 Flight Easement

Board reserves, for public use and benefit, a flight easement for the unobstructed passage of all aircraft in all air space above Airport and AG's leased land. Within the easement, aircraft may cause noise, vibrations, fumes, dust, fuel particles, and all other effects. AG waives any right or cause of action stemming from these effects.

8.2 Subordination

Agreement is subordinate to any agreement between Lessor and the United States relative to Airport operation or maintenance.

8.3 Default

If a party forgives an Agreement default, that party can still enforce any subsequent Agreement default.

8.4 Entire Agreement

Agreement contains the parties' entire agreement. Nothing outside Agreement can change it except a written amendment that both parties sign.

8.5 Governing Law

Agreement is governed by Missouri law, except where United States law is controlling.

8.6 Venue

For any legal proceeding under Agreement, venue will lie only in Greene County, Missouri.

8.7 Agreement Validity

If any court of competent jurisdiction rules with finality that any Agreement provision is invalid, the rest of Agreement will remain valid.

8.8 Time

Time is of the essence in Agreement.

8.9 *Notice*

Any Agreement *notice* must be:

(A) In writing; and,

(B) Mailed by United States mail that is:

(1) Postage prepaid;

(2) Registered or certified; and,

(3) Addressed as follows (or as the parties may designate to each other in writing):

BOARD
Director of Aviation
Springfield-Branson National Airport
5000 W. Kearney, Suite 15
Springfield, MO 65803

State of Missouri
Office of Administration
Division of Facilities Management
Design and Construction
301 West High Street, Room 840
P.O. Bos 809
Jefferson City, MO 65102

8.10 Headings

Headings are only for convenience and reference. They do not define, limit, or describe the scope or intent of any Lease provisions.

8.11 Successors

Lease binds and benefits both parties' assigns, sub lessees, or successors.

8.12 Nondiscrimination

(A) Class

AG must comply with:

(1) Part 21 of the Regulations of the Office of the Secretary of Transportation[1]; and,

(2) 14 C.F.R. Part 152, Subpart E[2].

(B) Economic

(1) AG must:

(a) "[F]urnish. . .services on a reasonable, and not unjustly discriminatory, basis to all [AG] users"; and,

(b) "[C]harge reasonable, and not unjustly discriminatory, prices. . . ."

(2) AG may "make reasonable and nondiscriminatory discounts, rebates, or other similar types of price reductions to volume purchasers."[3]

---

1 49 C.F.R. Pt. 21, App. C (b)(1).

2 14 C.F.R. § 152.401 (b).

9. LAND-LEASE OPTION

9.1 Grant

Board grants AG an option to rent the land mapped in Agreement's "Exhibit A" and legally described in Agreement's "Exhibit D," which land consists of 14.16 acres, more or less.

9.2 Provisions

Board and AG will negotiate optional-lease provisions if AG exercises its option. The optional-lease term must end when Agreement's regular lease-term ends.

9.3 Option *Notice*

If another tenant wants to rent, or if Board itself wants to use all, or part of, AG's optional-lease land, Board will send *notice* to AG. From the date Board sends its *notice* to AG, AG will have 60 days to exercise its option.

9.4 Limits on Use

AG's optional-lease land is now available only for aviation-related uses. That must continue if AG exercises its option.

9.5 Cost and Approval

AG's optional lease must be without cost to Board. Any proposed site plan AG has for its optional-lease land is subject to Board's prior-written approval.

9.6 Termination

Either Board or AG may terminate this part's land-lease option upon 30-days *notice.*

10. CONSERVATION PLAN

Agreement has a "Conservation Area" mapped on Agreement's "Exhibit A" and legally described in Agreement's "Exhibit F." An "Environmental Assessment" for Agreement's "Conservation Area" is in Agreement's "Exhibit E", which is a "Conservation Plan for the Ozark Cavefish."

---

3 14 C.F.R. Pt. 152, App. D A.20.b.

Signatures

BOARD

By:

Attest: Bob Vanaman
(Secretary's Printed Name)

Raeanne Presley
(Chair's Printed Name)

Vanaman
Secretary's Signature

Raeanne Presley
(Chair's Signature)

Date: 7/20/06

Date: 7/20/06

Notarized this 7/20/06 Nanette Kirkey Notary Public in Springfield Missouri Greene County for Bob Vanaman + Raeanne Presley.

NANETTE KIRKEY
Notary Public – Notary Seal
STATE OF MISSOURI
Greene County
My Commission Expires Aug. 23, 2006

MISSOURI NATIONAL GUARD

By:

King E. Sidwell,

Adjutant General, State of Missouri

Date: 1 Aug 2006

STATE OF MISSOURI

By:

Dave Mosby, CFM

Director, Facility Management, Design & Construction

Date: 7/25/06

Approved as to Form:

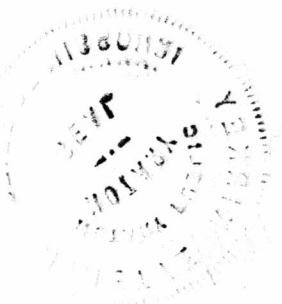
Assistant City Attorney

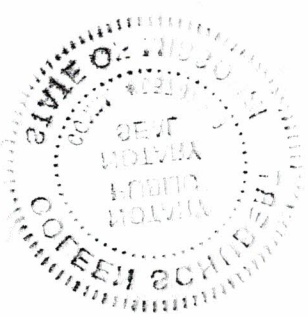
Date:

7/20/06

Coleen Schubert

COLEEN SCHUBERT
Notary Public - State of Missouri
County of Cole
My Commission Expires Sep. 13, 2009
Commission #05767939






RECEIVED
JUL 24 2006
By

I Brent A. Beckley, do solemnly affirm under the penalty of perjury, that King E. Sidwell, personally known to me, has executed the within lease in my presence, and has acknowledged to me that he executed the same for the purposes therein stated and requested that I sign my name on the within document as an executing witness.

Brent A. Beckley

Subscribed and affirmed before me this 1st day of August, 2006

Notary Public

NOTARY PUBLIC NOTARY SEAL MISSOURI

VICKIE R. UPSHAW
My Commission Expires
December 11, 2009
Moniteau County
Commission #05808323

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REAL ESTATE DOCUMENT
GREENE COUNTY, MISSOURI
RECORDERS CERTIFICATION

Linda S. Montgomery
RECORDER OF DEEDS

37

RECORDER OF DEEDS CERTIFICATE
GREENE COUNTY, MISSOURI
NON-STANDARD DOCUMENT

This document has been recorded and you have been charged the $25.00 non-standard fee pursuant to RSMo 59310.3. This Certificate has been added to your document in compliance with the laws of the State of Missouri.

Linda S. Montgomery
Recorder of Deeds
940 Boonville
Springfield, Missouri 65802
417-868-4068

<u>This page has been added as the first page of your document–DO NOT REMOVE</u>

MAIL TO

MAJ BRENT A. BECKLEY
6819 N. BOUNDARY RD
JEFFERSON CITY, MO 65101

EXHIBIT A

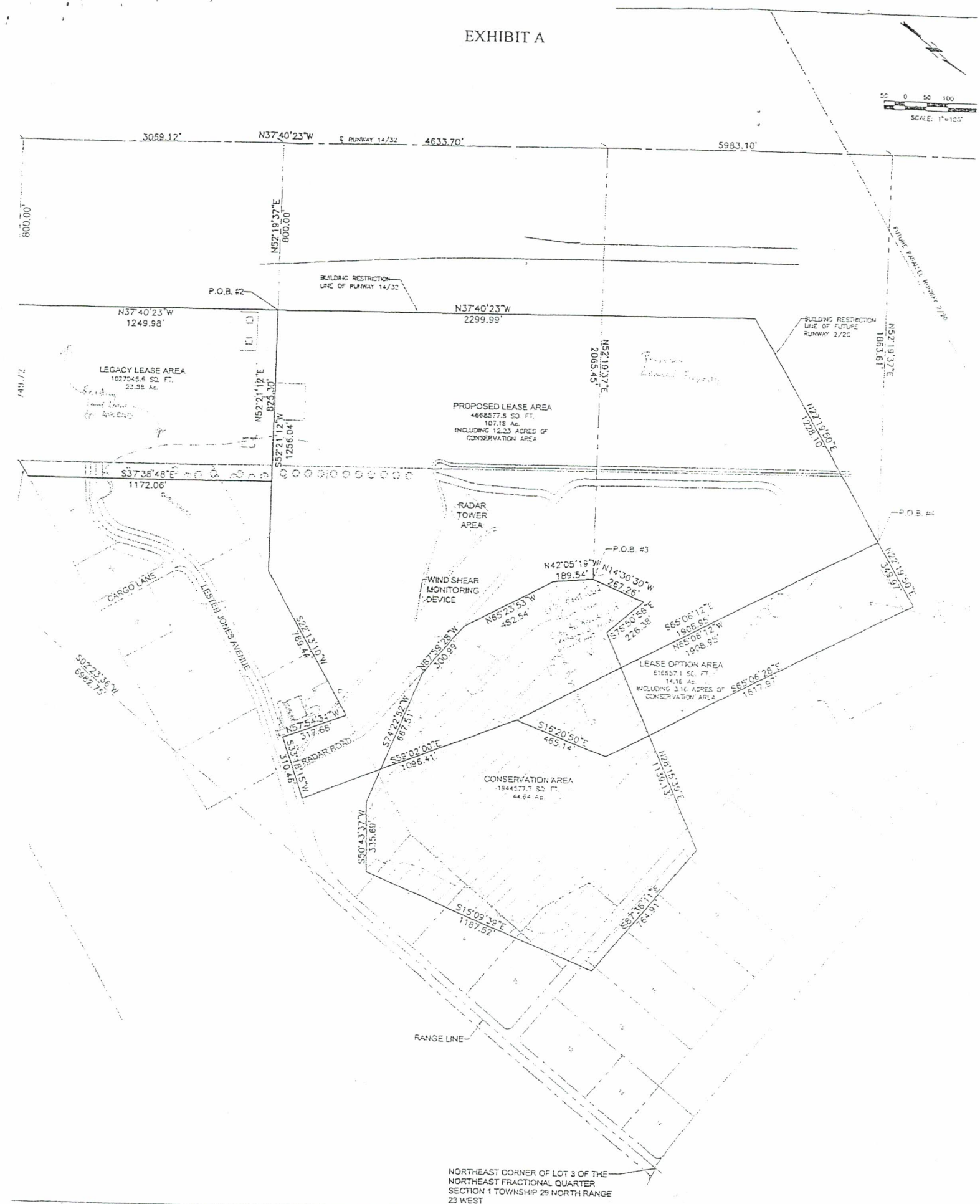

SCALE: 1"=100'
3059.12'
N37°40'23"W
℄ RUNWAY 14/32
4633.70'
5983.10'
800.00'
N52°19'37"E
800.00'
FUTURE PARALLEL RUNWAY 2/20
BUILDING RESTRICTION LINE OF RUNWAY 14/32
P.O.B. #2
N37°40'23"W
1249.98'
N37°40'23"W
2299.99'
BUILDING RESTRICTION LINE OF FUTURE RUNWAY 2/20
N52°19'37"E
1863.61'
N52°19'37"E
2065.45'
LEGACY LEASE AREA
1027045.6 SQ. FT.
23.58 Ac.
PROPOSED LEASE AREA
4668577.5 SQ. FT.
107.18 Ac.
INCLUDING 12.23 ACRES OF CONSERVATION AREA
N52°21'12"E
825.30'
S52°21'12"W
1256.04'
N22°19'50"E
1228.10'
S37°38'48"E
1172.06'
RADAR TOWER AREA
P.O.B. #3
P.O.B. #4
N42°05'19"W
189.54'
N14°30'30"W
267.26'
WIND SHEAR MONITORING DEVICE
CARGO LANE
LESTER JONES AVENUE
S22°13'10"W
169.44'
N65°23'53"W
462.54'
N67°58'38"W
300.99'
S78°50'56"E
226.38'
S65°06'12"E
1908.95'
N65°06'12"W
1908.95'
N22°19'50"E
349.97'
LEASE OPTION AREA
8165571 SQ. FT.
14.16 Ac.
INCLUDING 3.16 ACRES OF CONSERVATION AREA
S65°06'26"E
1617.97'
S0°23'36"W
692.75'
N57°54'31"W
317.68'
S74°22'32"W
687.51'
S15°20'50"E
468.14'
S32°18'15"W
510.84'
RADAR ROAD
S58°02'00"E
1096.41'
CONSERVATION AREA
1844577.3 SQ. FT.
44.64 Ac.
S28°15'35"E
1139.13'
S50°43'37"W
335.69'
S15°09'36"E
1187.52'
S67°16'11"E
764.97'
RANGE LINE
NORTHEAST CORNER OF LOT 3 OF THE NORTHEAST FRACTIONAL QUARTER SECTION 1 TOWNSHIP 29 NORTH RANGE 23 WEST

EXHIBIT B

PROPOSED LEASE AREA

THAT CERTAIN PARCEL OR TRACT OF LAND LOCATED IN THE NORTHEAST FRACTIONAL QUARTER OF SECTION 1, TOWNSHIP 29 NORTH, RANGE 23 WEST IN GREENE COUNTY, MISSOURI

COMMENCING AT THE NORTHEAST CORNER OF LOT 3 OF THE NORTHEAST FRACTIONAL QUARTER SECTION 1, TOWNSHIP 29 NORTH, RANGE 23 WEST;
THENCE, S02°23'36"W, ALONG THE RANGE LINE, A DISTANCE OF 6982.75 FEET;
THENCE, N87°36'24"W, A DISTANCE OF 527.37 FEET TO A POINT AT THE INTERSECTION OF THE CENTERLINE OF RUNWAY 14/32 WITH THE CENTERLINE OF RUNWAY 2/20;
THENCE, N37°40'23"W, ALONG THE CENTERLINE OF RUNWAY 14/32, A DISTANCE OF 3069.12 FEET;
THENCE, N52°19'37"E, A DISTANCE OF 800.00 FEET FOR A SECOND POINT OF BEGINNING; SAID TRUE POINT OF BEGINNING LYING ON THE NORTHERLY BUILDING RESTRICTION LINE OF RUNWAY 14/32;
THENCE, N37°40'23"W, ALONG THE NORTHERLY BUILDING RESTRICTION LINE OF RUNWAY 14/32, A DISTANCE OF 2299.99 FEET TO A POINT ON THE EASTERLY BUILDING RESTRICTION LINE OF THE FUTURE PARPLLEL RUNWAY 2/20;
THENCE, N22°19'50"E, ALONG THE EASTERLY BUILDING RESTRICTION LINE OF THE FUTURE PARPLLEL RUNWAY 2/20, A DISTANCE OF 1228.10 FEET;
THENCE, S65°06'12"E, A DISTANCE OF 1908.95 FEET;
THENCE, S59°02'00"E, A DISTANCE OF 1096.41 FEET TO A POINT ON THE WEST LINE OF LESTER JONES ACCESS;
THENCE, S33°18'15"W, ALONG SAID WEST LINE, A DISTANCE OF 310.46 FEET;
THENCE, N57°54'31"W, A DISTANCE OF 317.68 FEET;
THENCE, S22°13'10"W, A DISTANCE OF 789.44 FEET;
THENCE, S52°21'12"W, A DISTANCE OF 1256.04 FEET TO THE POINT OF BEGINNING;

CONTAINING 4,668,577.8 SQUARE FEET (107.18 ACRES) MORE OR LESS

EXHIBIT C

SPRINGFIELD MUNICIPAL AIRPORT
REGIONAL INDUSTRIAL AIRPARK
DECLARATION OF RESTRICTIONS FOR INDUSTRIAL ZONES

PREAMBLE

The City of Springfield, acting by and through its Municipal Airport Board, has established a general overall development plan for the development of the Airport, as set forth in the Airport Layout Plan, which includes Air Carrier, General Aviation, Industrial, and Recreational facilities.

In the overall development plan certain parcels of land have been established for desirable industrial environment for certain aeronautical, manufacturing, business, industrial, or recreational uses.

The Airport Board desires to subject the development of said parcels to certain conditions, restrictions, and covenants in order to insure the development of a desirable environment for said activities, and to insure that said development will be compatible with adjacent land uses on the Airport by performance, appearance and general operating characteristics.

The Airport Board hereby ordains that the property more generally described as the Springfield Municipal Airport Regional Industrial Airpark, hereafter is and shall be held subject to the conditions, restrictions, and covenants hereinafter set forth, each and all of which are for the benefit of each tenant of any portion of said property, and each and all of which shall apply to and bind the respective successors in interest of said property and any portion thereof.

ARTICLE I

PROPERTY

The real property subject to this Declaration is sitiated on the Springfield Municipal Airport, generally known as the Springfield Municipal Airport Regional Industrial Airpark.

ARTICLE II

DEFINITIONS

Wherever used in this Declaration, the following terms shall have the following meanings:

a. "BUILDING" shall include both the main portion of such building and all projections or extensions, therefrom, including garages, outside platforms and docks, carports, canopies, and porches. Ground cover shall not be included.

b. "LOT" shall mean the same as "BUILDING SITE", (see C below).

c. "BUILDING SITE" shall mean the entire area leased by one Lessee.

d. "STREET" shall mean any street, parkway, or other thoroughfare shown on the Map of the Industrial Park, as filed with the Zoning Department of the City of Springfield.

e. "SETBACK" shall mean the distance a building must be set back from the property line of the parcel.

f. "FRONT LOT LINE" shall mean the property line which faces the street; on corner parcels the "front lot line" shall mean the property line which is the width dimension of the parcel.

g. "REAR LOT LINE" shall be the property line usually parallel to the front lot line and contiguous to another parcel of property.

h. "SIDE LOT LINE" shall mean the property line usually perpendicular to the front and rear lot lines and contiguous to another property.

i. "DECLARANT" shall mean the Springfield Municipal Airport Board or any duly constituted agent/committee, appointed through said Board to fulfill the obligations herein required.

j. "LESSEE" shall mean a tenant under a lease with the Board.

ARTICLE III

PERMITTED USES

No building, structure, or land shall be used for any purpose other than the following, or any combination thereof, and such uses shall satisfy the standards set forth in Article IV and V herein:

a. Administrative, professional, or government offices.

b. Scientific or research laboratories, including incidental pilot plants in connection therewith.

c. Wholesaling.

d. Warehousing.

e. Distribution of products and merchandise, including retail sales of consumer goods such as are usually sold to the general public.

f. Processing and compounding of materials.

g. Fabricating and assembling of products.

h. Accessory uses directly related to the principal use on the site, including but not limited to:

1) Facilities for the furnishing of meals and the sale of refreshments and personal convenience items solely to employees of the tenants of an individual site and the guests and management thereof; provided that such facilities shall be located completely within a building on said site, with no external evidence thereof, including any signs relating thereto.

2) Motor pools, including service station facilities used for services of on-premises/motor pools, but not including public sales or service.

3) Business signs shall be permitted for the purpose of identification in accordance with provisions of Article IV, Paragraph H.

4) Outdoor storage facilities may be permitted as an auxiliary or accessory use, when screened from abutting public thoroughfares and other properties by a screen wall of masonry or other approved material, so erected as to screen stored materials from view at any point not more than six feet above ground level at the property line. However, there shall be no storage of vehicles not bearing current license plates.

i. Banking institutions.

j. Engineering, reproduction, and art supply firms; and any other use which, in the judgment of the Board, will contribute to the effective operation of all industrial tenants, their employees, and invitees. Such uses shall be governed by all performance, architectural, and building standards as herein set forth, and shall in all ways be compatible with the intent of the plans for development of land uses on the Airport.

k. Aeronautical facilities/enterprises.

ARTICLE IV

PERFORMANCE STANDARDS

No land or structure shall be used or occupied in any manner so as to

create any dangerous, injurious, noxious, or otherwise objectionable conditions which may affect any other property, including, but not limited to:

Fire and explosive hazard
Noise, vibration, or shock
Smoke, dust, odor or other forms of air pollution
Heat
Glare
Electrical or other disturbance
Liquid or solid refuse or wastes
Other substance, condition or element in such amount as to affect the surrounding area of adjoining premises.

a. FIRE AND EXPLOSIVE HAZARD. No activity shall be undertaken involving fire or explosive hazard which shall endanger the property, improvements, or employees of any other property owner or tenant.

b. NOISE. At no point on any property line shall the sound pressure level of any individual plant or operation (other than the operation of motor vehicles, aircraft, or other transportation facilities) exceed the decibel levels established by applicable Federal, State, County or City Regulations.

c. VIBRATION OR SHOCK. No vibration or shock perceptible to a person of normal sensibilities within 50 feet of the property line shall be permitted.

d. AIR POLLUTION.

1) Lessee shall comply with all Federal, State, County or City Environmental control or limits now or hereafter established whenever applicable.

2) Any use producing smoke, gas, dust, odor, fumes, aerosols, particulates, products of combustion or any other atmospheric pollutant, shall be conducted within a completely enclosed building.

3) No plant or operation shall discharge into the atmosphere toxic or noxious matter.

4) The emission of odors which are detectable at any point beyond the property line at any plant will not be permitted.

5) These requirements shall also be applicable to the disposal of trash and waste materials.

e. DUST CONTROL. All ground areas not covered by structures shall be landscaped and/or surfaced with concrete, asphaltic concrete, asphalt oil, or other comparable dust-free surfacing; shall be maintained in good condition, free of weeds, dust, trash, and other debris; and shall be properly drained and graded. Such development shall be accomplished before tenant may occupy the improvements on said lot.

f. HEAT OR GLARE. Any operation producing intense glare or heat shall be performed within an enclosed or screened area in such manner that the glare or heat emitted will not be discernible from the property line.

g. ILLUMINATION.

1) The source of illumination of any kind within the property shall not be visible at the property line, except for normal installation of standard interior lighting fixtures within buildings.

2) The maximum height of any lighting standard shall be limited to 30 feet above curb level.

3) The intensity of illumination shall be limited to 10 foot candles or 0.1 lumens per square foot for open areas or surfaces visible at the property line.

4) The design and location of exterior lighting shall comply in all respects to the requirements of the Federal Aviation Administration or any successor agencies and other governmental agencies having applicable jurisdiction with respect to height, type, and placement of lighting standards as they may affect the safety of flight operations into, from, and around the Airport.

h. SIGNS. The following regulations shall apply to all signs displayed for observation from outside a building, whether displayed on, near, or within a building:

1) Permitted Signs: Signs on the lot shall be limited to those identifying the uses conducted on the site, to those necessary for directional purposes, and to those required to advertise the rental of the specific property on which the sign is displayed. The size, design, and location of all signs shall require the written approval of the Board or its authorized agent prior to installation.

Outdoor advertising, billboards, or flashing lights shall not be permitted.

2) Area and Location. One sign may be permitted on the front setback line of each leasehold and one sign may be attached to the side of the building which faces a public street, both to state only the name, products, and services of the tenant.

The sign on the front setback line shall not exceed one square foot area for each 5 lineal feet of lot frontage, and shall not extend more than ten feet in height above the floor line of the building. An approved product or company symbol or device may be used in addition to each sign, and, on the front setback line, may extend up to any point on the building. Any such symbol or device shall be considered a sign for the purposes of this Article and shall require the written approval of the Board prior to installation.

3) Construction. All signs must comply with all building codes of the City of Springfield, and with all rules and regulations of the Federal Aviation Administration or any successor agencies.

i. REFUSE AND TRASH. No refuse or trash shall be kept, stored, or allowed to accumulate on any parcel.

j. SEWAGE DISPOSAL SYSTEMS. No cesspool, septic tank, or other sewage disposal system or device shall be installed, maintained, or used upon any parcel without the approval of the Board.

k. NUISANCE CONTROL. No industry, business or firm whose operation produces odors, fumes, smoke, dust, noise, vibration or air pollution in amounts which the Board or the Air Pollution Control District finds to be objectionable, or whose operation is considered to be hazardous by reason of danger of fire or explosion, will be permitted in the Industrial Airpark.

ARTICLE V

DEVELOPMENT OF SITE - REQUIRED IMPROVEMENTS

a. OFFSTREET PARKING. All provisions for automobile parking for employees, visitors, and invitees of the Lessee shall be placed on the lot(s) leased. No parking whatsoever shall be permitted on the streets.

All parking areas shall be paved to provide dust-free, all weather surfaces.

Parking shall not be permitted in front setback areas or inside setback areas facing the street, except that visitor parking may be provided in front setbacks and side setbacks facing the street if such parking is screened from the street by approved trees or shrubbery or such other screening as may be approved by the Board or its authorized agent.

Each parking space shall be designated by white lines painted upon the paved surface.

b. VEHICLE LOADING. All provisions for the loading and maneuvering of vehicles incidental to the operation of the business shall be placed on the lot(s) leased; onstreet vehicle loading shall not be permitted. Vehicle loading shall be permitted only at the rear of buildings, or on a side; except that such loading performed at a side shall be screened from front street visibility by approved trees and shrubbery.

c. SETBACKS. All buildings shall be set back a minimum of 25 feet from lot line(s) facing the street; the area between the lot line(s) and the setback shall be landscaped. If parking is provided in the front, all buildings shall be set back a minimum of 50 feet from the lot line.

100 per cent of the required minimum front setback area and side setback areas facing the street shall be landscaped and planted, unless covered by paving or outdoor construction.

Rear and side setbacks shall be 15 feet from the lot line or utility easement line, except that buildings on sites abutting railroad spurs may have loading docks extending to the rear property line, provided such construction does not interfere with utility services.

d. LANDSCAPING. A reasonable amount of landscaping, including the planting of ground covers, shrubs, and trees, shall be required, such landscaping to be in accordance with standards established by the Board. The first phase of such landscaping, as approved, shall be installed within a period not to exceed one hundred eighty (180) days after the Lessee occupies the initial building on said lot.

Setback areas shall be landscaped to the minimum extent outlined in Paragraph C, above. In addition, paving or landscaping shall extend from the property line to the curb, such paving or landscaping to be compatible with treatment for this area on other lots on the same block, and Lessee shall be responsible for maintaining these areas.

All trees shall be limited to a height of 35 feet above the curb line.

Tenants are encouraged to expand landscape development plans to include such elements as pools, fountains, sculpture, rock arrangements, sheltered outdoor seating areas, all subject to design approval before installation by the Board or its representative consultants.

e. BUILDING HEIGHTS. Building heights shall be limited to a maximum of 35 feet above the curb line, including any building equipment, penthouse, extrusions, etc.

f. SITE COVERAGE. All buildings and structures, or portions thereof, placed on the lot(s) shall not cover more than 50 percent of the total lot area, provided that up to 60 percent coverage may be permitted if a specific variance therefore is approved under Article VII.

g. TYPE OF CONSTRUCTION. All buildings shall be framed with reinforced concrete or masonry, structural steel, structural aluminum, or wood which has been satisfactorily treated to resist fire, rot, and insects. Siding shall be masonry, glass, enameled steel, or treated wood. Common masonry and treated wood siding shall be kept neatly painted, if used. The front of the buildings facing the street shall be finished with face brick, common brick painted, limestone or other material generally recognized as acceptable where both permanency and an attractive appearance are desired. Any deviations from the foregoing, and the design, type and material of all auxiliary buildings must be approved by the Board.

All buildings shall conform to all local building codes and ordinances.

h. STORAGE FACILITIES. All storage shall be within buildings or an enclosure as outlined in Article III, Paragraph H (4).

i. PIPES. No water pipe, gas pipe, sewer pipe or drainage pipe (other than those within structures) shall be installed or maintained upon any parcel above the surface of the ground, except hoses and movable pipes used for irrigation or similar purposes.

j. FENCES. No fence shall be erected or maintained without written approval of the Board.

ARTICLE VI

PREPARATION AND SUBMISSION OF PLANS FOR IMPROVEMENTS

a. GENERAL. All plans for improvements shall be prepared by registered engineers and architects, shall be of contemporary design, and shall require a prior written approval by the Board or its authorized agent before any construction can take place.

Upon the execution of a lease for a building site, the Board and the tenant shall jointly determine a reasonable period of time in which final plans and specifications shall be submitted, such period to be set forth in writing by the Board.

The following plans shall be required for submission to the Board within the time period determined:

1) A plot plan at a scale not smaller than 1 inch equals 100 feet showing the relationship of the proposed improvements to the lot(s) demised and to the improvements on adjacent lots, utilities, and access thereto, curbs, walks, driveways, parking areas, etc.

2) Floor plans at a scale not smaller than 1/16 inch equals one foot.

3) Ground cover plans, including landscaping.

4) A true architectural rendering of the proposed buildings, including the proposed exterior color scheme, style, materials, and design and placement of signs.

5) Any other plans, specifications, or design features which the Board or its authorized agent may deem necessary and request.

b. FORM AND CONTENT OF PLANS. The Board may promulgate rules governing the form and content of plans to be submitted for its approval or disapproval of architectural styles, details, or other matters pertaining to the plans.

Such rules and such statements of policy may be amended or revoked by the Board at any time, and no inclusion in, omission from, or amendment of any such rule shall be deemed to bind the Board to its approval or disapproval of any matter subject to its approval or to waive the exercise of the Board's discretion as to any such matter.

c. CODES AND REGULATIONS. All improvements shall be planned and constructed in accordance with rules and regulations prescribed by the Board or its authorized agents, with the laws and ordinances of the City of Springfield; with applicable building codes, and in compliance with the rules and regulations of the Federal Aviation Administration or any successor agencies, where applicable.

d. APPROVAL OF PLANS. Approval of plans and specifications shall be at the sole discretion of the Board, such approval not to be arbitrarily or unreasonably withheld. If the Board or its authorized agent fails to approve or disapprove such plans and specifications within thirty days after submission thereof, this shall serve as authorized approval of said plans and specifications as submitted.

Approval of said plans and specifications may be withheld because of:

1) Failure to comply with any of these restrictions.

2) Failure to include such information as may be reasonably requested.

3) Reasonable objection to the design and appearance of the proposed structure.

4) Failure to conform with existing structures upon other parcels.

5) The disapproval of the location, grading plan, color scheme, finish, design, proportions, style, or architecture, height or appropriateness of the proposed structure; or because of any other matter which, in the judgment of the Board would render the proposed structure inharmonious with the general plan for improvement of the Airport.

Approval of any plans or specifications for use on any one parcel shall not be deemed a waiver of the Board's right, at its discretion, to disapprove the same plans or specifications if such plans or specifications are subsequently submitted for approval for use on any other parcel or parcels.

e. COMMITMENT TO CONSTRUCT. Upon approval by the Board of plans for construction of any structure, a copy of the approved plans shall be deposited for permanent record with the Board; and a copy of such plans, bearing the written approval of the Board, shall be returned to the owner of the parcel upon which such structure is or will be placed.

Approval of these plans by the Board shall constitute a commitment on the part of the tenant to erect and maintain the improvements as proposed and approved and within a reasonable time period, such period to be determined jointly by the Board and the tenant, and to be set forth in writing by the Board.

f. CONSTRUCTION WITHIN TIME SPECIFIED. Any approved construction shall be prosecuted diligently in accordance with the approved plans and specifications, and shall be completed within the time period specified. Failure to complete such work in the time specified shall cause such approval to be automatically withdrawn, unless the Board grants written extension of such approval. After such automatic withdrawal of approval, the tenant will be considered in default of its Lease for such property; and the Board may terminate such Lease in accordance with the provisions set forth in that document.

g. LANDSCAPING PLANS. Trees, shrubs, fences, hedges, or other landscaping shall not be planted, placed, or maintained upon any parcel until a complete plan thereof has been submitted to and approved by the Board, in a manner similar to that required for architectural plans.

h. PLANS FOR ALTERATIONS IN IMPROVEMENTS. All plans for alterations to the leased lot(s), either for the construction of additional facilities or alterations to existing buildings, shall be prepared, submitted, and approved as outlined in Paragraphs A through G above, and shall be subject to the same restrictions as herein provided. This paragraph shall apply only to exterior or structural changes; alterations to the interior of buildings shall not be considered unless they affect the performance standards set forth in Article IV.

i. CONSTRUCTION WITHOUT APPROVAL. If any structure shall be altered, erected, placed, or maintained upon any parcel other than in accordance with plans and specifications approved by the Board, such alterations, erections, and maintenance shall be deemed to have been undertaken without the approval required herein. This restriction shall be applicable to landscaping plans, as well as architectural plans.

In event of such construction without approval, the tenant will be considered in default of the Lease for such property and the Board may terminate the Lease in accordance with the provisions set forth in that document.

j. FEE FOR EXAMINATION OF PLANS AND SPECIFICATIONS. The Board may charge and collect a fee of not more than Two Hundred Fifty Dollars ($250) for the examination of any plans and specifications submitted for approval pursuant to this Article. Such fee shall be payable at the time such plans and specifications are submitted.

The amount of such fee shall not exceed the actual cost to the Board of making such examination, including the cost of any architect's or engineer's fees incurred in connection therewith.

k. RIGHT OF ENTRY AND INSPECTION. Any authorized agent of the Board may, at any reasonable time during business hours and without notice, enter upon and inspect any parcel for the purpose of ascertaining whether the maintenance of such parcel and the maintenance, construction, or alteration of structures thereon are in compliance with the provisions hereof; and neither the Board nor such authorized agent shall be deemed to have committed a trespass or other wrongful act by reason of such entry or inspection. In those areas of the leased premises where entry is restricted to those persons qualified or cleared by any governmental agency or authority, no right of inspection shall be exercised other than by such qualified or cleared personnel.

l. NON-LIABILITY. Neither the Board nor any member thereof shall be responsible to the record Owner or to any other person, firm or corporation, for the structural design or architectural validity of all or any portion of any plans and specifications submitted to the Board nor shall the Board nor any member thereof be liable to any Owner or any person having any interest in a Site for any act or failure to act on any application submitted to the Board. Each Owner agrees by accepting title or any interest in any Site that the Board and each member thereof shall be immune from suit or liability in accordance with the foregoing.

ARTICLE VII

MISCELLANEOUS PROVISIONS

a. CUTTING AND FILLING. The Board or any authorized agent thereof may at any time make such cuts and fills upon any parcel or other part of said property and do such grading and moving of earth as, in its judgment, may be necessary to improve or maintain the streets in or adjacent to any property and to drain surface waters therefrom; provided, however, that after the principal structure upon a parcel shall have been completed in accordance with approved plans, the rights of the Board under this paragraph shall terminate with respect to such parcel, except that the Board shall thereafter have the right to maintain existing streets and drainage structures.

b. HOUSEKEEPING. If accumulations of weeds, rubbish, or items of equipment or supplies are permitted to remain on a parcel more than ten days after a request in writing from the Board to have them removed, the Board's authorized agent may enter upon any parcel for the purpose of removing same by whatever means it deems necessary. Such entry shall not be deemed a trespass, and the Board shall not be subject to any liability therefor. The cost of such work shall be borne by the tenant.

c. MAINTENANCE OF LANDSCAPING. If landscaped areas are not maintained in accordance with the standards prescribed by the Board and the condition is not corrected within ten days after written notice from the Board, the Board or its authorized agent shall have the right to enter any of the lot(s) leased and plant or replant such areas, without being deemed guilty of trespass. The costs therefor, as determined by the Board, shall be paid by the tenant.

d. USE PERMITS. Such use and occupancy permits as may be required by the Board, the City of Springfield, or State of Missouri shall be maintained in force at all times by each tenant.

e. PROVISION FOR VARIANCES. A majority of the Board may grant variances which permit construction of Improvements on a Site which would otherwise violate the provisons of Article V hereof.

f. COVENANTS RUN WITH THE LAND. All of the provisions contained in this Declaration shall run with the land and shall be enforceable at law or in equity.

g. NO WAIVER. Except as otherwise expressly provided herein, the failure or refusal of the Approving Agent or of any Owner to enforce any restriction contained herein shall not be deemed to be a waiver of the right to do so thereafter, nor of the right to enforce any other restriction contained herein.

h. CONSTRUCTIVE ACCEPTANCE. Every Lessee is and shall be conclusively deemed to have consented and agreed to every covenant, condition and restriction contained in this Declaration whether or not any reference to this Declaration is contained in the instrument by which such Lessee acquired such Lessee's interest in the Park.

i. SEVERABILITY. The provisions hereof shall be deemed independent and severable, and the invalidity or partial invalidity or unenforceability of any one provision or portion thereof shall not affect the validity or enforceability of any other provision hereof.

j. INTERPRETATION. The provisions of the restrictions set forth in this Declaration shall be liberally construed to effectuate its purpose of creating a uniform plan for the development and operation of the subject property. Failure to enforce any provision hereof shall not constitute a waiver of the right to enforce said provision or any other provision hereof.

k. RIGHT OF AMENDMENT. The Board reserves the right to amend this Declaration by majority vote of its members. However, any such amendment would not apply to any existing condition, building, structure or other improvements that were legally constructed under the provisions of these Declarations prior to the subject amendments, and would not conform to the amended Declaration.

END

EXHIBIT D

LEASE OPTION AREA

THAT CERTAIN PARCEL OR TRACT OF LAND LOCATED IN THE NORTHEAST FRACTIONAL QUARTER OF SECTION 1, TOWNSHIP 29 NORTH, RANGE 23 WEST IN GREENE COUNTY, MISSOURI.

COMMENCING AT THE NORTHEAST CORNER OF LOT 3 OF THE NORTHEAST FRACTIONAL QUARTER SECTION 1, TOWNSHIP 29 NORTH, RANGE 23 WEST;
THENCE, S02°23'36"W, ALONG THE RANGE LINE, A DISTANCE OF 6982.75 FEET;
THENCE, N87°36'24"W, A DISTANCE OF 527.37 FEET TO A POINT AT THE INTERSECTION OF THE CENTERLINE OF RUNWAY 14/32 WITH THE CENTERLINE OF RUNWAY 2/20;
THENCE, N37°40'23"W, ALONG THE CENTERLINE OF RUNWAY 14/32, A DISTANCE OF 5983.10 FEET;
THENCE, N52°19'37"E, A DISTANCE OF 1863.61 FEET FOR A FOURTH POINT OF BEGINNING; SAID TRUE POINT OF BEGINNING LYING ON THE EASTERLY BUILDING RESTRICTION LINE OF FUTURE PARALLEL RUNWAY 2/20;
THENCE, N22°19'50"E, ALONG SAID EASTERLY BUILDING RESTRICTION LINE OF FUTURE PARALLEL RUNWAY 2/20, A DISTANCE OF 349.97 FEET;
THENCE, S65°06'28"E, A DISTANCE OF 1617.97 FEET;
THENCE, S16°20'50"E, A DISTANCE OF 465.14 FEET;
THENCE, N65°06'12"W, A DISTANCE OF 1908.95 FEET TO THE POINT OF BEGINNING;

CONTAINING 616,657.1 SQUARE FEET (14.16 ACRES) MORE OR LESS

Appendix E - Conservation Plan for the Ozark Cavefish

Table of Contents

The list of threats to this species includes agricultural pesticides, soil and sediment erosion, inundation by reservoir construction, dewatering by lowered water tables, leaking underground storage tanks, fuel and toxic chemical spills, sealing cave entrances, sanitary wastes/septic systems, lead and zinc mining, human disturbance such as over-collection and cave use, urbanization and road construction, and livestock and poultry operations. The decline of the gray bat may also have had a negative impact on the Ozark cavefish.

Most threats are due to their potential to impact water quality or quantity. Increased groundwater contamination in recent years may have caused declines in the observed size of the species population. Ozark cavefish are sensitive to changes in groundwater quality and may be considered indicators of the quality of the groundwater in a cave system. Because the water in a cave system is ultimately provided by recharge from surface water, surface water that is polluted can have an effect on the Ozark cavefish.

E-10 Other Cave Species

Other cave species are included in this Conservation Plan because they are also obligate cave dwellers (troglobites) that can be impacted by poor water quality. These species are also known to occur in Fantastic Caverns. They are not federally listed or state endangered, generally being more abundant at individual locations and/or slightly more widespread than the Ozark cavefish. Avoiding impacts to the Ozark cavefish will also avoid impacts to these species.

Bristly Cave Crayfish

The bristly cave crayfish (*Cambarus setosus*) is known to occur approximately 5 miles to the east and in the Fantastic Caverns system. The bristly cave crayfish occurs in the Springfield Plateau section of the Ozark Uplands in approximately 9 southwestern Missouri counties and extreme northeastern Oklahoma. The crayfish lives in caves, openings of springs, and sometimes shallow wells in karst areas. It is often found in caves inhabited by gray bats. This species usually prefers a sand or silt substrate with scattered rock. It is 2 to 4 inches long and white in color.

Grotto Salamander

The grotto salamander (*Typhlotritron spelaeus*) is known to occur in Fantastic Caverns. When they hatch in the water as larvae, they have functional eyes and gills. They grow larger as larvae than their adult size. The grotto salamander shrinks as it matures, losing gills and pigment, and their eyes fuse shut. They may leave cave streams and pools as adults for short forays for food in moist areas. This species is known to occur in about 25 counties in Missouri and portions of states bordering southwest Missouri such as Arkansas, Oklahoma, and Kansas.

E-11 Conservation Measures

Conservation measures are directed at protecting the surface water that would be released from the proposed Aviation Complex before it enters the groundwater and subterranean streams and springs known to provide habitat for the Ozark cavefish. Based on the presence of the sinkholes, which connect to the Fantastic Caverns system, the MO ARNG will implement conservation measures to avoid impacts to listed species.

Conservation Measures have been grouped into functional categories. These categories are following:

- Restrict Activities in Sinkholes (E-11.1)
- Establish a Conservation Area (E-11.2)
- Applicable Laws, Regulations, and Guidelines (E-11.3)
- Stabilization of Soils (E-11.4)
- Prevent Spills and Leaks (E-11.5)
- Restrict Pesticide Use (E-11.6)
- Write and Update Plans (E-11.7)
- Regulatory Agency and Team Coordination (E-11.8)
- Engineering Controls (E-11.9)

See also sections 5.4 Geology and Soil, 5.5 Water Resources, and 5.11 Hazardous and Toxic Materials/Waste.

E-11.1 Restrict Activities in Sinkholes

The following actions and restrictions will be implemented in areas mapped as sinkholes (see Figure 4-3):

- No construction in sinkholes. Buildings and other structures will not be placed within any of the sinkholes and sinkholes will not be used as a construction staging area.
- No storage of fuels or chemicals in sinkholes and restriction of pesticide use (see Section E-11.6).
- No filling or excavation of soil in sinkholes.
- No paving or sealing of sinkholes.
- Fencing of sinkholes prior to construction activities. Fencing will consist of orange mesh fence.
- 100 feet buffers will be established around sinkholes.
- The buffer for the small sinkhole near the southeast corner of the existing facility, will be a "restricted use" zone in which handling of fuels, solvents, lubricants, paints and other hazardous substances will be restricted.
- The buffer for the sinkhole chosen for the Conservation Area will have a vegetative and restricted use zone of 100 feet. A small incursion into the buffer at the southwest corner of the Conservation Area - but not the sinkhole proper, may be needed if the entire Aviation Complex is built. The maintenance and management of the Conservation Area will be the responsibility of the MO ARNG.

- The current sections of Radar Road and Weather Road that contact the south-central and north-central portions of the Conservation Area, should to the extent possible, be left intact.
- Relocation of ASTs away from the sinkhole on the southeastern side of the current AVCRAD facility. Appropriate siting of fuel and hazardous materials storage was incorporated into the development of the Master Plan for the proposed site.

E-11.2 Establish a Conservation Area

To help meet the conservation goals of avoiding impacts to storm water and listed species, a Conservation Area will be established. The airport will provide the land and the MO ARNG will set-up and maintain the Conservation Area. Sections E-11.2.1 through E-11.2.5 discuss the selection and benefits of the Conservation Area, initial set-up and establishment of native plants, and maintenance of the Conservation Area.

E-11.2.1 Selection Of Conservation Area

Areas immediately to the east of the proposed site are heavily grazed by beef cattle. Soil map units listed as prime farmlands by the NRCS, areas included in the USFWS NWI, FEMA 500-year floodplains, and sinkholes are located east of and immediately adjacent to the proposed construction site (Figures 4-2 and 4-3).

Because of the presence of multiple natural resources and the logical discharge point for approximately 60% of the storm water discharges from the proposed site, the location shown on Figure E-2 was selected as the Conservation Area. The total area of the Conservation Area is approximately 45 acres. If the Conservation Area is included with the current facility and the proposed construction site, the total acreage would be approximately 175 acres.

