# FINAL Preliminary Assessment Report Army Aviation Support Facility, Waterloo, Iowa

Perfluorooctanesulfonic Acid (PFOS) and Perfluorooctanoic Acid (PFOA) Impacted Sites ARNG Installations, Nationwide

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# **Acronyms and Abbreviations**

°F degrees Fahrenheit

AASF Army Aviation Support Facility
AECOM Technical Services, Inc.

AFFF aqueous film forming foam

AOI Area of Interest

ARNG Army National Guard

CERCLA Comprehensive Environmental Response, Compensation, and Liability

Act

CSM conceptual site model

FTA fire training area

IAARNG Iowa Army National Guard mg/kg milligrams per kilogram mg/L milligrams per liter

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

VSI visual site inspection

# **Executive Summary**

The United States 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*. 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 as part of firefighting activities, although other PFAS sources are possible.

AECOM completed a PA for PFAS at the Army Aviation Support Facility (AASF) in Waterloo, lowa, to assess potential PFAS release areas and exposure pathways to receptors. The Waterloo AASF is constructed on a parcel of land owned by the State of Iowa. 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 22 August 2018
- Interviewed current and retired Iowa ARNG (IAARNG) AASF personnel during the site visit
- 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 area(s) of interest (AOIs) and the facility (**Figure ES-1**)

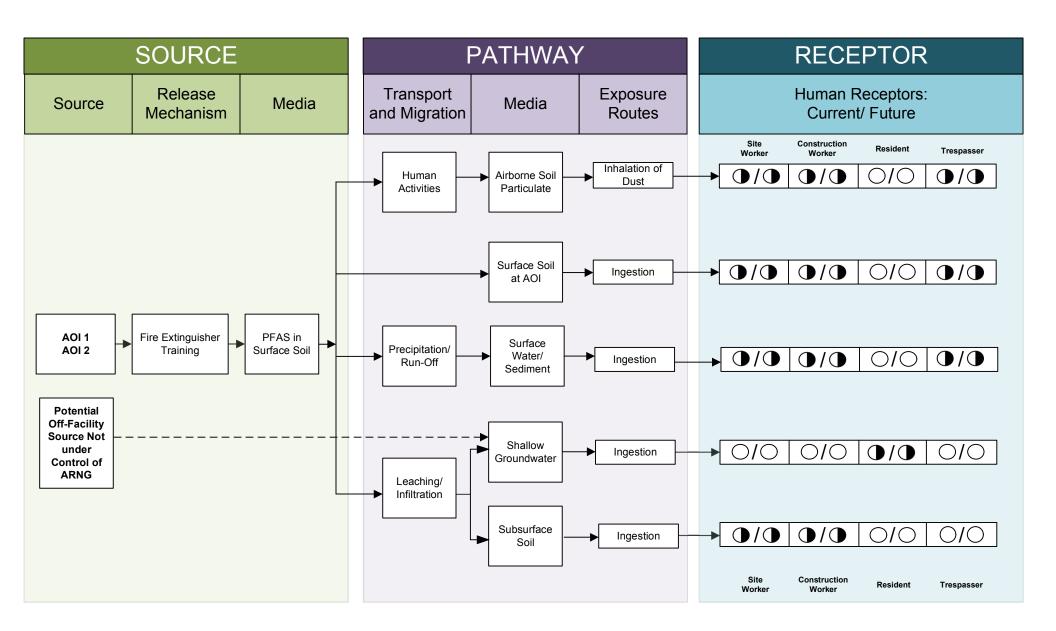
Two AOIs related to potential PFAS releases were identified at the Waterloo AASF during the PA. The AOIs are shown on **Figure ES-1** and described below:

Area of Interest	Name	Used by	Potential Release Date
AOI 1	Middle Ramp Fire Extinguisher Training	IAARNG	2001-2003
AOI 2	West Ramp Fire Extinguisher Training	IAARNG	2011-2013

Based on potential PFAS releases at these AOIs, there is potential for exposure to PFAS contamination in surface soil, surface water, and sediment for site workers, onsite construction workers, and trespassers; and subsurface soil for onsite construction workers. In addition, off-facility residents using groundwater for drinking water surrounding the facility may potentially be exposed to migrating PFAS contamination via nearby groundwater pathways. At this time the completeness of the groundwater pathway has not been verified. Potential off-facility PFAS release areas exist adjacent to the Waterloo AASF. Because the adjacent sources are downgradient of the Waterloo AASF, potential PFAS releases at these areas are not suspected to impact the Waterloo AASF. The CSM for the Waterloo AASF is shown on **Figure ES-2**.

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Flow-Chart Continues

Partial / Possible Flow

Incomplete Pathway

Potentially Complete Pathway

Complete Pathway

Figure ES-2
Conceptual Ste Model
Waterloo AASF

# 1. Introduction

# 1.1 Authority and Purpose

The United States 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. 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 facilities that used per- and poly-fluoroalkyl substances (PFAS), primarily in the form of aqueous film forming foam (AFFF) released as part of firefighting activities, although other PFAS sources 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 PFAS compounds in the environment varies. 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 lowa standards for PFOS and PFOA are 0.00007 milligrams per liter (mg/L) for a protected groundwater source, and 0.0010 mg/L for a non-protected groundwater source (PFOS only, no standard for PFOA). PFOS and PFOA soil standards are 1.8 milligrams per kilogram (mg/kg) and 1.2 mg/kg, respectively (Iowa Department of Natural Resources, 2012).

This report presents the findings of a PA for PFAS at the Army Aviation Support Facility (AASF) in Waterloo, Iowa, 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 other locations where PFAS may have been released into the environment at the Waterloo AASF. 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 22 August 2018
- Interviewed current and retired Iowa ARNG (IAARNG) AASF personnel during the site visit
- Completed visual site inspections (VSIs) 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 area(s) 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 for the AOIs and the facility
- **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 Waterloo AASF in Black Hawk County in Waterloo, IA, adjacent to the Waterloo Regional Airport (**Figure 1-1**). The Waterloo AASF is north of West Airline Highway, east of the Waterloo Regional Airport, south of West Big Rock Road, and east of Wagner Road. The communities of Waverly and Cedar Falls lie within 15 miles of the Waterloo AASF.

The Waterloo AASF was constructed circa 1974 on a 26-acre parcel of land. An additional 6-acre parcel located on the east boundary was acquired in 2002. Both are owned by the State of lowa.

# 1.5 Facility Environmental Setting

Waterloo AASF lies in the Iowan Surface region, a region characterized by glacial erratics, thin, discontinuous loess deposits, and northwest to southeast trending eolian features. The terrain of the area has been subjected to repeated periods of Quaternary-age glaciations and erosion, creating gently rolling hills with long slopes and low relief that slope toward nearby drainage features and wetlands (Iowa Geological Survey [IGS], 2017c) The elevation of the facility is approximately 875 feet above mean sea level. The elevation in the area decreases to the southwest toward the Cedar River.

#### 1.5.1 Geology

The Waterloo AASF is situated on Quaternary-age sand and gravel of the Noah Creek Formation which was deposited during the Wisconsin Glaciation. The Noah Creek Formation ranges from 10 feet to 66 feet thick and is characterized as yellowish brown to gray, poorly to well-sorted, massive to well stratified, coarse to fine feldspathic quartz sand and gravel (lowa Geological and Water Survey, 2013). The Quaternary-age deposits are underlain by approximately 185 feet of the dolomitic and argillaceous limestones of the Devonian aged Cedar Valley Group (lowa Geological and Water Survey, 2010; Witzke, B.J and Bunker, B.J., 2017).

#### 1.5.2 Hydrogeology

The Waterloo AASF is in the Northeast Iowa Groundwater Province within the boundaries of the Cambrian-Ordovician and the Silurian-Devonian bedrock aquifers. The Silurian-Devonian Aquifer serves rural, public, and industrials uses in eastern and northern Iowa (IGS, 2017a). Wells tapping the Silurian-Devonian Aquifer are typically 100 to 700 feet deep. The Cambrian-Ordovician Aquifer is a widespread source of water for high capacity wells, extensively used by municipalities and industries in eastern Iowa. Wells tapping the Cambrian-Ordovician Aquifer are typically 300 to 2,000 feet deep (IGS, 2017b). Alluvial aquifers are generally not used as production wells in the Northeast Iowa Groundwater Province as the bedrock aquifers are more productive and reliable, although alluvial aquifer utilization does occur along the larger rivers such as the Iowa, Cedar, and Wapsipinicon (Iowa Geological and Water Survey, 2013). Groundwater flow is inferred to be generally to the southwest toward the Cedar River (Figure 1-2).