E-11.2.2 Benefits Of The Conservation Area

The Conservation Area will help to improve biological diversity and conserve ecological processes while supporting the accomplishment of the mission. The Conservation Area will alter flood flows, maintain base flow through the gradual and natural release of floodwaters, impede the erosive forces of moving water, filter erosion, trap waterborne sediments and any associated pollutants, and allow naturally occurring fungi and bacteria to attenuate trace amounts of hydrocarbons and chemicals in runoff. Direct impacts to the resources already present will be avoided. Management of the area, such as removal of cattle and establishment of native species will result in enhancement of the natural resources currently present.

The proposed Conservation Area is currently being over-grazed by beef cattle. The cattle have been there for decades and Osage orange, honey locust, and other thorny invasive species dominate the area. The cattle have been particularly rough on the areas around the two ponds. No aquatic vegetation is growing in the shallow-water areas. Overgrazing and trodding by cattle hooves has exposed soil at many locations. Fecal coliforms are introduced directly into the water by livestock. Livestock will be removed from the Conservation Area. Removal of the cattle will reduce erosion, stop the direct introduction of fecal coliforms into surface waters, and allow subsequent establishment of native vegetation.

Figure E-2 Conservation Area

As depicted on Legal Survey exhibit F

Removing cattle would allow the ground vegetation to grow more profusely, filtering and naturally attenuating pollutants more readily, and decrease the number of fecal coliforms introduced into the sinkhole. Rehablitating the approximately 10 acre wetland in the middle of the area would enhance and provide classic wetland functions such as sediment retention, floodflow alteration, food chain support, and water quality improvement. Portions of the sinkhole are considered 500-year (Zone B) floodplain (approximately 20 acres). Even though the proposed project site is exempt from the FPPA, the Conservation Area contains prime farmlands (approximately 30 acres) that will be preserved. Prime farmland would be the best medium for growing vegetation.

E-11.2.3 Initial Setup Of Conservation Area

Lease: The property is owned by the City of Springfield, Missouri. The City allows the MO ARNG to operate the current AVCRAD site, which does not include the Conservation Area, under the terms of an exclusive license. A new lease or license would have to be obtained from the City of Springfield to allow the MO ARNG to begin work on the Conservation Area. Approximately 40 additional acres would need to be leased. Establishment of the Conservation Area would be expected to take approximately 5 years.

Fencing: The area will be fenced and marked with appropriate signs or warning tape before construction started. The fences may be removed after the completion of construction activities.

Tree and brush removal: The next step in the establishment of the Conservation Area will be the removal of the Osage orange, honey locust tress, and multi-flora rose bushes. Bulldozing of the trees will not be allowed. The trees will be cut down by chainsaw or other mechanical means and the cambium layer on the stump will be immediately sprayed with a small amount of Roundup® herbicide. After the Roundup® has had time to travel to and kill the roots to prevent re-sprouting, the stumps may be ground or cut off to ground level. The stumps will not be ripped or pulled out. Small saplings, seedlings, bushes, and tall weeds can be removed by mowing with a heavy-duty mower.

E-11.2.4 Establishment Of Natives

Weed removal: The area can be raked prior to planting of native species. Fescue and other herbaceous weeds will be present after mechanical removal of the woody species. Minimal use of Roundup® will be allowed in the Conservation Area for initial control of non-natives such as fescue. Soil disturbance will be kept to a minimum. Ripping, deep chisel plowing, and other agricultural practices typically used to remove roots and re-establish pasture or grassland in an area overgrown with woody species will be avoided to the extent possible. Shallow disking and harrowing may be used, but should be kept to a minimum. No-till drills will be used. Broadcasting, hydro seeding, and hand raking will be used.

Herbicide use: Native vegetation will be established to the extent possible in the Conservation Area. Establishment of natives in the Conservation Area will be difficult, but not impossible. Some minor short-term adverse impacts from establishment of the Conservation Area may occur, but will be offset by significant long term beneficial impacts. The area currently is infested with non-native grasses such as fescue and woody species such as multi-flora rose. Herbicide use will be minimized to the extent

possible. Without concurrence from the USFWS or MDC, only Roundup® or Rodeo® will be allowed to be used within the Conservation Area. Plateau® would be considered if fescue is still a problem in the second or third year. Other herbicides may be used with approval from the MDC and/or USFWS.

Seeding: Seeding rates of native grasses should be increased 25-50% in the conservation area due to the tillage restrictions, when conducting fall plantings, and/or broadcasting into existing stands. In general, legumes and forbs do well in fall plantings and grasses in spring plantings.

Companion crops: Native species are usually slow to establish. During the establishment period, certain non-native agricultural species such as oats, annual rye, and alfalfa may be used as a companion crop to the natives. Annual lespedeza may be over-seeded or broadcast into poor stands the second year. Fescue, brome, red clover, reed canary grass, and white clover will not be used as companion crops.

Fertilizer: If possible, the use of nitrogen (N) fertilizer should be avoided in the conservation area. Nitrogen fertilizer encourages the growth of non-natives weeds and runoff could degrade water quality. Small amounts of phosphorus (P) and potassium (K) fertilizer may be used if soil conditions warrant. The soil pH should be approximately 5.5 to 6.5. A few soil tests are recommended to determine if fertilizer or lime is needed. The NRCS and MDC should be consulted for recommendations for fertilization as well as species to be planted, and proper methods to establish natives.

Storm water outlets: Switch grass (*Panicum virgatum*) will be used in the Conservation Area, particularly the areas by the storm water outlets. Switch grass, when debearded is conducive to use in conventional agricultural drills. The varieties of switch grass most suited for flood areas and erosion control include Kanlow, Cave-in-the rock, and Blackwell. Native seeds or seedlings are sometimes difficult to obtain. Other species discussed below are suggested, and substitutions can be made for natives.

As stated above, storm water outlets will be vegetated primarily with switch grass. Native warm season grasses are in general more resistant to bending than introduced cool-season grasses such as fescue and brome. Switch grass is more resistant to bending than most other native warm season grasses when water is flowing through it. This stiffness helps it to slow down and disperse the flow of water. This results in better filtering of suspended particles. Switch grass can grow in moist or dry conditions and is resistant to ice and snow. This makes it appropriate for storm water outlet areas that will at times be alternately wet and dry. The resistance to ice and snow helps this grass to maintain its beneficial aspects in the winter months also.

Overseeding of existing stands of switch grass around storm water outlets may be used to increase stand density. Switch grass when de-bearded is a smooth round seed that is conducive to broadcasting into established stands of vegetation, being more likely to fall or work its way through standing vegetation and organic matter to reach the soil surface. Many native grass seeds, particularly if they are not debearded, are fluffy and hang-up on existing vegetation or organic matter and do not reach the soil if they are broadcast into an existing stand of vegetation. Legumes generally have a heavy, round, and slick seed that are good for broadcasting and winter seeding.

Planting scheme: The Conservation Area is a sinkhole with a 100 feet vegetative buffer. Conditions gradually change from relatively dry to wet from the edge to the bottom of the

sinkhole. The edge or buffer area generally has the driest conditions with the shallowest soil. The center or bottom of the sinkhole has two small ponds and generally has deeper soils and wetter conditions. When establishing the native vegetation the Conservation Area should be divided into approximately three bands or concentric circles. A mixture of native warm season grasses, legumes(*), and wildflowers are recommended for each mixture. The buffer area should be planted with species such as side-oats grama, little bluestem, purple prairie clover*, slender bush clover*, pale purple coneflower, and gray-headed coneflower. The center portion should be planted with native species such as big bluestem, Indian grass, roundhead bush clover*, Illinois bundleflower,* and black-eyed Susan. The inner portion around the ponds should be planted with species such as prairie cordgrass, eastern gama grass, sweet coneflower, and ashy sunflower. Prairie cordgrass is particularly recommended around the ponds because it spreads aggressively by rhizomes and is best suited to stabilizing the pond edges. Most of the native warm season grasses require a specialized type of drill. Additional technical assistance can be obtained from the NRCS or MDC.

E-11.2.5 Maintenance of Conservation Area

Mowing: Brush-hogging with a tractor and heavy duty mower once or twice a summer to prevent re-establishment of woody vegetation and facilitate thick stands of grass will be the primary means of controlling woody vegetation and encouraging growth of native vegetation. Areas seeded to native grasses should be mowed once in Spring to approximately 4-6 inches in height to help control fescue/non-natives; and, if needed to control woody vegetation once in early summer to a height of approximately 10 inches. Mowing is the best method in the Conservation Area to control woody species. Herbicide use in the Conservation Area has a greater potential to negatively impact water quality than mowing. Natives should not be mowed after mid-July. Mowing frequencies within the Conservation Area can be decreased after an establishment period of approximately 3 to 7 years.

Prescribed burning: Prescribed or controlled burning may be considered (early April is best), but not required as part of this Conservation Plan. Concurrence from the airport will be obtained before prescribed burning is considered. Prescribed burning releases smoke that could cause visibility problems for pilots and fire could present safety problems at the airport due to fuel storage. Trained personnel and permits would be required for prescribed burning.

Some type of active management to improve coverage of native species, besides mowing, will be conducted each year during the first five years. This can include practices such as over seeding or planting of bare-root seedlings, prescribed burning, herbicide control of fescue, and/or hand removal of undesirable species.

E-11.3 Applicable Laws, Regulations, and Guidelines

The following laws, regulations, and guidelines will be followed when designing storm water controls, writing the SWPPP and designing new facilities:

- Adherence to applicable regulations. Discussions concerning applicable regulations can be found in Section 4.3 for air quality, Section 4.4 for noise, Section 4.5 for geology/soil, Section 4.6 for floodplains and wetlands, Section 4.7 for biological resources, Section 4.8 for cultural resources, Section 4.12 for hazardous substances, and Section E-4.1 for listed species.

- Additional discussions on conservation measures can be found in section 5.2 for air quality, Section 5.3 for noise, Section 5.4 for geology/soil, Section 5.5 for water resources, Section 5.6 for biological resources, Section 5.7 for cultural resources, and Section 5.11 for hazardous substances.
- NPDES standards apply and storm water retention will be required.
- MDNR water quality standards apply, particularly Chapter 6, Permits (10 CSR 20-6) and Chapter 7, Water (10 CSR 20-7).
- Loading and unloading of hazardous materials will be performed in accordance with federal motor carrier safety regulations (49 CFR part 177 subpart B).
- City of Springfield Chapter 96 Storm water codes and Sinkhole Watershed Water Quality Protection Policies apply.
- A 25 or 30 feet buffer has been typically used to meet the sinkhole protection standards in the Springfield area on construction projects. The 100 feet buffer as recommended by MDC for karst areas will be adopted for the Conservation Area. The 100 feet buffer is not required per state and local water quality standards, but will be adopted due to the presence of essential habitat for the Ozark cavefish.
- MDNR has effluent standards for public owned treatment works (POTWs). The proposed action is not a POTW and would not discharge sanitary wastes to the environment, but the BOD and TSS standards should be considered when designing and developing storm water controls.
- Appendix C of the EPA Report (EPA 832-R-92-005), Storm Water Management for Construction Activities.
- MDNR 1995 publication, Protecting Water Quality: A field guide to erosion, sediment and storm water best management practices for development sites in Missouri.

E-11.4 Stabilization of Soil

Quick stabilization of soil will minimize the amount of soil and suspended solids entering surface water. For additional information on soils see Section 4.5.2. Following are measures to prevent soil erosion that will be implemented for the proposed Aviation Complex construction:

- Temporary silt basins will be placed in all drainage ditches or swales before construction begins. Silt fences will be erected before construction begins. These silt basins and fences will be inspected and repaired on a weekly basis. Monitoring and documentation of the erosion control will be conducted.
- Erosion control will be implemented immediately where soil has been disturbed. Appropriate measures such as silt fences, mulch, geo-fabrics, and/or hydroseeding will be used to control erosion until vegetation is established. All cleared and graded areas will be immediately revegetated and/or mulched unless building construction is to begin in one week or less.

EXHIBIT F

CONSERVATION AREA

THAT CERTAIN PARCEL OR TRACT OF LAND LOCATED IN THE NORTHEAST FRACTIONAL QUARTER OF SECTION 1, TOWNSHIP 29 NORTH, RANGE 23 WEST IN GREENE COUNTY, MISSOURI

COMMENCING AT THE NORTHEAST CORNER OF LOT 3 OF THE NORTHEAST FRACTIONAL QUARTER SECTION 1, TOWNSHIP 29 NORTH, RANGE 23 WEST;
THENCE, S02°23'36"W, ALONG THE RANGE LINE, A DISTANCE OF 6982.75 FEET;
THENCE, N87°36'24"W, A DISTANCE OF 527.37 FEET TO A POINT AT THE INTERSECTION OF THE CENTERLINE OF RUNWAY 14/32 WITH CENTERLINE OF RUNWAY 2/20;
THENCE, N37°40'23"W, ALONG THE CENTERLINE OF RUNWAY 14/32, A DISTANCE OF 4633.70 FEET;
THENCE, N52°19'37"E, A DISTANCE OF 2065.45 FEET FOR A THIRD POINT OF BEGINNING;
THENCE, N14°30'30"W, A DISTANCE OF 267.26 FEET;
THENCE, S78°50'56"E, A DISTANCE OF 226.38 FEET;
THENCE, N28°15'39"E, A DISTANCE OF 1139.13 FEET;
THENCE, S87°36'11"E, A DISTANCE OF 764.91 FEET;
THENCE, S15°09'39"E, A DISTANCE OF 1187.52 FEET;
THENCE, S50°43'37"W, A DISTANCE OF 335.69 FEET;
THENCE, S74°22'52"W, A DISTANCE OF 667.51 FEET;
THENCE, N87°59'28"W, A DISTANCE OF 300.99 FEET;
THENCE, N65°23'53"W, A DISTANCE OF 482.54 FEET;
THENCE, N42°05'19"W, A DISTANCE OF 189.54 FEET TO THE POINT OF BEGINNING;

CONTAINING 1,944,577.7 SQUARE FEET (44.64 ACRES) MORE OR LESS

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

NPDES Permit #MO-0134627

Aviation Classification and Repair Activity Depot (AVCRAD)
5250 West Depot Road
Springfield, Missouri 65803

SWPPP Latest Revision Date:
February 2019

Prepared by:
Missouri Army National Guard
6819B North Boundary Road
Jefferson City, Missouri 65101-1207

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) CERTIFICATION INFORMATION

A. Facility Name: Aviation Classification and Repair Activity Depot (AVCRAD)

B. Permit Number: MO-0134627

C. Facility Type: Military aircraft maintenance facility for the Army National Guard

D. Facility Address: 5250 West Depot Road
Springfield, MO 65803

E. Name and Address of Owner: Missouri Army National Guard
Environmental Management Office
6819B North Boundary Road
Jefferson City, Missouri 65101-1207

F. Designated Person(s) Responsible for Stormwater Pollution Prevention (SWPPP Coordinator): The SWPPP Coordinator(s) will be responsible for overseeing inspection, operation, and maintenance of BMP's.

Signature _____ Date _____

Name Jerry R. Sanders, LTC, AUS, Retired
Title Environmental Coordinator

CONTENTS

LIST OF APPENDICES

1.0 INTRODUCTION

This Storm Water Pollution Prevention Plan (SWPPP or Plan) for the Missouri Army National Guard's (MOARNG) Aviation Classification and Repair Activity Depot (AVCRAD) facility fulfills the requirements of the Missouri State Operating Permit Number MO-0134627 relating to storm water discharges associated with aircraft maintenance and flight operations.

This Plan identifies potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the MOARNG facility. The Plan describes the implementation of practices to reduce pollutants and to assure compliance with the terms and conditions of the State Operating Permit.

2.0 FACILITY INFORMATION

2.1 Facility Location

The AVCRAD is located within a leased portion of the Springfield-Branson National Airport in Greene County, Missouri. A Facility Location Map is included in Appendix A to this Plan.

2.2 Facility Description

The AVCRAD facility is one of four facilities in the U.S. that maintains aircraft for the Army National Guard. The Springfield AVCRAD facility maintains aircraft for the Missouri Army National Guard and 13 surrounding Midwestern states. Aircraft maintained at the AVCRAD facility are primarily helicopters; Apaches, Blackhawks, Chinooks, Hueys, and OH58's and several fixed wing aircraft. Maintenance work includes repairs, maintenance, and overhauls of all portions of the helicopters including engines, rotor blades, interiors, electronics, avionics, and air-frame work and repainting. The AVCRAD also provides crew member training and aviation flight and maintenance training. Major facility components consist of a corrosion control hangar, aircraft hangar, administrative office building, aircraft parking pads, an engine diagnostics facility, aboveground storage tanks, and one refueling truck,

2.3 Storm Water Permit

The AVCRAD was issued permit #MO-0134627 to discharge storm water from aircraft maintenance and flight operations. A copy of the permit is included in Appendix B. As required by the permit, this SWPPP will be reviewed and updated every five years or as site conditions change.

The Special Conditions section of Permit MO-0134627 require that discharges from the site shall not cause a violation of the state water quality standards, 10 CSR 20-7.031, which states, in part, that no water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:

(a) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
(b) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
(c) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
(d) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
(e) There shall be no significant human health hazard from incidental contact with the water;
(f) There shall be no acute toxicity to livestock or wildlife watering;
(g) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
(h) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

2.4 Overview of Industrial Activities

The industrial activities conducted at the AVCRAD that have the potential for exposure to storm water consist primarily of aircraft staging and aircraft refueling. Other potential stormwater contaminates include POV parking lots, accidental spills, equipment storage areas, minimal deicing products, and bulk storage of petroleum fuels and lubricants in aboveground storage tanks (ASTs). All aircraft washing is performed indoors.

2.5 Facility Drainage

The facility is located on relatively flat land north of the Springfield-Branson National Airport. The surface area at the AVCRAD facility consists generally of impervious surfaces; the aircraft hanger and building roofs, and the aircraft apron, access roads, driveways, and employee parking areas are paved with either concrete or asphalt. Sinkholes are common in the Springfield area, and are documented to exist adjacent to the AVCRAD facility to the south and east. The sinkholes are likely to drain surface water into subsurface karst systems.

2.6 Outfalls

Storm water runoff flows to two permitted outfalls.

Outfall #001 conveys storm water from the south drainage area of the complex including the parking lot, tarmac and parking pads, and roof of the aircraft hangar. Outfall #001 samples are collected from the storm water manhole located prior to end of pipe discharge. As water exists Outfall #001, it is directed into a drainage swale and likely enters groundwater via a sinkhole.

Outfall #002 has been removed.

Outfall #003 has been removed.

Outfall #004 conveys storm water from the north drainage area of the complex. A detention basin exists at outfall #004. Outfall #004 samples are collected from the drainage ditch north of the detention pond outlet before the ditch enters the tree line and exits AVCRAD property. The stormwater will likely enter groundwater through area sinkholes. If stormwater did not enter sinkholes, it would travel north towards Rainer Branch and eventually into Clear Creek

The locations of the outfalls are shown in Appendix A.

2.7 Designated Individuals

Names and addresses of designated contacts regarding storm water:

<u>AVCRAD Environmental Contact</u>
Mr. Jerry Sanders
5250 West Depot Road
Springfield, Missouri 65803

<u>Permit Owner</u>
Environmental Management Office
Mr. Timothy Schulte
6819B North Boundary Road
Jefferson City, Missouri 65101-1207

2.8 Potential Pollutant Source Areas

Table 1 describes the potential storm water pollutant sources, type and quantity of materials on-site, present management practices, potential storm water contact and risk assessment.

Table 1
Summary of Potential Pollution Sources and Pollution Potential

Location	**Aviation Classification and Repair Activity Depot (AVCRAD)**
Potential Pollutants	F-24 Fuel. POLs (petroleum, oils, lubricants). Pollutants from parked vehicles and equipment. Pollutants from parked aircraft. De-icing products (potassium chloride, calcium chloride, and sodium chloride)
Storage Quantity/Annual Usage	F-24: Use ~117,700 gal, stored in 2-12,000 gal ASTs, 2,500 gal truck, and 1,000 gal AST. Diesel: Use ~2,200 gal, stored in 1,000 gal AST MOGAS: Use ~520 gal, stored in 1,000 gal AST Used Oil: Generate ~1,200 gal, stored in 1,000 gal AST New Oils and Lubricants: stored in pint and gallon cans. De-icing products: Minimal amounts of deicing product on used on the sidewalks. No deicing products are used on the aircraft, runway, or tarmac.
Present Management	Portable fuel cans are stored in a cabinet equipped with secondary containment near parking pads. Aircraft washing is performed indoors and flows through an oil/water separator before discharging into the sanitary sewer system. Containment area water is examined for sheen before releasing. Fluid changes and lubrications are performed within the hangar. Parts cleaning solvents are used in self-contained washing units. New and used chemicals are stored indoors and are properly labeled. Storage areas are regularly inspected for incidental spills. Spill kits are available near chemical storage areas. Extensive and thorough housekeeping BMPs are strictly enforced. Service bays are cleaned daily. Trash is disposed of in covered dumpsters. Recycling of materials is encouraged.
Storm Water Contact	Storm water may come in contact with contaminates resulting from parked vehicles, aircraft, incidental vehicle or aircraft leaks, de-icing products, equipment storage, and accidental spills.
Risk Assessment	Potential for adverse storm water impacts are minimized by the inside storage of chemical materials, secondary containment of the ASTs and refueling truck, and enforcement of BMPs and Standard Operating Procedures (SOPS)

2.10.1 Significant Materials Stored On-Site

The AVCRAD has several ASTs. Two 12,000-gallon double-walled F-24 ASTs are located southwest of the HazMat Building. Other ASTs include one 1,000-gallon AST containing gasoline (MoGas), one 1,000-gallon used oil AST, one 1,000-gallon diesel fuel AST and one 1,000 gallon F-24 AST, all of which are double-walled and located south of the 12,000-gallon ASTs. The FEDS 1,000-gallon F-24 AST is a steel tank located east of the FEDS building. A 359-gallon diesel AST is located in the fire suppression building. A 2,500-gallon fuel tanker truck is used to refuel aircraft on the flight line. The tanker is parked adjacent to the 12,000-gallon F-24 ASTs.

2.10.2 Exposed Materials

Materials potentially exposed to storm water consist of the following:

- Aircraft, vehicles, and equipment
- Scrap metal
- Scrap wood
- Wood pallets
- Applied deicing products
- Aboveground storage tanks

This list is variable, but includes items that may commonly be located outside.

2.10.3 Storm Water Sampling Data

Permit #MO-0134627 requires quarterly sampling from outfalls #001 and #004. The following parameters are monitored by the permit: flow, Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), Oil and Grease, Xylene, and rainfall amount.

The effluent parameters within the permit are benchmarks. If a sample exceeds a benchmark, a Corrective Action Report (CAR) will be completed noting what steps were taken to meet the benchmark in the future. The SWPPP and BMPs must also be reviewed to determine what improvements or additional controls are needed to reduce the pollutant. The CAR must be retained with the SWPPP.

2.10.4 Non-Storm Water Discharges

All, industrial, non-storm water discharges, including sanitary sewers and floor drains, at the AVCRAD are connected to the sanitary sewer system and do not come into contact with storm water.

3.0 STORM WATER MEASURES AND CONTROLS

BMPs are measures or practices that reduce the potential and actual amount of pollutants that may affect the quality of storm water discharges. BMPs may be procedures, schedule of activities, management practices, or engineering controls utilized to control, prevent or reduce the discharge of pollutants to waters of the state. Although BMPs are used in many environmental programs, BMPs presented in this Plan are specifically designed to reduce or eliminate pollutants in storm water discharges.

BMPs are a broad class of measures which may include processes, procedures, scheduling of activities, and prohibition of certain practices to prevent or reduce storm water pollution. Implementing BMPs to prevent or mitigate pollutants from entering storm water discharges from the industrial activity areas of the facility is an integral part of the storm water pollution prevention program.

BMPs used at the facility include the following:

• Preventative maintenance	• Good housekeeping
• Spill prevention and response	• Materials management

3.1 Preventative Maintenance

Equipment requires maintenance to perform as designed and to minimize the potential for pollution. National Guard facilities and equipment are maintained at a high degree of readiness. Preventative maintenance activities include:

- Monthly inspection of all ASTs, supply lines, and piping, for indications of leaks or damage in accordance with (IAW) site Spill Prevention Control and Countermeasure (SPCC) Plan;
- Monthly site inspection of storm water BMPs, including observation and evaluation of BMP effectiveness, deficiencies, and corrective measures that will be taken;
- Record keeping of inspections of AST equipment, containment areas, and SWPPP monthly inspections;
- Repair or replacement of defective equipment.

3.2 Good Housekeeping

Good housekeeping practices are designed to maintain a clean, safe work area which reduces the possibility of spills. Awareness of good housekeeping is essential to storm water pollution prevention awareness. Good housekeeping BMPs include:

- All equipment washing occurs on the inside wash rack;
- Recycling of materials is encouraged;
- Parts cleaning solvent is used in self contained washing units;
- Solid waste dumpsters are kept covered;
- Minimal amounts of deicer are used as necessary to maintain safety;
- Minimal amounts of fertilizer and herbicide are used as necessary and do not exceed application rates;
- Materials are stored compatibly;
- Materials and equipment are kept out of walkways.

3.3 Spill Prevention and Response

The MOARNG maintains spill prevention and response in accordance with the requirements set forth in 40 Code of Federal Regulations (CFR) Part 112. This minimizes the potential for a release of petroleum

products and subsequent exposure to storm water. This includes the following controls and good operating practices:

- ASTs are equipped with secondary containment;
- Fueling nozzles are equipped with automatic shutoff controls to prevent overfilling;
- Facility personnel operating fuel facilities are trained in spill prevention and response;
- All deicing of aircraft is performed with heaters inside the hangar – no chemical deicers are used on aircraft;
- Deicing products are not used on the tarmac, snow and ice are cleared by mechanical means;
- Before releasing water that has accumulated in secondary containment areas, it is examined for hydrocarbon odor and presence of sheen;
- Outdoor vehicle maintenance is discouraged;
- Spill kits are available near storage areas;
- Material storage containers are maintained as necessary and replaced if leaking;
- Liquid wastes, such as POLs or other potentially hazardous substances, are not poured down drains.

3.4 Materials Management

Materials management is a critical step in spill prevention and storm water pollution prevention awareness. Minimizing the quantity of materials stored, proper storage conditions, and proper disposal practices minimize the pollution potential of stored materials. Material management BMPs include:

- Storage of excess quantities of materials is discouraged;
- New product is stored in sealed containers;
- Materials are stored in compatible containers and properly labeled;
- Hazardous and flammable substances are stored and labeled properly;
- Equipment and scrap metal is covered or moved under shed roofs if visible evidence of oil or greases is observed;
- Excess materials are disposed properly.

4.0 SWPPP ROUTINE REQUIREMENTS

4.1 Monthly Inspections

Monthly inspections will be conducted to ensure the effectiveness of the sites BMP's on protecting storm water quality. Inspections will be recorded on the form in Appendix C and will be kept with the SWPPP at the facility. All inspection logs shall have the following information:

- BMP effectiveness;
- BMP deficiencies;
- Corrective measures taken;
- Date of inspection;
- Name of inspector; and
- Brief written report

The inspection report must include precipitation information for the entire period since last inspection.

Operational deficiencies must be corrected within seven calendar days. Minor structural deficiencies must be corrected within 14 calendar days. Major structural deficiencies must be reported to the MDNR regional office within seven days and corrected as soon as reasonably possible.

4.2 Personnel Training

Training will be provided to all personnel involved in material handling and storage, and housekeeping of maintenance and cleaning areas. Several training programs are in place to provide training to applicable personnel. The Environmental Coordinator, Environmental Awareness, and Custodian courses give participants an overview of many environmental regulations, including the importance of using and maintaining Best Management Practices. The records of attendance for the courses will be kept on-site.

In the event that training is not immediately available at the time of a new personnel appointment, adequate training and guidance will be given to the new employee as appropriate for their job responsibilities.

4.3 Records Retention

This SWPPP, logs, and other permit related records will be maintained at the facility for three years.

5.0 AMENDMENT OF SWPPP

5.1 Reasons for SWPPP Amendment

This SWPPP will be reviewed and updated when it is found that BMP's are not effective or when operations have significantly changed at the facility.

5.2 Amendment Log

Amendment No.	Date	Brief Description of Amendment	Prepared By
1	1/13/2015	Updated address, environmental contact, and inspection checklist.	Angela Neal
2	9/22/2015	Installation of four 1,000 gallon storage tanks, updated deicing procedures (no longer using urea), and conversion of JP-8 to F-24.	Angela Neal
3	6/16/2017	Updated contact information.	Angela Neal
4	2/27/2019	Updated SWPPP to reflect new permit effective 1 February 2019.	Angela Neal

APPENDIX A

FIGURES

Site Location for AVCRAD

Figure 1

N

Not all data layers represented maintain the same accuracy level, therefore the map scale applied does not necessarily equate to the implied horizontal and vertical positional accuracy.

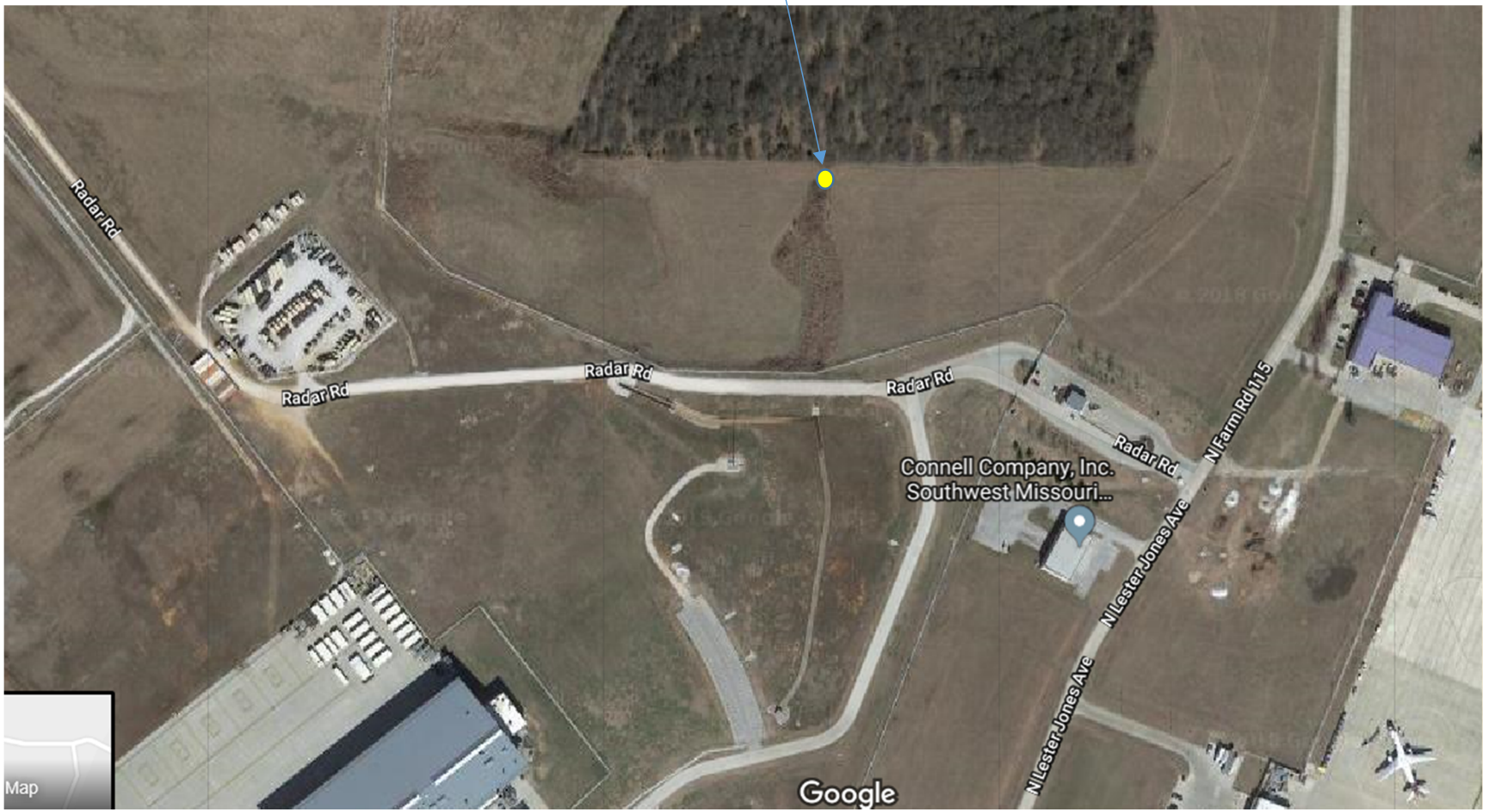
0 250 500 1,000 1,500 2,000 Meters

Data Source : The Missouri Spatial Data Information Service
http://msdis.missouri.edu/index.html

N
W E
S

Not all data layers represented maintain the same accuracy level, therefore the map scale applied does not necessarily equate to the implied horizontal and vertical positional accuracy.

Outfall 004 Sampling Location



AVCRAD

APPENDIX B

MISSOURI OPERATING PERMIT MO-R100070

Missouri Department of NATURAL RESOURCES
dnr.mo.gov
Michael L. Parson, Governor
Carol S. Comer, Director

JAN 30 2019

Missouri Army National Guard
Environmental Management Office
6819 B North Boundary Road
Jefferson City, MO 65101

Dear Permittee:

Pursuant to the Federal Water Pollution Control Act, under the authority granted to the State of Missouri and in compliance with the Missouri Clean Water Law, we have issued and are enclosing your State Operating Permit to discharge from Aviation Classification and Repair Activity Depot.

Please read your permit and attached Standard Conditions. They contain important information on monitoring requirements, effluent limitations, sampling frequencies and reporting requirements.

Monitoring reports required by the special conditions must be submitted on a periodic basis via the Missouri Department of Natural Resources' electronic Discharge Monitoring Report (eDMR) system unless waived, or can be submitted on the enclosed forms if you are subject to an eDMR registration schedule as established in the permit. Upon registration, please access the eDMR system via the following link: https://edmr.dnr.mo.gov/edmr/E2/Shared/Pages/Main/Login.aspx. If you experience difficulties with using the eDMR system, you may contact edmr@dnr.mo.gov or call 855-789-3889 or 573-526-2082 for assistance.

This permit may include requirements with which you may not be familiar. If you would like the Department to meet with you to discuss how to satisfy the permit requirements, an appointment can be set up by contacting your local regional office at 417-891-4300. These visits are called Compliance Assistance Visits and focus on explaining the requirements to the permit holder.

This permit is both your Federal National Pollutant Discharge Elimination System Permit and your new Missouri State Operating Permit and replaces all previous State Operating Permits issued for this facility under this permit number. In all future correspondence regarding this facility, please refer to your State Operating Permit number and facility name as shown on page one of the permit.

If you were adversely affected by this decision, you may be entitled to an appeal before the Administrative Hearing Commission (AHC) pursuant to Section 621.250, RSMo. To appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC. Contact information for the AHC is: Administrative Hearing Commission, United States Post Office Building, Third Floor, 131 West High Street, P.O. Box 1557, Jefferson City, MO 65102, phone: 573-751-2422, fax: 573-751-5018, and website: www.oa.mo.gov/ahc.

Please be aware that this facility may also be subject to any applicable county or other local ordinances or restrictions.

If you have any questions concerning this permit, please do not hesitate to contact the Department's Water Protection Program at P.O. Box 176, Jefferson City, MO 65102, or by phone at 573-751-1300. Thank you.

Sincerely,

WATER PROTECTION PROGRAM

Chris Wieberg
Director

CW/vs

Enclosure

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

Permit No.	MO-0134627
Owner:	Missouri Army National Guard Environmental Management Office
Address:	6819B North Boundary Road, Jefferson City, MO 65101
Continuing Authority:	Same as above
Address:	Same as above
Facility Name:	Aviation Classification and Repair Activity Depot (AVCRAD)
Facility Address:	5250 West Depot Road, Springfield, MO 65803
Legal Description:	See following page(s)
UTM Coordinates:	See following page(s)
Receiving Stream:	See following page(s)
First Classified Stream and ID:	See following page(s)
USGS Basin & Sub-watershed No.:	See following page(s)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

See following page(s)

This permit authorizes only stormwater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Sections 640.013, 621.250, and 644.051.6 of the Law.

February 1, 2019
Effective Date

Edward B. Galbraith
Edward B. Galbraith, Director, Division of Environmental Quality

January 31, 2024
Expiration Date

Chris Wieberg
Chris Wieberg, Director, Water Protection Program

FACILITY DESCRIPTION (CONTINUED)

The AVCRAD facility is one of four facilities in the U.S. that maintains aircraft for the Army National Guard. Aircraft maintained at the AVCRAD facility are primarily helicopters; Apaches, Blackhawks, Chinooks, Hueys, and OH58's and several fixed wing aircraft. Maintenance work includes repairs, maintenance, and overhauls of all portions of the helicopters including engines, rotor blades, interiors, electronics, avionics, air-frame work, and repainting. The AVCRAD also provides crew member training and aviation flight and maintenance training. No aircraft chemical de-icing is performed at the facility.

All wastewaters generated at the installation, including sanitary sewage from restrooms and showers and wastewaters from floor drains and oil/water separators, is conveyed by municipal sewer system to a wastewater treatment plant.

OUTFALL #001 –Aircraft Maintenance & Flight Operations SIC # 9711; NAICS # 928110
Stormwater Discharge Only

Legal Description:	Sec.01, T29N, R23W, Greene County
UTM Coordinates:	X = 465633, Y = 4122294
Receiving Stream:	Tributary to Groundwater
First Classified Stream and ID:	Groundwater
USGS Basin & Sub-watershed No.:	(10290106-0204)
Maximum Flow:	Dependent upon precipitation

OUTFALL # 002
Eliminated in August 2011

OUTFALL #003
Eliminated in January 2010

OUTFALL # 004 – Aircraft Maintenance & Flight Operations SIC # 9711; NAICS # 928110
Stormwater discharge only

Legal Description:	Sec.01, T29N, R23W, Greene County
UTM Coordinates:	X = 465569, Y = 4123058
Receiving Stream:	Tributary to Groundwater
First Classified Stream and ID:	Groundwater
USGS Basin & Sub-watershed No.:	(10290106-0204)
Maximum Flow:	Dependent upon precipitation

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

OUTFALL #001 & 004 *Stormwater Only*	**TABLE A** **FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective on **February 1, 2019** and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

EFFLUENT PARAMETERS	UNITS	FINAL LIMITATIONS		BENCH-MARKS	MONITORING REQUIREMENTS	
		DAILY MAXIMUM	MONTHLY AVERAGE		MEASUREMENT FREQUENCY	SAMPLE TYPE
PHYSICAL						
Flow	MGD	*		-	once/quarter ◊	24 Hr Est. ∞
Precipitation (#001 only)	inches	*		-	once/quarter ◊	Measured ∞
CONVENTIONAL						
Chemical Oxygen Demand	mg/L	**		120	once/quarter ◊	grab ∞
Oil & Grease	mg/L	**		10	once/quarter ◊	grab ∞
Total Suspended Solids	mg/L	**		100	once/quarter ◊	grab ∞
OTHER						
Xylene	µg/L	**		-	once/quarter ◊	grab ∞

MONITORING REPORTS SHALL BE SUBMITTED QUARTERLY; THE FIRST REPORT IS DUE APRIL 28, 2019.
THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

* Monitoring and reporting requirement only.

** Monitoring and reporting requirement with benchmark. See Special Condition #4.

∞ All samples shall be collected from a discharge resulting from a precipitation event greater than 0.1 inches in magnitude and occurring at least 72 hours from the previously measurable precipitation event. If a discharge does not occur within the reporting period, or if all reasonable attempt to collect a sample during the facilities normal operating time is made but unable to be sampled, report as no discharge. The total amount of precipitation should be noted from the event from which the samples were collected.

◊ Quarterly sampling

MINIMUM QUARTERLY SAMPLING REQUIREMENTS			
QUARTER	**MONTHS**	**QUARTERLY EFFLUENT PARAMETERS**	**REPORT IS DUE**
First	January, February, March	Sample at least once during any month of the quarter	April 28th
Second	April, May, June	Sample at least once during any month of the quarter	July 28th
Third	July, August, September	Sample at least once during any month of the quarter	October 28th
Fourth	October, November, December	Sample at least once during any month of the quarter	January 28th

B. STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached Part I standard conditions dated August 1, 2014 respectively, and hereby incorporated as though fully set forth herein.

C. SPECIAL CONDITIONS

1. Electronic Discharge Monitoring Report (eDMR) Submission System
   (a) Discharge Monitoring Reporting Requirements. The permittee must electronically submit compliance monitoring data via the eDMR system. In regards to Standard Conditions Part I, Section B, #7, the eDMR system is currently the only Department approved reporting method for this permit.
   Programmatic Reporting Requirements. The following reports (if required by this permit) must be electronically submitted as an attachment to the eDMR system until such a time when the current or a new system is available to allow direct input of the data:
      (1) Any additional report required by the permit excluding bypass reporting.
      After such a system has been made available by the Department, required data shall be directly input into the system by the next report due date.
   (b) Other actions. The following shall be submitted electronically after such a system has been made available by the Department:
      (1) General Permit Applications/Notices of Intent to discharge (NOIs);
      (2) Notices of Termination (NOTs);
      (3) No Exposure Certifications (NOEs);
      (4) Low Erosivity Waivers and Other Waivers from Stormwater Controls (LEWs); and
      (5) Bypass reporting,
   (c) Electronic Submission: access the eDMR system, via: https://edmr.dnr.mo.gov/edmr/E2/Shared/Pages/Main/Login.aspx.
   (d) Waivers from Electronic Reporting. The permittee must electronically submit compliance monitoring data and reports unless a waiver is granted by the department in compliance with 40 CFR Part 127. The permittee may obtain an electronic reporting waiver by first submitting an eDMR Waiver Request Form: http://dnr.mo.gov/forms/780-2692-f.pdf. The Department will either approve or deny this electronic reporting waiver request within 120 calendar days. Only permittees with an approved waiver request may submit monitoring data and reports on paper to the Department for the period the approved electronic reporting waiver is effective.

2. The facility shall implement a Stormwater Pollution Prevention Plan (SWPPP) which must be prepared and implemented upon permit issuance. The SWPPP must be kept on-site and should not be sent to the Department unless specifically requested. The SWPPP must be reviewed and updated every five years or as site conditions change. The permittee shall select, install, use, operate, and maintain the Best Management Practices prescribed in the SWPPP in accordance with the concepts and methods described in: *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in 2015 https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf
   The purpose of the SWPPP and the Best Management Practices (BMPs) listed herein is the prevention of pollution of waters of the state. A deficiency of a BMP means it was not effective preventing pollution [10 CSR 20-2.010(56)] of waters of the state. Corrective action means the facility took steps to eliminate the deficiency.
   The SWPPP must include:
   (a) A listing of specific contaminants and their control measures (or BMPs) and a narrative explaining how BMPs are implemented to control and minimize the amount of contaminants potentially entering stormwater.
   (b) A schedule for at least once per month site inspections and brief written reports. The inspection report must include precipitation information for the entire period since last inspection, as well as observations and evaluations of BMP effectiveness. Throughout coverage under this permit, the facility must perform ongoing SWPPP review and revision to incorporate any site condition changes.
      i. Operational deficiencies must be corrected within seven (7) calendar days.
      ii. Minor structural deficiencies must be corrected within fourteen (14) calendar days.
      iii. Major structural deficiencies must be reported to the regional office within seven (7) days of discovery. The initial report shall consist of the deficiency noted, the proposed remedies, the interim or temporary remedies (including proposed timing of the placement of the interim measures), and an estimate of the timeframe needed to wholly complete the repairs or construction. The permittee will work with the regional office to determine the best course of action, including but not limited to temporary structures to control stormwater runoff. The facility shall correct the major structural deficiency as soon as reasonably achievable.
      iv. All actions taken to correct the deficiencies shall be included with the written report, including photographs.
      v. Inspection reports must be kept on site with the SWPPP and maintained for a period of three (3) years. These must be made available to Department and EPA personnel upon request. Electronic versions of the documents are acceptable.
   (c) A provision for designating an individual to be responsible for environmental matters.