No potable water wells are located within the Waterloo AASF; however, domestic and municipal/public water supply wells exist within one mile of the facility (**Figure 1-2**). Drinking water for the Waterloo AASF is supplied by the City of Waterloo. Drinking water for the City of Waterloo is predominantly sourced from the limestone bedrock Cedar Valley Aquifer, although some of Waterloo's water supply is obtained from an alluvial aquifer along the Cedar River. Drinking water wells in and around the City of Waterloo range in depth from 76 feet to 225 feet (Waterloo Water Works, 2018).

# 1.5.3 Hydrology

The Waterloo AASF is in the East Lake Watershed, and tributaries leading to the Cedar River are located less than 0.5 mile east of the Waterloo AASF (**Figure 1-3**). The Waterloo AASF is currently connected to the City of Waterloo sanitary sewer system; however, prior to 1994, the AASF was served by a septic system. Regional surface water features include the Cedar River, approximately 2 miles southwest of the Waterloo AASF, which empties to the Mississippi River, Fisher Lake, and George Wyth Lake.

#### 1.5.4 Climate

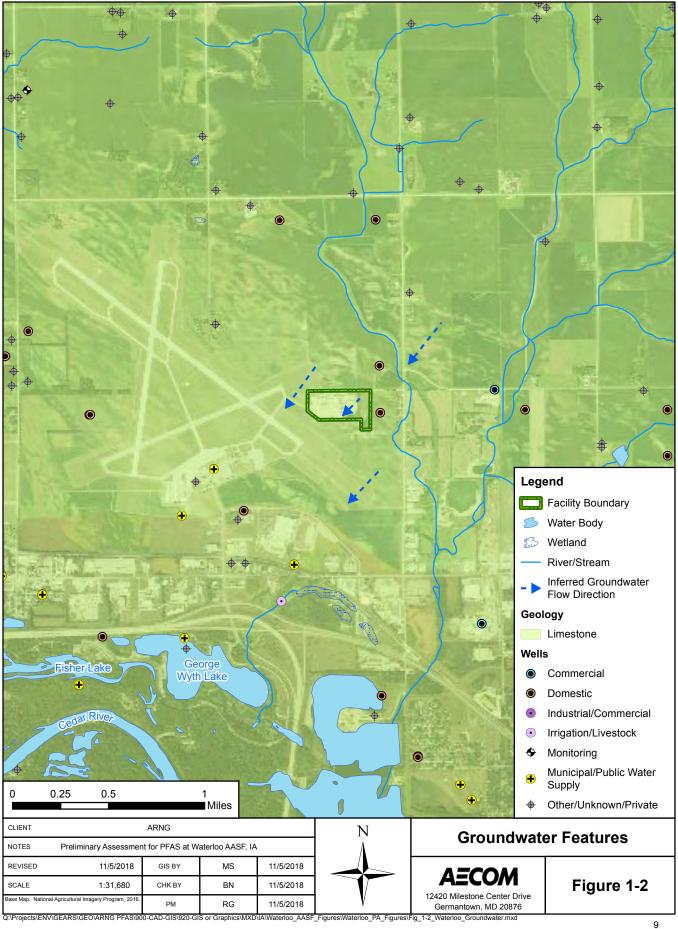
The climate at the Waterloo AASF is humid continental with warm summers, cold winters, and wet springs. The average temperature is 48 degrees Fahrenheit (°F). Seasonally, temperatures vary from summer highs of 84 °F to winter lows of 10 °F (World Climate, 2018). Average precipitation is 35 inches. The prevailing wind is southerly, averaging 10 miles per hour, with gust speeds of 60 miles per hour (National Weather Service Forecast Office, 2018).

#### 1.5.5 Current and Future Land Use

The Waterloo AASF is a controlled access facility and is adjacent to the Waterloo Regional Airport. The Waterloo Regional Airport is owned and operated by the City of Waterloo and

provides commercial and general air service to the Waterloo and Cedar Falls area. Future land use is not anticipated to change.







# 2. Fire Training Areas

Two FTAs were identified within the Waterloo AASF facility 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 Waterloo AASF Middle Ramp

One potential PFAS release event occurred between 2001 and 2003 during fire extinguisher training. During this potential release event, all Tri-Max fire extinguishers were emptied near the middle of the ramp, south of the Waterloo AASF hangar building (**Figure 2-1**). The geographic coordinates are 42°33'15.9"N and 92°23'05.0"W. No information was available regarding the type or amount of AFFF potentially released.