C. SPECIAL CONDITIONS (CONTINUED)

(d) A provision for providing training to all personnel involved in housekeeping, material handling (including but not limited to loading and unloading), storage, and staging of all operational, maintenance, storage, and cleaning areas. Proof of training shall be submitted upon request by the Department.

3. Permittee shall adhere to the following minimum Best Management Practices (BMPs):
   (a) Prevent the spillage or loss of fluids, oil, grease, fuel, etc. from vehicle maintenance, equipment cleaning, warehouse activities, and other areas and thereby prevent the contamination of stormwater from these substances.
   (b) Provide collection facilities and arrange for proper disposal of waste products including but not limited to petroleum waste products, and solvents.
   (c) Store all paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) so these materials are not exposed to stormwater or provide other prescribed BMPs such as plastic lids and/or portable spill pans to prevent the commingling of stormwater with container contents. Commingled water may not be discharged under this permit. Provide spill prevention control, and/or management sufficient to prevent any spills of these pollutants from entering waters of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater. Any spills should be noted in the SWPPP.
   (d) Provide good housekeeping practices on the site to keep trash from entry into waters of the state.
   (e) Provide sediment and erosion control sufficient to prevent or control sediment loss off of the property
   (f) Ensure adequate provisions are provided to prevent and to protect embankments from erosion.

4. This permit stipulates pollutant benchmarks applicable to your discharge. The benchmarks do not constitute direct numeric effluent limitations; therefore, a benchmark exceedance alone is not a permit violation. Benchmark monitoring and visual inspections shall be used to determine the overall effectiveness of the SWPPP and to assist you in knowing when additional corrective action may be necessary to protect water quality. If a sample exceeds a benchmark concentration you must review your SWPPP and your BMPs to determine what improvements or additional controls are needed to reduce the pollutant in your stormwater discharge(s).

   Any time a benchmark exceedance occurs, a Corrective Action Report (CAR) must be completed. A CAR is a document recording the efforts undertaken by the facility to improve BMPs to meet benchmarks in future samples. CARs must be retained with the SWPPP and be available to the Department upon request. If the efforts taken by the facility are not sufficient and subsequent exceedances of a benchmark occur, the facility must contact the Department if a benchmark value cannot be achieved. Failure to take corrective action to address a benchmark exceedance and failure to make measureable progress towards achieving the benchmarks is a permit violation.

5. To protect the general criteria found at 10 CSR 20-7.031(4), before releasing water accumulated in secondary containment areas, it must be examined for hydrocarbon odor and presence of sheen. If odor or sheen is indicated, the water shall be treated using an appropriate method or disposed of in accordance with legally approved methods, such as being sent to a wastewater treatment facility

6. The full implementation of this operating permit, which includes implementation of any applicable schedules of compliance, shall constitute compliance with all applicable federal and state statutes and regulations in accordance with §644.051.16, RSMo, and the CWA section 402(k); however, this permit may be reopened and modified, or alternatively revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), §304(b)(2), and §307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or controls any pollutant not limited in the permit.

7. All outfalls must be clearly marked in the field.

C. SPECIAL CONDITIONS (CONTINUED)

8. Changes in Discharges of Toxic Pollutant
   In addition to the reporting requirements under §122.41(1), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
   (a) That an activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
      (1) One hundred micrograms per liter (100 µg/L);
      (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile;
      (3) Five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol;
      (4) One milligram per liter (1 mg/L) for antimony;
      (5) Five (5) times the maximum concentration value reported for the pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
      (6) The notification level established by the Department in accordance with 40 CFR 122.44(f).
   (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
      (1) Five hundred micrograms per liter (500 µg/l);
      (2) One milligram per liter (1 mg/l) for antimony;
      (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with §122.21(g)(7).
      (4) The level established by the Director in accordance with §122.44(f).

9. Report as no-discharge when a discharge does not occur during the report period. It is a violation of this permit to report no-discharge when a discharge has occurred.

10. Reporting of Non-Detects
   (a) An analysis conducted by the permittee or their contracted laboratory shall be conducted in such a way the precision and accuracy of the analyzed result can be enumerated.
   (b) The permittee shall not report a sample result as "non-detect" without also reporting the detection limit of the test or the reporting limit of the laboratory. Reporting as "non-detect" without also including the detection/reporting limit will be considered failure to report, which is a violation of this permit.
   (c) The permittee shall report the non-detect result using the less than "<" symbol and the laboratory's detection/reporting limit (e.g. <6).
   (d) Where the permit contains a Minimum Level (ML) and the permittee is granted authority in the permit to report zero in lieu of the < ML for a specified parameter, then zero (0) is reported for the parameter.
   (e) See Standard Conditions Part I, Section A, #4 regarding proper detection limits used for sample analysis.
   (f) When calculating monthly averages, one-half of the minimum detection limit (MDL) should be used instead of a zero. Where all data are below the MDL, the "<MDL" shall be reported as indicated in item (C).

11. Failure to pay fees associated with this permit is a violation of the Missouri Clean Water Law (644.055 RSMo).

MISSOURI DEPARTMENT OF NATURAL RESOURCES
FACT SHEET
FOR THE PURPOSE OF RENEWAL
OF
MO-0134627
AVIATION CLASSIFICATION AND REPAIR ACTIVITY DEPOT

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollutant Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of stormwater from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (Department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified for less.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)(A)2.] a factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (MSOP or operating permit) listed below. A factsheet is not an enforceable part of an operating permit.

PART I. FACILITY INFORMATION

Facility Type:	Industrial
SIC Code(s):	9711 (national security)
NAICS Code(s):	928110 (national security)
Application Date:	February, 21 2018
Expiration Date:	August, 31 2018
Last Inspection:	September 22, 2015

FACILITY DESCRIPTION:
The Aviation Classification and Repair Activity Depot (AVCRAD) facility is located at Springfield-Branson National Airport in Greene County, in northwest Springfield. The facility is located north of the intersection of northwest-southeast Runway 32 and northeast-southwest Runway 2 at the Springfield-Branson National Airport. The address of the AVCRAD facility is 5250 West Depot, Springfield, Missouri, 65803, and the facility is generally located in the southeast ¼ of Section 1, Township 29 North, Range 23 West, Greene County, Missouri. This is a federal facility falling under 10 CSR 20-6.200(2)(B)3.F.

The AVCRAD facility is normally occupied 10.5 hours per day, four days per week. The AVCRAD facility operation schedule is normally Tuesday through Friday 6:00 AM to 4:30 PM A small contingent of personnel are on site after normal operating periods but do not conduct industrial activity. The AVCRAD facility is one of four facilities in the U.S. that maintains aircraft for the Army National Guard. The Springfield AVCRAD facility maintains aircraft for the Missouri Army National Guard and 13 surrounding Midwestern states. Aircraft maintained at the AVCRAD facility are primarily helicopters; Apaches, Blackhawks, Chinooks, Hueys, and OH58's and several fixed wing aircraft. Maintenance work includes repairs, maintenance, and overhauls of all portions of the helicopters including engines, rotor blades, interiors, electronics, avionics, and air-frame work and repainting. The AVCRAD also provides crew member training and aviation flight and maintenance training. No aircraft chemical de-icing is performed at the facility; if an aircraft is de- iced, the aircraft is pulled into the hangar to thermally deice without the use of chemical deicers.

The surface area at the AVCRAD facility consists generally of impervious surfaces; the main hanger and building roofs, and the aircraft apron, access roads, driveways, and employee parking areas that are paved with either concrete or asphalt.

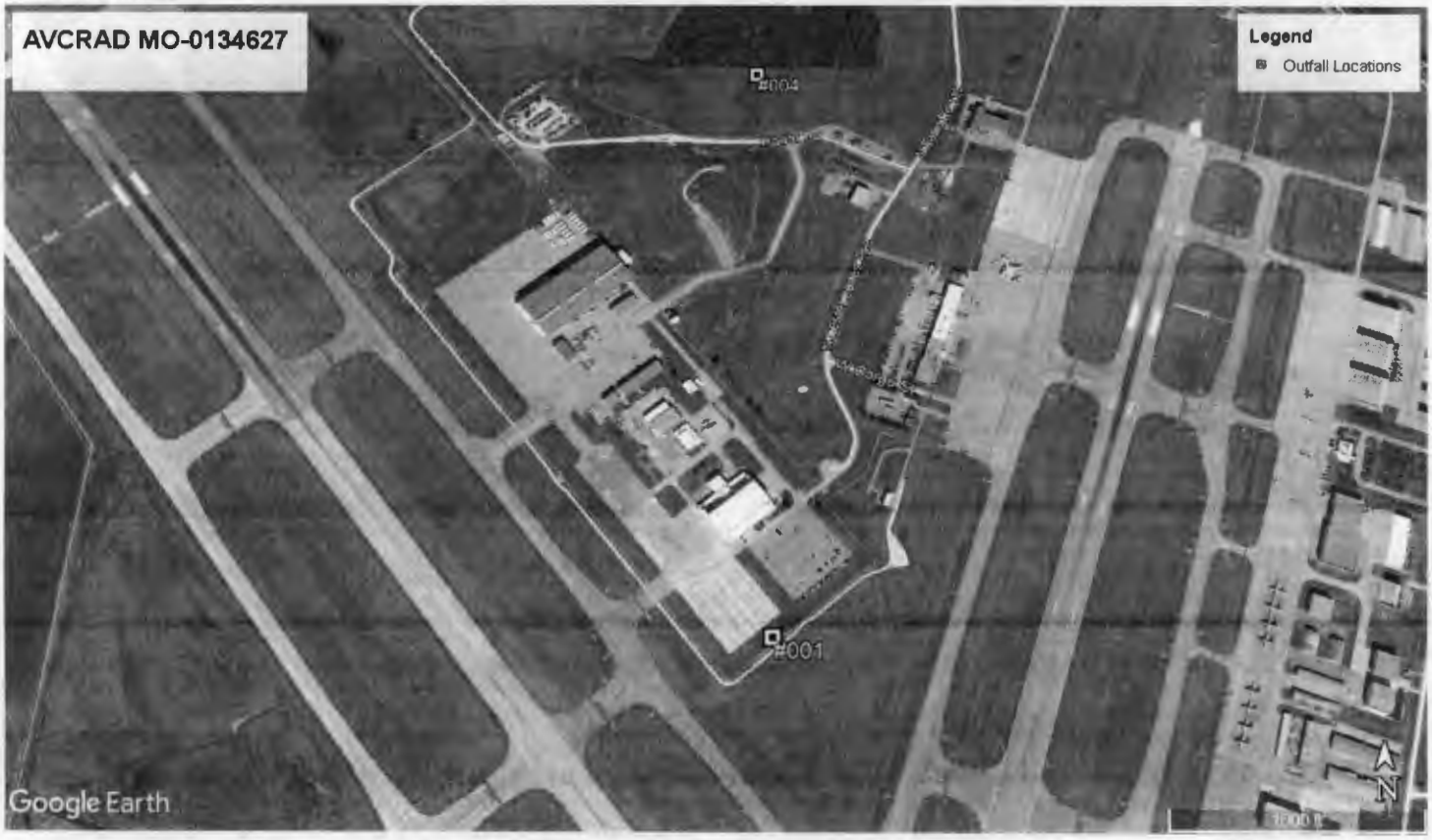
All wastewaters generated at the installation, including sanitary sewage from restrooms and showers and wastewaters from floor drains and oil/water separators, is conveyed by the City of Springfield municipal sewer system to the City's Northwest Wastewater Treatment Plant.

PERMITTED FEATURES TABLE:

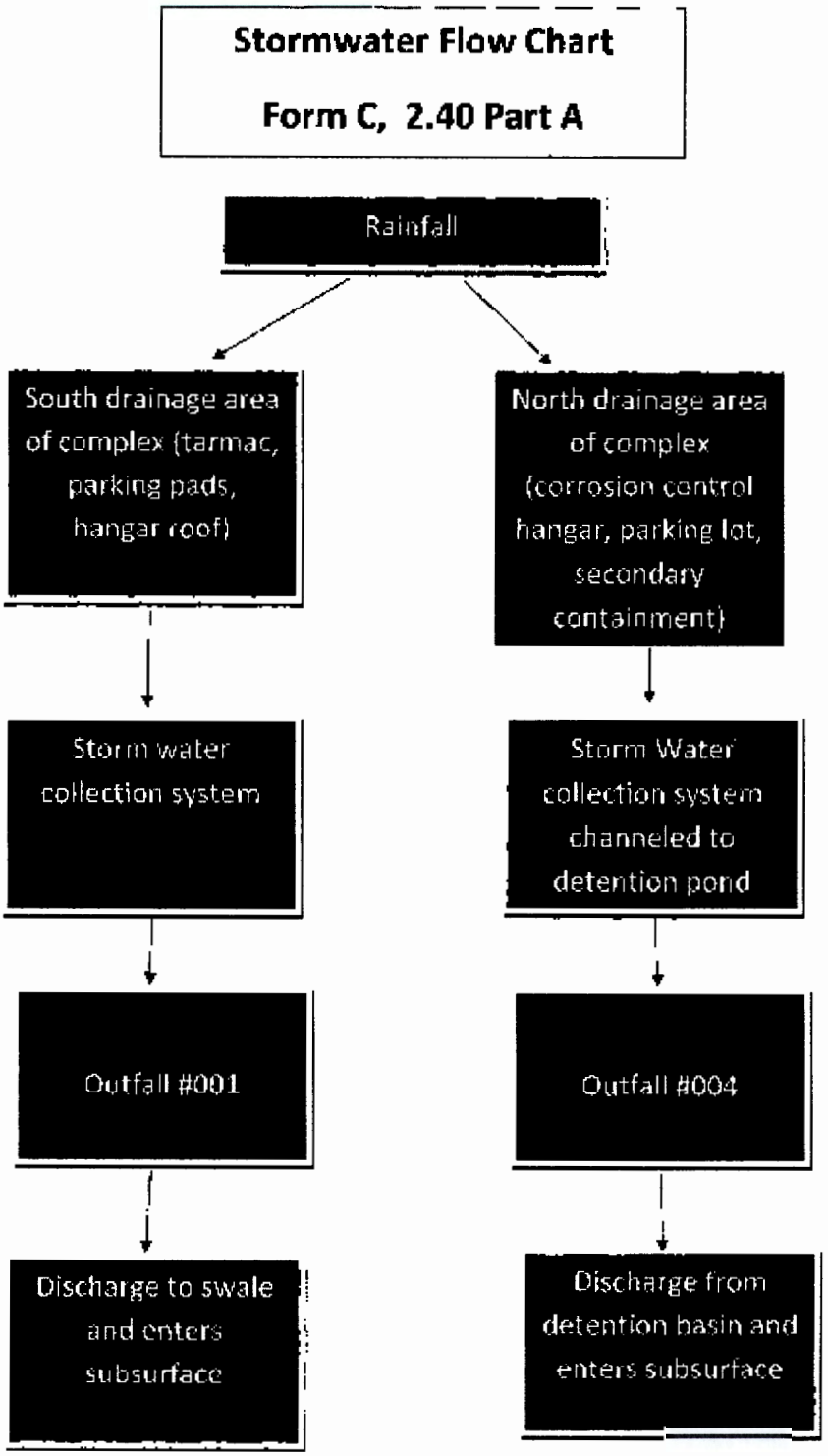
OUTFALL	DESIGN FLOW	TREATMENT LEVEL	EFFLUENT TYPE
#001	Dependent on Precipitation	BMP's	Industrial Stormwater
#004	Dependent on Precipitation	BMP's	Industrial Stormwater

FACILITY PERFORMANCE HISTORY & COMMENTS:
The electronic discharge monitoring reports were reviewed for the last five years. No effluent limit violations were reported by the facility during this time period. The facility was last inspected on September 22, 2015. The facility was found to be in compliance at the time of the inspection.

FACILITY MAP:



WATER BALANCE DIAGRAM:
Diagram Submitted with application:



PART II. RECEIVING WATERBODY INFORMATION

RECEIVING WATERBODY'S WATER QUALITY:
The receiving waterbody has no concurrent water quality data available.

303(D) LIST:
Section 303(d) of the federal Clean Water Act requires each state identify waters not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock, and wildlife. The 303(d) list helps state and federal agencies keep track of impaired waters not addressed by normal water pollution control programs. http://dnr.mo.gov/env/wpp/waterquality/303d/303d.htm
✓ Not applicable; this facility does not discharge to an impaired segment of a 303(d) listed stream.

TOTAL MAXIMUM DAILY LOAD (TMDL):
A TMDL is a calculation of the maximum amount of a given pollutant a water body can absorb before its water quality is affected; hence, the purpose of a TMDL is to determine the pollutant loading a specific waterbody can assimilate without exceeding water quality standards. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan or TMDL may be developed. The TMDL shall include the WLA calculation. http://dnr.mo.gov/env/wpp/tmdl/
✓ Not applicable; this facility does not discharge to a waterbody/watershed with a TMDL.

APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:
Per Missouri's Effluent Regulations [10 CSR 20-7.015(1)(B)], waters of the state are divided into seven categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall's effluent limitation table and further discussed in Part IV: Effluents Limits Determinations
✓ Losing
✓ Subsurface Water
✓ All Other Waters

RECEIVING WATERBODY TABLE:

OUTFALL	WATERBODY NAME	CLASS	WBID	DESIGNATED USES	DISTANCE TO SEGMENT	12-DIGIT HUC
#001	Tributary to Groundwater	n/a	n/a	GEN, GRW	0.06 mi	110290106-0204 Headwaters Clear Creek
#004	Tributary to Groundwater	n/a	n/a	GEN, GRW	0.08 mi	

n/a not applicable

Classes are hydrologic classes as defined in 10 CSR 20-7.031(1)(F). L1: Lakes with drinking water supply - wastewater discharges are not permitted to occur to L1 watersheds per 10 CSR 20-7.015(3)(C); L2: major reservoirs; L3: all other public and private lakes; P: permanent streams; C: streams which may cease flow in dry periods but maintain pools supporting aquatic life; E: streams which do not maintain surface flow; and W: wetland. Losing streams are defined in 10 CSR 20-7.031(1)(O) and are designated on the Losing Stream dataset or determined by the Department to lose 30% or more of flow to the subsurface.

WBID = Waterbody Identification: Missouri Use Designation Dataset per 10 CSR 20-7.031(1)(Q) and (S) as 8-20-13 MUDD V1.0 or newer; data can be found as an ArcGIS shapefile on MSDIS at ftp://msdis.missouri.edu/pub/Inland_Water_Resources/MO_2014_WQS_Stream_Classifications_and_Use_shp.zip; New C streams described on the dataset per 10 CSR 20-7.031(2)(A)3. as 100K Extent Remaining Streams.

Per 10 CSR 20-7.031, the Department defines the Clean Water Commission's water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and 1st classified receiving stream's beneficial water uses are to be maintained in the receiving streams in accordance with [10 CSR 20-7.031(1)(C)]. Uses which may be found in the receiving streams table, above:

10 CSR 20-7.031(1)(C)1.: **ALP** = Aquatic Life Protection (formerly AQL; current uses are defined to ensure the protection and propagation of fish shellfish and wildlife, further subcategorized as: WWH = Warm Water Habitat; CLH = Cool Water Habitat; CDH = Cold Water Habitat; EAH = Ephemeral Aquatic Habitat; MAH = Modified Aquatic Habitat; LAH = Limited Aquatic Habitat. This permit uses ALP effluent limitations in 10 CSR 20-7.031 Table A1-A2 for all habitat designations unless otherwise specified.
10 CSR 20-7.031(1)(C)2.: Recreation in and on the water
WBC = Whole Body Contact recreation where the entire body is capable of being submerged;
WBC-A = whole body contact recreation supporting swimming uses and has public access;
WBC-B = whole body contact recreation not supported in WBC-A;
SCR = Secondary Contact Recreation (like fishing, wading, and boating)

10 CSR 20-7.031(1)(C)3. to 7.:
HHP (formerly HHF) = Human Health Protection as it relates to the consumption of fish and drinking of water;
IRR = irrigation for use on crops utilized for human or livestock consumption
LWW = Livestock and Wildlife Watering (current narrative use is defined as LWP = Livestock and Wildlife Protection);
DWS = Drinking Water Supply
IND = industrial water supply
10 CSR 20-7.031(1)(C)8-11.: Wetlands (10 CSR 20-7.031 Tables A1-B3 currently does not have corresponding habitat use criteria for these defined uses): WSA = storm- and flood-water storage and attenuation; WHP = habitat for resident and migratory wildlife species; WRC = recreational, cultural, educational, scientific, and natural aesthetic values and uses; WHC = hydrologic cycle maintenance.
10 CSR 20-7.031(6): **GRW** = Groundwater

MIXING CONSIDERATIONS:
For all outfalls, mixing zone and zone of initial dilution are not allowed per 10 CSR 20-7.031(5)(A)4.B.(I)(a) and (b), as the base stream flow does not provide dilution to the effluent.
RECEIVING WATERBODY MONITORING REQUIREMENTS:
No receiving water monitoring requirements are recommended at this time.

PART III. RATIONALE AND DERIVATION OF EFFLUENT LIMITATIONS & PERMIT CONDITIONS

ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:
As per [10 CSR 20-7.015(4)(A)], discharges to losing streams shall be permitted only after other alternatives including land application, discharges to a gaining stream and connection to a regional wastewater treatment facility have been evaluated and determined to be unacceptable for environmental and/or economic reasons.
✓ Not applicable; the facility does not discharge to a losing stream as defined by [10 CSR 20-2.010(36)] &
✓ [10 CSR 20-7.031(1)(N)], or is an existing facility.

ANTIBACKSLIDING:
Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(l)] require a reissued permit to be as stringent as the previous permit with some exceptions. Backsliding (a less stringent permit limitation) is only allowed under certain conditions.
✓ Limitations in this operating permit for the reissuance conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.
  ✓ The Department determined technical mistakes or mistaken interpretations of law were made in issuing the permit under section 402(a)(1)(b).
    - Chemical Oxygen Demand, Total Suspended Solids, and Oil and Grease have been changed to benchmarks. The previous permit limits for outfall #001 and #004 were established in error, based on limits for process wastewater, however, these are stormwater outfalls. Also, the previous permit included monthly averages for the stormwater outfalls; however, stormwater is not continuous pursuant to 40 CFR 122.45(d) therefore monthly averages are not implemented; stormwater discharges vary widely in frequency, magnitude, and duration. This renewal establishes benchmarks appropriate for stormwater discharges. There will be no changes to industrial activities onsite or the composition of the stormwater discharge as a result of this renewal. The benchmark concentrations and required corrective actions within this permit are protective of the receiving stream's uses to be maintained. The permit writer has determined there is no reasonable potential to cause or contribute to water quality exceedances.
    - Effluent limits have been removed for pH. Activities at this site are not expected to result in an impact on pH levels. The applicant has not disclosed any information as to activities at the site that would contribute to stormwater exceeding the water quality standard for pH. In addition previous inspection reports were reviewed which did not identify any processes or material that would result in a derivation from water quality standards for pH at this site.
    - Monitoring requirements for Ethylbenzene, Toluene, Benzene, Xylene, Chloride and Ammonia (summer season) have been removed. This is reflective of the facilities previous five years of discharge monitoring reports which identify reported values for these pollutants well below the water quality standards applicable to this facility.
    - Ammonia parameter (winter season) has been removed. The previous permit identified Urea used in the deicing of airplanes. As a result, the previous permit writer included ammonia limits for the winter months. Review of the previous five years of discharge monitoring reports identifies all of the ammonia levels reported were reported as non-detects except for one which was reported as 0.09 mg/L, well below the previous permit limit. In addition the facility identified through email on October 24, 2018 that urea is no longer used to deice at this facility. All aircraft are deiced in a heated hanger. Floor drains convey any water to a municipal collection system and is conveyed to a municipal wastewater facility. Snow and ice on the tarmac are cleared by mechanical means. As a result ammonia parameters have been removed.
    - Nitrate parameter has been removed. This facility is not expected to cause an excursion from water quality standards for nitrate. Results for the previous five years of quarterly sampling for nitrate for both outfall #001 and #004 have been consistently at or below 0.5 mg/L while the water quality standard for nitrate for groundwater designated use is 10 mg/L.
    - The previous permit special conditions contained a specific set of prohibitions related to general criteria found in

10 CSR 20-7.031(4); however, there was no determination as to whether the discharges have reasonable potential to cause or contribute to excursion of those general water quality criteria in the previous permit. Federal regulations 40 CFR 122.44(d)(1)(iii) requires instances where reasonable potential (RP) to cause or contribute to an exceedance of a water quality standard exists, a numeric limitation must be included in the permit. Rather than conducting the appropriate RP determination, the previous permit simply placed the prohibitions in the permit. These conditions were removed from the permit. Appropriate reasonable potential determinations were conducted for each general criterion listed in 10 CSR 20-7.031(4)(A) through (I) and effluent limitations were placed in the permit for those general criteria where it was determined the discharge had reasonable potential to cause or contribute to excursions of the general criteria. Specific effluent limitations were not included for those general criteria where it was determined the discharges will not cause or contribute to excursions of general criteria. Removal of the prohibitions does not reduce the protections of the permit or allow for impairment of the receiving stream. The permit maintains sufficient effluent limitations, monitoring requirements and best management practices to protect water quality. See GENERAL CRITERIA CONSIDERATIONS below.

ANTIDEGRADATION REVIEW:
Process water discharges with new, altered, or expanding flows, the Department is to document, by means of antidegradation review, if the use of a water body's available assimilative capacity is justified. In accordance with Missouri's water quality regulations for antidegradation [10 CSR 20-7.031(3)], degradation may be justified by documenting the socio-economic importance of a discharge after determining the necessity of the discharge. Facilities must submit the antidegradation review request to the Department prior to establishing, altering, or expanding discharges. See http://dnr.mo.gov/env/wpp/permits/antideg-implementation.htm

✓ Not applicable; the facility has not submitted information proposing expanded or altered process water discharge; no further degradation proposed therefore no further review necessary.

For stormwater discharges with new, altered, or expanding discharges, the stormwater BMP chosen for the facility, through the antidegradation analysis performed by the facility, must be implemented and maintained at the facility. Failure to implement and maintain the chosen BMP alternative is a permit violation; see SWPPP.

✓ Applicable; the facility must review and maintain stormwater BMPs as appropriate.

CHANGES IN DISCHARGES OF TOXIC POLLUTANT:
This special condition reiterates the federal rules found in 40 CFR 122.44(f) and 122.42(a)(1). In these rules, the facility is required to report changes in amounts of toxic substances discharged. Toxic substances are defined in 40 CFR 122.2 as "...any pollutant listed as toxic under section 307(a)(1) or, in the case of "sludge use or disposal practices," any pollutant identified in regulations implementing section 405(d) of the CWA." Section 307 of the clean water act then refers to those parameters found in 40 CFR 401.15. The permittee should also consider any other toxic pollutant in the discharge as reportable under this condition.

COMPLIANCE AND ENFORCEMENT:
Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the WPP is to resolve violations and return the entity to compliance.

✓ Not applicable; the permittee/facility is not currently under Water Protection Program enforcement action.

EFFLUENT LIMITATION GUIDELINE:
Effluent Limitation Guidelines, or ELGs, are found at 40 CFR 400-499. These are limitations established by the EPA based on the SIC code and the type of work a facility is conducting. Most ELGs are for process wastewater and some address stormwater. All are technology based limitations which must be met by the applicable facility at all times.

✓ The facility does not have an associated ELG.

GENERAL CRITERIA CONSIDERATIONS:
In accordance with 40 CFR 122.44(d)(1), effluent limitations shall be placed into permits for pollutants determined to cause, have reasonable potential to cause, or to contribute to an excursion above any State water quality standard, including State narrative criteria for water quality. The rule further states pollutants which have been determined to cause, have the reasonable potential to cause, or contribute to an excursion above a narrative criterion within an applicable State water quality standard, the permit shall contain a numeric effluent limitation to protect the specified narrative criterion. The previous permit included the narrative criteria as special conditions included in the permit absent any discussion of the discharge's reasonable potential to cause or contribute to an excursion of the criterion. In order to comply with this regulation, the permit writer has completed a reasonable potential determination on whether the discharge has reasonable potential to cause, or contribute to an excursion of the general criteria listed in 10 CSR 20-7.031(4). These specific requirements are listed below followed by derivation and discussion (the lettering matches the rule itself, under 10 CSR 20-7.031(4)). In instances where reasonable potential exists, the permit includes numeric limitations to address the reasonable potential. In instances where reasonable potential does not exist, the permit may include monitoring to later determine the discharges potential to impact the receiving stream's narrative criteria. Finally, all of the previous permit narrative criteria prohibitions have been removed from the permit given they are addressed by numeric limits where reasonable potential exists. It should also be noted Section 644.076.1, RSMo as well as Section D – Administrative Requirements of Standard Conditions Part I of this permit state

it shall be unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri is in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law or any standard, rule, or regulation promulgated by the commission.

(A) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses.
- For all outfalls, there is no RP for putrescent bottom deposits preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates putrescent wastewater would be discharged from the facility.
- For all outfalls, there is no RP for unsightly or harmful bottom deposits preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates unsightly or harmful bottom deposits would be discharged from the facility.

Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses.
- All of the AVCRAD operations, including aircraft fueling, drain to outfall #001 and #004. These types of petroleum related products float on water. The permit contains a special condition addressing fuel spills or fuel releases to the environment. Compliance with the best management practices required within a special condition will prevent fuel from being discharged through the outfall in amounts sufficient enough to create a sheen. Additionally, there are no activities occurring on the site would result in floating debris in the discharge. The best management practices are sufficient to protect the general water quality standard.

(B) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses.
- For all outfalls, there is no RP for unsightly color or turbidity in sufficient amounts preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates unsightly color or turbidity will be present in sufficient amounts to impair beneficial uses.
- For all outfalls, there is no RP for offensive odor in sufficient amounts preventing full maintenance of beneficial uses because nothing disclosed by the permittee indicates offensive odor will be present in sufficient amounts to impair beneficial uses.

(C) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life.
- The permit writer considered specific toxic pollutants when writing this permit. In addition previous discharge monitoring reports were evaluated as well as inspection reports. No evidence of any substances or conditions in sufficient amounts to result in toxicity have been observed at this facility.

(D) There shall be no significant human health hazard from incidental contact with the water.
- This criterion is very similar to (D) above. See Part IV, Effluent Limits Derivation below.

(E) There shall be no acute toxicity to livestock or wildlife watering.
- This criterion is very similar to (D) above. See Part IV, Effluent Limits Derivation below.

(F) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community.
- For all outfalls, there is no RP for physical changes that would impair the natural biological community because nothing disclosed by the permittee indicates physical changes that would impair the natural biological community.
- For all outfalls, there is no RP for chemical changes that would impair the natural biological community because nothing disclosed by the permittee indicates chemical changes are occurring impairing the natural biological community.
- For all outfalls, there is no RP for hydrologic changes that would impair the natural biological community because nothing disclosed by the permittee indicates hydrologic changes would impair the natural biological community.

(G) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
- There are no solid waste disposal activities or any operation which has reasonable potential to cause or contribute to the materials listed above being discharged through any outfall.

GROUNDWATER MONITORING:

Groundwater is a water of the state according to 10 CSR 20-2.010(82), and is subject to regulations at 10 CSR 20-7.015(7) and 10 CSR 20-7.031(6) and must be protected accordingly.

✓ This facility is not required to monitor groundwater for the water protection program.

MAJOR WATER USER:

Any surface or groundwater user with a water source and the equipment necessary to withdraw or divert 100,000 gallons (or 70 gallons per minute) or more per day combined from all sources from any stream, river, lake, well, spring, or other water source is considered a major water user in Missouri. All major water users are required by law to register water use annually (Missouri Revised Statues Chapter 256.400 Geology, Water Resources and Geodetic Survey Section). https://dnr.mo.gov/pubs/pub2337.htm

✓ Not applicable; this permittee cannot withdraw water from the state in excess of 70 gpm/0.1 MGD.

NO-DISCHARGE LAND APPLICATION:
Land application of wastewater or sludge shall comply with the all applicable no-discharge requirements listed in 10 CSR 20-6.015 and all facility operations and maintenance requirements listed in 10 CSR 20-8.020(15). These requirements ensure appropriate operation of the no-discharge land application systems and prevent unauthorized and illicit discharges to waters of the state. Land applications by a contract hauler on fields the permittee has a spreading agreement on are not required to be in this permit. A spreading agreement does not constitute the field being rented or leased by the permittee as they do not have any control over management of the field.

✓ Not applicable; this permit does not authorize operation of a no-discharge land application system to treat wastewater or sludge.

REASONABLE POTENTIAL (RP):
Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants which are (or may be) discharged at a level causing or have the reasonable potential to cause (or contribute to) an in-stream excursion above narrative or numeric water quality standards. Per 10 CSR 20-7.031(4), general criteria shall be applicable to all waters of the state at all times; however, acute toxicity criteria may be exceeded by permit in zones of initial dilution, and chronic toxicity criteria may be exceeded by permit in mixing zones. If the permit writer determines any given pollutant has the reasonable potential to cause or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for the pollutant per 40 CFR Part 122.44(d)(1)(iii) and the most stringent limits per 10 CSR 20-7.031(9)(A).

✓ Not applicable; a mathematical RPA was not conducted for this facility. This permit establishes permit limits and benchmarks for stormwater. The Department has determined stormwater is not a continuous discharge and is therefore not necessarily dependent on mathematical RPAs. However, the permit writer completed an RPD, a reasonable potential determination, using best professional judgment for all of the appropriate parameters in this permit. An RPD consists of reviewing application data and/or discharge monitoring data for the last five years and comparing those data to narrative or numeric water quality criteria.

SCHEDULE OF COMPLIANCE (SOC):
A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, effluent limits, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit. SOCs are allowed under 40 CFR 122.47 providing certain conditions are met. A SOC is not allowed:

- For effluent limitations based on technology-based standards established in accordance with federal requirements, if the deadline for compliance established in federal regulations has passed. 40 CFR § 125.3.
- For a newly constructed facility in most cases. Newly constructed facilities must meet applicable effluent limitations when discharge begins, because the facility has installed the appropriate control technology as specified in a permit or antidegradation review. A SOC is allowed for a new water quality based effluent limit not included in a previously public noticed permit or antidegradation review, which may occur if a regulation changes during construction.
- To develop a TMDL, UAA, or other study associated with development of a site specific criterion. A facility is not prohibited from conducting these activities, but a SOC may not be granted for conducting these activities.

In order to provide guidance in developing SOCs, and to attain a greater level of consistency, the department issued a policy on development of SOCs on October 25, 2012. The policy provides guidance to permit writers on standard time frames for schedules for common activities, and guidance on factors to modify the length of the schedule.

✓ Not applicable; this permit does not contain a SOC.

SPILL REPORTING:
Per 10 CSR 24-3.010, any emergency involving a hazardous substance must be reported to the Department's 24 hour Environmental Emergency Response hotline at (573) 634-2436 at the earliest practicable moment after discovery. The Department may require the submittal of a written report detailing measures taken to clean up a spill. These reporting requirements apply whether or not the spill results in chemicals or materials leaving the permitted property or reaching waters of the state. This requirement is in addition to the noncompliance reporting requirement found in Standard Conditions Part I. http://dnr.mo.gov/env/esp/spillbill.htm

SLUDGE – DOMESTIC BIOSOLIDS:
Biosolids are solid materials resulting from domestic wastewater treatment meeting federal and state criteria for beneficial use (i.e. fertilizer). Sewage sludge is solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information: http://extension.missouri.edu/main/DisplayCategory.aspx?C=74 (WQ422 through WQ449).

✓ Sludge produced by oil water separators is hauled off-site by a contract hauler.

SLUDGE – INDUSTRIAL:
Industrial sludge is solid, semi-solid, or liquid residue generated during the treatment of industrial process wastewater in a treatment works; including but not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment process; scum and solids filtered from water supplies and backwashed; and a material derived from industrial sludge.
✓ Not applicable; sludge is not generated at this facility.

STANDARD CONDITIONS:
The standard conditions Part I attached to this permit incorporate all sections of 40 CFR 122.41(a) through (n) by reference as required by law. These conditions, in addition to the conditions enumerated within the standard conditions should be reviewed by the permittee to ascertain compliance with this permit, state regulations, state statues, federal regulations, and the Clean Water Act.

STORMWATER PERMITTING: LIMITATIONS AND BENCHMARKS:
Because of the fleeting nature of stormwater discharges, the Department, under the direction of EPA guidance, has determined monthly averages are capricious measures of stormwater discharges. The *Technical Support Document for Water Quality Based Toxics Control* (EPA/505/2-90-001; 1991) Section 3.1 indicates most procedures within the document apply only to water quality based approaches, not end-of-pipe technology-based controls. Hence, stormwater-only outfalls will generally only contain a maximum daily limit (MDL), benchmark, or monitoring requirement determined by the site specific conditions, the BMPs in place, past performance of the facility, and the receiving water's current quality.

Sufficient rainfall to cause a discharge for one hour or more from a facility would not necessarily cause significant flow in a receiving stream. Acute Water Quality Standards (WQSs) are based on one hour of exposure, and must be protected at all times. Therefore, industrial stormwater facilities with toxic contaminants present in the stormwater may have the potential to cause a violation of acute WQSs if toxic contaminants occur in sufficient amounts. In this instance, the permit writer may apply daily maximum limitations.

Conversely, it is unlikely for rainfall to cause a discharge for four continuous days from a facility; if this does occur however, the receiving stream will also likely sustain a significant amount of flow providing dilution. Most chronic WQSs are based on a four-day exposure with some exceptions. Under this scenario, most industrial stormwater facilities have limited potential to cause a violation of chronic water quality standards in the receiving stream.

A standard mass-balance equation cannot be calculated for stormwater from this facility because the stormwater flow and flow in the receiving stream cannot be determined for conditions on any given day or storm event. The amount of stormwater discharged from the facility will vary based on current and previous rainfall, soil saturation, humidity, detention time, BMPs, surface permeability, etc. Flow in the receiving stream will vary based on climatic conditions, size of watershed, amount of surfaces with reduced permeability (houses, parking lots, and the like) in the watershed, hydrogeology, topography, etc. Decreased permeability may increase the stream flow dramatically over a short period of time (flash).

Numeric benchmark values are based on site specific requirements taking in to account a number of factors but cannot be applied to any process water discharges. First, the technology in place at the site to control pollutant discharges in stormwater is evaluated. The permit writer also evaluates other similar permits for similar activities. A review of the guidance forming the basis of Environmental Protection Agency's (EPA's) *Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity* (MSGP) may also occur. Because precipitation events are sudden and momentary, benchmarks based on state or federal standards or recommendations use the Criteria Maximum Concentration (CMC) value, or acute standard may also be used. The CMC is the estimate of the highest concentration of a material in surface water to which an aquatic community can be exposed briefly without resulting in an unacceptable effect. The CMC for aquatic life is intended to be protective of the vast majority of the aquatic communities in the United States.

40 CFR 122.44(b)(1) requires the permit implement the most stringent limitations for each discharge, including industrially exposed stormwater; and 40 CFR 122.44(d)(1)(i) and (iii) requires the permit to include water-quality based effluent limitations where reasonable potential has been found; however, because of the non-continuous nature of stormwater discharges, staff are unable to perform statistical Reasonable Potential Analysis (RPA). Reasonable potential determinations (RPDs; see REASONABLE POTENTIAL above) using best professional judgment are performed.

Benchmarks require the facility to monitor, and if necessary, replace and update stormwater control measures. Benchmark concentrations are not effluent limitations. A benchmark exceedance, therefore, is not a permit violation; however, failure to take corrective action is a violation of the permit. Benchmark monitoring data is used to determine the overall effectiveness of control measures and to assist the permittee in knowing when additional corrective actions may be necessary to comply with the conditions of the permit.

BMP inspections typically occur more frequently than sampling. Sampling frequencies are based on the facility's ability to comply with the benchmarks and the requirements of the permit. Inspections should occur after large rain events and any other time an issue is noted; sampling after a benchmark exceedance may need to occur to show the corrective active taken was meaningful.

When a permitted feature or outfall consists of only stormwater, a benchmark may be implemented at the discretion of the permit writer, if there is no RP for water quality excursions.

✓ Applicable, this facility has stormwater-only outfalls.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP):

In accordance with 40 CFR 122.44(k), Best Management Practices (BMPs) must be used to control or abate the discharge of pollutants when: 1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities; 2) Authorized under section 402(p) of the CWA for the control of stormwater discharges; 3) Numeric effluent limitations are infeasible; or 4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. In accordance with the EPA's *Developing Your Stormwater Pollution Prevention Plan, A Guide for Industrial Operators*, (EPA 833-B-09-002) published by the EPA in 2015 https://www.epa.gov/sites/production/files/2015-11/documents/swppp_guide_industrial_2015.pdf, BMPs are measures or practices used to reduce the amount of pollution entering waters of the state from a permitted facility. BMPs may take the form of a process, activity, or physical structure. Additionally in accordance with the Stormwater Management, a SWPPP is a series of steps and activities to 1) identify sources of pollution or contamination, and 2) select and carry out actions which prevent or control the pollution of storm water discharges. Additional information can be found in *Stormwater Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices* (EPA 832-R-92-006; September 1992).

A SWPPP must be prepared by the permittee if the SIC code is found in 40 CFR 122.26(b)(14) and/or 10 CSR 20-6.200(2). A SWPPP may be required of other facilities where stormwater has been identified as necessitating better management. The purpose of a SWPPP is to comply with all applicable stormwater regulations by creating an adaptive management plan to control and mitigate stream pollution from stormwater runoff. Developing a SWPPP provides opportunities to employ appropriate BMPs to minimize the risk of pollutants being discharged during storm events. The following paragraph outlines the general steps the permittee should take to determine which BMPs will work to achieve the benchmark values or limits in the permit. This section is not intended to be all encompassing or restrict the use of any physical BMP or operational and maintenance procedure assisting in pollution control. Additional steps or revisions to the SWPPP may be required to meet the requirements of the permit.

Areas which should be included in the SWPPP are identified in 40 CFR 122.26(b)(14). Once the potential sources of stormwater pollution have been identified, a plan should be formulated to best control the amount of pollutant being released and discharged by each activity or source. This should include, but is not limited to, minimizing exposure to stormwater, good housekeeping measures, proper facility and equipment maintenance, spill prevention and response, vehicle traffic control, and proper materials handling. Once a plan has been developed the facility will employ the control measures determined to be adequate to achieve the benchmark values discussed above. The facility will conduct monitoring and inspections of the BMPs to ensure they are working properly and re-evaluate any BMP not achieving compliance with permitting requirements. For example, if sample results from an outfall show values of TSS above the benchmark value, the BMP being employed is deficient in controlling stormwater pollution. Corrective action should be taken to repair, improve, or replace the failing BMP. This internal evaluation is required at least once per month but should be continued more frequently if BMPs continue to fail. If failures do occur, continue this trial and error process until appropriate BMPs have been established.

For new, altered, or expanded stormwater discharges, the SWPPP shall identify reasonable and effective BMPs while accounting for environmental impacts of varying control methods. The antidegradation analysis must document why no discharge or no exposure options are not feasible. The selection and documentation of appropriate control measures shall serve as an alternative analysis of technology and fulfill the requirements of antidegradation [10 CSR 20-7.031(3)]. For further guidance, consult the antidegradation implementation procedure (http://dnr.mo.gov/env/wpp/docs/AIP050212.pdf).

Alternative Analysis (AA) evaluation of the BMPs is a structured evaluation of BMPs which are reasonable and cost effective. The AA evaluation should include practices designed to be: 1) non-degrading; 2) less degrading; or 3) degrading water quality. The glossary of AIP defines these three terms. The chosen BMP will be the most reasonable and effective management strategy while ensuring the highest statutory and regulatory requirements are achieved and the highest quality water attainable for the facility is discharged. The AA evaluation must demonstrate why "no discharge" or "no exposure" is not a feasible alternative at the facility. This structured analysis of BMPs serves as the antidegradation review, fulfilling the requirements of 10 CSR 20-7.031(3) Water Quality Standards and *Antidegradation Implementation Procedure* (AIP), Section II.B.

If parameter-specific numeric benchmark exceedances continue to occur and the permittee feels there are no practicable or cost-effective BMPs which will sufficiently reduce a pollutant concentration in the discharge to the benchmark values established in the permit, the permittee can submit a request to re-evaluate the benchmark values. This request needs to include 1) a detailed explanation of why the facility is unable to comply with the permit conditions and unable to establish BMPs to achieve the benchmark values; 2) financial data of the company and documentation of cost associated with BMPs for review and 3) the SWPPP, which should contain adequate documentation of BMPs employed, failed BMPs, corrective actions, and all other required information. This will allow the Department to conduct a cost analysis on control measures and actions taken by the facility to determine cost-effectiveness of BMPs. The request shall be submitted in the form of an operating permit modification; the application is found at: https://dnr.mo.gov/forms/#WaterPollution

✓ Applicable; a SWPPP shall be developed and implemented for this facility.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS (TBEL):

One of the major strategies of the Clean Water Act (CWA) in making "reasonable further progress toward the national goal of eliminating the discharge of all pollutants" is to require effluent limitations based on the capabilities of the technologies available to control those discharges. Technology-based effluent limitations (TBELs) aim to prevent pollution by requiring a minimum level of effluent quality attainable using demonstrated technologies for reducing discharges of pollutants or pollution into the waters of the United States. TBELs are developed independently of the potential impact of a discharge on the receiving water, which is addressed through water quality standards and water quality-based effluent limitations (WQBELs).

✓ Not applicable, this facility does not discharge process wastewater therefore the BPJ process for numeric TBELs were not completed.

UNDERGROUND INJECTION CONTROL (UIC):

The UIC program for all classes of wells in the State of Missouri is administered by the Missouri Department of Natural Resources and approved by EPA pursuant to section 1422 and 1425 of the Safe Drinking Water Act (SDWA) and 40 CFR 147 Subpart AA. Injection wells are classified based on the liquids which are being injected. Class I wells are hazardous waste wells which are banned by RSMo 577.155; Class II wells are established for oil and natural gas production; Class III wells are used to inject fluids to extract minerals; Class IV wells are also banned by Missouri in RSMo 577.155; Class V wells are shallow injection wells; some examples are heat pump wells and groundwater remediation wells. Domestic wastewater being disposed of sub-surface is also considered a Class V well. In accordance with 40 CFR 144.82, construction, operation, maintenance, conversion, plugging, or closure of injection wells shall not cause movement of fluids containing any contaminant into Underground Sources of Drinking Water (USDW) if the presence of any contaminant may cause a violation of drinking water standards or groundwater standards under 10 CSR 20-7.031, or other health based standards, or may otherwise adversely affect human health. If the director finds the injection activity may endanger USDWs, the Department may require closure of the injection wells, or other actions listed in 40 CFR 144.12(c), (d), or (e). In accordance with 40 CFR 144.26, the permittee shall submit a Class V Well Inventory Form for each active or new underground injection well drilled, or when the status of a well changes, to the Missouri Department of Natural Resources, Geological Survey Program, P.O. Box 250, Rolla, Missouri 65402. The Class V Well Inventory Form can be requested from the Geological Survey Program or can be found at the following web address: http://dnr.mo.gov/forms/780-1774-f.pdf

✓ Not applicable; the permittee has not submitted materials indicating the facility will be performing UI at this site.

VARIANCE:

Per the Missouri Clean Water Law §644.061.4, variances shall be granted for such period of time and under such terms and conditions as shall be specified by the commission in its order. The variance may be extended by affirmative action of the commission. In no event shall the variance be granted for a period of time greater than is reasonably necessary for complying with the Missouri Clean Water Law §§644.006 to 644.141 or any standard, rule or regulation promulgated pursuant to Missouri Clean Water Law §§644.006 to 644.141.

✓ Not applicable; this permit is not drafted under premise of a petition for variance.

WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:

As per [10 CSR 20-2.010(78)], the WLA is the amount of pollutant each discharger is allowed to discharge into the receiving stream without endangering water quality. Two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs) are reviewed. If one limit does not provide adequate protection for the receiving water, then the other must be used per 10 CSR 20-7.015(9)(A).

✓ Applicable; wasteload allocations were calculated where relevant using water quality criteria or water quality model results and by applying the dilution equation below:

$$C = \frac{(Cs \times Qs) + (Ce \times Qe)}{(Qe + Qs)}$$ (EPA/505/2-90-001, Section 4.5.5)

Where C = downstream concentration
Cs = upstream concentration
Qs = upstream flow
Ce = effluent concentration
Qe = effluent flow

- Acute wasteload allocations designated as daily maximum limits (MDL) were determined using applicable water quality criteria (CMC: criteria maximum concentration) and stream volume of flow at the edge of the zone of initial dilution (ZID).
- Chronic wasteload allocations designated as monthly average limits (AML) were determined using applicable chronic water quality criteria (CCC: criteria continuous concentration) and stream volume of flow at the edge of the mixing zone (MZ).
- Water quality based MDL and AML effluent limitations were calculated using methods and procedures outlined in USEPA's *Technical Support Document For Water Quality-based Toxics Control* or TSD EPA/505/2-90-001; 3/1991.
- Number of Samples "n": In accordance with the TSD for water quality-based permitting, effluent quality is determined by the underlying distribution of daily values, which is determined by the Long Term Average (LTA) associated with a particular Wasteload Allocation (WLA) and by the Coefficient of Variation (CV) of the effluent concentrations. Increasing or decreasing the monitoring frequency does not affect this underlying distribution or treatment performance which should be, at a minimum, targeted to comply with the values dictated by the WLA. Therefore, it is recommended the actual planned frequency of monitoring normally be used to determine the value of "n" for calculating the AML. However, in situations where monitoring frequency is once per month or less, a higher value for "n" must be assumed for AML derivation purposes. Thus, the statistical procedure being employed using an assumed number of samples is "n = 4" at a minimum. For total ammonia as nitrogen, "n = 30" is used.

✓ Not applicable; wasteload allocations were not calculated.

WLA MODELING:

Permittees may submit site specific studies to better determine the site specific wasteload allocations applied in permits.

✓ Not applicable; a WLA study was either not submitted or determined not applicable by Department staff.

PART IV. EFFLUENT LIMITS DETERMINATIONS

Effluent limitations derived and established for this permit are based on current operations of the facility and applied per 10 CSR 20-7.015(9)(A). Any flow through the outfall is considered a discharge and must be sampled and reported as provided below. Future permit action due to facility modification may contain new operating permit terms and conditions which supersede the terms and conditions, including effluent limitations, of this operating permit. Daily maximums and monthly averages are required per 40 CFR 122.45(d)(1) for continuous discharges (not from a POTW).

OUTFALL #001 & #004– MAIN FACILITY OUTFALL

EFFLUENT LIMITATIONS TABLE:

PARAMETERS	UNIT	DAILY MAXIMUM LIMIT	BENCH-MARK	PREVIOUS PERMIT LIMITS	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
PHYSICAL							
FLOW	MGD	*		SAME	ONCE/QUARTER	QUARTERLY	24 HR. ESTIMATE
PRECIPITATION		*		SAME	ONCE/QUARTER	QUARTERLY	MEASURED
CONVENTIONAL							
COD	mg/L		120	120/90	ONCE/QUARTER	QUARTERLY	GRAB
OIL & GREASE	mg/L		10	15/10	ONCE/QUARTER	QUARTERLY	GRAB
TSS	mg/L		100	100/70	ONCE/QUARTER	QUARTERLY	GRAB
OTHER							
XYLENE	µg/L	*		SAME	ONCE/QUARTER	QUARTERLY	GRAB
REMOVED POLLUTANT	**REMOVED FROM MONITORING**						
PARAMETERS	UNIT	DAILY MAXIMUM LIMIT		MONTHLY AVERAGE	MINIMUM SAMPLING FREQUENCY	MINIMUM REPORTING FREQUENCY	SAMPLE TYPE
pH	SU	6.5		9.0	ONCE/QUARTER	QUARTERLY	GRAB
BENZENE	µg/L	*		*	ONCE/QUARTER	QUARTERLY	GRAB
TOLUENE	µg/L	*		*	ONCE/QUARTER	QUARTERLY	GRAB
ETHYLBENZENE	µg/L	*		*	ONCE/QUARTER	QUARTERLY	GRAB
CHLORIDE AS CL	µg/L	*		*	ONCE/QUARTER	QUARTERLY	GRAB
TOTAL AMMONIA NITROGEN (SUMMER)	mg/L	*		*	ONCE/QUARTER	QUARTERLY	GRAB
TOTAL AMMONIA NITROGEN (WINTER)	mg/L	7.5		2.9	ONCE/QUARTER	QUARTERLY	GRAB
NITRATE	mg/L	16.4		8.2	ONCE/QUARTER	QUARTERLY	GRAB

* Monitoring and reporting requirement only
** Monitoring with associated benchmark
NEW Parameter not established in previous state operating permit
TR Total Recoverable

DERIVATION AND DISCUSSION OF LIMITS:

PHYSICAL:

Flow

In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification. The facility will report the estimated flow in millions of gallons per day (MGD).

Precipitation
Monitoring only requirement; measuring the amount of precipitation [(10 CSR 20-6.200(2)(C)1.E(VI)] during an event is necessary to ensure adequate stormwater management exists at the site. Knowing the amount of potential stormwater runoff can provide the permittee a better understanding of any specific control measures be employed to ensure protection of water quality. The facility will provide the 24 hour accumulation value of precipitation from the day of sampling the other parameters.

CONVENTIONAL:

Chemical Oxygen Demand (COD)
Monitoring with 120 mg/L daily maximum benchmark is included using the permit writer's best professional judgment. There is no numeric water quality standard for COD; however, increased oxygen demand may impact instream water quality. COD is also a valuable indicator parameter. COD monitoring allows the permittee to identify increases in COD may indicate materials/chemicals coming into contact with stormwater causing an increase in oxygen demand. Increases in COD may indicate a need for maintenance or improvement of BMPs. The benchmark value falls within the range of values implemented in other permits having similar industrial activities and is achievable through proper BMP controls.

Oil & Grease
Monitoring with a daily maximum benchmark of 10 mg/L. Oil and grease is considered a conventional pollutant. Oil and grease is a comprehensive test which measures for gasoline, diesel, crude oil, creosote, kerosene, heating oils, heavy fuel oils, lubricating oils, waxes, and some asphalt and pitch. The test can also detect some volatile organics such as benzene, toluene, ethylbenzene, or xylene, but these constituents are often lost during testing due to their boiling points. It is recommended to perform separate testing for these constituents if they are a known pollutant of concern at the site, i.e. aquatic life toxicity or human health is a concern. Results do not allow for separation of specific pollutants within the test, they are reported, totaled, as "oil and grease". Per 10 CSR 20-7.031 Table A1: *Criteria for Designated Uses*; 10 mg/L is the standard for protection of aquatic life. This standard will also be used to protect the general criteria found at 10 CSR 20: 7.031 (4). 10 mg/L is the level at which sheen is expected to form on receiving waters. Oils and greases of different densities will possibly form sheen or unsightly bottom deposits at levels which vary from 10 mg/L. To protect the general criteria, it is the responsibility of the permittee to visually observe the discharge and receiving waters for sheen or bottom deposits. The benchmark is achievable through proper operational and maintenance of BMPs and falls within the range of values implemented in other permits having similar industrial activities.

Total Suspended Solids (TSS)
Monitoring with a daily maximum benchmark of 100 mg/L. There is no numeric water quality standard for TSS; however, sediment discharges can negatively impact aquatic life habitat. TSS is also a valuable indicator parameter. TSS monitoring allows the permittee to identify increases in TSS indicating uncontrolled materials leaving the site. Increased suspended solids in runoff can lead to decreased available oxygen for aquatic life and an increase of surface water temperatures in a receiving stream. Suspended solids can also be carriers of toxins, which can adsorb to the suspended particles; therefore, total suspended solids are a valuable indicator parameter for other pollution. The benchmark is achievable through proper operational and maintenance of BMPs and falls within the range of values implemented in other permits having similar industrial activities.

Xylene
Monitoring only for Xylene, This facility has several JP-8 fuel storage tanks which are located in side of secondary containment structures. As stormwater can be released from these structures Xylene is monitored to determine if treatment of the stormwater prior to being released from the structure is sufficient to remove fuel contamination.

OTHER:

Benzene, Ethylene, and Toluene
Benzene, Ethylene and Toluene, were pollutants implemented in the previous permit for monitoring only. The permit writer reviewed the data and determined these pollutants were not present at the site in sufficient amounts to warrant further monitoring.

pH – pH was implemented in the previous permit as a range of 6.5 – 9.0 SU Review of the application and any information disclosed by the applicant does not reveal any processes or activities taking place that may cause reasonable potential for stormwater to cause an instream excursion from water quality standards for pH.

Chloride as Cl - Justification for Chlorides in the previous permit identified the presence of Chloride monitoring in the general permit MO-R80F. Chlorides were include due to the use of chemical de-icers being used on the aircraft. This facility has disclosed no chemical de-icing takes place at this facility. Therefore the permit writer used best professional judgment (BPJ) to remove monitoring requirements.

Total Ammonia Nitrogen- Ammonia parameter was included in the previous permit due to the use of chemical de-icer on the aircraft. This facility has disclosed no chemical de-icing takes place at this facility. Permit writer used BPJ to remove effluent limits and monitoring requirements for ammonia.

Nitrate- This parameter has been removed. It has been determined this facility does not have reasonable potential to cause an excursion from the water quality standard for Nitrate. This is further supported by the facilities discharge monitoring reports which show nitrate levels consistently below 1 mg/L for all reported periods.

PART V. SAMPLING AND REPORTING REQUIREMENTS

Refer to each outfall's derivation and discussion of limits section to review individual sampling and reporting frequencies and sampling type. Additionally, see Standard Conditions Part I attached at the end of this permit and fully incorporated within.

ELECTRONIC DISCHARGE MONITORING REPORT (EDMR) SUBMISSION SYSTEM:
The U.S. Environmental Protection Agency (EPA) promulgated a final rule on October 22, 2015, to modernize Clean Water Act reporting for municipalities, industries, and other facilities by converting to an electronic data reporting system. The final rule requires regulated entities and state and federal regulators to use information technology to electronically report data required by the National Pollutant Discharge Elimination System (NPDES) permit program instead of filing paper reports. To comply with the federal rule, the Department is requiring all permittees to begin submitting discharge monitoring data and reports online.

Per 40 CFR 127.15 and 127.24, permitted facilities may request a temporary waiver for up to 5 years or a permanent waiver from electronic reporting from the Department. To obtain an electronic reporting waiver, a permittee must first submit an eDMR Waiver Request Form: http://dnr.mo.gov/forms/780-2692-f.pdf. A request must be made for each facility. If more than one facility is owned or operated by a single entity, then the entity must submit a separate request for each facility based on its specific circumstances. An approved waiver is not transferable.

The Department must review and notify the facility within 120 calendar days of receipt if the waiver request has been approved or rejected [40 CFR 124.27(a)]. During the Department review period as well as after a waiver is granted, the facility must continue submitting a hard-copy of any reports required by their permit. The Department will enter data submitted in hard-copy from those facilities allowed to do so and electronically submit the data to the EPA on behalf of the facility.
✓ The permittee/facility is currently using the eDMR data reporting system.

SAMPLING FREQUENCY JUSTIFICATION:
Sampling frequency for stormwater-only outfalls is typically quarterly even though BMP inspection occurs monthly. The facility may sample more frequently if additional data is required to determine if best management operations and technology are performing as expected.

SAMPLING TYPE JUSTIFICATION:
Sampling type was continued from the previous permit. The sampling types are representative of the discharges, and are protective of water quality. Discharges with altering effluent should have composite sampling; discharges with uniform effluent can have grab samples. Grab samples are usually appropriate for stormwater. Parameters which must have grab sampling are: pH, ammonia, *E. coli*, total residual chlorine, free available chlorine, hexavalent chromium, dissolved oxygen, total phosphorus, volatile organic compounds, and others.

SUFFICIENTLY SENSITIVE ANALYTICAL METHODS:
Please review Standard Conditions Part 1, section A, number 4. The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 and/or 40 CFR 136 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations are low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is "sufficiently sensitive" when; 1) the method quantifies the pollutant below the level of the applicable water quality criterion or; 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility's discharge is high enough the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015 and or 40 CFR 136. These methods are also required for parameters listed as monitoring only, as the data collected may be used to determine if numeric limitations need to be established. A permittee is responsible for working with their contractors to ensure the analysis performed is sufficiently sensitive. 40 CFR 136 lists the approved methods accepted by the Department. Tables A1-B3 at 10 CSR 20-7.031 shows water quality standards.

PART VI. ADMINISTRATIVE REQUIREMENTS

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

PERMIT SYNCHRONIZATION:
The Department of Natural Resources is currently undergoing a synchronization process for operating permits. Permits are normally issued on a five-year term, but to achieve synchronization many permits will need to be issued for less than the full five years allowed by regulation. The intent is all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. http://dnr.mo.gov/env/wpp/cpp/docs/watershed-based-management.pdf. This will allow further streamlining by placing multiple permits within a smaller geographic area on public notice simultaneously, thereby reducing repeated administrative efforts. This will also allow the Department to explore a watershed based permitting effort at some point in the future. Renewal applications must continue to be submitted within 180 days of expiration, however, in instances where effluent data from the previous renewal is less than two years old, such data may be re-submitted to meet the requirements of the renewal application. If the permit provides a schedule of compliance for meeting new water quality based effluent limits beyond the expiration date of the permit, the time remaining in the schedule of compliance will be allotted in the renewed permit.

- ✓ If the Department issues the permit at this time, the effective period of the permit would be less than one year in length. To ensure efficient use of Department staff time, reduce the Department's permitting back log, and to provide better service to the permittee by avoiding another renewal application to be submitted in such a short time period, this operating permit will be issued for the maximum timeframe of five years and synced with other permits in the watershed at a later date.

PUBLIC NOTICE:
The Department shall give public notice a draft permit has been prepared and its issuance is pending. http://dnr.mo.gov/env/wpp/permits/pn/index.html Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in or with water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and permittee must be notified of the denial in writing.

The Department must issue public notice of a pending operating permit or of a new or reissued statewide general permit. The public comment period is the length of time not less than 30 days following the date of the public notice which interested persons may submit written comments about the proposed permit.

For persons wanting to submit comments regarding this proposed operating permit, then please refer to the Public Notice page located at the front of this draft operating permit. The Public Notice page gives direction on how and where to submit appropriate comments.

- ✓ The Public Notice period for this operating permit was from December 7, 2018 to January 7, 2019. No comments were received during this time period.

DATE OF FACT SHEET: 11/14/2018
COMPLETED BY:
SHAWN MASSEY, ENVIRONMENTAL SPECIALIST
MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER PROTECTION PROGRAM
OPERATING PERMITS SECTION - INDUSTRIAL UNIT
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STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
REVISED
AUGUST 1, 2014

These Standard Conditions incorporate permit conditions as required by 40 CFR 122.41 or other applicable state statutes or regulations. These minimum conditions apply unless superseded by requirements specified in the permit.

Part I – General Conditions
Section A – Sampling, Monitoring, and Recording

1. **Sampling Requirements.**
   a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
   b. All samples shall be taken at the outfall(s) or Missouri Department of Natural Resources (Department) approved sampling location(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.

2. **Monitoring Requirements.**
   a. Records of monitoring information shall include:
      i. The date, exact place, and time of sampling or measurements;
      ii. The individual(s) who performed the sampling or measurements;
      iii. The date(s) analyses were performed;
      iv. The individual(s) who performed the analyses;
      v. The analytical techniques or methods used; and
      vi. The results of such analyses.
   b. If the permittee monitors any pollutant more frequently than required by the permit at the location specified in the permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reported to the Department with the discharge monitoring report data (DMR) submitted to the Department pursuant to Section B, paragraph 7.

3. **Sample and Monitoring Calculations.** Calculations for all sample and monitoring results which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.

4. **Test Procedures.** The analytical and sampling methods used shall conform to the reference methods listed in 10 CSR 20-7.015 unless alternates are approved by the Department. The facility shall use sufficiently sensitive analytical methods for detecting, identifying, and measuring the concentrations of pollutants. The facility shall ensure that the selected methods are able to quantify the presence of pollutants in a given discharge at concentrations that are low enough to determine compliance with Water Quality Standards in 10 CSR 20-7.031 or effluent limitations unless provisions in the permit allow for other alternatives. A method is "sufficiently sensitive" when; 1) the method minimum level is at or below the level of the applicable water quality criterion for the pollutant or, 2) the method minimum level is above the applicable water quality criterion, but the amount of pollutant in a facility's discharge is high enough that the method detects and quantifies the level of pollutant in the discharge, or 3) the method has the lowest minimum level of the analytical methods approved under 10 CSR 20-7.015. These methods are also required for parameters that are listed as monitoring only, as the data collected may be used to determine if limitations need to be established. A permittee is responsible for working with their contractors to ensure that the analysis performed is sufficiently sensitive.

5. **Record Retention.** Except for records of monitoring information required by the permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

6. **Illegal Activities.**
   a. The Federal Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under the permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two (2) years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four (4) years, or both.
   b. The Missouri Clean Water Law provides that any person or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than six (6) months, or by both. Second and successive convictions for violation under this paragraph by any person shall be punished by a fine of not more than $50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

Section B – Reporting Requirements

1. **Planned Changes.**
   a. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility when:
      i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or
      ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42;
      iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;
      iv. Any facility expansions, production increases, or process modifications which will result in a new or substantially different discharge or sludge characteristics must be reported to the Department 60 days before the facility or process modification begins. Notification may be accomplished by application for a new permit. If the discharge does not violate effluent limitations specified in the permit, the facility is to submit a notice to the Department of the changed discharge at least 30 days before such changes. The Department may require a construction permit and/or permit modification as a result of the proposed changes at the facility.

2. **Non-compliance Reporting.**
   a. The permittee shall report any noncompliance which may endanger health or the environment. Relevant information shall be provided orally or via the current electronic method approved by the Department, within 24 hours from the time the permittee becomes aware of the circumstances, and shall be reported to the appropriate Regional Office during normal business hours or the Environmental Emergency Response hotline at 573-634-2436 outside of normal business hours. A written submission shall also be provided within five (5) business days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

b. The following shall be included as information which must be reported within 24 hours under this paragraph.
   i. Any unanticipated bypass which exceeds any effluent limitation in the permit.
   ii. Any upset which exceeds any effluent limitation in the permit.
   iii. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit required to be reported within 24 hours.

c. The Department may waive the written report on a case-by-case basis for reports under paragraph 2. b. of this section if the oral report has been received within 24 hours.

3. **Anticipated Noncompliance**. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The notice shall be submitted to the Department 60 days prior to such changes or activity.

4. **Compliance Schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date. The report shall provide an explanation for the instance of noncompliance and a proposed schedule or anticipated date, for achieving compliance with the compliance schedule requirement.

5. **Other Noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs 2, 3, and 6 of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph 2. a. of this section.

6. **Other Information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

7. **Discharge Monitoring Reports.**
   a. Monitoring results shall be reported at the intervals specified in the permit.
   b. Monitoring results must be reported to the Department via the current method approved by the Department, unless the permittee has been granted a waiver from using the method. If the permittee has been granted a waiver, the permittee must use forms provided by the Department.
   c. Monitoring results shall be reported to the Department no later than the 28th day of the month following the end of the reporting period.

Section C – Bypass/Upset Requirements

1. **Definitions.**
   a. *Bypass*: the intentional diversion of waste streams from any portion of a treatment facility, except in the case of blending.
   b. *Severe Property Damage*: substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
   c. *Upset*: an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

2. **Bypass Requirements.**
   a. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2. b. and 2. c. of this section.
   b. Notice.
      i. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.
      ii. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Section B – Reporting Requirements, paragraph 5 (24-hour notice).
   c. Prohibition of bypass.
      i. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:
         1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
         2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
         3. The permittee submitted notices as required under paragraph 2. b. of this section.
      ii. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three (3) conditions listed above in paragraph 2. c. i. of this section.

3. **Upset Requirements.**
   a. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph 3. b. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
   b. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
      i. An upset occurred and that the permittee can identify the cause(s) of the upset;
      ii. The permitted facility was at the time being properly operated; and
      iii. The permittee submitted notice of the upset as required in Section B – Reporting Requirements, paragraph 2. b. ii. (24-hour notice).
      iv. The permittee complied with any remedial measures required under Section D – Administrative Requirements, paragraph 4.
   c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

Section D – Administrative Requirements

1. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Missouri Clean Water Law and Federal Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.
   a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
   b. The Federal Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed $25,000 per day for each violation. The Federal Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement

imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

c. Any person may be assessed an administrative penalty by the EPA Director for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed $10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $25,000. Penalties for Class II violations are not to exceed $10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $125,000.

d. It is unlawful for any person to cause or permit any discharge of water contaminants from any water contaminant or point source located in Missouri in violation of sections 644.006 to 644.141 of the Missouri Clean Water Law, or any standard, rule or regulation promulgated by the commission. In the event the commission or the director determines that any provision of sections 644.006 to 644.141 of the Missouri Clean Water Law or standard, rules, limitations or regulations promulgated pursuant thereto, or permits issued by, or any final abatement order, other order, or determination made by the commission or the director, or any filing requirement pursuant to sections 644.006 to 644.141 of the Missouri Clean Water Law or any other provision which this state is required to enforce pursuant to any federal water pollution control act, is being, was, or is in imminent danger of being violated, the commission or director may cause to have instituted a civil action in any court of competent jurisdiction for the injunctive relief to prevent any such violation or further violation or for the assessment of a penalty not to exceed $10,000 per day for each day, or part thereof, the violation occurred and continues to occur, or both, as the court deems proper. Any person who willfully or negligently commits any violation in this paragraph shall, upon conviction, be punished by a fine of not less than $2,500 nor more than $25,000 per day of violation, or by imprisonment for not more than one year, or both. Second and successive convictions for violation of the same provision of this paragraph by any person shall be punished by a fine of not more than $50,000 per day of violation, or by imprisonment for not more than two (2) years, or both.

2. **Duty to Reapply.**
   a. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
   b. A permittee with a currently effective site-specific permit shall submit an application for renewal at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Department. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)
   c. A permittees with currently effective general permit shall submit an application for renewal at least 30 days before the existing permit expires, unless the permittee has been notified by the Department that an earlier application must be made. The Department may grant permission for a later submission date. (The Department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

3. **Need to Halt or Reduce Activity Not a Defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. **Proper Operation and Maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

6. **Permit Actions.**
   a. Subject to compliance with statutory requirements of the Law and Regulations and applicable Court Order, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
      i. Violations of any terms or conditions of this permit or the law;
      ii. Having obtained this permit by misrepresentation or failure to disclose fully any relevant facts;
      iii. A change in any circumstances or conditions that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
      iv. Any reason set forth in the Law or Regulations.
   b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. **Permit Transfer.**
   a. Subject to 10 CSR 20-6.010, an operating permit may be transferred upon submission to the Department of an application to transfer signed by the existing owner and the new owner, unless prohibited by the terms of the permit. Until such time the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
   b. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Missouri Clean Water Law or the Federal Clean Water Act.
   c. The Department, within 30 days of receipt of the application, shall notify the new permittee of its intent to revoke or reissue or transfer the permit.

8. **Toxic Pollutants.** The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Federal Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

9. **Property Rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.

10. **Duty to Provide Information.** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

11. **Inspection and Entry.** The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:
    a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
    b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
    c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
    d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Federal Clean Water Act or Missouri Clean Water Law, any substances or parameters at any location.

12. **Closure of Treatment Facilities.**
    a. Persons who cease operation or plan to cease operation of waste, wastewater, and sludge handling and treatment facilities shall close the facilities in accordance with a closure plan approved by the Department.
    b. Operating Permits under 10 CSR 20-6.010 or under 10 CSR 20-6.015 are required until all waste, wastewater, and sludges have been disposed of in accordance with the closure plan approved by the Department and any disturbed areas have been properly stabilized. Disturbed areas will be considered stabilized when perennial vegetation, pavement, or structures using permanent materials cover all areas that have been disturbed. Vegetative cover, if used, shall be at least 70% plant density over 100% of the disturbed area.

13. **Signatory Requirement.**
    a. All permit applications, reports required by the permit, or information requested by the Department shall be signed and certified. (See 40 CFR 122.22 and 10 CSR 20-6.010)
    b. The Federal Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.
    c. The Missouri Clean Water Law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to sections 644.006 to 644.141 shall, upon conviction, be punished by a fine of not more than ten thousand dollars, or by imprisonment for not more than six months, or by both.

14. **Severability.** The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.

APPENDIX C

SITE INSPECTION FORM

SWPPP Bi-Monthly Inspection Checklist

Facility Name	
Inspector's Name	
Inspector's Signature	
Date of Inspection	

Requirement/BMP	Yes	No*	N/A	Corrective Action
Preventive Maintenance				
Storm water inlets are free of trash/debris?				
Oil/Water Separators and wash racks do not contain excessive sludge or sediment?				
Good Housekeeping				
Washing of vehicles or helicopters is occurring at the designated wash rack(s)?				
Materials are stored compatibly?				
Solid waste dumpsters kept closed?				
Liquids are not disposed of in dumpsters?				
Walkways are kept clear of equipment?				
Spill Prevention and Response				
Is the valve on the secondary containment maintained closed?				
Is the rainwater in the secondary containment inspected for a sheen before it is released?				
Secondary containment provided for POL containers of 55 gallons or greater?				
Spill kits are readily available near potential spill areas?				
Spill supplies are in good working condition?				
Evidence of spills or leaks (stressed vegetation, stains on concrete) is not present?				

Requirement/BMP	Yes	No	N/A	Corrective Action
Materials Management				
Materials (drums, equipment, scrap metal) are stored indoors or under covered areas to the maximum extent practicable.				
Materials are stored in compatible containers and properly labeled?				
Materials are still within their "use by" date (not expired)?				
Outfalls				
Erosion or sediment deposition is not present?				
Drainage Ditches/Detention Basin				
Erosion or sediment deposition is not present?				
If vegetation is present, is it in good condition?				
Training				
Annual spill response training has occurred?				

* “No” denotes item that may require corrective action.

General Comments:

UNCLASSIFIED

SPRINGFIELD AVCRAD

SURFACE RUNOFF ACCUMULATION ANALYSIS

LEGEND

- Installation Boundary
- Building/Structure
- Airfield
- Restricted Area
- Pavement

Flow Accumulation
- High
- Low

Elevation
- High
- Low

0 100 200 Meters

(Printed Scale: 1:7,000)

MISSOURI ARMY NATIONAL GUARD
ENVIRONMENTAL MANAGEMENT OFFICE
6819B North Boundary Road
Jefferson City, MO 65101-1207

ELLIPSOID	WORLD GEODETIC SYSTEM 1984
GRID/UNIT	UTM ZONE 15 N/METER
PROJECTION	TRANSVERSE MERCATOR
VERTICAL DATUM	MEAN SEA LEVEL
HORIZONTAL DATUM	WGS 1984
DEVELOPED BY	MISSOURI ARMY NATIONAL GUARD
CARTOGRAPHER	NICHOLAS J. YOUNG

DECEMBER, 2016

Field Service Report REVISED

Report Date: November 7, 2011

Basic Information

Client: Freedom Fire Pro LLC
811 Lester lane
Rogers, AR 72756

Client Contact: Doyle Cormier

Location: MOAVCRAD Helicopter Hangar
Springfield, MO

Purpose: System Start-up and Flow Test

Date of Work: August 11, 2011

System Description

Viking Bladder Type Balanced Pressure Proportioning System consisting of (1) 800 gallon capacity bladder tank, horizontal configuration. Tank provided by Chemguard, through Viking. Tank S/N 60481, complete with sight level gauge. Tank Model #CHBT-TD-800. Foam tank supplies (4) 8" Chemguard Ratio Controllers (proportioners) installed in (4) separate wet-pipe foam sprinkler risers. Each Ratio Controller is manufactured and tagged for use with 3% MS AFFF foam concentrate (P/N EF11535, S/N 60481). The foam concentrate control to each Ratio Controller is accomplished by passing through one common automatic foam concentrate valve. This valve is manufacturer by Viking as their Model E-4 Halar deluge type valve, 2" pipe size. No individual manual valve exists in any of the foam concentrate pipe runs to any individual Ratio Controller. Only a check valve has been installed in these individual foam concentrate pipe runs to prevent water from backing from the riser to the foam tank. See Recommendation 2 relative to the problematic situation the absence of manual control valves create in these individual pipe runs. An alarm valve in each system riser has been installed, from which piping is connected to the upper portion of each valve retard chamber. This piping is connected to a common manifold to the Viking Model D-3 PORV, which is intended to cause the Halar valve to open when any of the sprinkler risers begin to flow. The absence of a check valve in each pipe run from each retard chamber does present a

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problem and is addressed in Recommendation 1 of this report. The system is charged with Chemguard C-301MS 3% Mil. Spec. AFFF foam concentrate, for use on hydrocarbon type fuel products. Foam concentrate is Lot #0928102. **See Recommendations and the corrective actions taken subsequent to the original report of 8/11/11.**

Service Performed

On Thursday, August 11, 2011, the bladder tank and foam system installation was visually inspected. Some problems were found which will adversely affect proper operation of the system. These problems mentioned previously, will be addressed in detail in the Recommendations portion of this report. The internal bladder of the 800 gallon foam concentrate tank was checked for integrity (by air integrity test) and determined to be in serviceable condition. The tank was then filled with 770 gallons of Chemguard 3% MS AFFF foam concentrate per the manufacturers established filling instructions. The foam tank was then prepared for flow testing of the system. The Viking Model D-3 PORV and Halar valve arrangement was manually tested and performed properly, indicating the PORV is piped properly, however, this system could not be function tested with system flow due to the absence of a check valve in each ½" pipe from each retard chamber. **See Recommendations and the corrective actions taken subsequent to the original report of 8/11/11.**

Foam System Test

A water flow was established through (2) fire hoses connected to (2) 2 ½" valved system test connections located at the exterior of the building. A common 4" test header pipe was installed for the purpose of flow testing each system, without discharging from the sprinkler system. A 4" pipe connection has been provided downstream of each system Ratio Controller. A manual control valve is located at each riser connection. The discharge flow from the (2) 2 ½" fire hoses was directed to atmosphere during the water flow test, but was connected to a vacuum tanker truck when foam solution was discharged, to prevent release of the effluent to the environment. Beginning with sprinkler Riser #1 (riser nearest the foam tank), a water flow of approx. 1100 GPM was established and flowed for approx. (2) minutes to flush the piping. A water sample was collected and foam concentrate control samples were mixed and tested and the results were plotted on a graph.

A base calibration curve was prepared using on site water and foam concentrate taken from the bladder tank. This base calibration curve was used to determine foam system proportioning accuracy. Base calibration curve information was as follows:

Percent Concentration (%)	Conductivity Reading (mS)
0%	303
3%	1071
4%	1294

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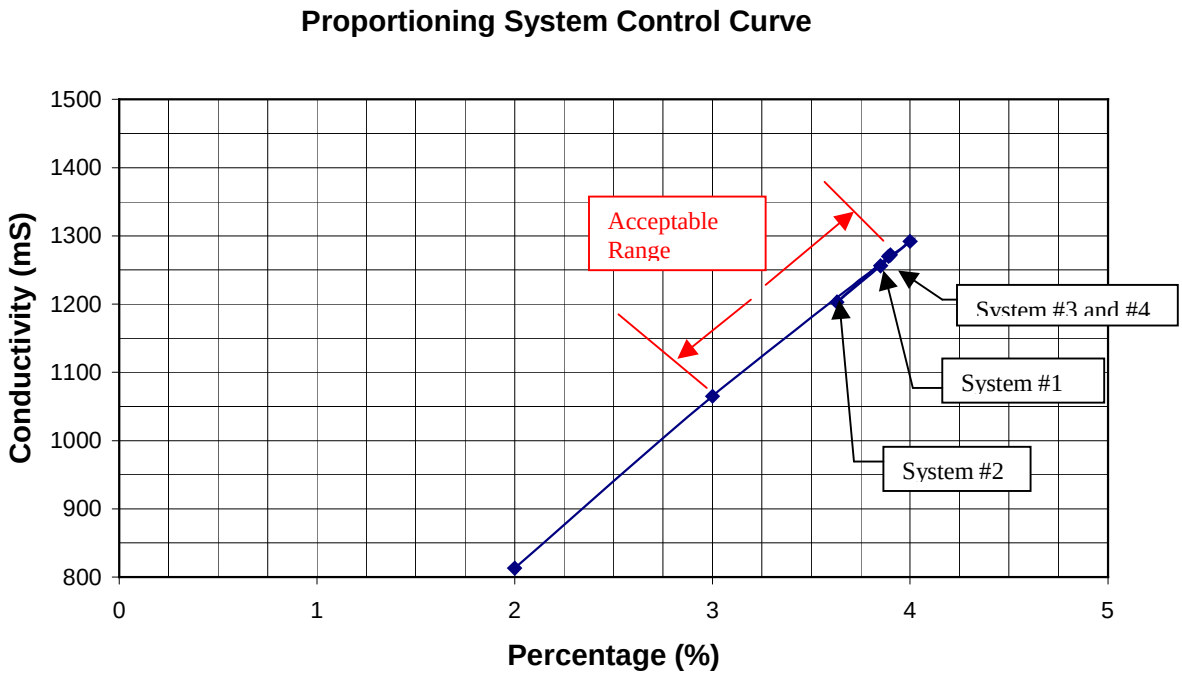
The system was then prepared for flowing with foam solution through the same sprinkler system riser. The Viking Halar valve was manually depressurized at the top chamber, as the system piping, as existing, would not permit this chamber to clear. Some piping modification will be required for each system to permit the automatic release feature of the Halar valve to perform properly. The system was then set for flowing foam solution from this riser. A garden hose was attached to a valve located on a saddle tee on Riser #1, downstream of the Ratio Controller. This hose was outfitted with a conductivity probe to measure the foam solution for proportioning accuracy as some of the solution was passed through this hose while the foam solution flow test was being conducted. This layout enabled the quickest means for measuring foam proportioning while allowing for the least overall amount of discharge. Flow measurement was determined by a paddlewheel type flow meter installed within one of the 2 ½" discharge hoses (of identical length). Water flow was again established at approx. 1100 GPM. The manual foam concentrate valve was kept closed, then opened by hand and remained so for approx. 15 seconds. At 1100 GPM flow, the foam injection rate was observed at 3.85% for System #1. System #2, #3 and #4 were flow tested respectively, in the same manner, and the results recorded. The results are as indicated on the chart following.

See Recommendations and the corrective actions taken subsequent to the original report of 8/11/11.



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System	Ratio Controller	Flow GPM	Conductivity (uS)	Proportioning Rate (%)	Pass/Fail
1	8”	1100	1256	3.85%	PASS
2	8”	1100	1203	3.63%	PASS
3	8”	1100	1270	3.89%	PASS
4	8”	1100	1272	3.90%	PASS

Conclusions

Test results for the 3% foam system are within NFPA’s acceptance limits (3.0-% - 3.9%). The foam system was left out of service for additional work to be performed.

The water supply pump was running during all flow testing performed.

The amount of foam concentrate used during all flow testing was approx. 70 gallons. The foam concentrate should now contain approx. 700 gallons of 3% MS AFFF.

Foam concentrate measurement was accomplished by on-line conductivity meter as permitted by NFPA Standard 11.

Original Recommendations and Corrective Actions Taken

The following recommendations noted on our previous report of 8/11/11, have been corrected and this report has been amended as per the notations following each original recommendation below:

1. The automatic operation of the Foam Concentrate Control Valve (Viking HALAR Valve) was NOT verified during system testing. This was due to the control piping arrangement not allowing the water pressure to build up in the piping from the retard chamber to the Viking D-3 PORV, which operates the Halar valve. Each ½” pipe run from each alarm valve retard chamber MUST be outfitted with a check valve installed to prevent water flow back to the retard chamber, thus permitting flow ONLY in the direction of the Viking D-3 PORV which reduces pressure on the Halar valve.

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Recommendations (continued)

Now with the installation of the ½" check valve at the retard chamber outlet (top) of each alarm valve, the proper release of the Viking Halar valve can be verified. Each time flow occurs in the riser so as to permit the clapper in the alarm check valve to lift and allow flow to the retard chamber, or when the "alarm test" valve is opened allowing flow to the retard chamber, the water flow will be directed to the PORV on the Viking Halar valve trim only. This will cause the water pressure to be exhausted from the top (holding) chamber of the Viking Halar valve and thus permit the valve to open and allow foam concentrate flow to any of the foam Ratio Controllers (proportioners). This function can and should be verified by opening the "alarm test" valve at each foam sprinkler alarm valve (with the main manual foam concentrate valve kept closed during this verification, then re-opened for normal standby service.

2. A manual (ball type) shut-off valve must be installed within each foam pipe run to each 8" Ratio controller. This will permit the system to be flow tested without the potential for forcing foam concentrate into a static riser, while another is flowing. This situation was experienced during flow testing of this system. Consequently, by the time Risers 3 and 4 were flow tested, an appreciable amount of foam concentrate was forced into these risers (although these risers were charged with water) during the flow testing of Risers 1 and 2. This necessitated draining in part, risers 3 and 4 prior to flow testing, and thus resulted in the proportioning results to be subject to some question, due to the fluctuation of the purity of the water within these risers during the test. Ultimately, it is highly recommended that the foam proportioning system be re-fitted so that a Viking Halar valve for automatic foam concentrate control and a manual shut-off valve (as previously stated) and the (existing) check valve, be provided within <u>each</u> separate foam concentrate pipe run to <u>each</u> 8" Ratio Controller. Consult NFPA Standard 16, Figure A.5.14 entitled "Test Connection Detail" for the arrangement of these devices. Note too, that this figure also depicts a supervised OS and Y valve in the sprinkler riser, downstream of the test connection tie-in, which will prevent any water from back-feeding from the sprinkler riser into the test header, while the system is being flow tested through the test header.

Manual ball valves have been installed in the foam concentrate pipe to each proportioner. The installation of these manual valves as now accomplished, will facilitate future system testing, eliminating the need to flush unnecessarily expended foam concentrate from each riser test piping prior to initiating the foam solution test.

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3. The paddle type flow switches installed in each riser should be re-located so that the Paddle within the riser pipe is not blocking the outlet cone of the Ratio Controller. The location of these flow switches should be moved on the system side of the test connection tie-in locations, and be located a safe distance from these tie-in points so the paddle will not flex back and obstruct the test tie-in point in any way.

This correction, as accomplished, will now facilitate proper laminar flow at the discharge portion of the Ratio Controller (proportioner) and eliminate potential blockage or interference with the foam solution flow through the test piping connection.

4. When installing Ratio Controllers in system riser piping, a minimum of 5 pipe diameters of straight and unobstructed pipe should be present at the inlet and outlet of the Ratio Controller. This is a standard recommendation throughout the industry. Ratio Controllers may be installed in either vertical or horizontal orientation. Sprinkler Risers #1 and #2 have 90 degree elbows installed very close to the locations of the Ratio Controllers in each of these risers.

This correction, as accomplished, now permits the Ratio Controllers (proportioners) to be installed with the system risers in accordance with the manufacturer's recommendation of required pipe length up and downstream of their respective inlet and discharge, thus permitting optimum performance.

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3% AFFF Foam System

Valve Description	Required Position
Water Feed Valve (at tank)	Open
Automatic Concentrate Feed Valve (Halar)	Closed
Manual Concentrate Valve (at tank)	Open
Shell Vent Valve (1") (at tank)	Closed
Shell Drain Valve (1") (at tank)	Closed
Bladder Vent Valve (1") (at tank)	Closed
Bladder Drain Valve (1") (at tank)	Closed

No other testing was accomplished by Vector Fire Technology Inc. during this visit.

The corrective actions taken by Freedom Fire Pro LLC, pursuant to the recommendations made in the original service report provide by Vector Fire Technology Inc. (8/11/11), were reported to have been accomplished by Freedom Fire Pro LLC personnel, during the week of October 31 – November 4, 2011. The corrections noted in this report have been based on discussions with Freedom Fire Pro LLC and photographs submitted by same (on 11/4/2011), to Vector Fire Technology Inc., showing the corrections made for each recommendation previously noted.