At the time of the potential release, the ramp consisted of concrete pads surrounded by cracked asphalt. PFAS from the potential release likely infiltrated the surface soil under the cracked asphalt, and surface drainage from the potential release area likely flowed to the surface soil south of the middle ramp area. In 2007 or 2008 the ramp was expanded and the cracked asphalt was replaced by concrete. No information was available regarding the final disposition of the cracked asphalt.

# 2.2 Waterloo AASF West Ramp

A second potential PFAS release event occurred between 2011 and 2013 during fire extinguisher training. During this potential release event, all Tri-Max fire extinguishers were emptied on the west end of the ramp, created during the expansion in 2007 or 2008 (**Figure 2-1**). The geographic coordinates are 42°33'18.1"N and 92°23'09.2"W. During the 2007 or 2008 ramp expansion, detention ponds to the west, south, and southwest of the ramp were also created. Fire extinguishers emptied to concrete on the west end of the ramp between 2011 and 2013 would have most likely been washed off the ramp into the detention pond located southwest of the ramp. No information was available regarding the type or amount of AFFF potentially released.

The Waterloo AASF facility currently houses Tri-Max and Halotron fire extinguishers. Halotron fire extinguishers, which do not contain PFAS, are intended to replace the Tri-Max extinguishers. A facility-provided safety data sheet for the Halotron is located in **Appendix A**. Currently, two Tri-Max 30 fire extinguishers are stored on the ramp immediately outside the hangar, one Tri-Max 60 fire extinguisher is located in the building east of the hangar, and five Halotron fire extinguishers are stored on the ramp. Bulk AFFF is stored at the facility and used to refill the Tri-Max fire extinguishers after off-facility hydrostatic testing has been completed. Four five-gallon containers of 6 percent AFFF were observed at the Waterloo AASF during the VSI.



# 3. Non-Fire Training Areas

No non-FTAs where AFFF was stored and/or potentially released were identified during the PA through interviews or document review.

# 4. Emergency Response Areas

No emergency response areas were identified within the Waterloo AASF facility during the PA through interviews or document review. All emergency services for the Waterloo AASF are provided by the Waterloo Regional Airport and the City of Waterloo.

# 5. Adjacent Sources

Two potential off-facility sources of PFAS adjacent to the Waterloo AASF, not under the control of the IAARNG, were identified during the PA. A description of each adjacent source is presented below, and the adjacent sources are shown on **Figure 5-1**.

# 5.1 Off-Facility Fire Training Area

A fire truck was present at the facility prior to 1999 until the mid-2000s. The fire truck was used in annual off-facility training exercises by the IAARNG at the southwest quadrant of Streeter and Dunkerton Road on Waterloo Regional Airport property. According to interviewees, the fire truck was not used from 1999 until the mid-2000s when it was removed from the Waterloo AASF due to maintenance issues. No information was available regarding the type or amount of AFFF used during training, nozzle testing, where fire truck washing activities occurred, or the fire truck maintenance issues.

Prior to 1999, the Waterloo AASF fire truck was used in annual training exercises at the southwest quadrant of Streeter and Dunkerton Road on Waterloo Regional Airport property (**Figure 5-1**). The geographic coordinates are 42°34'07.11"N and 92°23'50.85"W. No information was available with regard to the type or amount of AFFF used during training or where fire truck washing activities occurred. A freshwater emergent wetland is currently located in the same location as the off-facility FTA.

# 5.2 Waterloo Regional Airport

The Waterloo Regional Airport is located approximately 3/4 mile west of the Waterloo AASF (**Figure 5-1**). The geographic coordinates are 42°32'59.40"N and 92°23'51.25"W. The runways for the Waterloo Regional Airport are located within 700 feet west of the Waterloo AASF ramp. The Waterloo Regional Airport is owned and operated by the City of Waterloo. No information was available on the use of AFFF by the Waterloo Regional Airport; however, the Waterloo Regional Airport (along with the City of Waterloo) provides fire fighting services for the Waterloo AASF. Therefore, the potential for PFAS use by the Waterloo Regional Airport exists.



# 6. Conceptual Site Model

Based on the PA findings, two AOIs were identified at the Waterloo AASF: AOI 1 Middle Ramp Fire Extinguisher Training Area and AOI 2 West Ramp Fire Extinguisher Training Area. The AOI locations are shown on **Figure 6-1**. The following sections describe the CSM components and the specific CSM developed for AOI 1 and AOI 2. 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.