Reported by:

Donald Helsel

Donald Helsel
Vector Fire Technology, Inc.
dhelsel@vectorfire.net

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Phone: 610 466 1717 Fax: 610 466 1718

Springfield AVCRAD

Springfield, MO

Springfield, MO 65803

Inquiry Number: 5722487.3

July 19, 2019

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

07/19/19

Site Name:

Springfield AVCRAD
Springfield, MO
Springfield, MO 65803
EDR Inquiry # 5722487.3

Client Name:

AECOM
12120 Shamrock Plaza
Omaha, NE 68154
Contact: Savannah Irving

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by AECOM were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # FC2D-4991-B59C

PO # NA

Project Springfield AVCRAD

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: FC2D-4991-B59C

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Springfield AVCRAD

Springfield, MO

Springfield, MO 65803

Inquiry Number: 5722487.5

July 22, 2019

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

07/22/19

Site Name:

Springfield AVCRAD
Springfield, MO
Springfield, MO 65803
EDR Inquiry # 5722487.5

Client Name:

AECOM
12120 Shamrock Plaza
Omaha, NE 68154
Contact: Savannah Irving

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2016	1"=625'	Flight Year: 2016	USDA/NAIP
2012	1"=625'	Flight Year: 2012	USDA/NAIP
2009	1"=625'	Flight Year: 2009	USDA/NAIP
2006	1"=625'	Flight Year: 2006	USDA/NAIP
1997	1"=625'	Acquisition Date: March 20, 1997	USGS/DOQQ
1996	1"=625'	Flight Date: March 20, 1996	USGS
1990	1"=625'	Flight Date: February 17, 1990	USGS
1984	1"=625'	Flight Date: April 06, 1984	USDA
1979	1"=625'	Flight Date: September 16, 1979	USDA
1953	1"=625'	Flight Date: September 20, 1953	USDA
1938	1"=625'	Flight Date: August 03, 1938	USDA

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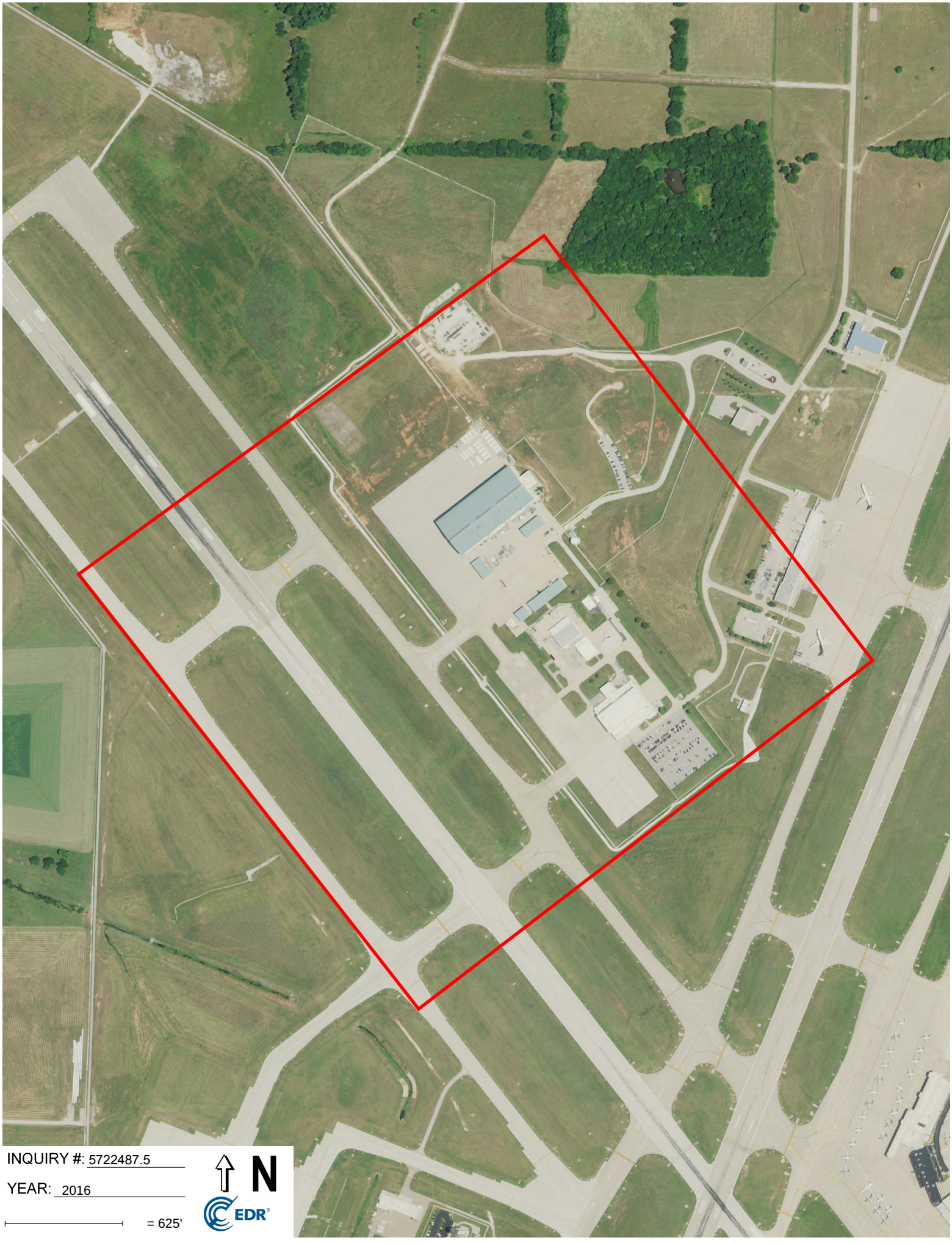
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N
EDR


INQUIRY #: 5722487.5
YEAR: 2012
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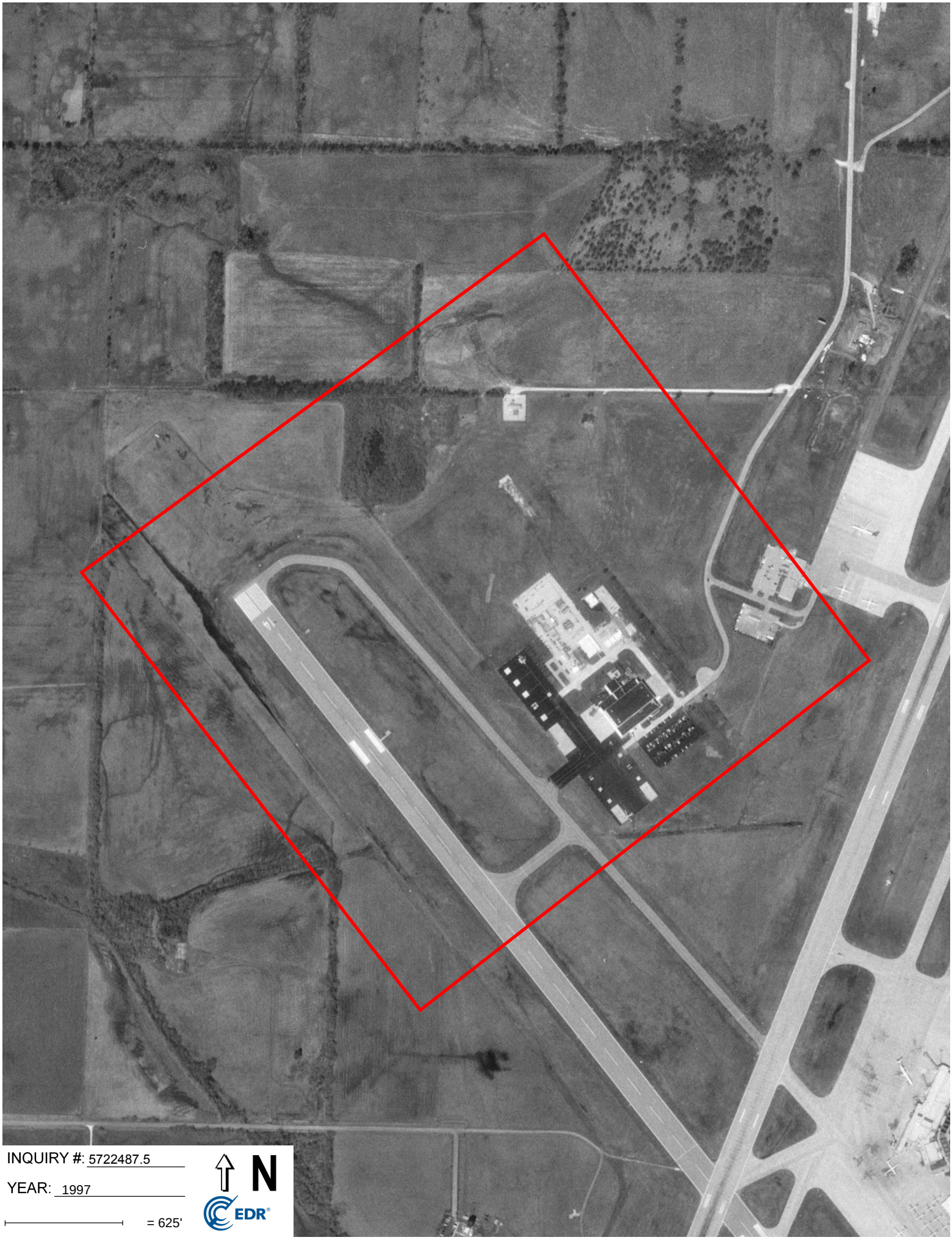
EDR


INQUIRY #: 5722487.5
YEAR: 2009
= 625'
N
EDR


INQUIRY #: 5722487.5
YEAR: 2006
= 625'
N
EDR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EDR

INQUIRY #: 5722487.5

YEAR: 1996

= 625'

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EDR

INQUIRY #: 5722487.5

YEAR: 1990

= 625'

N

EDR


INQUIRY #: 5722487.5
YEAR: 1984
= 625'
N
EDR


INQUIRY #: 5722487.5
YEAR: 1979
= 625'
N
EDR

INQUIRY #: 5722487.5

YEAR: 1953

= 625'

N

EDR

INQUIRY #: 5722487.5

YEAR: 1938

= 625'

N

EDR

Springfield AVCRAD
Springfield, MO
Springfield, MO 65803

Inquiry Number: 5722487.2s
July 19, 2019

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

SPRINGFIELD, MO
SPRINGFIELD, MO 65803

COORDINATES

Latitude (North):	37.2495620 - 37° 14' 58.42''
Longitude (West):	93.3901730 - 93° 23' 24.62''
Universal Tranverse Mercator:	Zone 15
UTM X (Meters):	465396.8
UTM Y (Meters):	4122425.2
Elevation:	1254 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	6726419 BROOKLINE, MO
Version Date:	2015
Northeast Map:	6727092 EBENEZER, MO
Version Date:	2015
Southeast Map:	6727754 SPRINGFIELD, MO
Version Date:	2015
Northwest Map:	6726493 WILLARD, MO
Version Date:	2015

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140630, 20140823
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
SPRINGFIELD, MO
SPRINGFIELD, MO 65803

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	ABX AIR INC	5141 W CARGO RD STE	RCRA NonGen / NLR	Higher	1 ft.
A2	UPS SPRINGFIELD GATE	5140 AIR CARGO RD	RCRA-CESQG	Higher	1 ft.
3	MO-AVCRAD	2501 N LESTER JONES	SEMS	Lower	1 ft.
B4	MO-AVCRAD MISSOURI N	2501 LESTER JONES AV	MO UST	Higher	1 ft.
B5	MOAVCRAD	2501 LESTER JONES AV	MO SPILLS, MO AIRS, MO NPDES, MO RRC, MO SMARS	Higher	1 ft.
6			MO MINES	Higher	410, 0.078, West
C7	SPRINGFIELD-BRANSON	5000 W. KEARNEY STRE	SEMS	Lower	1069, 0.202, ENE
C8	SPRINGFIELD REGIONAL	5000 W. KEARNEY	MO AST	Lower	1069, 0.202, ENE
C9	AMERICAN EAGLE	5000 W KEARNEY ST	RCRA NonGen / NLR	Lower	1069, 0.202, ENE
10	SPRINGFIELD REGIONAL	REGIONAL AIRPORT	MO LUST, MO UST	Higher	1242, 0.235, SE
11	FORMER AIRPORT TERMI	N GENERAL AVIATION R	US BROWNFIELDS, FINDS	Higher	2010, 0.381, SE
D12	LITTON SYSTEMS, INC.	4811 WEST KEARNEY ST	MO SHWS, MO SPILLS, MO SMARS	Higher	2296, 0.435, ESE
D13	NORTHROP GRUMMAN GUI	4811 W KEARNEY ST	SEMS, RCRA-CESQG, NY MANIFEST	Higher	2296, 0.435, ESE
14	SPRINGFIELD REGIONAL	5000 W KEARNEY	MO LUST, MO UST, MO AST, MO NPDES, MO SMARS	Higher	2457, 0.465, SSW
15	FORMER NATIONAL AIRP	N GENERAL AVIATION A	US BROWNFIELDS, FINDS	Higher	2467, 0.467, SE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-SQG ---------- RCRA - Small Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

EXECUTIVE SUMMARY

State and tribal landfill and/or solid waste disposal site lists

MO SWF/LF ---------- Permitted Facility List

State and tribal leaking storage tank lists

MO LAST ---------- Leaking Aboveground Storage Tanks
INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal institutional control / engineering control registries

MO AUL ---------- Sites with Controls

State and tribal voluntary cleanup sites

MO VCP ---------- Voluntary Cleanup Program Site Listing
INDIAN VCP ---------- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

MO BROWNFIELDS ---------- Brownfields Site List

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Landfill / Solid Waste Disposal Sites

MO HIST LF ---------- Solid Waste Facility Database List
MO SWRCY ---------- Solid Waste Recycling Facilities
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
ODI ---------- Open Dump Inventory
IHS OPEN DUMPS ---------- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---------- Delisted National Clandestine Laboratory Register
MO CDL ---------- Environmental Emergency Response System
MO DEL SHWS ---------- Registry Sites Withdrawn or Deleted
US CDL ---------- National Clandestine Laboratory Register

Local Land Records

LIENS 2 ---------- CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ---------- Hazardous Materials Information Reporting System
MO SPILLS 90 ---------- SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR	Financial Assurance Information
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
ROD	Records Of Decision
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
PRP	Potentially Responsible Parties
PADS	PCB Activity Database System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
CONSENT	Superfund (CERCLA) Consent Decrees
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
DOCKET HWC	Hazardous Waste Compliance Docket Listing
UXO	Unexploded Ordnance Sites
ECHO	Enforcement & Compliance History Information
FUELS PROGRAM	EPA Fuels Program Registered Listing
MO ASBESTOS	Asbestos Notification Listing
MO COAL ASH	Coal Ash Disposal Sites
MO DRYCLEANERS	Drycleaners in Missouri Listing
MO Financial Assurance	Financial Assurance Information Listing
MO UIC	Underground Injection Wells Database

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

MO RGA HWS	Recovered Government Archive State Hazardous Waste Facilities List

EXECUTIVE SUMMARY

MO RGA LF---------- Recovered Government Archive Solid Waste Facilities List
MO RGA LUST---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS list

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 04/11/2019 has revealed that there are 3 SEMS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
NORTHROP GRUMMAN GUI Site ID: 0700873 EPA Id: MOD007152903	***4811 W KEARNEY ST***	***ESE 1/4 - 1/2 (0.435 mi.)***	***D13***	***41***

Lower Elevation	Address	Direction / Distance	Map ID	Page
MO-AVCRAD Site ID: 0701764 EPA Id: MO4210090003	2501 N LESTER JONES	0 - 1/8 (0.000 mi.)	3	12
SPRINGFIELD-BRANSON Site ID: 0704766 EPA Id: MON000704766	5000 W. KEARNEY STRE	ENE 1/8 - 1/4 (0.202 mi.)	C7	24

EXECUTIVE SUMMARY

Federal RCRA generators list

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 03/25/2019 has revealed that there is 1 RCRA-CESQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UPS SPRINGFIELD GATE EPA ID:: MOR000500298	5140 AIR CARGO RD	0 - 1/8 (0.000 mi.)	A2	9

State- and tribal - equivalent CERCLIS

MO SHWS: Registry and Registry Log.

A review of the MO SHWS list, as provided by EDR, has revealed that there is 1 MO SHWS site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
LITTON SYSTEMS, INC. Database: SHWS, Date of Government Version: 07/02/2018	***4811 WEST KEARNEY ST***	***ESE 1/4 - 1/2 (0.435 mi.)***	***D12***	***39***

State and tribal leaking storage tank lists

MO LUST: Leaking Underground Storage Tanks.

A review of the MO LUST list, as provided by EDR, and dated 03/07/2019 has revealed that there are 2 MO LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SPRINGFIELD REGIONAL Facility Id: ST0006560 Date Of NFA Letter From DNR: 1993-10-28 00:00:00	***REGIONAL AIRPORT***	***SE 1/8 - 1/4 (0.235 mi.)***	***10***	***27***
SPRINGFIELD REGIONAL Facility Id: ST0006540	***5000 W KEARNEY***	***SSW 1/4 - 1/2 (0.465 mi.)***	***14***	***54***

State and tribal registered storage tank lists

MO UST: Underground Storage Tank Information.

A review of the MO UST list, as provided by EDR, and dated 03/07/2019 has revealed that there are 2 MO UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MO-AVCRAD MISSOURI N Facility Id: ST0006487 Tank Status: Removed	2501 LESTER JONES AV	0 - 1/8 (0.000 mi.)	B4	14
SPRINGFIELD REGIONAL Facility Id: ST0006560 Tank Status: Removed	***REGIONAL AIRPORT***	***SE 1/8 - 1/4 (0.235 mi.)***	***10***	***27***

MO AST: Aboveground Petroleum Storage.

A review of the MO AST list, as provided by EDR, and dated 11/30/2018 has revealed that there is 1 MO AST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SPRINGFIELD REGIONAL Facility Id: 1818	5000 W. KEARNEY	ENE 1/8 - 1/4 (0.202 mi.)	C8	25

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: The EPA's listing of Brownfields properties from the Cleanups in My Community program, which provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

A review of the US BROWNFIELDS list, as provided by EDR, and dated 12/17/2018 has revealed that there are 2 US BROWNFIELDS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
FORMER AIRPORT TERMI ACRES property ID: 118521	***N GENERAL AVIATION R***	***SE 1/4 - 1/2 (0.381 mi.)***	***11***	***34***
FORMER NATIONAL AIRP ACRES property ID: 118681	***N GENERAL AVIATION A***	***SE 1/4 - 1/2 (0.467 mi.)***	***15***	***81***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/25/2019 has revealed that there are 2 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ABX AIR INC EPA ID:: MOR000524413	5141 W CARGO RD STE	0 - 1/8 (0.000 mi.)	A1	8

Lower Elevation	Address	Direction / Distance	Map ID	Page
AMERICAN EAGLE EPA ID:: MOR000545269	5000 W KEARNEY ST	ENE 1/8 - 1/4 (0.202 mi.)	C9	25

MO MINES: This data set contains names, locations and additional data for active Industrial Mineral Mines permitted with the Missouri Department of Natural Resources, Division of Environmental Quality, Land Reclamation Program. Industrial Mineral Mines permitted are rock quarries, clay pits, sand and gravel pits, or in-stream sand and gravel operations.

A review of the MO MINES list, as provided by EDR, and dated 01/18/2019 has revealed that there is 1 MO MINES site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
Not reported		W 0 - 1/8 (0.078 mi.)	6	23

MO SMARS: SMARS currently houses information for Superfund, Federal Facility, Brownfields Voluntary Cleanup Program and Missouri's other state response programs.

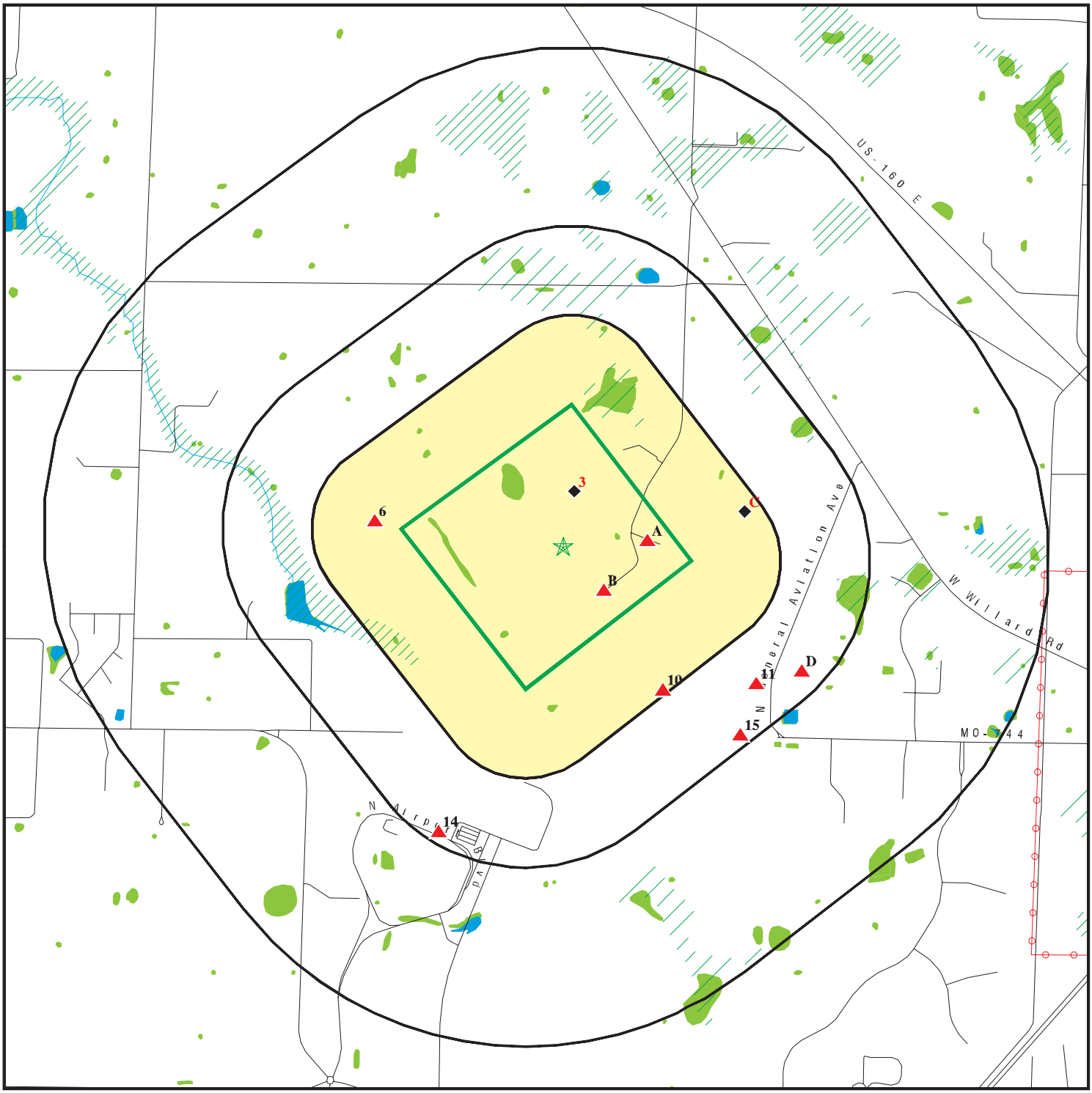
A review of the MO SMARS list, as provided by EDR, and dated 04/02/2019 has revealed that there are 3 MO SMARS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MOAVCRAD	***2501 LESTER JONES AV***	***0 - 1/8 (0.000 mi.)***	***B5***	***19***
LITTON SYSTEMS, INC.	***4811 WEST KEARNEY ST***	***ESE 1/4 - 1/2 (0.435 mi.)***	***D12***	***39***
SPRINGFIELD REGIONAL	***5000 W KEARNEY***	***SSW 1/4 - 1/2 (0.465 mi.)***	***14***	***54***

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 5722487.2S



0 1/4 1/2 1 Miles

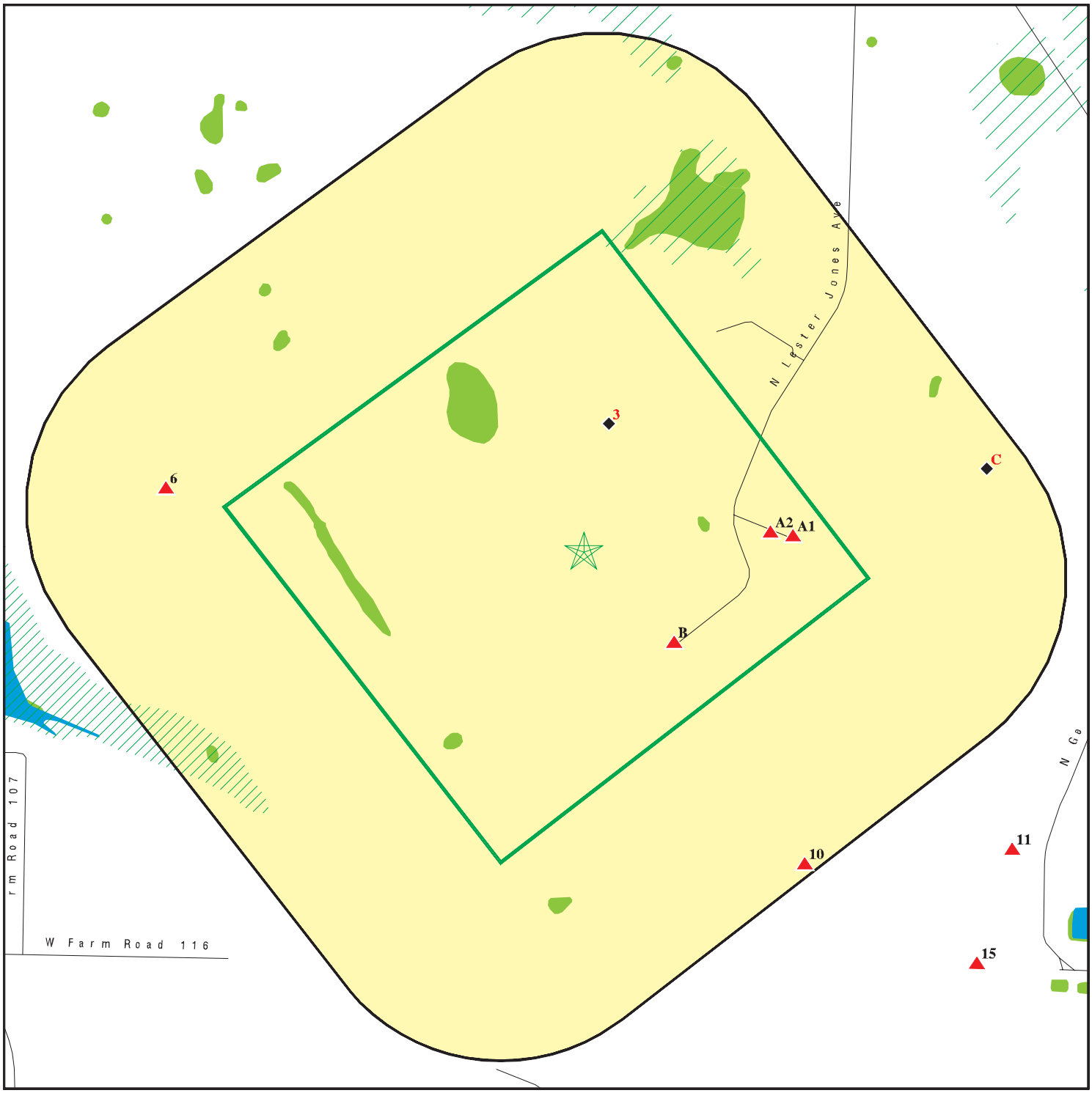
Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
National Priority List Sites
Dept. Defense Sites

Indian Reservations BIA
Power transmission lines
100-year flood zone
500-year flood zone
National Wetland Inventory
State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Springfield AVCRAD ADDRESS: Springfield, MO Springfield MO 65803 LAT/LONG: 37.249562 / 93.390173	CLIENT: AECOM CONTACT: Savannah Irving INQUIRY #: 5722487.2s DATE: July 19, 2019 4:27 pm

DETAIL MAP - 5722487.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites

0 1/8 1/4 1/2 Miles

- Indian Reservations BIA
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Springfield AVCRAD ADDRESS: Springfield, MO Springfield MO 65803 LAT/LONG: 37.249562 / 93.390173	CLIENT: AECOM CONTACT: Savannah Irving INQUIRY #: 5722487.2s DATE: July 19, 2019 4:30 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		1	1	1	NR	NR	3
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		1	0	NR	NR	NR	1
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
MO SHWS	1.000		0	0	1	0	NR	1
State and tribal landfill and/or solid waste disposal site lists								
MO SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
MO LAST	0.500		0	0	0	NR	NR	0
MO LUST	0.500		0	1	1	NR	NR	2
INDIAN LUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MO UST	0.250		1	1	NR	NR	NR	2
MO AST	0.250		0	1	NR	NR	NR	1
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
MO AUL	0.500		0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
MO VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
MO BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	2	NR	NR	2
Local Lists of Landfill / Solid Waste Disposal Sites								
MO HIST LF	0.500		0	0	0	NR	NR	0
MO SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
MO CDL	TP		NR	NR	NR	NR	NR	0
MO DEL SHWS	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
MO SPILLS	TP		NR	NR	NR	NR	NR	0
MO SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		1	1	NR	NR	NR	2
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
MO AIRS	TP		NR	NR	NR	NR	NR	0
MO ASBESTOS	TP		NR	NR	NR	NR	NR	0
MO COAL ASH	0.500		0	0	0	NR	NR	0
MO DRYCLEANERS	0.250		0	0	NR	NR	NR	0
MO Financial Assurance	TP		NR	NR	NR	NR	NR	0
NY MANIFEST	0.250		0	0	NR	NR	NR	0
MO MINES	0.250		1	0	NR	NR	NR	1
MO NPDES	TP		NR	NR	NR	NR	NR	0
MO RRC	TP		NR	NR	NR	NR	NR	0
MO SMARS	0.500		1	0	2	NR	NR	3
MO UIC	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
MO RGA HWS	TP		NR	NR	NR	NR	NR	0
MO RGA LF	TP		NR	NR	NR	NR	NR	0
MO RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	6	5	7	0	0	18

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **ABX AIR INC** **RCRA NonGen / NLR** **1010322842**
5141 W CARGO RD STE G **MOR000524413**
< 1/8 **SPRINGFIELD, MO 65803**
1 ft.

Site 1 of 2 in cluster A

Relative: **Higher**

Actual: **1261 ft.**

RCRA NonGen / NLR:

Date form received by agency:	04/27/2009
Facility name:	ABX AIR INC
Facility address:	5141 W CARGO RD STE G SPRINGFIELD, MO 65803-9512
EPA ID:	MOR000524413
Mailing address:	HUNTER DR WILMINGTON, OH 45177
Contact:	BRIAN LAYCOCK
Contact address:	HUNTER DR WILMINGTON, OH 45177
Contact country:	US
Contact telephone:	937-382-5591
Telephone ext.:	63119
Contact email:	BRIAN.LAYCOCK.@ABXAIR.COM
EPA Region:	07
Land type:	Private
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	ABX AIR INC
Owner/operator address:	HUNTER DR WILMINGTON, OH 45177
Owner/operator country:	US
Owner/operator telephone:	937-382-5591
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	10/27/2006
Owner/Op end date:	Not reported

Owner/operator name:	ABX AIR INC
Owner/operator address:	HUNTER DR WILMINGTON, OH 45177
Owner/operator country:	US
Owner/operator telephone:	937-382-5591
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	10/27/2006
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No

ABX AIR INC (Continued) **1010322842**

Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	10/27/2006
Site name:	ABX AIR INC
Classification:	Small Quantity Generator

Hazardous Waste Summary:

. Waste code:	D001
. Waste name:	IGNITABLE WASTE

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date:	04/18/2007
Evaluation:	COMPLIANCE ASSISTANCE VISIT
Area of violation:	Not reported
Date achieved compliance:	Not reported
Evaluation lead agency:	State

A2 **UPS SPRINGFIELD GATEWAY** **RCRA-CESQG** **1007110681**
5140 AIR CARGO RD **MOR000500298**
< 1/8 **SPRINGFIELD, MO 65803**
1 ft.

Site 2 of 2 in cluster A

Relative: Higher
Actual: 1258 ft.

RCRA-CESQG:

Date form received by agency:	07/13/2017
Facility name:	UPS SPRINGFIELD GATEWAY
Facility address:	5140 AIR CARGO RD SPRINGFIELD, MO 65803-9512
EPA ID:	MOR000500298
Mailing address:	2609 DIXON ST DES MOINES, IA 50316-1864
Contact:	PAUL SPRAGG
Contact address:	2609 DIXON ST DES MOINES, IA 50316-1864
Contact country:	US
Contact telephone:	417-831-7744
Contact email:	STL1SXS@UPS.COM
EPA Region:	07
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous

UPS SPRINGFIELD GATEWAY (Continued) **1007110681**

waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	UPS INC OF OHIO
Owner/operator address:	55 GLENLAKE PARKWAY NE ATLANTA, GA 30328
Owner/operator country:	Not reported
Owner/operator telephone:	404-828-7128
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	UPS INC
Owner/operator address:	13818 RIDER TRAIL N EARTH CITY, MO 63045
Owner/operator country:	US
Owner/operator telephone:	314-344-3167
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	06/25/2001
Owner/Op end date:	Not reported

Owner/operator name:	UPS INC
Owner/operator address:	13818 RIDER TRAIL N EARTH CITY, MO 63045
Owner/operator country:	US
Owner/operator telephone:	314-344-3167
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	06/25/2001
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No

UPS SPRINGFIELD GATEWAY (Continued) **1007110681**

Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 12/22/2011
Site name: UPS SPRINGFIELD GATEWAY
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 02/25/2011
Site name: UPS SPRINGFIELD GATEWAY
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 01/31/2011
Site name: UPS SPRINGFIELD GATEWAY
Classification: Small Quantity Generator

Date form received by agency: 06/25/2001
Site name: UNITED PARCEL SERVICE
Classification: Conditionally Exempt Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D018
. Waste name: BENZENE

. Waste code: D027
. Waste name: 1,4-DICHLOROBENZENE

. Waste code: D035

UPS SPRINGFIELD GATEWAY (Continued) **1007110681**

. Waste name: METHYL ETHYL KETONE

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

Violation Status: No violations found

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3 **MO-AVCRAD** **SEMS** **1015731365**
2501 N LESTER JONES AVE **MO4210090003**
< 1/8 **SPRINGFIELD, MO 65803**
1 ft.

Relative:
Lower

Actual:
1253 ft.

SEMS:
Site ID: 0701764
EPA ID: MO4210090003
Cong District: 07
FIPS Code: 29077
Latitude: Not reported
Longitude: Not reported
FF: Y
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

SEMS Detail:
Region: 07
Site ID: 0701764
EPA ID: MO4210090003
Site Name: MO-AVCRAD
NPL: N
FF: Y
OU: 00
Action Code: VS
Action Name: ARCH SITE
SEQ: 1
Start Date: Not reported
Finish Date: 12/30/1988 5:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf In-Hse

Region: 07
Site ID: 0701764
EPA ID: MO4210090003
Site Name: MO-AVCRAD
NPL: N
FF: Y
OU: 00
Action Code: VU
Action Name: UNARCHIVE
SEQ: 1
Start Date: Not reported
Finish Date: 8/3/2005 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf In-Hse

Region: 07
Site ID: 0701764

MO-AVCRAD (Continued) **1015731365**

EPA ID: MO4210090003
Site Name: MO-AVCRAD
NPL: N
FF: Y
OU: 00
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 1987-06-30 04:00:00
Finish Date: 6/30/1987 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 07
Site ID: 0701764
EPA ID: MO4210090003
Site Name: MO-AVCRAD
NPL: N
FF: Y
OU: 00
Action Code: PA
Action Name: PA
SEQ: 1
Start Date: 1988-04-15 04:00:00
Finish Date: 12/30/1988 5:00:00 AM
Qual: L
Current Action Lead: Fed Fac

Region: 07
Site ID: 0701764
EPA ID: MO4210090003
Site Name: MO-AVCRAD
NPL: N
FF: Y
OU: 00
Action Code: SI
Action Name: SI
SEQ: 1
Start Date: 1988-07-15 04:00:00
Finish Date: 12/30/1988 5:00:00 AM
Qual: N
Current Action Lead: Fed Fac

Region: 07
Site ID: 0701764
EPA ID: MO4210090003
Site Name: MO-AVCRAD
NPL: N
FF: Y
OU: 00
Action Code: OO
Action Name: SITE REASS
SEQ: 1
Start Date: 2005-08-03 04:00:00
Finish Date: 10/26/2006 4:00:00 AM
Qual: N
Current Action Lead: St Perf

B4 **MO-AVCRAD MISSOURI NATIONAL GUARD** **MO UST** **U001161007**
2501 LESTER JONES AVE **N/A**
< 1/8 **SPRINGFIELD, MO 65803**
1 ft.

Site 1 of 2 in cluster B

Relative: Higher
Actual: 1262 ft.

UST:

Facility ID:	ST0006487
Region:	SW
Easting:	465572.558
Northing:	4122503.45
Owner Of Geospatial Data:	Hazardous Waste Program
Geospatial Data Collected By:	CON_Fortin,Joel
Date GIS Data Collected:	03/12/2014
Lat/Long:	37.24778 / -93.38778
Lat/Long (dms):	37 14 52 / 93 23 16

Tanks:

Owner:

Owner ID:	OW10227
Owner Name:	MISSOURI ARMY NATIONAL GUARD
Owner Address:	2301 MILITIA DR/NGMO-RPE
Owner City,St,Zip:	JEFFERSON CITY, MO 65101 1203
Owner County Code:	51
Owner Phone:	7519694
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	1996-06-27 00:00:00
Name of Person Editing Record:	Not reported

Tank ID:	1	
Tank Double Wall:	0	
Tank Type:	Below Ground	
Tank Status:	**Removed**	
Meet 98 Update Requirements:	Not reported	
Date Tank Installed:	01/03/1992	
Tank Material:	Steel	
Code for Tank Material Manufacturer:	Not reported	
Code for Tank Installer:	Not reported	
Other Type Of Tank Material:	Not reported	
Tank Internal Protection:	Not reported	
Other Tank Internal Protection:	Not reported	
Tank Internal Protection Date:	Not reported	
Tank External Protection:	Not reported	
Other Type Tank Extrn Protec:	Not reported	
Tank External Protec Date:	Not reported	
Date Tank Last Used:	01/03/1995	
Date Tank Permanently Closed/ Removed:	Not reported	
Dt Tk Exp Brought InUse/Internal Tracking:		Not reported
Tank Fees Waived:	No	
Expedite Closure On Tank?:	No	
Responsible Person Expediting Closure:	Not reported	
Temporary Status Verified Date:	Not reported	
Admin Fee 585:	Not reported	
Date Administratively Closed:	Not reported	
Date Record Added:	06/30/1995	

MO-AVCRAD MISSOURI NATIONAL GUARD (Continued) **U001161007**

Date Record Edited:	12/15/1997
Person Adding/Editing Record:	N$PERRT
Date Of NFA Letter:	Not reported
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	09/27/1994
Date Of Aprroval Letter:	Not reported
Firm Closing Tank:	CET ENVIRONMENTAL
Date Closure Report Received:	1996-05-06 00:00:00
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	FINAL LETTER FOR 2-10,000 TANKS.

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16286
Tank PK:	16286
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	7000
Substance:	Hazardous Substance
Substance Other:	Not reported
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1995-01-03 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

Owner:

Owner ID:	OW10227
Owner Name:	MISSOURI ARMY NATIONAL GUARD
Owner Address:	2301 MILITIA DR/NGMO-RPE
Owner City,St,Zip:	JEFFERSON CITY, MO 65101 1203
Owner County Code:	51
Owner Phone:	7519694
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	1996-06-27 00:00:00
Name of Person Editing Record:	Not reported

Tank ID:	2
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	Not reported
Date Tank Installed:	01/03/1990

MO-AVCRAD MISSOURI NATIONAL GUARD (Continued) **U001161007**

Tank Material:	Steel	
Code for Tank Material Manufacturer:	Not reported	
Code for Tank Installer:	Not reported	
Other Type Of Tank Material:	Not reported	
Tank Internal Protection:	Not reported	
Other Tank Internal Protection:	Not reported	
Tank Internal Protection Date:	Not reported	
Tank External Protection:	Not reported	
Other Type Tank Extrn Protec:	Not reported	
Tank External Protec Date:	Not reported	
Date Tank Last Used:	01/03/1995	
Date Tank Permanently Closed/ Removed:	Not reported	
Dt Tk Exp Brought InUse/Internal Tracking:		Not reported
Tank Fees Waived:	No	
Expedite Closure On Tank?:	No	
Responsible Person Expediting Closure:	Not reported	
Temporary Status Verified Date:	Not reported	
Admin Fee 585:	Not reported	
Date Administratively Closed:	Not reported	
Date Record Added:	06/30/1995	
Date Record Edited:	12/15/1997	
Person Adding/Editing Record:	N$PERRT	
Date Of NFA Letter:	Not reported	
Is Tank Used For Emergency Generator:	No	
Date Closure Notice Received:	09/27/1994	
Date Of Aprroval Letter:	Not reported	
Firm Closing Tank:	CET ENVIRONMENTAL	
Date Closure Report Received:	1996-05-06 00:00:00	
Registration End Date:	Not reported	
LockOut Flag:	No	
Comments:	FINAL LETTER FOR 2-10,000 TANKS.	

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16287
Tank PK:	16287
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	10000
Substance:	Other
Substance Other:	JP8
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1995-01-03 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

Owner:

MO-AVCRAD MISSOURI NATIONAL GUARD (Continued) **U001161007**

Owner ID:	OW10227
Owner Name:	MISSOURI ARMY NATIONAL GUARD
Owner Address:	2301 MILITIA DR/NGMO-RPE
Owner City,St,Zip:	JEFFERSON CITY, MO 65101 1203
Owner County Code:	51
Owner Phone:	7519694
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	1996-06-27 00:00:00
Name of Person Editing Record:	Not reported

Tank ID:	3
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	Not reported
Date Tank Installed:	01/03/1990
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	Not reported
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Not reported
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	01/03/1995
Date Tank Permanently Closed/ Removed:	Not reported
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported
Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995
Date Record Edited:	12/15/1997
Person Adding/Editing Record:	N$PERRT
Date Of NFA Letter:	Not reported
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	09/27/1994
Date Of Aprroval Letter:	Not reported
Firm Closing Tank:	CET ENVIRONMENTAL
Date Closure Report Received:	1996-05-06 00:00:00
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	FINAL LETTER FOR 2-10,000 TANKS.

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16288
Tank PK:	16288
Case Number:	Not reported

MO-AVCRAD MISSOURI NATIONAL GUARD (Continued) **U001161007**

Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	10000
Substance:	Other
Substance Other:	JP8
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1995-01-03 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

Tank Aug 2011:

Facility Id:	ST0006487
Tank Id:	1
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0006487
Tank Id:	2
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0006487
Tank Id:	3

MO-AVCRAD MISSOURI NATIONAL GUARD (Continued) **U001161007**

Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

B5 **MOAVCRAD** **MO SPILLS** **S109026925**
2501 LESTER JONES AVENUE **MO AIRS** **N/A**
< 1/8 **SPRINGFIELD, MO 65803** **MO NPDES**
1 ft. **MO RRC**
Site 2 of 2 in cluster B **MO SMARS**

Relative: Higher
Actual: 1262 ft.