In general, the potential PFAS exposure pathways are ingestion and inhalation. Dermal contact is not considered to be a potential exposure pathway as studies have shown very limited absorption of PFAS through the skin (National Ground Water Association [NGWA], 2018). Receptors at the Waterloo AASF include site workers, construction workers, trespassers, and off-facility residents. The CSM for the Waterloo AASF indicates which specific receptors could potentially be exposed to PFAS.

# 6.1 AOI 1 Middle Ramp Fire Extinguisher Training Area

AOI 1 is on the middle of the ramp, south of the Waterloo AASF hangar. PFAS was released to concrete pads surrounded by cracked asphalt at AOI 1 during fire extinguisher training by the IAARNG. The potential release occurred between 2001 and 2003. PFAS may have been released directly to surface soil through cracks in the asphalt on the ramp. The potential PFAS released also may also have migrated via overland flow to the surface soil south of the middle ramp area. A ramp expansion in 2007 or 2008 replaced cracked asphalt on the ramp and created detention ponds to the west, southwest, and south of the ramp. An unknown amount of soil surrounding the ramp was disturbed and removed during the ramp expansion. PFAS may potentially remain in the surface soil south of the middle ramp fire extinguisher training area. PFAS are water soluble and can migrate readily from soil to groundwater via leaching. As such, PFAS may have migrated to subsurface soil and groundwater.

Ground-disturbing activities to surface soil and intermittent surface water and sediment at AOI 1 could result in site worker, construction worker, and trespasser exposure to potential PFAS contamination. Ground-disturbing activities to subsurface soil could result in site and construction worker exposure via inhalation of soil particles and ingestion of subsurface soil. Therefore, the inhalation and ingestion pathways for these receptors are considered potentially complete.

The Waterloo AASF drinking water is supplied by the City of Waterloo; however, domestic and municipal/commercial wells are present to the southwest of Waterloo AASF. Groundwater flow at the Waterloo AASF is inferred to be to the southwest; therefore, there are wells downgradient of AOI 1. Therefore, the ingestion exposure pathway for groundwater is potentially complete for off-facility residents. The CSM for the Waterloo AASF is shown on **Figure 6-2**.

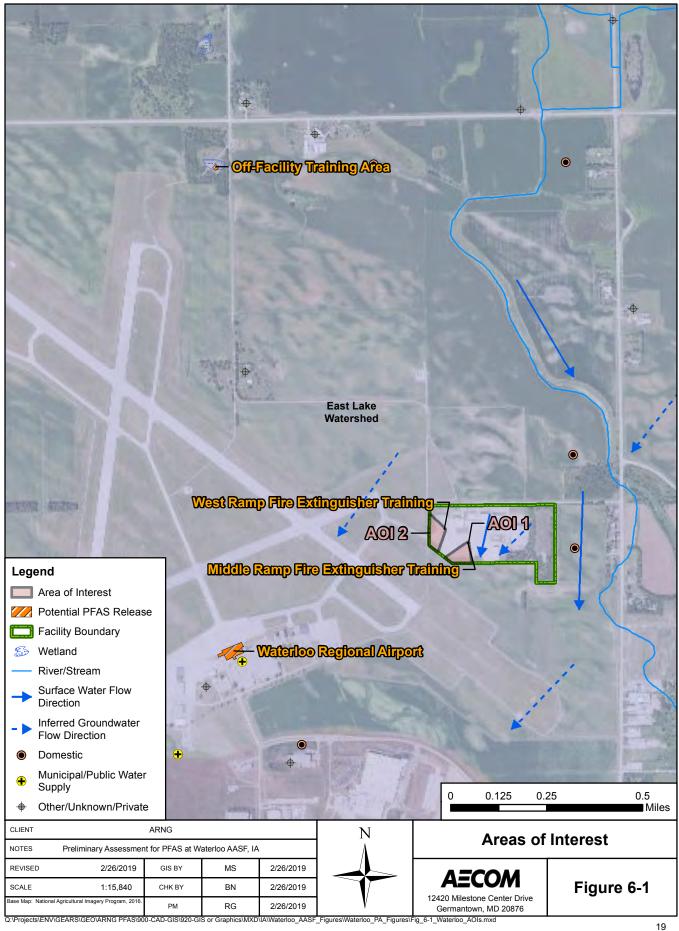
# 6.2 AOI 2 West Ramp Fire Extinguisher Training Area