MO SPILLS:

Facility ID:	0903301447PAB
Regional Office:	SWRO
Spill Number:	0903301447PAB
Date Reported:	03/30/2009
Call Date/time:	14:47:00
Lat/Long:	37.2487792 -94.386810
UTM Zone For GPS:	15
Discovery Date:	03/30/2009
Email:	False

Is This A Continuous Release To Be Monitered?: False

AIRS:

Year:	Not reported
Facility ID:	AP0000770220
Start Review Date:	01/12/2015
Program ID:	AP201501016
Complete Date:	02/23/2015
Country:	Not reported
Permit Number:	122010-002B
Step Name:	AP: Amendment Approved
Permitee Name:	AP: Corrections & Amendments
SA Description:	Not reported
Locator X:	2501 Lester Jones Ave
Expiration Date:	Not reported
Received Submittal Date:	01/12/2015
Description:	Stripping Booth Emission Point
Contact Name:	Little, David
Cons Name:	Not reported
Port Cnty:	Not reported
Permit Code:	AP30
FIPS Plant:	0770220
Contact Code:	APDL
Days From Start:	154
Days From Completion:	42
Number of Days:	154

MOAVCRAD (Continued) **S109026925**

Organization Formal Name:	Not reported
Affiliation Type Code:	Not reported
Facility Category Code:	Not reported
Facility Site Status Code:	Not reported
Facility Site Status Code Year:	Not reported
Facility Site Comment:	Not reported
NAICS Code:	Not reported
Supplemental Location Text:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Year:	Not reported
Facility ID:	AP0000770220
Start Review Date:	04/09/2010
Program ID:	AP201004031
Complete Date:	12/01/2010
Country:	Not reported
Permit Number:	122010-002
Step Name:	AP: Section 5 Permit Issued
Permitee Name:	AP: Sec 5 & 6: Deminimis and Minor
SA Description:	Not reported
Locator X:	2501 Lester Jones Ave
Expiration Date:	Not reported
Received Submittal Date:	04/09/2010
Description:	Paint Booths
Contact Name:	Little, David
Cons Name:	KEITH BRAUN
Port Cnty:	Not reported
Permit Code:	AP90
FIPS Plant:	0770220
Contact Code:	APDL
Days From Start:	1893
Days From Completion:	236
Number of Days:	1893
Organization Formal Name:	Not reported
Affiliation Type Code:	Not reported
Facility Category Code:	Not reported
Facility Site Status Code:	Not reported
Facility Site Status Code Year:	Not reported
Facility Site Comment:	Not reported
NAICS Code:	Not reported
Supplemental Location Text:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Year:	Not reported
Facility ID:	AP0000770220
Start Review Date:	11/06/2012
Program ID:	AP201211013
Complete Date:	02/19/2013
Country:	Not reported
Permit Number:	122010-002A
Step Name:	AP: Correction Approved
Permitee Name:	AP: Corrections & Amendments
SA Description:	Not reported
Locator X:	2501 Lester Jones Ave
Expiration Date:	Not reported

MOAVCRAD (Continued) **S109026925**

Received Submittal Date:	11/06/2012
Description:	Fuel Sulfur Content
Contact Name:	Little, David
Cons Name:	KEITH BRAUN
Port Cnty:	Not reported
Permit Code:	AP30
FIPS Plant:	0770220
Contact Code:	APDL
Days From Start:	951
Days From Completion:	105
Number of Days:	951
Organization Formal Name:	Not reported
Affiliation Type Code:	Not reported
Facility Category Code:	Not reported
Facility Site Status Code:	Not reported
Facility Site Status Code Year:	Not reported
Facility Site Comment:	Not reported
NAICS Code:	Not reported
Supplemental Location Text:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Year:	Not reported
Facility ID:	AP0000770220
Start Review Date:	11/04/2011
Program ID:	AP201111007
Complete Date:	12/08/2011
Country:	Not reported
Permit Number:	Not reported
Step Name:	AP: Closed out, per policy
Permitee Name:	AP: Corrections & Amendments
SA Description:	Not reported
Locator X:	2501 Lester Jones Ave
Expiration Date:	Not reported
Received Submittal Date:	11/04/2011
Description:	Filter Changes
Contact Name:	Little, David
Cons Name:	DEAN LAMB
Port Cnty:	Not reported
Permit Code:	AP30
FIPS Plant:	0770220
Contact Code:	APDL
Days From Start:	1319
Days From Completion:	34
Number of Days:	1319
Organization Formal Name:	Not reported
Affiliation Type Code:	Not reported
Facility Category Code:	Not reported
Facility Site Status Code:	Not reported
Facility Site Status Code Year:	Not reported
Facility Site Comment:	Not reported
NAICS Code:	Not reported
Supplemental Location Text:	Not reported
Latitude:	Not reported
Longitude:	Not reported

MOAVCRAD (Continued) **S109026925**

NPDES:

Permit Number:	MO0134627
Permit Status:	Effective
SIC:	4581
SIC Description:	AIRPORTS, FLYING FIELDS, AND SERVICES
Issue Date:	01/30/2019
Effective Date:	02/01/2019
Category Description:	Not reported
Treatment Type Description:	Storm Water
Facility Telephone:	4178747316
Owner Name:	MISSOURI ARMY NATIONAL GUARD
Owner Address:	6819B N BOUNDARY ROAD
Owner Address 2:	Not reported
Owner City:	JEFFERSON CITY
Owner State:	MO
Owner Zip:	65101
Permit Type 100:	Not reported
Major 10:	Not reported
Region 10:	Not reported
Issuing Authority 10:	Not reported
Permit Action 100:	Not reported
Date Notification 25:	Not reported
Region Decode:	Not reported
Iss Auth Decode:	Not reported

RRC:

Name:	MOAVCRAD
Address:	2501 LESTER JONES AVENUE
City,State,Zip:	SPRINGFIELD, MO 65803
Classification:	Not reported
Facility ID:	523
Facility Contact:	DEAN LAMB
Facility Phone:	(573) 638-9813
EPA Id:	MO4210090003
Missouri Id:	003222
Job Code:	Not reported
Process:	DISTILLS SPENT SOLVENTS
Exp Date:	01/25/2008
Region:	SWRO
Status:	E
Contact Address:	Not reported
Contact City:	Not reported
Contact State:	Not reported
Contact Zip:	Not reported
WO:	Not reported
Char:	Not reported
Listed:	Not reported
UGS:	Not reported
AGS:	Not reported
DRS:	Not reported
Reports:	Not reported
Facility Type:	Not reported
Not Date:	Not reported
Exp Date:	Not reported

MOAVCRAD (Continued) **S109026925**

SMARS:

Name:	MO-AVCRAD
Address:	2501 LESTER JONES AVENUE
City,State,Zip:	SPRINGFIELD, MO 65803-9513
SM Number:	11185
CERCLIS:	MO421009003
Ownership:	Superfund
Superfund Ownership:	Yes
Voluntary Cleanup Ownership:	No
Federal Facilities Ownership:	No
Permits Ownership:	Yes
NPL Date:	Not reported
Tank Site Identification #:	Not reported
Tank Remediation #:	Not reported
Registry:	No
Site Code:	Not reported
Other Site Code:	Not reported

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6 **MO MINES** **S122456615**
West **N/A**
< 1/8
0.078 mi.
410 ft.

SPRINGFIELD, MO

Relative:
Higher

Actual:
1261 ft.

MINES:

Site ID:	0770220
Elevation Meters:	Not reported
Elevation Feet:	1260
Quadrangle:	Willard or Brookline
FIPS Code:	077
Township:	29N
Range:	23W
Section:	1
Quarter:	NESW
Projected:	Not reported
Land Grant:	Not reported
Type of Operation:	Not reported
Surface:	Not reported
Underground:	Not reported
Smelter:	Not reported
Mine Tailings:	Not reported
Mine Waste Rock:	Not reported
Processing Plant:	Not reported
Status:	Not reported
Mine Safety and Health Administration:	Not reported
Commodities:	Limestone cb
Property Owner:	Not reported
Operator:	Not reported
Acres:	Not reported
Depth:	Not reported
Reference Table:	y
Aerial Photos:	Not reported
Mine Extends Into Different Section:	Not reported
Formations:	Not reported
Operation Opened:	Not reported
Operation Closed:	Not reported
Operation Reopened:	Not reported

(Continued) **S122456615**

Operation Reclosed:	Not reported
Tonnage of Ore:	Not reported
Source Info:	Not reported
Timeframe:	Not reported
Areal Data:	Not reported
Comments:	Not reported
Shaft Name:	Not reported
Different:	Not reported
Dimensions:	Not reported
MILS Compilation:	Not reported
Location:	estimated location, long section
UTM Coordinates:	legal description
UTM Easting NAD27:	464567
UTM Northing NAD27:	4122550
UTM Easting NAD83:	464551
UTM Northing NAD83:	4122759

C7 **SPRINGFIELD-BRANSON REGIONAL AIRPORT** **SEMS** **1007646581**
ENE **5000 W. KEARNEY STREET** **MON000704766**
1/8-1/4 **SPRINGFIELD, MO 65803**
0.202 mi.
1069 ft. **Site 1 of 3 in cluster C**

Relative:
Lower

Actual:
1252 ft.

SEMS:

Site ID:	0704766
EPA ID:	MON000704766
Cong District:	07
FIPS Code:	29077
Latitude:	Not reported
Longitude:	Not reported
FF:	N
NPL:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

SEMS Detail:

Region:	07
Site ID:	0704766
EPA ID:	MON000704766
Site Name:	SPRINGFIELD-BRANSON REGIONAL AIRPORT
NPL:	N
FF:	N
OU:	00
Action Code:	SI
Action Name:	SI
SEQ:	1
Start Date:	2005-05-01 04:00:00
Finish Date:	10/26/2006 4:00:00 AM
Qual:	N
Current Action Lead:	St Perf

Region:	07
Site ID:	0704766
EPA ID:	MON000704766
Site Name:	SPRINGFIELD-BRANSON REGIONAL AIRPORT
NPL:	N
FF:	N
OU:	00
Action Code:	PA

SPRINGFIELD-BRANSON REGIONAL AIRPORT (Continued) **1007646581**

Action Name:	PA
SEQ:	1
Start Date:	2004-11-20 05:00:00
Finish Date:	10/1/2006 4:00:00 AM
Qual:	H
Current Action Lead:	St Perf
Region:	07
Site ID:	0704766
EPA ID:	MON000704766
Site Name:	SPRINGFIELD-BRANSON REGIONAL AIRPORT
NPL:	N
FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	2004-11-05 05:00:00
Finish Date:	11/5/2004 5:00:00 AM
Qual:	Not reported
Current Action Lead:	St Perf

C8 **SPRINGFIELD REGIONAL AIRPORT** **MO AST** **A100452649**
ENE **5000 W. KEARNEY** **N/A**
1/8-1/4 **SPRINGFIELD, MO 65802**
0.202 mi.
1069 ft. **Site 2 of 3 in cluster C**

Relative: **Lower**
Actual: **1252 ft.**

AST:

Facility ID:	1818
Facility Telephone Number:	Not reported
Products Count:	0
Cabinets Count:	0
Total number of meters:	0
AST Count:	0
UST Count:	1
Product Count:	Not reported
Prof Cat:	STA;
Facility Status:	InActive
Latitude:	Not reported
Longitude:	Not reported

C9 **AMERICAN EAGLE** **RCRA NonGen / NLR** **1015744564**
ENE **5000 W KEARNEY ST** **MOR000545269**
1/8-1/4 **SPRINGFIELD, MO 65803**
0.202 mi.
1069 ft. **Site 3 of 3 in cluster C**

Relative: **Lower**
Actual: **1252 ft.**

RCRA NonGen / NLR:

Date form received by agency:	09/21/2012
Facility name:	AMERICAN EAGLE
Facility address:	5000 W KEARNEY ST SPRINGFIELD, MO 65803-9575
EPA ID:	MOR000545269
Mailing address:	4333 AMON CARTER BLVD MD5285

AMERICAN EAGLE (Continued) **1015744564**

FT WORTH, TX 76155-2664
Contact: DAVID KORN
Contact address: 4333 AMON CARTER BLVD MD5285
FT WORTH, TX 76155-2664
Contact country: US
Contact telephone: 417-862-1044
Contact email: Not reported
EPA Region: 07
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: SIMMONS AIRLINES INC
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 09/21/2012
Owner/Op end date: Not reported

Owner/operator name: SIMMONS AIRLINES INC
Owner/operator address: Not reported
Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 09/21/2012
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

10
SE
1/8-1/4
0.235 mi.
1242 ft.

SPRINGFIELD REGIONAL AIRPORT
REGIONAL AIRPORT
SPRINGFIELD, MO 65803

MO LUST **U001161038**
MO UST **N/A**

Relative:
Higher

Actual:
1263 ft.

LUST:

Facility ID:	ST0006560
Region:	SW - Southwest Regional Office
Lat/Long (dms):	Not reported
Spill Number:	Not reported
Release Date:	12/02/1992
Release Type:	UNDERGROUND STORAGE TANK
Date Cleanup Started:	01/19/1993
Date Cleanup Finished:	10/26/1993
Expedited:	No
Expedited Date:	Not reported
Expenditures From The American Recovery and Reinvestment Act of 2009	No
Reopened Date:	Not reported
Number Of Remediation Monitoring Wells:	0
Active:	No
Date Of NFA Letter From DNR:	**1993-10-28 00:00:00**
Date Record Meets Archive Criteria:	Not reported
Remediation ID:	R004226
Rank:	Not reported
Emergeny Response Date:	Not reported
Emergency Cleanup Start:	Not reported
Referred To DGLS for Investigation:	Not reported
Contractor Performing Clean Up:	Not reported
RBCA NFA:	No
Project Manager:	L
Next Correspondence/Update With Fac:	Not reported
Date Added:	06/30/1995
Date Record Edited:	10/17/2014
Person Adding Or Editing Record:	BULLOCK, TERESA
Facility Sent To State Archive:	Yes
Date Remediation Unit Closed The File:	Not reported
Site Affectd By Funding Level From PSTIF:	No
General Comments:	ONE 6,000-GALLON #1 DIESEL TANK REMOVED.

UST:

Facility ID:	ST0006560
Region:	SW
Easting:	464788.400
Northing:	4121445.29
Owner Of Geospatial Data:	Hazardous Waste Program
Geospatial Data Collected By:	CORBIN, M
Date GIS Data Collected:	11/03/2011
Lat/Long:	37.31847 / -93.30255
Lat/Long (dms):	Not reported

Tanks:

Owner:

Owner ID:	OW00635
Owner Name:	FAA/MICHELLE LOTT, RPMES
Owner Address:	901 LOCUST STREET
Owner City,St,Zip:	KANSAS CITY, MO 64106
Owner County Code:	Not reported
Owner Phone:	3293643

SPRINGFIELD REGIONAL AIRPORT (Continued) **U001161038**

Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	2007-05-17 00:00:00
Name of Person Editing Record:	KIRCHNER, M

Tank ID:	1
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	Not reported
Date Tank Installed:	01/01/1962
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	Not reported
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Not reported
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	05/01/1987
Date Tank Permanently Closed/ Removed:	05/01/1987
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported
Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	1987-05-01 00:00:00
Date Record Added:	06/30/1995
Date Record Edited:	08/14/2007
Person Adding/Editing Record:	LIGHT, K
Date Of NFA Letter:	Not reported
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	02/07/1991
Date Of Aprroval Letter:	Not reported
Firm Closing Tank:	PREFERRED MAINTENANCE
Date Closure Report Received:	Not reported
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	Removed prior to dept regulations.

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16547
Tank PK:	16547
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	515
Substance:	Gasoline, Including Blends
Substance Other:	Not reported
Hazardous Substance:	Not reported

SPRINGFIELD REGIONAL AIRPORT (Continued) **U001161038**

Mixture:	False
Date of Last Use:	1987-05-01 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

Owner:

Owner ID:	OW00635
Owner Name:	FAA/MICHELLE LOTT, RPMES
Owner Address:	901 LOCUST STREET
Owner City,St,Zip:	KANSAS CITY, MO 64106
Owner County Code:	Not reported
Owner Phone:	3293643
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	2007-05-17 00:00:00
Name of Person Editing Record:	KIRCHNER, M

Tank ID:	2
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	Not reported
Date Tank Installed:	01/01/1974
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	Not reported
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Not reported
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	08/01/1990
Date Tank Permanently Closed/ Removed:	07/21/1993
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported
Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995
Date Record Edited:	06/13/2001
Person Adding/Editing Record:	WILDER, B
Date Of NFA Letter:	01/31/1994
Is Tank Used For Emergency Generator:	No

SPRINGFIELD REGIONAL AIRPORT (Continued) **U001161038**

Date Closure Notice Received:	04/19/1993
Date Of Aprroval Letter:	1994-01-31 00:00:00
Firm Closing Tank:	RAYTHEON SERVICE COMPANY
Date Closure Report Received:	1994-01-28 00:00:00
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	1-515 GAL DIESEL, FAA ID #35

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16548
Tank PK:	16548
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	515
Substance:	Diesel
Substance Other:	Not reported
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1990-08-01 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	3
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

Owner:

Owner ID:	OW00635
Owner Name:	FAA/MICHELLE LOTT, RPMES
Owner Address:	901 LOCUST STREET
Owner City,St,Zip:	KANSAS CITY, MO 64106
Owner County Code:	Not reported
Owner Phone:	3293643
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	2007-05-17 00:00:00
Name of Person Editing Record:	KIRCHNER, M

Tank ID:	3
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	Not reported
Date Tank Installed:	01/01/1977
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported

SPRINGFIELD REGIONAL AIRPORT (Continued) **U001161038**

Tank Internal Protection:	Not reported	
Other Tank Internal Protection:	Not reported	
Tank Internal Protection Date:	Not reported	
Tank External Protection:	Not reported	
Other Type Tank Extrn Protec:	Not reported	
Tank External Protec Date:	Not reported	
Date Tank Last Used:	11/21/1991	
Date Tank Permanently Closed/ Removed:	11/21/1991	
Dt Tk Exp Brought InUse/Internal Tracking:		Not reported
Tank Fees Waived:	No	
Expedite Closure On Tank?:	No	
Responsible Person Expediting Closure:	Not reported	
Temporary Status Verified Date:	Not reported	
Admin Fee 585:	Not reported	
Date Administratively Closed:	Not reported	
Date Record Added:	06/30/1995	
Date Record Edited:	06/13/2001	
Person Adding/Editing Record:	WILDER, B	
Date Of NFA Letter:	02/27/1992	
Is Tank Used For Emergency Generator:	No	
Date Closure Notice Received:	09/27/1991	
Date Of Aprroval Letter:	1992-02-25 00:00:00	
Firm Closing Tank:	RAYTHEON	
Date Closure Report Received:	1992-01-07 00:00:00	
Registration End Date:	Not reported	
LockOut Flag:	No	
Comments:	Not reported	

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16549
Tank PK:	16549
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	1000
Substance:	Diesel
Substance Other:	Not reported
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1991-11-21 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

Owner:

Owner ID:	OW00635
Owner Name:	FAA/MICHELLE LOTT, RPMES
Owner Address:	901 LOCUST STREET
Owner City,St,Zip:	KANSAS CITY, MO 64106

SPRINGFIELD REGIONAL AIRPORT (Continued) **U001161038**

Owner County Code:	Not reported
Owner Phone:	3293643
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	2007-05-17 00:00:00
Name of Person Editing Record:	KIRCHNER, M

Tank ID:	4
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	Not reported
Date Tank Installed:	01/01/1978
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	Not reported
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Not reported
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	10/28/1993
Date Tank Permanently Closed/ Removed:	10/28/1993
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported
Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995
Date Record Edited:	08/10/2001
Person Adding/Editing Record:	WILDER, B
Date Of NFA Letter:	10/28/1993
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	12/04/1992
Date Of Aprroval Letter:	1993-10-28 00:00:00
Firm Closing Tank:	RAYTHEON SERVICE CO
Date Closure Report Received:	1993-10-06 00:00:00
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	1-6000 GAL DIESEL

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16550
Tank PK:	16550
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	6000
Substance:	Diesel

SPRINGFIELD REGIONAL AIRPORT (Continued) **U001161038**

Substance Other:	Not reported
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1993-10-28 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

Tank Aug 2011:

Facility Id:	ST0006560
Tank Id:	1
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0006560
Tank Id:	2
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0006560
Tank Id:	3
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported

SPRINGFIELD REGIONAL AIRPORT (Continued) **U001161038**

Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0006560
Tank Id:	4
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

11
SE
1/4-1/2
0.381 mi.
2010 ft.

FORMER AIRPORT TERMINAL PARKING LOT
N GENERAL AVIATION RD & N PLAINVIEW RD
SPRINGFIELD, MO 65803

US BROWNFIELDS **1016356812**
FINDS **N/A**

Relative:
Higher

Actual:
1273 ft.

US BROWNFIELDS:

Property Name:	FORMER AIRPORT TERMINAL PARKING LOT
Recipient Name:	R7 TBA (STAG Funded)
Grant Type:	TBA
Property Number:	1306200041
Parcel size:	3.58
Latitude:	37.244097
Longitude:	-93.380376
HCM Label:	GPS (Pseudo Range) Precise Position
Map Scale:	Not reported
Point of Reference:	Center of a Facility or Station
Highlights:	Not reported
Datum:	North American Datum of 1983
Acres Property ID:	118521
IC Data Access:	Not reported
Start Date:	Not reported
Redev Completition Date:	Not reported
Completed Date:	Not reported
Acres Cleaned Up:	Not reported
Cleanup Funding:	Not reported
Cleanup Funding Source:	Not reported
Assessment Funding:	49398

FORMER AIRPORT TERMINAL PARKING LOT (Continued) **1016356812**

Assessment Funding Source:	US EPA - TBA Funding
Redevelopment Funding:	Not reported
Redev. Funding Source:	Not reported
Redev. Funding Entity Name:	Not reported
Redevelopment Start Date:	Not reported
Assessment Funding Entity:	EPA
Cleanup Funding Entity:	Not reported
Grant Type:	N/A
Accomplishment Type:	Phase II Environmental Assessment
Accomplishment Count:	1
Cooperative Agreement Number:	n/a
Start Date:	09/11/2009 00:00:00
Ownership Entity:	Government
Completion Date:	05/11/2010 00:00:00
Current Owner:	City of Springfield
Did Owner Change:	N
Cleanup Required:	U
Video Available:	Not reported
Photo Available:	Y
Institutional Controls Required:	U
IC Category Proprietary Controls:	Not reported
IC Cat. Info. Devices:	Not reported
IC Cat. Gov. Controls:	Not reported
IC Cat. Enforcement Permit Tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Y
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y

FORMER AIRPORT TERMINAL PARKING LOT (Continued) **1016356812**

Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Y
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Surface Water:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	3.58
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	N
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
Nickel Cleaned Up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Property Description:	Airport employees parking lot since 1995, no longer utilized. Undeveloped pasture land 1940 - 1995.
Below Poverty Number:	1
Below Poverty Percent:	25.0%
Meidan Income:	7
Meidan Income Number:	1
Meidan Income Percent:	25.0%
Vacant Housing Number:	0
Vacant Housing Percent:	.0%

FORMER AIRPORT TERMINAL PARKING LOT (Continued) **1016356812**

Unemployed Number:	0
Unemployed Percent:	.0%
Property Name:	FORMER AIRPORT TERMINAL PARKING LOT
Recipient Name:	R7 TBA (STAG Funded)
Grant Type:	TBA
Property Number:	1306200041
Parcel size:	3.58
Latitude:	37.244097
Longitude:	-93.380376
HCM Label:	GPS (Pseudo Range) Precise Position
Map Scale:	Not reported
Point of Reference:	Center of a Facility or Station
Highlights:	Not reported
Datum:	North American Datum of 1983
Acres Property ID:	118521
IC Data Access:	Not reported
Start Date:	Not reported
Redev Completition Date:	Not reported
Completed Date:	Not reported
Acres Cleaned Up:	Not reported
Cleanup Funding:	Not reported
Cleanup Funding Source:	Not reported
Assessment Funding:	1
Assessment Funding Source:	Local Funding
Redevelopment Funding:	Not reported
Redev. Funding Source:	Not reported
Redev. Funding Entity Name:	Not reported
Redevelopment Start Date:	Not reported
Assessment Funding Entity:	City of Springfield
Cleanup Funding Entity:	Not reported
Grant Type:	N/A
Accomplishment Type:	Phase I Environmental Assessment
Accomplishment Count:	0
Cooperative Agreement Number:	n/a
Start Date:	04/17/2009 00:00:00
Ownership Entity:	Government
Completion Date:	07/17/2009 00:00:00
Current Owner:	City of Springfield
Did Owner Change:	N
Cleanup Required:	U
Video Available:	Not reported
Photo Available:	Y
Institutional Controls Required:	U
IC Category Proprietary Controls:	Not reported
IC Cat. Info. Devices:	Not reported
IC Cat. Gov. Controls:	Not reported
IC Cat. Enforcement Permit Tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported

FORMER AIRPORT TERMINAL PARKING LOT (Continued) **1016356812**

Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Not reported
Lead contaminant found:	Not reported
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Y
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Y
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Surface Water:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	3.58
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	N
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
Nickel Cleaned Up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported

FORMER AIRPORT TERMINAL PARKING LOT (Continued) **1016356812**

Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Property Description:	Airport employees parking lot since 1995, no longer utilized. Undeveloped pasture land 1940 - 1995.
Below Poverty Number:	1
Below Poverty Percent:	25.0%
Meidan Income:	7
Meidan Income Number:	1
Meidan Income Percent:	25.0%
Vacant Housing Number:	0
Vacant Housing Percent:	.0%
Unemployed Number:	0
Unemployed Percent:	.0%

FINDS:

Registry ID: 110042300710

Environmental Interest/Information System
US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES) is an federal online database for Brownfields Grantees to electronically submit data directly to EPA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

D12 **LITTON SYSTEMS, INC.** **MO SHWS** **S105568424**
ESE **4811 WEST KEARNEY ST.** **MO SPILLS** **N/A**
1/4-1/2 **SPRINGFIELD, MO 65803** **MO SMARS**
0.435 mi.
2296 ft. **Site 1 of 2 in cluster D**

Relative:
Higher

Actual:
1279 ft.

Missouri Hazardous Waste:

Category Name:	Consent Agreement Sites
Category Desc:	Sites in this category are not listed on the Registry: Registry listing has been appealed and a consent agreement for cleanup has been signed.
Site Class:	Not reported
Owner Name:	Interconnect Technologies Div, Litton Systems, Inc
Owner Address:	4811 West Kearney Street
Owner City,St,Zip:	Springfield, MO 65801-0847
Action Date:	07/29/1993
Contamination:	1,1,1-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene,

LITTON SYSTEMS, INC. (Continued) **S105568424**

1,2,4-Trichlorobenzene, 2-Methylnaphthalene, Acenaphthene, Acenaphthylene, Anthracene, Arsenic, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(ghi)perylene, Benzo(k)fluoranthe

Classification: Not reported
Date of Placement: Not reported
Present Property Owner: Not reported
Lead Agency: Not reported
Facility Zip: Not reported
Address Detail: Not reported
Waste Type: Not reported
Quantity: Not reported
Site Description: Not reported
Env Problems/Areas of Concern: Not reported
Remedial Action: Not reported
General Geologic/Hydrologic Setting: Not reported
Public Drinking Water Advisory: Not reported
Health Assessment: Not reported

MO SPILLS:
Facility ID: 0203280547EEG
Regional Office: SWRO
Spill Number: 0203280547EEG
Date Reported: 03/28/2002
Call Date/time: 05:47:00
Lat/Long: 37.2439994 -93.377998
UTM Zone For GPS: 15
Discovery Date: 03/28/2002
Email: False
Is This A Continuous Release To Be Monitered?: False

SMARS:
Name: LITTON SYSTEMS, INC.
Address: 4811 WEST KEARNEY ST.
City,State,Zip: SPRINGFIELD, MO 65803-9579
SM Number: 10127
CERCLIS: MOD007152903
Ownership: Superfund
Superfund Ownership: Yes
Voluntary Cleanup Ownership: No
Federal Facilities Ownership: No
Permits Ownership: No
NPL Date: Not reported
Tank Site Identification #: Not reported
Tank Remediation #: Not reported
Registry: Yes
Site Code: 3930
Other Site Code: Not reported

D13 **NORTHROP GRUMMAN GUIDANCE & ELECTRONICS COMPANY IN** **SEMS** **1015731375**
ESE **4811 W KEARNEY ST** **RCRA-CESQG** **MOD007152903**
1/4-1/2 **SPRINGFIELD, MO 65803** **NY MANIFEST**
0.435 mi.
2296 ft. **Site 2 of 2 in cluster D**

Relative:
Higher

Actual:
1279 ft.

SEMS:

Site ID:	0700873
EPA ID:	MOD007152903
Cong District:	07
FIPS Code:	29077
Latitude:	Not reported
Longitude:	Not reported
FF:	N
NPL:	Not on the NPL
Non NPL Status:	NFRAP-Site does not qualify for the NPL based on existing information

SEMS Detail:

Region:	07
Site ID:	0700873
EPA ID:	MOD007152903
Site Name:	LITTON SYSTEMS INC
NPL:	N
FF:	N
OU:	00
Action Code:	VU
Action Name:	UNARCHIVE
SEQ:	1
Start Date:	Not reported
Finish Date:	8/17/2006 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf In-Hse

Region:	07
Site ID:	0700873
EPA ID:	MOD007152903
Site Name:	LITTON SYSTEMS INC
NPL:	N
FF:	N
OU:	00
Action Code:	VS
Action Name:	ARCH SITE
SEQ:	1
Start Date:	Not reported
Finish Date:	9/29/1993 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf In-Hse

Region:	07
Site ID:	0700873
EPA ID:	MOD007152903
Site Name:	LITTON SYSTEMS INC
NPL:	N
FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1979-10-01 04:00:00
Finish Date:	10/1/1979 4:00:00 AM

NORTHROP GRUMMAN GUIDANCE & ELECTRONICS COMPANY INC (Continued) **1015731375**

Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	07
Site ID:	0700873
EPA ID:	MOD007152903
Site Name:	LITTON SYSTEMS INC
NPL:	N
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	1981-04-01 05:00:00
Finish Date:	4/1/1981 5:00:00 AM
Qual:	L
Current Action Lead:	EPA Perf
Region:	07
Site ID:	0700873
EPA ID:	MOD007152903
Site Name:	LITTON SYSTEMS INC
NPL:	N
FF:	N
OU:	00
Action Code:	SI
Action Name:	SI
SEQ:	1
Start Date:	1981-04-06 05:00:00
Finish Date:	4/6/1981 5:00:00 AM
Qual:	H
Current Action Lead:	EPA Perf
Region:	07
Site ID:	0700873
EPA ID:	MOD007152903
Site Name:	LITTON SYSTEMS INC
NPL:	N
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	2
Start Date:	1985-04-09 06:00:00
Finish Date:	8/20/1985 5:00:00 AM
Qual:	L
Current Action Lead:	St Perf
Region:	07
Site ID:	0700873
EPA ID:	MOD007152903
Site Name:	LITTON SYSTEMS INC
NPL:	N
FF:	N
OU:	00
Action Code:	SI
Action Name:	SI

NORTHROP GRUMMAN GUIDANCE & ELECTRONICS COMPANY INC (Continued) **1015731375**

SEQ: 2
Start Date: 1988-01-27 05:00:00
Finish Date: 11/19/1991 5:00:00 AM
Qual: N
Current Action Lead: St Perf

Region: 07
Site ID: 0700873
EPA ID: MOD007152903
Site Name: LITTON SYSTEMS INC
NPL: N
FF: N
OU: 00
Action Code: OO
Action Name: SITE REASS
SEQ: 1
Start Date: 2003-11-07 05:00:00
Finish Date: 10/26/2006 4:00:00 AM
Qual: N
Current Action Lead: St Perf

RCRA-CESQG:
Date form received by agency: 07/13/2015
Facility name: NORTHROP GRUMMAN GUIDANCE & ELECTRONICS COMPANY INC
Facility address: 4811 W KEARNEY ST
SPRINGFIELD, MO 65803-9579
EPA ID: MOD007152903
Mailing address: PO BOX 1693 MS 1401
BALTIMORE, MD 21203-1693
Contact: ADAM SAYLOR
Contact address: PO BOX 1693 MS 1401
BALTIMORE, MD 21203-1693
Contact country: US
Contact telephone: 410-993-7080
Contact email: ADAM.SAYLOR@NGC.COM
EPA Region: 07
Land type: Private
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: NORTHROP GRUMMAN GUIDANCE & ELECTR

NORTHROP GRUMMAN GUIDANCE & ELECTRONICS COMPANY INC (Continued) **1015731375**

Owner/operator address: 2980 FAIRVIEW PARK DR
FALLS CHURCH, VA 22042
Owner/operator country: US
Owner/operator telephone: 410-993-7080
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 05/04/2009
Owner/Op end date: Not reported

Owner/operator name: NORTHROP GRUMMAN GUIDANCE & ELECTR
Owner/operator address: 2980 FAIRVIEW PARK DR
FALLS CHURCH, VA 22042
Owner/operator country: US
Owner/operator telephone: 410-993-7080
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 05/04/2009
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Universal Waste Summary:
Waste type: Batteries
Accumulated waste on-site: Yes
Generated waste on-site: No

Waste type: Lamps
Accumulated waste on-site: Yes
Generated waste on-site: No

Waste type: Pesticides
Accumulated waste on-site: Yes
Generated waste on-site: No

Waste type: Thermostats

NORTHROP GRUMMAN GUIDANCE & ELECTRONICS COMPANY INC (Continued) **1015731375**

Accumulated waste on-site: Yes
Generated waste on-site: No

Historical Generators:

Date form received by agency: 02/17/2014
Site name: NORTHROP GRUMMAN GUIDANCE AND ELECTRONICS COMPANY, INC.
Classification: Large Quantity Generator

Date form received by agency: 02/16/2012
Site name: NORTHROP GRUMMAN GUIDANCE AND ELECTRONICS COMPANY INC
Classification: Large Quantity Generator

Date form received by agency: 02/22/2010
Site name: NORTHROP GRUMMAN GUIDANCE AND ELECTRONICS COMPANY INC
Classification: Large Quantity Generator

Date form received by agency: 05/04/2009
Site name: NORTHROP GRUMMAN GUIDANCE AND ELECTRONICS COMPANY INC
Classification: Large Quantity Generator

Date form received by agency: 02/01/2008
Site name: NORTHROP GRUMMAN GUIDANCE AND ELECTRONICS COMPANY INC
Classification: Large Quantity Generator

Date form received by agency: 10/13/2006
Site name: NORTHROP GRUMMAN LITTON SYSTEMS INC
Classification: Small Quantity Generator

Date form received by agency: 02/11/2006
Site name: LITTON SYSTEMS INC
Classification: Large Quantity Generator

Date form received by agency: 02/11/2004
Site name: NORTHRUP GRUMMAN INTERCONNECT TECHNOLOGY
Classification: Large Quantity Generator

Date form received by agency: 04/19/2002
Site name: LITTON INTERCONNECT TECHNOLOGIES PCBO
Classification: Large Quantity Generator

Date form received by agency: 01/10/2002
Site name: NORTHROP GRUMMAN INTERCONNECT TECH
Classification: Large Quantity Generator

Date form received by agency: 04/06/2001
Site name: LITTON INTERCONNECT TECHNOLOGIES PCBO
Classification: Large Quantity Generator

Date form received by agency: 02/19/2000
Site name: LITTON INTERCONNECT TECHNOLOGY
Classification: Large Quantity Generator

Date form received by agency: 09/27/1999
Site name: LITTON INTERCONNECT TECHNOLOGIES PCBO
Classification: Large Quantity Generator

Date form received by agency: 01/17/1998

NORTHROP GRUMMAN GUIDANCE & ELECTRONICS COMPANY INC (Continued) **1015731375**

Site name: LITTON SYSTEMS ADVANCED CIRCUIT
Classification: Large Quantity Generator

Date form received by agency: 01/23/1996
Site name: LITTON SYSTEMS: ADVANCED CIRCUITRY
Classification: Large Quantity Generator

Date form received by agency: 02/27/1994
Site name: LITTON SYSTEMS INC ADVANCED CIR DIV
Classification: Large Quantity Generator

Date form received by agency: 03/20/1992
Site name: LITTON SYSTEMS: ADVANCED CIRCUITRY D
Classification: Large Quantity Generator

Date form received by agency: 03/13/1992
Site name: LITTON INTERCONNECT TECHNOLOGIES PCBO
Classification: Large Quantity Generator

Date form received by agency: 02/19/1990
Site name: LITTON SYSTEMS: ADVANCED CIRCUITRY
Classification: Large Quantity Generator

Date form received by agency: 11/17/1980
Site name: LITTON INTERCONNECT TECHNOLOGIES PCBO
Classification: Not a generator, verified

Hazardous Waste Summary:

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011

NORTHROP GRUMMAN GUIDANCE & ELECTRONICS COMPANY INC (Continued) **1015731375**

. Waste name: SILVER

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS, EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC, AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

. Waste code: F007
. Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS.

. Waste code: F009
. Waste name: SPENT STRIPPING AND CLEANING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS IN WHICH CYANIDES ARE USED IN THE PROCESS.

. Waste code: LABP

NORTHROP GRUMMAN GUIDANCE & ELECTRONICS COMPANY INC (Continued) **1015731375**

. Waste name: LAB PACK

. Waste code: NONE
. Waste name: None

. Waste code: P063
. Waste name: HYDROCYANIC ACID (OR) HYDROGEN CYANIDE

. Waste code: P098
. Waste name: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

. Waste code: P106
. Waste name: SODIUM CYANIDE (OR) SODIUM CYANIDE NA(CN)

. Waste code: U135
. Waste name: HYDROGEN SULFIDE (OR) HYDROGEN SULFIDE H2S

. Waste code: U151
. Waste name: MERCURY

Facility Has Received Notices of Violations:
Regulation violated: FR - 40 CFR 265.173(a)
Area of violation: Generators - Pre-transport
Date violation determined: 12/07/2005
Date achieved compliance: 12/19/2005
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/07/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 40 CFR 232.34(c)(1)(ii)
Area of violation: Generators - Pre-transport
Date violation determined: 12/07/2005
Date achieved compliance: 12/19/2005
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/07/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 40 CFR 265.16(d)(1), (2) & (3)
Area of violation: TSD - General Facility Standards
Date violation determined: 12/07/2005
Date achieved compliance: 12/19/2005
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/07/2005
Enf. disposition status: Not reported

NORTHROP GRUMMAN GUIDANCE & ELECTRONICS COMPANY INC (Continued) **1015731375**

Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 40 CFR 262.34(c)(1)&(2)
Area of violation: Generators - Pre-transport
Date violation determined: 12/07/2005
Date achieved compliance: 12/19/2005
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/07/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 10 CSR 25-5.262(2)(B)1&2
Area of violation: Generators - Manifest
Date violation determined: 12/07/2005
Date achieved compliance: 12/19/2005
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/07/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 01/24/1995
Date achieved compliance: 03/02/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/15/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 01/24/1995
Date achieved compliance: 03/28/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/15/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

NORTHROP GRUMMAN GUIDANCE & ELECTRONICS COMPANY INC (Continued) **1015731375**

Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 01/24/1995
Date achieved compliance: 05/03/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/15/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 01/24/1995
Date achieved compliance: 03/02/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/15/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 01/24/1995
Date achieved compliance: 03/02/1995
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/15/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 01/28/1991
Date achieved compliance: 03/13/1991
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/04/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State

NORTHROP GRUMMAN GUIDANCE & ELECTRONICS COMPANY INC (Continued) **1015731375**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 04/28/1987
Date achieved compliance: 05/29/1987
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/01/1987
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 06/25/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/18/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 12/06/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 12/19/2005
Evaluation lead agency: EPA

Evaluation date: 12/06/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 12/19/2005
Evaluation lead agency: EPA

Evaluation date: 12/06/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 12/19/2005
Evaluation lead agency: EPA

Evaluation date: 08/26/1999
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/24/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

NORTHROP GRUMMAN GUIDANCE & ELECTRONICS COMPANY INC (Continued) **1015731375**

Area of violation: Generators - Manifest
Date achieved compliance: 03/02/1995
Evaluation lead agency: State

Evaluation date: 01/24/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 05/03/1995
Evaluation lead agency: State

Evaluation date: 01/24/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 03/02/1995
Evaluation lead agency: State

Evaluation date: 01/24/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 03/28/1995
Evaluation lead agency: State

Evaluation date: 01/24/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 03/02/1995
Evaluation lead agency: State

Evaluation date: 01/28/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 03/13/1991
Evaluation lead agency: State

Evaluation date: 04/28/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 05/29/1987
Evaluation lead agency: State

NY MANIFEST:
Name: LITTON SYSTEMS ADVANCED CIRCUITRY DIV
Address: 4811 W KEARNEY
City,State,Zip: SPRINGFIELD, MO 65803
Country: USA
EPA ID: MOD007152903
Facility Status: Not reported
Location Address 1: 4811 W KEARNY
Code: BP
Location Address 2: Not reported
Total Tanks: Not reported
Location City: SPRINGFIELD
Location State: MO
Location Zip: 65803
Location Zip 4: Not reported

NY MANIFEST:
EPAID: MOD007152903

NORTHROP GRUMMAN GUIDANCE & ELECTRONICS COMPANY INC (Continued) **1015731375**

Mailing Name:	LITTON SYSTEMS ADVANCED CIRCUITRY DIV
Mailing Contact:	LITTON SYSTEMS ADVANCED CIRCUITRY DIV
Mailing Address 1:	4811 W KEARNY
Mailing Address 2:	Not reported
Mailing City:	SPRINGFIELD
Mailing State:	MO
Mailing Zip:	65803
Mailing Zip 4:	Not reported
Mailing Country:	USA
Mailing Phone:	4178620751

NY MANIFEST:

Document ID:	NYB4934304
Manifest Status:	Not reported
seq:	01
Year:	1998
Trans1 State ID:	Not reported
Trans2 State ID:	Not reported
Generator Ship Date:	06/29/1998
Trans1 Recv Date:	06/29/1998
Trans2 Recv Date:	Not reported
TSD Site Recv Date:	07/07/1998
Part A Recv Date:	Not reported
Part B Recv Date:	Not reported
Generator EPA ID:	MOD007152903
Trans1 EPA ID:	NYD980769947
Trans2 EPA ID:	Not reported
TSDF ID 1:	NYD001325661
TSDF ID 2:	Not reported
Manifest Tracking Number:	Not reported
Import Indicator:	Not reported
Export Indicator:	Not reported
Discr Quantity Indicator:	Not reported
Discr Type Indicator:	Not reported
Discr Residue Indicator:	Not reported
Discr Partial Reject Indicator:	Not reported
Discr Full Reject Indicator:	Not reported
Manifest Ref Number:	Not reported
Alt Facility RCRA ID:	Not reported
Alt Facility Sign Date:	Not reported
MGMT Method Type Code:	Not reported
Waste Code:	D003 - NON-LISTED REACTIVE WASTES
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Waste Code:	Not reported
Quantity:	00010
Units:	P - Pounds
Number of Containers:	001
Container Type:	DF - Fiberboard or plastic drums (glass)
Handling Method:	R Material recovery of more than 75 percent of the total material.
Specific Gravity:	01.00

NORTHROP GRUMMAN GUIDANCE & ELECTRONICS COMPANY INC (Continued) **1015731375**

Click this hyperlink while viewing on your computer to access
-1 additional NY MANIFEST: record(s) in the EDR Site Report.

14
SSW
1/4-1/2
0.465 mi.
2457 ft.

SPRINGFIELD REGIONAL AIRPORT
5000 W KEARNEY
SPRINGFIELD, MO 65803

MO LUST **U003757011**
MO UST **N/A**
MO AST
MO NPDES
MO SMARS

Relative:
Higher

Actual:
1269 ft.

LUST:

Facility ID:	ST0006540
Region:	SW - Southwest Regional Office
Lat/Long (dms):	Not reported
Spill Number:	05031-DEM-0930
Release Date:	05/03/1991
Release Type:	UNDERGROUND STORAGE TANK
Date Cleanup Started:	05/03/1991
Date Cleanup Finished:	Not reported
Expedited:	No
Expedited Date:	Not reported
Expenditures From The American Recovery and Reinvestment Act of 2009	No
Reopened Date:	Not reported
Number Of Remediation Monitoring Wells:	14
Active:	Yes
Date Of NFA Letter From DNR:	**Not reported**
Date Record Meets Archive Criteria:	Not reported
Remediation ID:	R002324
Rank:	33
Emergeny Response Date:	Not reported
Emergency Cleanup Start:	Not reported
Referred To DGLS for Investigation:	Not reported
Contractor Performing Clean Up:	302
RBCA NFA:	No
Project Manager:	4
Next Correspondence/Update With Fac:	11/30/2018
Date Added:	06/30/1995
Date Record Edited:	08/20/2018
Person Adding Or Editing Record:	MUKHTAR, H
Facility Sent To State Archive:	No
Date Remediation Unit Closed The File:	Not reported
Site Affectd By Funding Level From PSTIF:	No
General Comments:	File LU4218 was deleted and contents placed into this file. 4/18/96 SJ Reviewed natural attenuation proposal and requested site characterization work plan. 3/12/97 MJK Approved work plan to sample all wells and to install two more. 3/10/98 MJK Requested plan for sampling wells three more times. This site is NOT related to contamination in Clear Creek Park Spring. 2/23/99 HRM Reviewed cls rpt. No chain of custody, no sample on excavated soil that was put back into pit. Letter drafted. 4/12/99 HRM reviewed response to dept. letter. Still no chain of custody documents. 5/20/99 HRM reviewed chain of custody documents. Tank closure activities complete. DNR still waiting on GW work plan asked for March 13, '98. 01/13/01 HRM Reviewed file for site ranking and sent update letter. 8/26/01 TH sent LOW 9/21 TH received update from owner. Palmerton & Parrish are new contractors. 1/25/02 TH reviewed gwm rpt., request additon mont wells. 3/21/02 TH reviewed gwm report

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

11/20/02 LJB rev site file and GW mon rpt., rpt needs cumlative data tables, memo to Gary B. for Ed G. pointing out chlorinated solvent hits. 6-2-03; LJB, rvw'd GWM progress report, hits in MWs -3, 14, 16 ,17, 23 & 25. Rpt still missing data tables, also no conclusions or recommends. 60 days for status rpt on historical soil & GW + recommends or WP. 12-17-03; LJB, rvw'd revised rpt, recommends waiting for Litton SC and "GW rule". Sent std RBCA ltr w/ draft chap 7. 60 days for response or WP. 4-1-04; LJB, Called Brad Parrish (Parrish and Palmerton), they are reviewing data and MRBCA determine how to continue from here. 9-23-04; LJB, rcv'd notification from P&P for Gary Cyr and the airport that they wish to follow old guidance, per EG March 2, 2004, letter. 3/16/09 LTA reviewed file - The most recent groundwater investigation report present in the file was submitted in August 2003. COCs were below the DTLs in all well sampled with the exception of monitoring wells MW-14, MW-16, MW-23, MW-17, and MW-25. COCs were below the Tier 1 non-residential indoor inhalation RBTLs in all samples. A complete risk assessment is needed to determine applicable receptors and associates RBTLs. Requested the RP be sent a status request. 10/31/11 JTO - drafted status request letter 5/16/13 TB Address future correspondence to Brian C Weiler, AAE. 5/30/13 TB Reviewed file. Sent status update request w/in 60 days. 6/19/13 TB Returned mail. Sent to updated address at 2700 North Airport Blvd Suite 100 Springfield, MO 65803. 8/8/13 TB Rec'v phone call from Donnie with Palmerton & Parrish. They are working on a work plan but waiting on draft and budget approval as this is a City of Springfield project; therefore, made take longer to get project going. Told him to submit a letter with explanation and I will set tracking to check for update in 30 - 60 days. 9/9/13:HM: Approved SC WP of 8/19/13 and submittal of a SC/T-1 report. 12/31/13:HM: Reviewed response of 12/23/13 and approved installtion of replacement and new monitoring wells as propsoed. 6/18/14:HM: Requested a SC report. 8/25/14:HM: Received update status letter dated August 1, 2014, that a Tier 1 RA report will be submitted by 9/1/2014. 9/15/14:HM: Requested submittal of a report. 10/27/14:HM: Reviewed T-1 report dated 10/1/14. Requested a GW monit WP and ecological risk assessment for the Ozark Cavefish. ECOLOGICAL RISK UNDER REVIEW BY JUSTIN. 1/7/15:HM: Approved WP dated 12/15/14 for four GW monit events. 3/31/15:HM: Reviewed GW moni report dated 3/16/15. Waiting for next report. 4/22/15:HM: Reviewed GW monit report dated 3/26/15. Waiting for next report. 4/29/15:HM: Reviewed ecological risk report dated 1/30/15. 6/18/15:HM: Received bedrock wells WP dated 5/27/15. Requested construction specifications and construction diagrams for the wells before review of the WP. 7/7/15:HM: Based on communication with Fish and Wildlife they agreed to use the following level for ecological risk assessment: Benzene 21 ppb Ethylbenzene 7.3 ppb Naphthalene 12.0 ppb Toluene 9.8 ppb Xylenes 13.0 ppb 7/30/15:HM:reviewed the Bedrock Wells installation Work Plan dated July 13, 2015, and the Groundwater Monitoring Report dated July 15, 2015. Waiting

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

for MGS review of the work plan. 12/4/15:HM: Received the GSP memo dated 11/6/15. Requested that the bedrcok wells installtion specfications incorporate the GSP comments. 1/25/16:HM: Reviewed GW monit report dated 1/11/16. 4/13/16:HM: Reviewed the bedrock wells isntallation report dated 3/10/16 and GW monit report dated 3/31/16. Requested a WP for add monit of the bedrock wells. . 5/10/16:HM: Approved WP dated 4/20/16 for three groundwater monitoring events for plume stability. 8/11/16:HM: Requested a report. 9/13/16:HM: Reviewed GW monit report dated 8/10/16. Waiting for next report. 12/9/16:HM: Requested a GW monit report. 12/16/16:HM: Reviewed GW monit report dated 12/2/16. Waiting for next report. 4/5/17:HM: Reviewed GW monit reprot dated 3/15/17. Requested to use the toxocolgical giudance trarget levels, codncut GW monit and submit a risk asssessment, and submit data to verfiy that contam will not reach the Ozark Cavefsih habitat as indicated in the report. 5/31/17:HM: Approved WP dated May 11, 2017, for ecolgical risk assessment. 9/12/17:HM: Requested a report. 11/6/17:HM: Reviewed GW monit report dated 10/18/17. 2/15/18:HM: Reviewed GW monit report dated 1/18/18. Waiting for next report. 5/15/18:HM: Reviewed GW monit report dated April 17, 2018. Waitng for risk assessment report. 8/20/18:HM: Reviewed ecological risk dated July 29, 2018. Waiting for review by the GSP and Justin.

UST:

Facility ID:	ST0006540
Region:	SW
Easting:	466450.634
Northing:	4121643.95
Owner Of Geospatial Data:	Hazardous Waste Program
Geospatial Data Collected By:	CON_Fortin,Joel
Date GIS Data Collected:	03/12/2014
Lat/Long:	37.240114 / -93.380284
Lat/Long (dms):	Not reported

Tanks:

Owner:

Owner ID:	OW05051
Owner Name:	SPRINGFIELD REGIONAL AIRPORT
Owner Address:	5000 W KEARNEY
Owner City,St,Zip:	SPRINGFIELD, MO 65803
Owner County Code:	77
Owner Phone:	8697231
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	1
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Meet 98 Update Requirements:	Not reported	
Date Tank Installed:	01/01/1951	
Tank Material:	Steel	
Code for Tank Material Manufacturer:	Not reported	
Code for Tank Installer:	Not reported	
Other Type Of Tank Material:	Not reported	
Tank Internal Protection:	Not reported	
Other Tank Internal Protection:	Not reported	
Tank Internal Protection Date:	Not reported	
Tank External Protection:	Not reported	
Other Type Tank Extrn Protec:	Not reported	
Tank External Protec Date:	Not reported	
Date Tank Last Used:	01/01/1993	
Date Tank Permanently Closed/ Removed:	Not reported	
Dt Tk Exp Brought InUse/Internal Tracking:		Not reported
Tank Fees Waived:	No	
Expedite Closure On Tank?:	No	
Responsible Person Expediting Closure:	Not reported	
Temporary Status Verified Date:	Not reported	
Admin Fee 585:	Not reported	
Date Administratively Closed:	Not reported	
Date Record Added:	06/30/1995	
Date Record Edited:	08/26/1996	
Person Adding/Editing Record:	N$HOEGR	
Date Of NFA Letter:	Not reported	
Is Tank Used For Emergency Generator:	No	
Date Closure Notice Received:	01/26/1994	
Date Of Aprroval Letter:	Not reported	
Firm Closing Tank:	MIDWEST ENVIRONMENTAL	
Date Closure Report Received:	Not reported	
Registration End Date:	Not reported	
LockOut Flag:	No	
Comments:	Not reported	

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16484
Tank PK:	16484
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	4000
Substance:	Gasoline, Including Blends
Substance Other:	Not reported
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1993-01-01 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Owner:

Owner ID:	OW05051
Owner Name:	SPRINGFIELD REGIONAL AIRPORT
Owner Address:	5000 W KEARNEY
Owner City,St,Zip:	SPRINGFIELD, MO 65803
Owner County Code:	77
Owner Phone:	8697231
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	10
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	Not reported
Date Tank Installed:	01/01/1968
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	Not reported
Other Tank Internal Protection:	I Lining SW1856
Tank Internal Protection Date:	Not reported
Tank External Protection:	Not reported
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	01/01/1993
Date Tank Permanently Closed/ Removed:	02/01/1994
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported
Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995
Date Record Edited:	09/25/2003
Person Adding/Editing Record:	PURVIS, K
Date Of NFA Letter:	02/01/1994
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	01/26/1994
Date Of Aprroval Letter:	Not reported
Firm Closing Tank:	MIDWEST ENVIRONMENTAL
Date Closure Report Received:	Not reported
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	Not reported

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16493

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Tank PK:	16493
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	10000
Substance:	Other
Substance Other:	AVIATION FUEL /JET
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1993-01-01 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

Owner:

Owner ID:	OW05051
Owner Name:	SPRINGFIELD REGIONAL AIRPORT
Owner Address:	5000 W KEARNEY
Owner City,St,Zip:	SPRINGFIELD, MO 65803
Owner County Code:	77
Owner Phone:	8697231
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	11
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	Not reported
Date Tank Installed:	01/01/1975
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	Not reported
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Not reported
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	01/01/1993
Date Tank Permanently Closed/ Removed:	Not reported
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	Yes
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995
Date Record Edited:	08/26/1996
Person Adding/Editing Record:	N$HOEGR
Date Of NFA Letter:	Not reported
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	04/23/1991
Date Of Aprroval Letter:	Not reported
Firm Closing Tank:	ENGINEERING SERV & SURVEY
Date Closure Report Received:	Not reported
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	PUMP AND TREAT ON GW

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16494
Tank PK:	16494
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	1000
Substance:	Gasoline, Including Blends
Substance Other:	Not reported
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1993-01-01 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

Owner:

Owner ID:	OW05051
Owner Name:	SPRINGFIELD REGIONAL AIRPORT
Owner Address:	5000 W KEARNEY
Owner City,St,Zip:	SPRINGFIELD, MO 65803
Owner County Code:	77
Owner Phone:	8697231
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	12
Tank Double Wall:	0

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Tank Type:	Below Ground	
Tank Status:	**Removed**	
Meet 98 Update Requirements:	Not reported	
Date Tank Installed:	01/01/1971	
Tank Material:	Steel	
Code for Tank Material Manufacturer:	Not reported	
Code for Tank Installer:	Not reported	
Other Type Of Tank Material:	Not reported	
Tank Internal Protection:	Not reported	
Other Tank Internal Protection:	Not reported	
Tank Internal Protection Date:	Not reported	
Tank External Protection:	Not reported	
Other Type Tank Extrn Protec:	Not reported	
Tank External Protec Date:	Not reported	
Date Tank Last Used:	01/01/1993	
Date Tank Permanently Closed/ Removed:	Not reported	
Dt Tk Exp Brought InUse/Internal Tracking:		Not reported
Tank Fees Waived:	Yes	
Expedite Closure On Tank?:	No	
Responsible Person Expediting Closure:	Not reported	
Temporary Status Verified Date:	Not reported	
Admin Fee 585:	Not reported	
Date Administratively Closed:	Not reported	
Date Record Added:	06/30/1995	
Date Record Edited:	08/26/1996	
Person Adding/Editing Record:	N$HOEGR	
Date Of NFA Letter:	Not reported	
Is Tank Used For Emergency Generator:	No	
Date Closure Notice Received:	04/23/1991	
Date Of Aprroval Letter:	Not reported	
Firm Closing Tank:	ENGINEERING SERV & SURVEY	
Date Closure Report Received:	Not reported	
Registration End Date:	Not reported	
LockOut Flag:	No	
Comments:	PUMP AND TREAT ON GW	

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16495
Tank PK:	16495
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	1000
Substance:	Diesel
Substance Other:	Not reported
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1993-01-01 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Owner:

Owner ID:	OW05051
Owner Name:	SPRINGFIELD REGIONAL AIRPORT
Owner Address:	5000 W KEARNEY
Owner City,St,Zip:	SPRINGFIELD, MO 65803
Owner County Code:	77
Owner Phone:	8697231
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	13
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	Not reported
Date Tank Installed:	01/01/1951
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	Not reported
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Not reported
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	01/01/1993
Date Tank Permanently Closed/ Removed:	02/01/1994
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported
Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995
Date Record Edited:	08/26/1996
Person Adding/Editing Record:	N$HOEGR
Date Of NFA Letter:	02/01/1994
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	01/26/1994
Date Of Aprroval Letter:	Not reported
Firm Closing Tank:	MIDWEST ENVIRONMENTAL
Date Closure Report Received:	Not reported
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	Not reported

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16496

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Tank PK:	16496
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	500
Substance:	Gasoline, Including Blends
Substance Other:	Not reported
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1993-01-01 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

Owner:

Owner ID:	OW05051
Owner Name:	SPRINGFIELD REGIONAL AIRPORT
Owner Address:	5000 W KEARNEY
Owner City,St,Zip:	SPRINGFIELD, MO 65803
Owner County Code:	77
Owner Phone:	8697231
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	14
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	Not reported
Date Tank Installed:	01/01/1973
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	Not reported
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Not reported
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	10/20/1998
Date Tank Permanently Closed/ Removed:	10/31/1998
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995
Date Record Edited:	02/20/2001
Person Adding/Editing Record:	EVERS, L
Date Of NFA Letter:	10/31/1998
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	10/23/1998
Date Of Aprroval Letter:	1998-10-31 00:00:00
Firm Closing Tank:	OWNER
Date Closure Report Received:	1998-12-29 00:00:00
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	Not reported

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16497
Tank PK:	16497
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	500
Substance:	Diesel
Substance Other:	Not reported
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1998-10-20 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

Owner:

Owner ID:	OW05051
Owner Name:	SPRINGFIELD REGIONAL AIRPORT
Owner Address:	5000 W KEARNEY
Owner City,St,Zip:	SPRINGFIELD, MO 65803
Owner County Code:	77
Owner Phone:	8697231
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	2
Tank Double Wall:	0

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Tank Type:	Below Ground	
Tank Status:	**Removed**	
Meet 98 Update Requirements:	Not reported	
Date Tank Installed:	01/01/1951	
Tank Material:	Steel	
Code for Tank Material Manufacturer:	Not reported	
Code for Tank Installer:	Not reported	
Other Type Of Tank Material:	Not reported	
Tank Internal Protection:	Not reported	
Other Tank Internal Protection:	Not reported	
Tank Internal Protection Date:	Not reported	
Tank External Protection:	Not reported	
Other Type Tank Extrn Protec:	Not reported	
Tank External Protec Date:	Not reported	
Date Tank Last Used:	01/01/1993	
Date Tank Permanently Closed/ Removed:	Not reported	
Dt Tk Exp Brought InUse/Internal Tracking:		Not reported
Tank Fees Waived:	No	
Expedite Closure On Tank?:	No	
Responsible Person Expediting Closure:	Not reported	
Temporary Status Verified Date:	Not reported	
Admin Fee 585:	Not reported	
Date Administratively Closed:	Not reported	
Date Record Added:	06/30/1995	
Date Record Edited:	08/26/1996	
Person Adding/Editing Record:	N$HOEGR	
Date Of NFA Letter:	Not reported	
Is Tank Used For Emergency Generator:	No	
Date Closure Notice Received:	01/26/1994	
Date Of Aprroval Letter:	Not reported	
Firm Closing Tank:	MIDWEST ENVIRONMENTAL	
Date Closure Report Received:	Not reported	
Registration End Date:	Not reported	
LockOut Flag:	No	
Comments:	Not reported	

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16485
Tank PK:	16485
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	4000
Substance:	Gasoline, Including Blends
Substance Other:	Not reported
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1993-01-01 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Owner:

Owner ID:	OW05051
Owner Name:	SPRINGFIELD REGIONAL AIRPORT
Owner Address:	5000 W KEARNEY
Owner City,St,Zip:	SPRINGFIELD, MO 65803
Owner County Code:	77
Owner Phone:	8697231
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	3
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	Not reported
Date Tank Installed:	01/01/1956
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	Not reported
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Not reported
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	01/01/1993
Date Tank Permanently Closed/ Removed:	02/01/1994
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported
Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995
Date Record Edited:	08/26/1996
Person Adding/Editing Record:	N$HOEGR
Date Of NFA Letter:	02/01/1994
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	01/26/1994
Date Of Aprroval Letter:	Not reported
Firm Closing Tank:	MIDWEST ENVIRONMENTAL
Date Closure Report Received:	Not reported
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	Not reported

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16486

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Tank PK:	16486
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	6000
Substance:	Gasoline, Including Blends
Substance Other:	Not reported
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1993-01-01 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

Owner:

Owner ID:	OW05051
Owner Name:	SPRINGFIELD REGIONAL AIRPORT
Owner Address:	5000 W KEARNEY
Owner City,St,Zip:	SPRINGFIELD, MO 65803
Owner County Code:	77
Owner Phone:	8697231
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	4
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	Not reported
Date Tank Installed:	01/01/1956
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	Not reported
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Not reported
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	01/01/1993
Date Tank Permanently Closed/ Removed:	02/01/1994
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995
Date Record Edited:	08/26/1996
Person Adding/Editing Record:	N$HOEGR
Date Of NFA Letter:	02/01/1994
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	01/26/1994
Date Of Aprroval Letter:	Not reported
Firm Closing Tank:	MIDWEST ENVIRONMENTAL
Date Closure Report Received:	Not reported
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	Not reported

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16487
Tank PK:	16487
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	4000
Substance:	Gasoline, Including Blends
Substance Other:	Not reported
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1993-01-01 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

Owner:

Owner ID:	OW05051
Owner Name:	SPRINGFIELD REGIONAL AIRPORT
Owner Address:	5000 W KEARNEY
Owner City,St,Zip:	SPRINGFIELD, MO 65803
Owner County Code:	77
Owner Phone:	8697231
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	5
Tank Double Wall:	0

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Tank Type:	Below Ground	
Tank Status:	**Removed**	
Meet 98 Update Requirements:	Not reported	
Date Tank Installed:	01/01/1956	
Tank Material:	Steel	
Code for Tank Material Manufacturer:	Not reported	
Code for Tank Installer:	Not reported	
Other Type Of Tank Material:	Not reported	
Tank Internal Protection:	Not reported	
Other Tank Internal Protection:	Not reported	
Tank Internal Protection Date:	Not reported	
Tank External Protection:	Not reported	
Other Type Tank Extrn Protec:	Not reported	
Tank External Protec Date:	Not reported	
Date Tank Last Used:	01/01/1993	
Date Tank Permanently Closed/ Removed:	02/01/1994	
Dt Tk Exp Brought InUse/Internal Tracking:		Not reported
Tank Fees Waived:	No	
Expedite Closure On Tank?:	No	
Responsible Person Expediting Closure:	Not reported	
Temporary Status Verified Date:	Not reported	
Admin Fee 585:	Not reported	
Date Administratively Closed:	Not reported	
Date Record Added:	06/30/1995	
Date Record Edited:	08/26/1996	
Person Adding/Editing Record:	N$HOEGR	
Date Of NFA Letter:	02/01/1994	
Is Tank Used For Emergency Generator:	No	
Date Closure Notice Received:	01/26/1994	
Date Of Aprroval Letter:	Not reported	
Firm Closing Tank:	MIDWEST ENVIRONMENTAL	
Date Closure Report Received:	Not reported	
Registration End Date:	Not reported	
LockOut Flag:	No	
Comments:	Not reported	

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16488
Tank PK:	16488
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	4000
Substance:	Gasoline, Including Blends
Substance Other:	Not reported
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1993-01-01 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Owner:

Owner ID:	OW05051
Owner Name:	SPRINGFIELD REGIONAL AIRPORT
Owner Address:	5000 W KEARNEY
Owner City,St,Zip:	SPRINGFIELD, MO 65803
Owner County Code:	77
Owner Phone:	8697231
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	6
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	Not reported
Date Tank Installed:	01/01/1966
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	Not reported
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Not reported
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	01/01/1993
Date Tank Permanently Closed/ Removed:	02/01/1994
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported
Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995
Date Record Edited:	08/26/1996
Person Adding/Editing Record:	N$HOEGR
Date Of NFA Letter:	02/01/1994
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	01/26/1994
Date Of Aprroval Letter:	Not reported
Firm Closing Tank:	MIDWEST ENVIRONMENTAL
Date Closure Report Received:	Not reported
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	Not reported

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16489

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Tank PK:	16489
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	4000
Substance:	Gasoline, Including Blends
Substance Other:	Not reported
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1993-01-01 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

Owner:

Owner ID:	OW05051
Owner Name:	SPRINGFIELD REGIONAL AIRPORT
Owner Address:	5000 W KEARNEY
Owner City,St,Zip:	SPRINGFIELD, MO 65803
Owner County Code:	77
Owner Phone:	8697231
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	7
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	Not reported
Date Tank Installed:	01/01/1966
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	Not reported
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Not reported
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	01/01/1993
Date Tank Permanently Closed/ Removed:	02/01/1994
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995
Date Record Edited:	08/26/1996
Person Adding/Editing Record:	N$HOEGR
Date Of NFA Letter:	02/01/1994
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	01/26/1994
Date Of Aprroval Letter:	Not reported
Firm Closing Tank:	MIDWEST ENVIRONMENTAL
Date Closure Report Received:	Not reported
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	Not reported

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16490
Tank PK:	16490
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	4000
Substance:	Gasoline, Including Blends
Substance Other:	Not reported
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1993-01-01 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

Owner:

Owner ID:	OW05051
Owner Name:	SPRINGFIELD REGIONAL AIRPORT
Owner Address:	5000 W KEARNEY
Owner City,St,Zip:	SPRINGFIELD, MO 65803
Owner County Code:	77
Owner Phone:	8697231
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	8
Tank Double Wall:	0

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Tank Type:	Below Ground	
Tank Status:	**Removed**	
Meet 98 Update Requirements:	Not reported	
Date Tank Installed:	01/01/1959	
Tank Material:	Steel	
Code for Tank Material Manufacturer:	Not reported	
Code for Tank Installer:	Not reported	
Other Type Of Tank Material:	Not reported	
Tank Internal Protection:	Not reported	
Other Tank Internal Protection:	I Lining SW1856	
Tank Internal Protection Date:	Not reported	
Tank External Protection:	Not reported	
Other Type Tank Extrn Protec:	Not reported	
Tank External Protec Date:	Not reported	
Date Tank Last Used:	01/01/1993	
Date Tank Permanently Closed/ Removed:	02/01/1994	
Dt Tk Exp Brought InUse/Internal Tracking:		Not reported
Tank Fees Waived:	No	
Expedite Closure On Tank?:	No	
Responsible Person Expediting Closure:	Not reported	
Temporary Status Verified Date:	Not reported	
Admin Fee 585:	Not reported	
Date Administratively Closed:	Not reported	
Date Record Added:	06/30/1995	
Date Record Edited:	09/25/2003	
Person Adding/Editing Record:	PURVIS, K	
Date Of NFA Letter:	02/01/1994	
Is Tank Used For Emergency Generator:	No	
Date Closure Notice Received:	01/26/1994	
Date Of Aprroval Letter:	Not reported	
Firm Closing Tank:	MIDWEST ENVIRONMENTAL	
Date Closure Report Received:	Not reported	
Registration End Date:	Not reported	
LockOut Flag:	No	
Comments:	Not reported	

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16491
Tank PK:	16491
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	10000
Substance:	Other
Substance Other:	AVIATION FUEL /JET
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1993-01-01 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Owner:

Owner ID:	OW05051
Owner Name:	SPRINGFIELD REGIONAL AIRPORT
Owner Address:	5000 W KEARNEY
Owner City,St,Zip:	SPRINGFIELD, MO 65803
Owner County Code:	77
Owner Phone:	8697231
Mail Was Not Deliverable:	No
Is Owner Active?:	No
Date Registration Received:	Not reported
Date Record Added:	1995-06-30 00:00:00
Date Record Edited:	Not reported
Name of Person Editing Record:	Not reported

Tank ID:	9
Tank Double Wall:	0
Tank Type:	Below Ground
Tank Status:	**Removed**
Meet 98 Update Requirements:	Not reported
Date Tank Installed:	01/01/1968
Tank Material:	Steel
Code for Tank Material Manufacturer:	Not reported
Code for Tank Installer:	Not reported
Other Type Of Tank Material:	Not reported
Tank Internal Protection:	Not reported
Other Tank Internal Protection:	Not reported
Tank Internal Protection Date:	Not reported
Tank External Protection:	Not reported
Other Type Tank Extrn Protec:	Not reported
Tank External Protec Date:	Not reported
Date Tank Last Used:	01/01/1993
Date Tank Permanently Closed/ Removed:	02/01/1994
Dt Tk Exp Brought InUse/Internal Tracking:	Not reported
Tank Fees Waived:	No
Expedite Closure On Tank?:	No
Responsible Person Expediting Closure:	Not reported
Temporary Status Verified Date:	Not reported
Admin Fee 585:	Not reported
Date Administratively Closed:	Not reported
Date Record Added:	06/30/1995
Date Record Edited:	09/25/2003
Person Adding/Editing Record:	PURVIS, K
Date Of NFA Letter:	02/01/1994
Is Tank Used For Emergency Generator:	No
Date Closure Notice Received:	01/26/1994
Date Of Aprroval Letter:	Not reported
Firm Closing Tank:	MIDWEST ENVIRONMENTAL
Date Closure Report Received:	Not reported
Registration End Date:	Not reported
LockOut Flag:	No
Comments:	Not reported

Tank Compartment:

Tanks Use:	False
Compartment No:	1
Tank Compartment PK:	16492

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Tank PK:	16492
Case Number:	Not reported
Compartment Status:	Removed
Compartment Temp Verified Dt:	Not reported
Capacity:	10000
Substance:	Other
Substance Other:	AVIATION FUEL /JET
Hazardous Substance:	Not reported
Mixture:	False
Date of Last Use:	1993-01-01 00:00:00
Pipe Installation Date:	Not reported
Pipe System:	Not reported
Pipe Material:	1
Pipe Material Other:	Not reported
Pipe Protection:	Not reported
Pipe Protection Date:	Not reported
Pipe Double Wall:	0
Spill Protection:	False

Tank Aug 2011:

Facility Id:	ST0006540
Tank Id:	1
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0006540
Tank Id:	2
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Facility Id:	ST0006540
Tank Id:	3
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0006540
Tank Id:	4
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0006540
Tank Id:	5
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0006540
Tank Id:	6
Site Usage:	Not reported

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0006540
Tank Id:	7
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0006540
Tank Id:	8
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0006540
Tank Id:	9
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0006540
Tank Id:	10
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0006540
Tank Id:	11
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

Facility Id:	ST0006540
Tank Id:	12
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No
Facility Id:	ST0006540
Tank Id:	13
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No
Facility Id:	ST0006540
Tank Id:	14
Site Usage:	Not reported
Risk Type:	Not reported
Soil Type:	Not reported
GW Flow:	Not reported
Offsite Impact:	Not reported
Free Product:	Not reported
Drinking Water:	Not reported
Closed Under:	Not reported
No Drinking Wells:	No
No Buildings:	No
Vapor Barrier:	0
St Louis Mo:	No
Special Well Area:	No
Surface Cap:	No
No Excavation:	No

AST:

Facility ID:	1882
Facility Telephone Number:	417-868-0598
Products Count:	6
Cabinets Count:	4
Total number of meters:	8
AST Count:	13
UST Count:	0
Product Count:	87;2-D;
Prof Cat:	AIR;
Facility Status:	Active
Latitude:	Not reported

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

Longitude: Not reported

NPDES:

Permit Number:	MORA04303
Permit Status:	Effective
SIC:	1629
SIC Description:	HEAVY CONSTRUCTION
Issue Date:	01/09/2014
Effective Date:	01/09/2014
Category Description:	Not reported
Treatment Type Description:	Storm Water
Facility Telephone:	Not reported
Owner Name:	CITY OF SPRINGFIELD
Owner Address:	840 N BOONVILLE
Owner Address 2:	Not reported
Owner City:	SPRINGFIELD
Owner State:	MO
Owner Zip:	65802
Permit Type 100:	Not reported
Major 10:	Not reported
Region 10:	Not reported
Issuing Authority 10:	Not reported
Permit Action 100:	Not reported
Date Notification 25:	Not reported
Region Decode:	Not reported
Iss Auth Decode:	Not reported

Permit Number:	MO0134830
Permit Status:	Effective
SIC:	Not reported
SIC Description:	Not reported
Issue Date:	06/16/2014
Effective Date:	07/01/2014
Category Description:	Not reported
Treatment Type Description:	Storm Water
Facility Telephone:	Not reported
Owner Name:	CITY OF SPRINGFIELD
Owner Address:	840 N BOONVILLE
Owner Address 2:	Not reported
Owner City:	SPRINGFIELD
Owner State:	MO
Owner Zip:	65802
Permit Type 100:	Not reported
Major 10:	Not reported
Region 10:	Not reported
Issuing Authority 10:	Not reported
Permit Action 100:	Not reported
Date Notification 25:	Not reported
Region Decode:	Not reported
Iss Auth Decode:	Not reported

SMARS:

Name:	SPRINGFIELD BRANSON REGIONAL AIRPORT
Address:	5000 W. KEARNEY
City,State,Zip:	SPRINGFIELD, MO 65803
SM Number:	10987

SPRINGFIELD REGIONAL AIRPORT (Continued) **U003757011**

CERCLIS:	Not reported
Ownership:	Superfund
Superfund Ownership:	Yes
Voluntary Cleanup Ownership:	No
Federal Facilities Ownership:	No
Permits Ownership:	No
NPL Date:	Not reported
Tank Site Identification #:	Not reported
Tank Remediation #:	Not reported
Registry:	No
Site Code:	Not reported
Other Site Code:	Not reported

15
SE
1/4-1/2
0.467 mi.
2467 ft.

FORMER NATIONAL AIRPORT TERMINAL **US BROWNFIELDS** **1016356814**
N GENERAL AVIATION AVE & W KEARNEY BLVD **FINDS** **N/A**
SPRINGFIELD, MO 65803

Relative:
Higher

Actual:
1275 ft.

US BROWNFIELDS:

Property Name:	FORMER NATIONAL AIRPORT TERMINAL
Recipient Name:	R7 TBA (STAG Funded)
Grant Type:	TBA
Property Number:	1306200041
Parcel size:	29
Latitude:	37.242011
Longitude:	-93.381183
HCM Label:	GPS (Pseudo Range) Precise Position
Map Scale:	Not reported
Point of Reference:	Center of a Facility or Station
Highlights:	Not reported
Datum:	North American Datum of 1983
Acres Property ID:	118681
IC Data Access:	Not reported
Start Date:	Not reported
Redev Completition Date:	Not reported
Completed Date:	Not reported
Acres Cleaned Up:	Not reported
Cleanup Funding:	Not reported
Cleanup Funding Source:	Not reported
Assessment Funding:	49380
Assessment Funding Source:	US EPA - TBA Funding
Redevelopment Funding:	Not reported
Redev. Funding Source:	Not reported
Redev. Funding Entity Name:	Not reported
Redevelopment Start Date:	Not reported
Assessment Funding Entity:	EPA
Cleanup Funding Entity:	Not reported
Grant Type:	N/A
Accomplishment Type:	Phase II Environmental Assessment
Accomplishment Count:	1
Cooperative Agreement Number:	n/a
Start Date:	09/11/2009 00:00:00
Ownership Entity:	Government
Completion Date:	05/11/2010 00:00:00
Current Owner:	City of Springfield
Did Owner Change:	N
Cleanup Required:	U

FORMER NATIONAL AIRPORT TERMINAL (Continued) **1016356814**

Video Available:	Not reported
Photo Available:	Y
Institutional Controls Required:	U
IC Category Proprietary Controls:	Not reported
IC Cat. Info. Devices:	Not reported
IC Cat. Gov. Controls:	Not reported
IC Cat. Enforcement Permit Tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported
PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Y
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Y
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Surface Water:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	29
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	N

FORMER NATIONAL AIRPORT TERMINAL (Continued) **1016356814**

Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
Nickel Cleaned Up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Property Description:	Currently contains asphalt parking areas, raods, grassed areas, three buildings and a tarmac. Aircraft maintenance 1972-1999, farmland prior to 1940.
Below Poverty Number:	1
Below Poverty Percent:	25.0%
Meidan Income:	7
Meidan Income Number:	1
Meidan Income Percent:	25.0%
Vacant Housing Number:	0
Vacant Housing Percent:	.0%
Unemployed Number:	0
Unemployed Percent:	.0%
Property Name:	FORMER NATIONAL AIRPORT TERMINAL
Recipient Name:	R7 TBA (STAG Funded)
Grant Type:	TBA
Property Number:	1306200041
Parcel size:	29
Latitude:	37.242011
Longitude:	-93.381183
HCM Label:	GPS (Pseudo Range) Precise Position
Map Scale:	Not reported
Point of Reference:	Center of a Facility or Station
Highlights:	Not reported
Datum:	North American Datum of 1983
Acres Property ID:	118681

FORMER NATIONAL AIRPORT TERMINAL (Continued) **1016356814**

IC Data Access:	Not reported
Start Date:	Not reported
Redev Completition Date:	Not reported
Completed Date:	Not reported
Acres Cleaned Up:	Not reported
Cleanup Funding:	Not reported
Cleanup Funding Source:	Not reported
Assessment Funding:	1
Assessment Funding Source:	Local Funding
Redevelopment Funding:	Not reported
Redev. Funding Source:	Not reported
Redev. Funding Entity Name:	Not reported
Redevelopment Start Date:	Not reported
Assessment Funding Entity:	City of Springfield
Cleanup Funding Entity:	Not reported
Grant Type:	N/A
Accomplishment Type:	Phase I Environmental Assessment
Accomplishment Count:	0
Cooperative Agreement Number:	n/a
Start Date:	04/17/2009 00:00:00
Ownership Entity:	Government
Completion Date:	07/17/2009 00:00:00
Current Owner:	City of Springfield
Did Owner Change:	N
Cleanup Required:	U
Video Available:	Not reported
Photo Available:	Y
Institutional Controls Required:	U
IC Category Proprietary Controls:	Not reported
IC Cat. Info. Devices:	Not reported
IC Cat. Gov. Controls:	Not reported
IC Cat. Enforcement Permit Tools:	Not reported
IC in place date:	Not reported
IC in place:	Not reported
State/tribal program date:	Not reported
State/tribal program ID:	Not reported
State/tribal NFA date:	Not reported
Air contaminated:	Not reported
Air cleaned:	Not reported
Asbestos found:	Not reported
Asbestos cleaned:	Not reported
Controled substance found:	Not reported
Controled substance cleaned:	Not reported
Drinking water affected:	Not reported
Drinking water cleaned:	Not reported
Groundwater affected:	Y
Groundwater cleaned:	Not reported
Lead contaminant found:	Y
Lead cleaned up:	Not reported
No media affected:	Not reported
Unknown media affected:	Not reported
Other cleaned up:	Not reported
Other metals found:	Not reported
Other metals cleaned:	Not reported
Other contaminants found:	Not reported
Other contams found description:	Not reported
PAHs found:	Not reported

FORMER NATIONAL AIRPORT TERMINAL (Continued) **1016356814**

PAHs cleaned up:	Not reported
PCBs found:	Not reported
PCBs cleaned up:	Not reported
Petro products found:	Y
Petro products cleaned:	Not reported
Sediments found:	Not reported
Sediments cleaned:	Not reported
Soil affected:	Y
Soil cleaned up:	Not reported
Surface water cleaned:	Not reported
VOCs found:	Y
VOCs cleaned:	Not reported
Cleanup other description:	Not reported
Num. of cleanup and re-dev. jobs:	Not reported
Past use greenspace acreage:	Not reported
Past use residential acreage:	Not reported
Surface Water:	Not reported
Past use commercial acreage:	Not reported
Past use industrial acreage:	29
Future use greenspace acreage:	Not reported
Future use residential acreage:	Not reported
Future use commercial acreage:	Not reported
Future use industrial acreage:	Not reported
Greenspace acreage and type:	Not reported
Superfund Fed. landowner flag:	N
Arsenic cleaned up:	Not reported
Cadmium cleaned up:	Not reported
Chromium cleaned up:	Not reported
Copper cleaned up:	Not reported
Iron cleaned up:	Not reported
mercury cleaned up:	Not reported
Nickel Cleaned Up:	Not reported
No clean up:	Not reported
Pesticides cleaned up:	Not reported
Selenium cleaned up:	Not reported
SVOCs cleaned up:	Not reported
Unknown clean up:	Not reported
Arsenic contaminant found:	Not reported
Cadmium contaminant found:	Not reported
Chromium contaminant found:	Not reported
Copper contaminant found:	Not reported
Iron contaminant found:	Not reported
Mercury contaminant found:	Not reported
Nickel contaminant found:	Not reported
No contaminant found:	Not reported
Pesticides contaminant found:	Not reported
Selenium contaminant found:	Not reported
SVOCs contaminant found:	Not reported
Unknown contaminant found:	Not reported
Future Use: Multistory	Not reported
Media affected Bluiding Material:	Not reported
Media affected indoor air:	Not reported
Building material media cleaned up:	Not reported
Indoor air media cleaned up:	Not reported
Unknown media cleaned up:	Not reported
Past Use: Multistory	Not reported
Property Description:	Currently contains asphalt parking areas, raods, grassed areas, three

FORMER NATIONAL AIRPORT TERMINAL (Continued) **1016356814**

buildings and a tarmac. Aircraft maintenance 1972-1999, farmland prior to 1940.

Below Poverty Number:	1
Below Poverty Percent:	25.0%
Meidan Income:	7
Meidan Income Number:	1
Meidan Income Percent:	25.0%
Vacant Housing Number:	0
Vacant Housing Percent:	.0%
Unemployed Number:	0
Unemployed Percent:	.0%

FINDS:

Registry ID: 110042300738

Environmental Interest/Information System

US EPA Assessment, Cleanup and Redevelopment Exchange System (ACRES) is an federal online database for Brownfields Grantees to electronically submit data directly to EPA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
		NO SITES FOUND			

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/03/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 913-551-7003
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 913-551-7003
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 913-551-7003
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 913-551-7003
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/22/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 41

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/10/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 01/31/2019
Date Data Arrived at EDR: 02/04/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/29/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 01/31/2019
Date Data Arrived at EDR: 02/04/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/29/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 36

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

HWS DETAIL: Registry Annual Report

Each site is described in detail in this annual report and includeds the following information: a general description of the site; a summary of any significant environmental problems at and near the site; a summary of any serious health problems in the immediate vicinity of the site; the status of any testing, monitoring or remedial actions in progress or recommended by the department.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 75

Source: Department of Natural Resources
Telephone: 573-751-3176
Last EDR Contact: 05/31/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Annually

SHWS: Registry of Confirmed Abandoned or Uncontrolled Hazardous Waste Disposal Sites

State Hazardous Waste Sites. State hazardous waste site records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. Available information varies by state.

Date of Government Version: 07/02/2018
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 10/15/2018
Number of Days to Update: 34

Source: Department of Natural Resources
Telephone: 573-751-1990
Last EDR Contact: 06/10/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Annually

State and tribal landfill and/or solid waste disposal site lists

SWF/LF: Solid Waste Facility List

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/15/2018
Date Data Arrived at EDR: 07/03/2018
Date Made Active in Reports: 08/06/2018
Number of Days to Update: 34

Source: Department of Natural Resources
Telephone: 573-751-5401
Last EDR Contact: 05/13/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Varies

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tanks

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 03/07/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 05/13/2019
Number of Days to Update: 61

Source: Department of Natural Resources
Telephone: 573-751-0135
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

LAST: Leaking Aboveground Storage Tanks
A listing of leaking aboveground storage tanks.

Date of Government Version: 03/07/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 05/13/2019
Number of Days to Update: 61
Source: Department of Natural Resources
Telephone: 573-751-6822
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/17/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/10/2018
Date Data Arrived at EDR: 03/08/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 54
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/16/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 11/01/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 09/24/2018
Date Data Arrived at EDR: 03/12/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 50
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/13/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/12/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/10/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Varies

UST: Petroleum Storage Tanks
Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 03/07/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 05/13/2019
Number of Days to Update: 61

Source: Department of Natural Resources
Telephone: 573-751-0135
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

AST: Aboveground Petroleum Storage Tanks
Registered Aboveground Storage Tanks.

Date of Government Version: 11/30/2018
Date Data Arrived at EDR: 12/04/2018
Date Made Active in Reports: 01/16/2019
Number of Days to Update: 43

Source: Department of Agriculture
Telephone: 573-751-7062
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Semi-Annually

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 11/01/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 11/07/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/16/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/17/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/10/2018
Date Data Arrived at EDR: 03/08/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 54

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 09/24/2018
Date Data Arrived at EDR: 03/12/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 50

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/12/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/03/2018
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 55

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

AUL: Sites with Controls

Activity and use limitations include both engineering controls and institutional controls.

Date of Government Version: 04/02/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 65

Source: Department of Natural Resources
Telephone: 573-751-3176
Last EDR Contact: 05/14/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/20/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Sites Participating in the Voluntary Cleanup Program

Sites participating in the Voluntary Cleanup Program.

Date of Government Version: 04/02/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 65

Source: Department of Natural Resources
Telephone: 573-526-8913
Last EDR Contact: 05/14/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Brownfields Site List

Brownfields are sites where redevelopment and reuse is hampered by known or suspected contamination with hazardous substances. While many brownfield sites are minimally contaminated, potential environmental liability can be a problem for owners, operators, prospective buyers and financial institutions. Because of the large number of these sites, their economic impact especially in heavily industrial areas is substantial.

Date of Government Version: 04/02/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/18/2019
Number of Days to Update: 65

Source: Department of Natural Resources
Telephone: 573-526-8913
Last EDR Contact: 05/14/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/17/2018
Date Data Arrived at EDR: 12/18/2018
Date Made Active in Reports: 01/11/2019
Number of Days to Update: 24

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/04/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

HIST LF: Solid Waste Facility Database List

This database contains detailed information per site. It is no longer maintained by the Department of Natural Resources. For current information on solid waste facilities/landfills see the SWF/LF database.

Date of Government Version: 04/12/2005
Date Data Arrived at EDR: 07/19/2006
Date Made Active in Reports: 08/18/2006
Number of Days to Update: 30

Source: Department of Natural Resources
Telephone: 573-751-5401
Last EDR Contact: 01/12/2009
Next Scheduled EDR Contact: 04/13/2009
Data Release Frequency: No Update Planned

SWRCY: Solid Waste Recycling Facilities

A listing of recycling center locations.

Date of Government Version: 10/30/2018
Date Data Arrived at EDR: 11/01/2018
Date Made Active in Reports: 11/20/2018
Number of Days to Update: 19

Source: Department of Natural Resources
Telephone: 573-526-3944
Last EDR Contact: 05/28/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/23/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/24/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 50

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: No Update Planned

CDL: Environmental Emergency Response System

Incidents reported to the Department of Natural Resources where drug lab materials were involved.

Date of Government Version: 03/08/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 05/13/2019
Number of Days to Update: 61

Source: Department of Natural Resources
Telephone: 573-751-3443
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

DEL SHWS: Registry Sites Withdrawn or Deleted

A list of sites that were removed from the Registry or for which Registry action was suspended due to cleanup.

Date of Government Version: 07/02/2018
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 10/15/2018
Number of Days to Update: 34

Source: Department of Natural Resources
Telephone: 573-522-3710
Last EDR Contact: 06/10/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Annually

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/24/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 50

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Quarterly

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/02/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 49

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

SPILLS: Environmental Response Tracking Database

Releases of hazardous substances reported to the department's Environmental Emergency Response (EER) section.

Date of Government Version: 03/08/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 05/13/2019
Number of Days to Update: 61

Source: Department of Natural Resources
Telephone: 573-526-3349
Last EDR Contact: 06/12/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/27/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 913-551-7003
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 03/07/2019
Date Data Arrived at EDR: 04/03/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 50

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/21/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/09/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/10/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/13/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 05/07/2019
Number of Days to Update: 42

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/06/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/10/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/18/2019
Next Scheduled EDR Contact: 09/30/2019
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/24/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 07/01/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/25/2019
Date Data Arrived at EDR: 05/02/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 07/01/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2019
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 34

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/12/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 07/03/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 06/07/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/07/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/02/2019
Date Data Arrived at EDR: 04/02/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 42
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/01/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 51
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 30

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 07/08/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/10/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/02/2019
Next Scheduled EDR Contact: 08/19/2019
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 07/01/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/27/2018
Date Data Arrived at EDR: 02/27/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 33

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/29/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/31/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/31/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/27/2019
Date Data Arrived at EDR: 03/28/2019
Date Made Active in Reports: 05/01/2019
Number of Days to Update: 34

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/19/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/15/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 03/15/2019
Number of Days to Update: 10

Source: EPA
Telephone: (913) 551-7003
Last EDR Contact: 06/05/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 74

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 07/15/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 04/07/2019
Date Data Arrived at EDR: 04/09/2019
Date Made Active in Reports: 05/23/2019
Number of Days to Update: 44

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 07/09/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/09/2019
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 02/21/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 39

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/21/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Quarterly

AIRS: Permit Facility Listing

A listing of Air Pollution Control Program permits.

Date of Government Version: 11/21/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/17/2019
Number of Days to Update: 37

Source: Department of Natural Resources
Telephone: 573-751-4817
Last EDR Contact: 06/14/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Varies

ASBESTOS: Asbestos Notification Listing

The department requires notification of demolitions and abatement projects involving regulated structures at least 10 working days before crews begin a project.

Date of Government Version: 04/08/2019
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/15/2019
Number of Days to Update: 35

Source: Department of Natural Resources
Telephone: 573-751-4817
Last EDR Contact: 07/09/2019
Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Sites

A listing of power plants with coal ash ponds.

Date of Government Version: 01/03/2018
Date Data Arrived at EDR: 02/01/2018
Date Made Active in Reports: 03/22/2018
Number of Days to Update: 49

Source: Department of Natural Resources
Telephone: 573-526-1825
Last EDR Contact: 06/26/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: No Update Planned

DRYCLEANERS: Drycleaners in Missouri Listing

A listing of drycleaner facilities that are potentially eligible for reimbursement of department approved cleanup costs under the Drycleaning Environmental Response Trust Fund.

Date of Government Version: 11/30/2017
Date Data Arrived at EDR: 12/13/2017
Date Made Active in Reports: 01/18/2018
Number of Days to Update: 36

Source: Department of Natural Resources
Telephone: 573-526-8913
Last EDR Contact: 06/14/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 61

Source: Department of Natural Resources
Telephone: 573-751-3553
Last EDR Contact: 06/03/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Annually

Financial Assurance 2: Financial Assurance Information Listing

Financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay

Date of Government Version: 10/31/2018
Date Data Arrived at EDR: 12/07/2018
Date Made Active in Reports: 01/02/2019
Number of Days to Update: 26

Source: Department of Natural Resources
Telephone: 573-751-5401
Last EDR Contact: 06/05/2019
Next Scheduled EDR Contact: 09/16/2019
Data Release Frequency: Quarterly

MINES: Industrial Mineral Mines Database
This data set contains names, locations and additional data for active Industrial Mineral Mines permitted with the Missouri Department of Natural Resources, Division of Environmental Quality, Land Reclamation Program. Industrial Mineral Mines permitted are rock quarries, clay pits, sand and gravel pits, or in-stream sand and gravel operations.

Date of Government Version: 01/18/2019
Date Data Arrived at EDR: 04/17/2019
Date Made Active in Reports: 05/15/2019
Number of Days to Update: 28
Source: Department of Natural Resources
Telephone: 573-751-4041
Last EDR Contact: 04/17/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

NPDES: Permitted Facility Listing
A listing of permitted facilities from the Water Pollution Branch.

Date of Government Version: 04/01/2019
Date Data Arrived at EDR: 04/03/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 41
Source: Department of Natural Resources
Telephone: 573-751-7023
Last EDR Contact: 07/15/2019
Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

RRC: Certified Hazardous Waste Resource Recovery Facilities
Facilities that take hazardous waste material, either from on-site or off-site, and make it re-usable.

Date of Government Version: 03/12/2019
Date Data Arrived at EDR: 05/01/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 77
Source: Department of Natural Resources
Telephone: 573-751-3176
Last EDR Contact: 06/10/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Annually

SMARS: Site Management and Reporting System
SMARS currently houses information for Superfund, Federal Facility, Brownfields Voluntary Cleanup Program and Missouri's other state response programs.

Date of Government Version: 04/02/2019
Date Data Arrived at EDR: 04/30/2019
Date Made Active in Reports: 06/25/2019
Number of Days to Update: 56
Source: Department of Natural Resources
Telephone: 573-751-3043
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

UIC: Underground Injection Wells Database
A listing of underground injection well locations. The UIC Program is responsible for regulating the construction, operation, permitting, and closure of injection wells that place fluids underground for storage or disposal.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 02/21/2019
Date Made Active in Reports: 03/14/2019
Number of Days to Update: 21
Source: Department of Natural Resources
Telephone: 573-368-2183
Last EDR Contact: 05/24/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Semi-Annually

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Natural Resources in Missouri.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 186

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Natural Resources in Missouri.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/15/2014
Number of Days to Update: 198

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Natural Resources in Missouri.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 186

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 02/11/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/04/2019
Number of Days to Update: 20

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/14/2019
Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: No Update Planned

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 05/01/2019
Date Made Active in Reports: 06/21/2019
Number of Days to Update: 51

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/01/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/27/2018
Number of Days to Update: 35

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/15/2019
Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/17/2019
Next Scheduled EDR Contact: 09/02/2019
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/15/2018
Date Made Active in Reports: 07/09/2018
Number of Days to Update: 24

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/10/2019
Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Child Care Facilities

Source: Department of Health & Senior Services
Telephone: 573-751-2450

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: National Wetland Inventory of Missouri
Source: Department of Natural Resources
Telephone: 573-751-5110

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

SPRINGFIELD AVCRAD
SPRINGFIELD, MO
SPRINGFIELD, MO 65803

TARGET PROPERTY COORDINATES

Latitude (North):	37.249562 - 37° 14' 58.42''
Longitude (West):	93.390173 - 93° 23' 24.62''
Universal Tranverse Mercator:	Zone 15
UTM X (Meters):	465396.8
UTM Y (Meters):	4122425.2
Elevation:	1254 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	6726419 BROOKLINE, MO
Version Date:	2015
Northeast Map:	6727092 EBENEZER, MO
Version Date:	2015
Southeast Map:	6727754 SPRINGFIELD, MO
Version Date:	2015
Northwest Map:	6726493 WILLARD, MO
Version Date:	2015

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

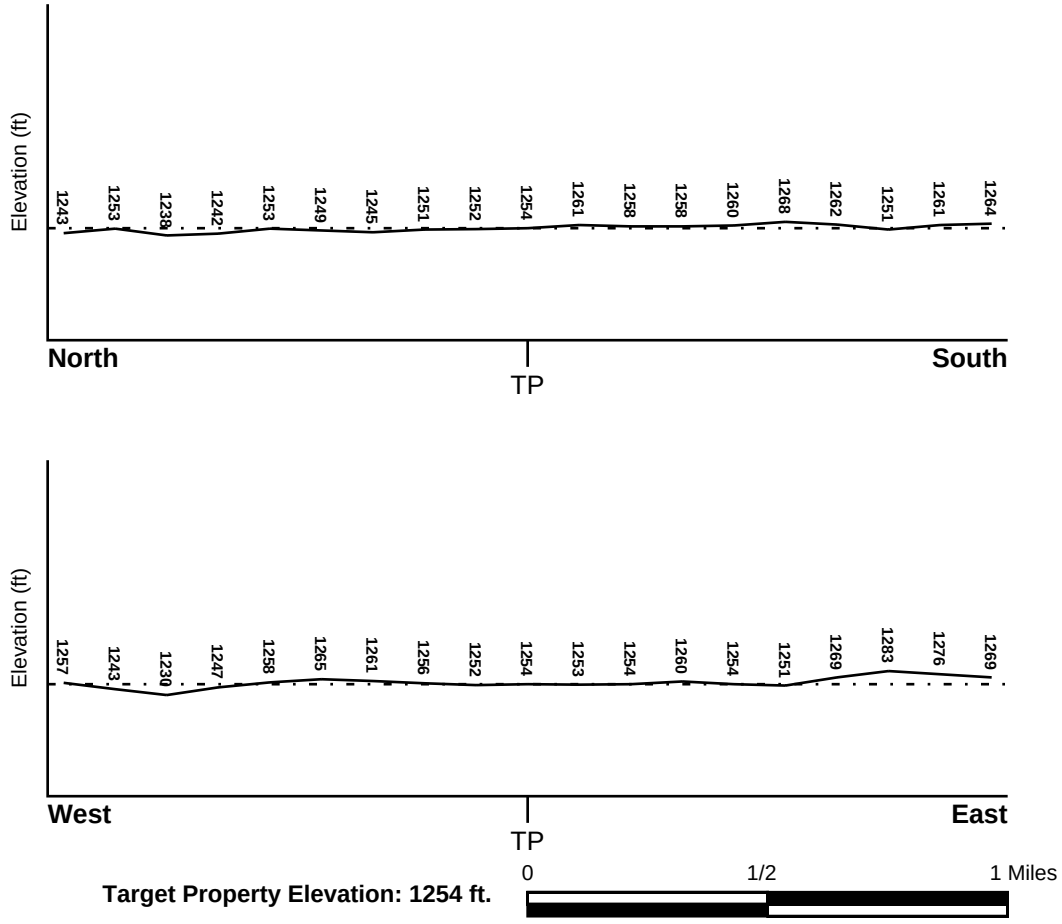
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NNW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
29077C0307E	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
29077C0194E	FEMA FIRM Flood data
29077C0213E	FEMA FIRM Flood data
29077C0193E	FEMA FIRM Flood data
29077C0306E	FEMA FIRM Flood data
29077C0326E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
BROOKLINE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

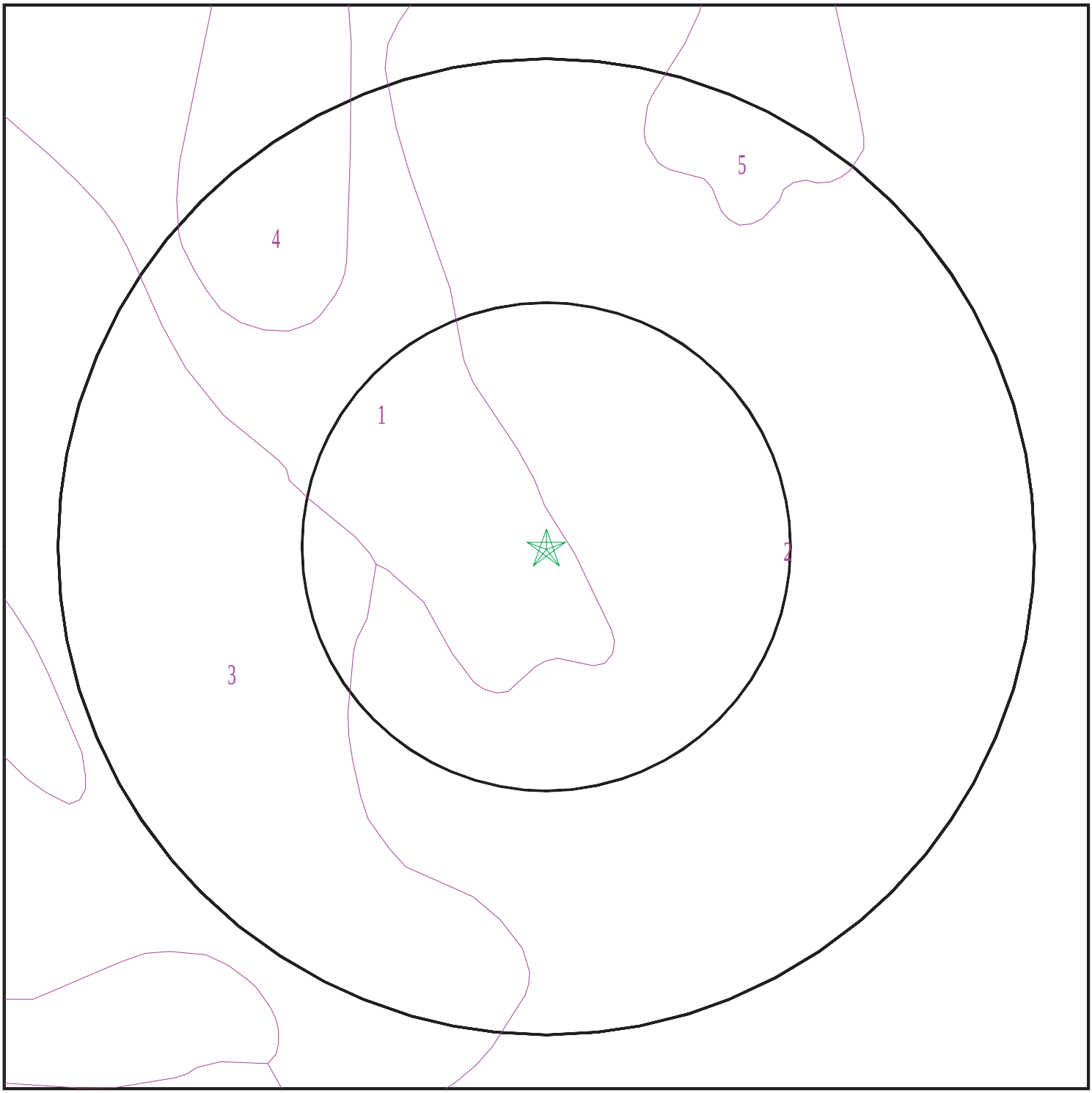
Era:	Paleozoic
System:	Mississippian
Series:	Osagean and Kinderhookian Series
Code:	M1 *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 5722487.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Springfield AVCRAD	CLIENT:	AECOM
ADDRESS:	Springfield, MO Springfield MO 65803	CONTACT:	Savannah Irving
		INQUIRY #:	5722487.2s
LAT/LONG:	37.249562 / 93.390173	DATE:	July 19, 2019 4:32 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Newtonia

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 7.3 Min: 5.1
2	9 inches	20 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 7.3 Min: 5.1
3	20 inches	27 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 7.3 Min: 5.1

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
4	27 inches	53 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 7.3 Min: 5.1
5	53 inches	72 inches	silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 14 Min: 4	Max: 7.3 Min: 5.1

Soil Map ID: 2

Soil Component Name: Keeno

Soil Surface Texture: gravelly silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 61 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	gravelly silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 14 Min: 4	Max: 5.5 Min: 4.5

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	11 inches	27 inches	very gravelly silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 14 Min: 4	Max: 5.5 Min: 4.5
3	27 inches	38 inches	extremely gravelly silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 14 Min: 4	Max: 5.5 Min: 4.5
4	38 inches	59 inches	extremely gravelly clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 14 Min: 4	Max: 5.5 Min: 4.5

Soil Map ID: 3

Soil Component Name: Creldon

Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 69 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4	Max: 6 Min: 3.6
2	9 inches	14 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4	Max: 6 Min: 3.6
3	14 inches	24 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4	Max: 6 Min: 3.6
4	24 inches	35 inches	very gravelly silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4	Max: 6 Min: 3.6
5	35 inches	46 inches	very gravelly silty clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4	Max: 6 Min: 3.6
6	46 inches	66 inches	gravelly clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4	Max: 6 Min: 3.6

Soil Map ID: 4

Soil Component Name: Gerald

Soil Surface Texture: silt loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Somewhat poorly drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 46 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 5.5 Min: 4.5
2	11 inches	24 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 5.5 Min: 4.5
3	24 inches	44 inches	gravelly silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 5.5 Min: 4.5
4	44 inches	72 inches	very gravelly clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 5.5 Min: 4.5

Soil Map ID: 5

Soil Component Name: Pembroke

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4	Max: 6 Min: 4.5
2	7 inches	46 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4	Max: 6 Min: 4.5
3	46 inches	72 inches	very gravelly clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 14 Min: 4	Max: 6 Min: 4.5

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
2	USGS40000688785	1/4 - 1/2 Mile North
3	USGS40000688707	1/4 - 1/2 Mile SSE
A5	USGS40000688718	1/2 - 1 Mile SE
A6	USGS40000688713	1/2 - 1 Mile SE
8	USGS40000688757	1/2 - 1 Mile East
9	USGS40000688709	1/2 - 1 Mile ESE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

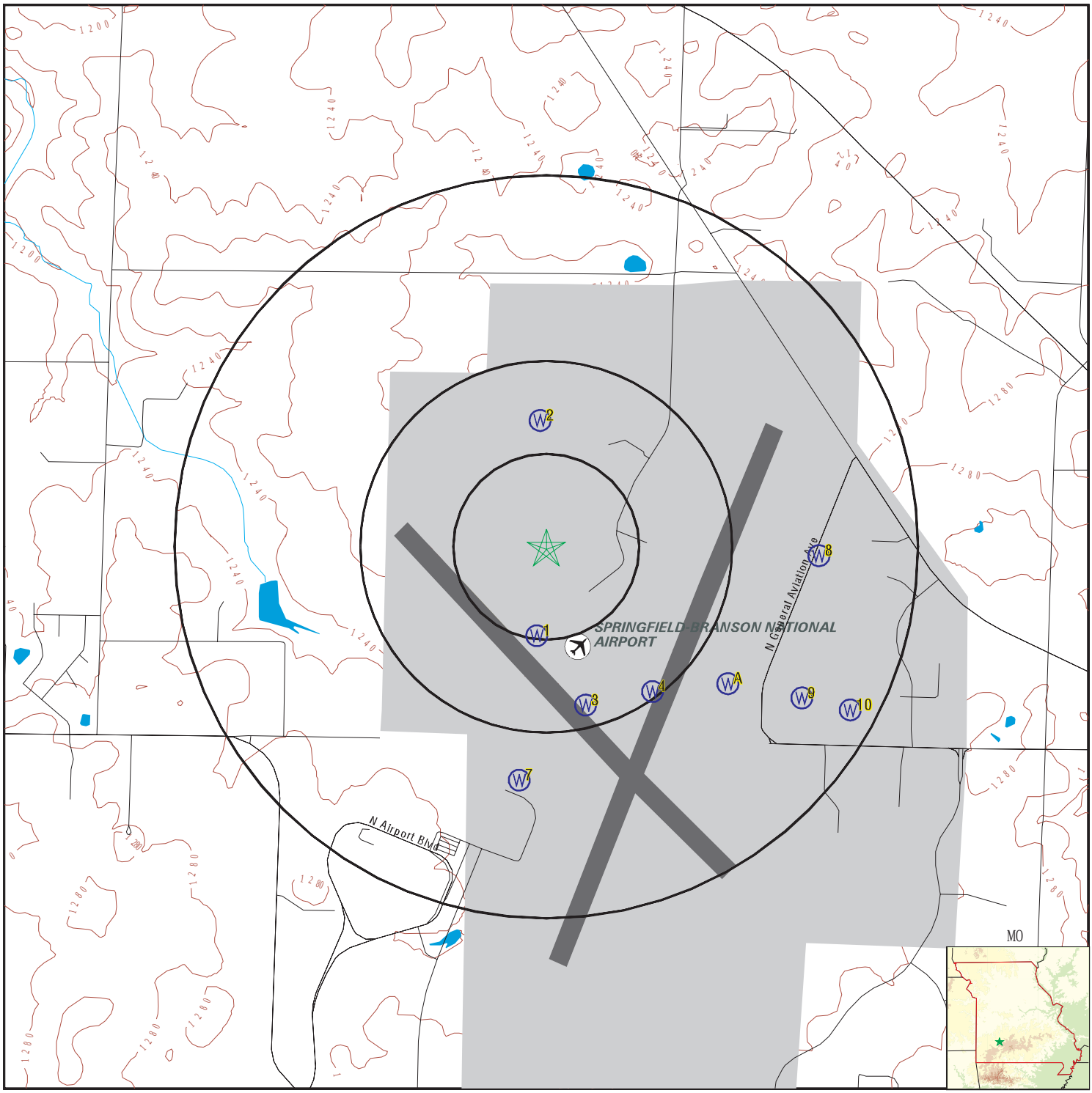
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	MOLOG1000005258	1/8 - 1/4 Mile South
4	MOLOG1000005248	1/4 - 1/2 Mile SE
7	MO7000000003704	1/2 - 1 Mile South
10	MOLOG1000005236	1/2 - 1 Mile ESE

PHYSICAL SETTING SOURCE MAP - 5722487.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Oil, gas or related wells

SITE NAME:	Springfield AVCRAD	CLIENT:	AECOM
ADDRESS:	Springfield, MO Springfield MO 65803	CONTACT:	Savannah Irving
		INQUIRY #:	5722487.2s
LAT/LONG:	37.249562 / 93.390173	DATE:	July 19, 2019 4:31 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
South
1/8 - 1/4 Mile
Higher

MO WELLS **MOLOG1000005258**

Database:	Geologic Well Log Database	ID:	004975
Elevation:	1258	Static Water Level:	82

2
North
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000688785**

Organization ID:	USGS-MO	Organization Name:	USGS Missouri Water Science Center
Monitor Location:	T29N R23W 01DCA1	Type:	Well
Description:	Not Reported	HUC:	10290106
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Ozark Plateaus aquifer system		
Formation Type:	Osagean Series	Aquifer Type:	Not Reported
Construction Date:	19380701	Well Depth:	150
Well Depth Units:	ft	Well Hole Depth:	150
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1938-07-01
Feet below surface:	82	Feet to sea level:	Not Reported
Note:	Not Reported		

3
SSE
1/4 - 1/2 Mile
Higher

FED USGS **USGS40000688707**

Organization ID:	USGS-MO	Organization Name:	USGS Missouri Water Science Center
Monitor Location:	T29N R23W 03DCC1	Type:	Well
Description:	Not Reported	HUC:	10290106
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Ozark Plateaus aquifer system		
Formation Type:	Eminence-Potosi Dolomites	Aquifer Type:	Not Reported
Construction Date:	19700101	Well Depth:	1475
Well Depth Units:	ft	Well Hole Depth:	1475
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	3	Level reading date:	1996-09-10
Feet below surface:	436	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1987-08-04	Feet below surface:	212
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1970-01-01	Feet below surface:	224
Feet to sea level:	Not Reported	Note:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

4
SE
1/4 - 1/2 Mile
Higher | **MO WELLS** | **MOLOG1000005248**

Database:	Geologic Well Log Database	ID:	008718
Elevation:	1267	Static Water Level:	0

A5
SE
1/2 - 1 Mile
Higher | **FED USGS** | **USGS40000688718**

Organization ID:	USGS-MO	Organization Name:	USGS Missouri Water Science Center
Monitor Location:	T29N R22W 06CCA	Type:	Well
Description:	Not Reported	HUC:	10290106
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Ozark Plateaus aquifer system		
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	Not Reported	Well Depth:	1250
Well Depth Units:	ft	Well Hole Depth:	1250
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	2	Level reading date:	1987-07-23
Feet below surface:	203	Feet to sea level:	Not Reported
Note:	Not Reported		

Level reading date:	1973	Feet below surface:	258
Feet to sea level:	Not Reported	Note:	Not Reported

A6
SE
1/2 - 1 Mile
Higher | **FED USGS** | **USGS40000688713**

Organization ID:	USGS-MO	Organization Name:	USGS Missouri Water Science Center
Monitor Location:	T29N R23W 06CCA1	Type:	Well
Description:	Not Reported	HUC:	10290106
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Ozark Plateaus aquifer system		
Formation Type:	Eminence Dolomite	Aquifer Type:	Not Reported
Construction Date:	19450301	Well Depth:	1250
Well Depth Units:	ft	Well Hole Depth:	1250
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	1	Level reading date:	1945-03-01
Feet below surface:	218	Feet to sea level:	Not Reported
Note:	Not Reported		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

7
South
1/2 - 1 Mile
Higher

MO WELLS **MO7000000003704**

Database:	Missouri Public Drinking Water Wells		
DGLS ID:	103205	LOGMAIN ID:	0028105
Well Certification #:	Not Reported		
PWSS Name:	Springfield-Branson Regional Airport		
PWSS ID:	5102365	IPWS ID:	MO5102365
Well #:	1	Local Name:	Well #1 (was FAA ATCT)
Well ID:	12848	Facility Type:	Federal Facility
Federal Water System Type:	Non-Transient, Non-Community		
Status:	Inactive	Drill Date:	1978
Abandoned:	0	Plugged:	0
Material Type:	Consolidated	Formation at Casing Depth:	Cotter
Formation at Total Depth:	Roubidoux	Total Depth:	750
Ground Elevation:	1260	Top Seal Type:	Cement Grout
Bottom Seal Type:	Cement Grout	Casing Depth:	375
Casing Diameter:	6	Casing Type:	Steel
Casing Elevation:	0	Casing Height:	2
Outer Well Casing Depth:	0	Outer Casing Diameter:	0
Screen Length (ft):	-9999	Screen Size (in):	-9999
Depth to Static Water Level:	0	Max Yield (gal/min):	0
Dynamic Head of Pump:	0	Drawdown:	0
Year of Pump Test:	0	Pump Type:	Submersible
Pump Manufacturer:	Not Reported	Pump Depth:	483
Pump Capacity:	0	Has Pump Meter:	Not Reported
Has Stand-by Power:	Not Reported	VOC detections:	N
Nitrates Detected:	N	Chlorination Used:	N
Filtration Used:	N	GWUDISW:	N
Meets Construction Requirements:	N	Surface Drainage:	Not Reported
Water System Entry Point ID:	Not Reported	SWIP Wellhead Status:	Not Verified

---

8
East
1/2 - 1 Mile
Higher

FED USGS **USGS40000688757**

Organization ID:	USGS-MO	Organization Name:	USGS Missouri Water Science Center
Monitor Location:	T29N R22W 06	Type:	Well
Description:	Not Reported	HUC:	10290106
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Ozark Plateaus aquifer system		
Formation Type:	Osagean Series	Aquifer Type:	Not Reported
Construction Date:	19410101	Well Depth:	140
Well Depth Units:	ft	Well Hole Depth:	140
Well Hole Depth Units:	ft		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

9
ESE
1/2 - 1 Mile
Higher

FED USGS **USGS40000688709**

Organization ID:	USGS-MO	Organization Name:	USGS Missouri Water Science Center
Monitor Location:	T29N R22W 06CDD1	Type:	Well
Description:	Not Reported	HUC:	10290106
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Ozark Plateaus aquifer system		
Formation Type:	Eminence Dolomite	Aquifer Type:	Confined single aquifer
Construction Date:	19640501	Well Depth:	1390
Well Depth Units:	ft	Well Hole Depth:	1390
Well Hole Depth Units:	ft		

Ground water levels,Number of Measurements:	4	Level reading date:	1987-08-04
Feet below surface:	250	Feet to sea level:	Not Reported
Note:	Not Reported		
Level reading date:	1973-03-15	Feet below surface:	405
Feet to sea level:	Not Reported	Note:	The site had been pumped recently.
Level reading date:	1972-05-01	Feet below surface:	281
Feet to sea level:	Not Reported	Note:	Not Reported
Level reading date:	1964-05-01	Feet below surface:	265
Feet to sea level:	Not Reported	Note:	Not Reported

10
ESE
1/2 - 1 Mile
Higher

MO WELLS **MOLOG1000005236**

Database:	Geologic Well Log Database	ID:	022630
Elevation:	1277	Static Water Level:	0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: MO Radon

Radon Test Results

Zipcode	Test Date	Result
65803	02/18/08	2
65803	02/21/09	2.7
65803	01/02/08	< 0.3
65803	01/12/08	2
65803	02/10/09	0.8
65803	02/14/08	1
65803	04/05/08	????
65803	04/17/08	2.3
65803	03/03/08	< 0.3
65803	06/07/08	0.8
65803	07/23/07	2.2
65803	08/01/08	3.2
65803	08/25/08	5.2
65803	09/01/06	3.5
65803	05/08/08	2.4
65803	11/21/07	????
65803	11/29/07	3.3
65803	11/30/07	1.3
65803	11/30/07	32.1
65803	12/03/07	0.5
65803	12/05/07	1.7
65803	12/09/08	0.8
65803	12/12/07	1.7
65803	12/13/07	6
65803	12/13/07	????

Federal EPA Radon Zone for GREENE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 65803

Number of sites tested: 6

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.633 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: National Wetland Inventory of Missouri
Source: Department of Natural Resources
Telephone: 573-751-5110

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Missouri Public Drinking Water Wells
Source: Department of Natural Resources
Telephone: 573-526-5448

Missouri Geologic Well Log Database
Source: Department of Natural Resources
Telephone: 573-526-5448

OTHER STATE DATABASE INFORMATION

Oil and Gas Well Database
Source: Department of Natural Resources
Telephone: 573-368-2143

RADON

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

Appendix B
Preliminary Assessment Documentation

Appendix B.1
Interview Records

PA Interview Questionnaire - Other

Facility: Springfield AVCRAD, Missouri
Interviewer: [redacted]
Date/Time: 7/11/2019

Interviewee: name withheld **Title: Airport Firefighter** **Phone Number:** **Email:**	Can your name/role be used in the PA Report? Y or N Can you recommend anyone we can interview? Y or **N** _____

Roles or activities with the Facility/Years working at the Facility:

Has been a firefighter at the Springfield-Branson Airport Fire Department for 10 years.

PFAS Use: Identify accidental/intentional release locations, time frame of release, frequency of releases, storage container size (maintenance, fire training, firefighting, buildings with suppression systems (as builts), fueling stations, crash sites, pest management, recreational, dining facilities, metals plating, or waterproofing). How are materials ordered/purchased/disposed/shared with others?

The airport has a fire department that responds to emergencies at the airport and the AVCRAD. The Airport Fire Department has never responded to a fire at the AVCRAD. Airport Fire Department personnel stated that they do not use AFFF for training and does not recall dispensing AFFF due to the expense.

Known Uses
Use
Procurement
Disposition
Storage (Mixed)
Storage (Solution)
Inventory, Off-Spec
Containment
SOP on Filling
Leaking Vehicles
Nozzle and Suppression System Testing
Dining Facilities
Vehicle Washing
Ramp Washing
Fuel Spill Washing and Fueling Stations
Chrome Plating or Waterproofing

PA Interview Questionnaire - Other

Facility: Springfield AVCRAD
Interviewer: [redacted]
Date/Time: 07/11/2019, 0800

Interviewee: [redacted] **Title: AGSE Supervisor** **Phone Number:** [redacted] **Email:** [redacted]	Can your name/role be used in the PA Report? **Y** or N Can you recommend anyone we can interview? Y or **N** _____

Roles or activities with the Facility/Years working at the Facility:

[redacted] has been at the Springfield AVCRAD for 16 years and serves as the AGSE Supervisor.

PFAS Use: Identify accidental/intentional release locations, time frame of release, frequency of releases, storage container size (maintenance, fire training, firefighting, buildings with suppression systems (as builts), fueling stations, crash sites, pest management, recreational, dining facilities, metals plating, or waterproofing). How are materials ordered/purchased/disposed/shared with others?

[redacted] recalls there was one fire training exercise that took place in 2014 on the grass on the west side of the facility with one TriMax fire extinguisher and approximately 20 gallons of AFFF was released. Since 2015, they have trained with soap/water for their fire training exercises. In 2011/2012, six TriMax units were emptied into barrels and sent the cannisters were sent to PFO empty. They were given 9 new TriMax60 units that are placed on the ramps and fueling point, and every 5 years undergo hydrostatic testing by a contractor off-site.

The new hangar (the hangar to the north-west) was built in 2011 and upon installation of the AFFF fire suppression system, he said there was a myth that indicated that the hangar was filled six feet high with AFFF after the initial testing and that the hangar doors were then opened. However, the contactor report states that the AFFF was taken off site for disposal and never released from the hangar nozzles.

[redacted] stated that there was never a fire truck at the AASF.

Some years, they would change the TriMax units solution to prepare for winter. In the GSE building, they would switch the solution for a 3 percent AFFF Chemguard Low Temperature solution. The solution was containerized in 55-gallon drums and there were never any spills. The drains lead to an oil/water separator, then to the sanitary WWTP.

Known Uses
Use
Procurement
Disposition
Storage (Mixed)
Storage (Solution)
Inventory, Off-Spec
Containment
SOP on Filling
Leaking Vehicles
Nozzle and Suppression System Testing
Dining Facilities
Vehicle Washing
Ramp Washing
Fuel Spill Washing and Fueling Stations
Chrome Plating or Waterproofing

PA Interview Questionnaire - Other

Facility: Springfield AVCRAD
Interviewer: [redacted]
Date/Time:07/11/2019, 0800

Interviewee: [redacted] **Title: Building Manager** **Phone Number:** [redacted] **Email:** [redacted]	Can your name/role be used in the PA Report? **Y** or N Can you recommend anyone we can interview? Y or **N** _____

Roles or activities with the Facility/Years working at the Facility:

[redacted] has been at the AVCRAD for 17 years, and serves as the building manager.

PFAS Use: Identify accidental/intentional release locations, time frame of release, frequency of releases, storage container size (maintenance, fire training, firefighting, buildings with suppression systems (as builts), fueling stations, crash sites, pest management, recreational, dining facilities, metals plating, or waterproofing). How are materials ordered/purchased/disposed/shared with others?

[redacted] recalls a one-time fire training exercise in 2007, where they most likely emptied one fire extinguisher on the southern ramp area of the facility. He stated that it was most likely one of their TriMax units. Additionally, there was no fire training exercises that took place at the old hangar.

The Springfield Airport fire department provides their emergency services. There has been no crashes or emergencies since [redacted] has been at the AVCRAD.

There have not been any leaks or breaches of the AFFF fire suppression system since its installation. All indoor drains lead to an oil/water separator and then to the sanitary WWTP.

Known Uses
Use
Procurement
Disposition
Storage (Mixed)
Storage (Solution)
Inventory, Off-Spec
Containment
SOP on Filling
Leaking Vehicles
Nozzle and Suppression System Testing
Dining Facilities
Vehicle Washing
Ramp Washing
Fuel Spill Washing and Fueling Stations
Chrome Plating or Waterproofing

PA Interview Questionnaire - Other

Facility: Springfield AVCRAD
Interviewer: [redacted]
Date/Time:07/11/2019, 0800

Interviewee: [redacted] **Title: GSA Shop Chief** **Phone Number:** [redacted] **Email:** [redacted]	Can your name/role be used in the PA Report? **Y** or N Can you recommend anyone we can interview? Y or **N** _____

Roles or activities with the Facility/Years working at the Facility:

[redacted] has been at the AVCRAD for 16 years, and serves as the GSA Shop Chief.

PFAS Use: Identify accidental/intentional release locations, time frame of release, frequency of releases, storage container size (maintenance, fire training, firefighting, buildings with suppression systems (as builts), fueling stations, crash sites, pest management, recreational, dining facilities, metals plating, or waterproofing). How are materials ordered/purchased/disposed/shared with others?

[redacted] concurs with [redacted] regarding the one-time fire training exercise that occurred in 2007. There are 26 bulk 55-gallon drums of 3% AFFF that is stored on the west side of the new hangar, and 1 55-gallon drum stored in the GSE building. If any changing of AFFF solution occurred, it would have been in the GSE building. [redacted] does not recall any spills or releases of AFFF in the GSE building.

There is a retention pond on the east side of the facility where all surface water from the north side of the hangar and ramp drains to. The retention pond then drains to the north and off-facility when it overflows. All ramp drains lead to the retention pond.

Known Uses
Use
Procurement
Disposition
Storage (Mixed)
Storage (Solution)
Inventory, Off-Spec
Containment
SOP on Filling
Leaking Vehicles
Nozzle and Suppression System Testing
Dining Facilities
Vehicle Washing
Ramp Washing
Fuel Spill Washing and Fueling Stations
Chrome Plating or Waterproofing

Appendix B.2
Visual Site Inspection Checklists

Visual Site Inspection Checklist

Names(s) of people performing VSI: [redacted]

Recorded by: [redacted]

ARNG Contact: [redacted]

Date and Time: July 9, 2019 0800

Method of visit (walking, driving, adjacent): walking, driving

Source/Release Information

Site Name / Area Name / Unique ID: Springfield AVCRAD

Site / Area Acreage: 107.18 acres

Historic Site Use (Brief Description): The 107.18 acre property was acquired in 2006. The facility consists of a repair hangar, shops, and office area. Exterior features are vehicle parking areas, roads, aircraft parking and taxiways.

Current Site Use (Brief Description): The AVCRAD supports the Missouri Army National Guard (MOARNG).

Physical barriers or access restrictions: Access to the area is restricted to the MOARNG.

1. Was PFAS used (or spilled) at the site/area? **Y / N**

1a. If yes, document how PFAS was used and usage time (e.g., fire fighting training 2001 to 2014):

2. Has usage been documented? **Y / N**

2a. If yes, keep a record (place electronic files on a disk):

n/a

3. What types of businesses are located near the site? **Industrial / Commercial / Plating / Waterproofing / Residential**

3a. Indicate what businesses are located near the site

4. Is this site located at an airport/flightline? **Y / N**

4a. If yes, provide a description of the airport/flightline tenants:

Visual Survey Inspection Log

Other Significant Site Features:

1. Does the facility have a fire suppression system? **Y / N**

1a. If yes, indicate which type of AFFF has been used:

3% AFFF

1b. If yes, describe maintenance schedule/leaks:

No information on routine maintenance

1c. If yes, how often is the AFFF replaced:

unknown

1d. If yes, does the facility have floor drains and where do they lead? Can we obtain an as built drawing?

The trench drains lead to the oil/water separator then to the sanitary WWTP.

Transport / Pathway Information

Migration Potential:

1. Does site/area drainage flow off installation? **Y / N**

1a. If so, note observation and location:

The AASF surface flows to the north

2. Is there channelized flow within the site/area? **Y / N**

2a. If so, please note observation and location:

3. Are monitoring or drinking water wells located near the site? **Y / N**

3a. If so, please note the location:

Yes, there are domestic wells, monitoring wells and other/unknown wells surrounding the AVCRAD on all sides.

4. Are surface water intakes located near the site? **Y / N**

4a. If so, please note the location:

Surface water flows to the north, so surface water could potentially flow off the runway/air field and flow onto the facility boundary.

5. Can wind dispersion information be obtained? **Y / N**

5a. If so, please note and observe the location.

6. Does an adjacent non-ARNG PFAS source exist? **Y / N**

6a. If so, please note the source and location.

6b. Will off-site reconnaissance be conducted? **Y / N**

Visual Survey Inspection Log

Significant Topographical Features:

1. Has the infrastructure changed at the site/area? **Y / N**

1a. If so, please describe change (ex. Structures no longer exist):

2. Is the site/area vegetated? **Y / N**

2a. If not vegetated, briefly describe the site/area composition:

3. Does the site or area exhibit evidence of erosion? **Y / N**

3a. If yes, describe the location and extent of the erosion:

4. Does the site/area exhibit any areas of ponding or standing water? **Y / N**

4a. If yes, describe the location and extent of the ponding:

Severe flooding surrounding the facility on all sides up to the flight line occurred in March 2019. There is no consisant ponding or standing water.

Receptor Information

1. Is access to the site restricted? **Y / N**

1a. If so, please note to what extent:

The facility has controlled access.

2. Who can access the site? **Site Workers / Construction Workers / Trespassers / Residential / Recreational Users / Ecological**

2a. Circle all that apply, note any not covered above:

3. Are residential areas located near the site? **Y / N**

3a. If so, please note the location/distance:

There is residential to the northeast (less than 2 miles), and across the Missouri River to the west and south (less than 2 miles).

4. Are any schools/day care centers located near the site? **Y / N**

4a. If so, please note the location/distance/type:

There are approximately 6 schools/day cares within a 4 mile radius of the AASF.

5. Are any wetlands located near the site? **Y / N**

5a. If so, please note the location/distance/type:

Visual Survey Inspection Log

Additional Notes

Photographic Log

Photo ID/Name	Date & Location	Photograph Description
1	7/11/2019, Hangar 27	Bulk 3% AFFF stored inside Hangar 27 on the west wall.
2	7/11/2019, GSE Building	One 55-gallon drum of 3% AFFF Chemguard Low Temperature solution stored in the GSE building.
3	7/11/2019, Hangar 27	Hangar 27 fire suppression tank holds 800 gallons of 3% AFFF.
4	7/11/2019, Hangar 27	Trench drains on the north side of Hangar 27. The trench drains lead to an oil/water separator, then to the sanitary WWTP.

Appendix B.3
Conceptual Site Model Information

Preliminary Assessment – Conceptual Site Model Information

Site Name: Springfield AVCRAD

Why has this location been identified as a site?
Facility is an aviation support site with aircraft hangars, high probability of release due to asset type and historical site usage.

Are there any other activities nearby that could also impact this location?
Springfield Branson National Airport

Training Events

Have any training events with AFFF occurred at this site? *Yes*

If so, how often? *One time training event south of the fuel farm and one time training event on the grass, west of Hangar 27.*

How much material was used? Is it documented*? unknown*

Identify Potential Pathways: Do we have enough information to fully understand over land surface water flow, groundwater flow, and geological formations on and around the facility? Any direct pathways to larger water bodies?

Surface Water:

Surface water flow direction? *To the northwest*

Average rainfall? *51.6 inches*

Any flooding during rainy season? *yes*

Direct or indirect pathway to ditches? *Direct to the retention pond*

Direct or indirect pathway to larger bodies of water? *No*

Does surface water pond any place on site? *No*

Any impoundment areas or retention ponds? *There is a retention pond on the east side of the facility.*

Any NPDES location points near the site? *Yes*

How does surface water drain on and around the flight line? *Surface water drains to the northwest off the runway*

Groundwater:

Groundwater flow direction? *To the southeast*

Depth to groundwater? *unknown*

Uses (agricultural, drinking water, irrigation)? *Not used.*

Any groundwater treatment systems? *None known*

Any groundwater monitoring well locations near the site? *Yes, there is several to the southeast of the facility.*

Preliminary Assessment – Conceptual Site Model Information

Is groundwater used for drinking water? *Drinking water is supplied by the City of Springfield which sources water from surface water of rivers and lakes, and also via public water wells.*

Are there drinking water supply wells on installation? *Yes, there is one domestic well on the installation boundary, however, it is not used by the facility or residents.*

Do they serve off-post populations? *No*

Are there off-post drinking water wells downgradient? *No, but there is a public water well side gradient of the facility.*

Waste Water Treatment Plant:

Has the installation ever had a WWTP, past or present? *No*

If so, do we understand the process and which water is/was treated at the plant? *N/A*

Do we understand the fate of sludge waste? *N/A*

Is surface water from potential contaminated sites treated? *N/A*

Equipment Rinse Water

1. Is firefighting equipment washed? Where does the rinse water go?
N/A

2. Are nozzles tested? How often are nozzles tested? Where are nozzles tested? Are nozzles cleaned after use? Where does the rinse water flow after cleaning nozzles?
N/A

3. Other?

Identify Potential Receptors:

Site Worker *Yes*

Construction Worker *Yes*

Recreational User *No*

Residential *Yes*

Child *Yes*

Ecological *No*

Note what is located near by the site (e.g. daycare, schools, hospitals, churches, agricultural, livestock)?
Airport, residential area

Documentation

Ask for Engineering drawings (if applicable). Has there been a reconstruction or changes to the drainage system? When did that occur? *There is no known reconstruction to the AASF.*

Appendix C
Photographic Log

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Springfield AVCRAD	Missouri

Photograph No. 1

Description:

Bulk 3% AFFF stored inside Hangar 27 on the west wall.

Photograph No. 2

Description:

One 55-gallon drum of 3% AFFF Chemguard Low Temperature solution stored in the GSE building.

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Springfield AVCRAD	Missouri

Photograph No. 3

Description:

Hangar 27 fire suppression tank holds 800 gallons of 3% AFFF.

Photograph No. 4

Description:

Trench drains on the north side of Hangar 27. The trench drains lead to an oil/water separator, then to the sanitary WWTP.