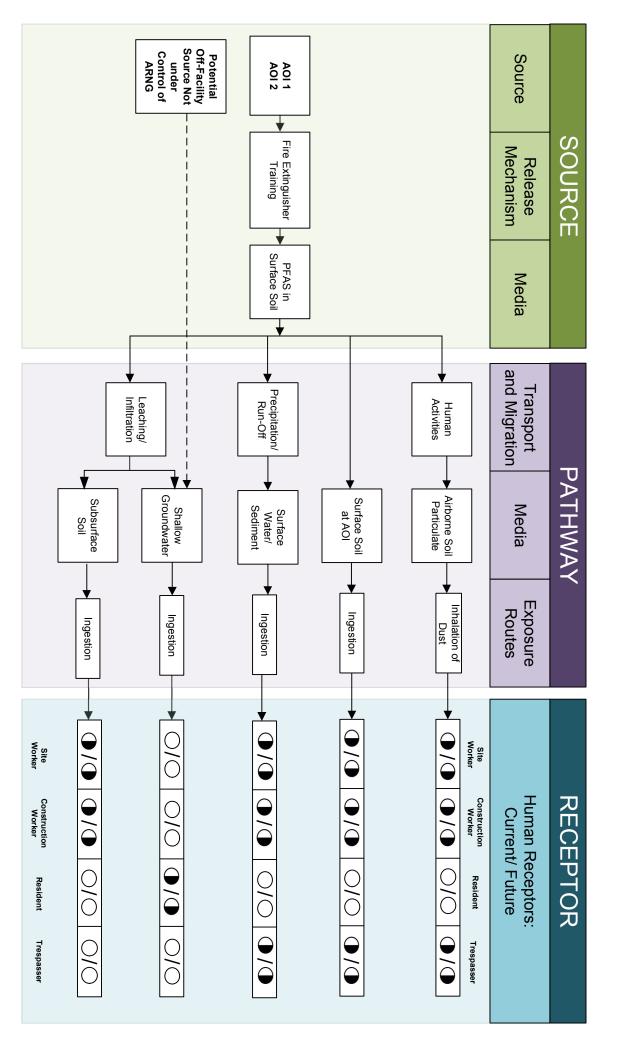
AOI 2 is on the ramp west of the hangar of the Waterloo AASF. PFAS was released to concrete at AOI 2 during fire extinguisher training by the IAARNG between 2011 and 2013. Prior to the potential release, a ramp expansion in 2007 or 2008 replaced cracked asphalt on the ramp with concrete. During the ramp expansion, detention ponds to the west, southwest, and south of the ramp were created. The potential PFAS release to concrete at AOI 2 may have been washed into the detention ponds on the west and southwest of the ramp, potentially releasing PFAS to intermittent surface water and sediment and surface soil. PFAS are water soluble and can migrate readily from soil to groundwater via leaching. As such, PFAS may have migrated to subsurface soil and groundwater.

Ground-disturbing activities to surface soil and intermittent surface water and sediment at AOI 2 could result in site worker, construction worker, and trespasser exposure to potential PFAS contamination. Ground-disturbing activities to subsurface soil could result in site and construction worker exposure via inhalation of soil particles and ingestion of subsurface soil. Therefore, the inhalation and ingestion pathways for these receptors are considered potentially complete.

Domestic and municipal/commercial wells are present to the southwest of Waterloo AASF. Groundwater flow at the Waterloo AASF is inferred to be to the southwest; therefore, there are wells downgradient of AOI 2. Therefore, the ingestion exposure pathway for groundwater is potentially complete for off-facility residents.

In addition, because potential PFAS contamination may have migrated from the soil to intermittent surface water in the western and southwestern detention ponds, the surface water and sediment exposure pathways via ingestion for site workers, construction workers, and trespassers are potentially complete. The CSM for the Waterloo AASF is shown on **Figure 6-2**.





# **LEGEND**

→ Flow-Chart Continues

→ Partial / Possible Flow

) Incomplete Pathway

Potentially Complete Pathway

Complete Pathway

Figure 6-2

Conceptual Ste Model

AOI 1 Middle Ramp Fire Extinguisher Training Area and AOI 2 West

Ramp Fire Extinguisher Training Area

# 7. Conclusions

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

# 7.1 Findings

Two AOIs related to potential PFAS releases were identified at the Waterloo AASF during the PA (**Figure 7-1**):

Area of Interest	Name	Used by	Potential Release Dates
AOI 1	Middle Ramp Fire Extinguisher Training	IAARNG	2001-2003
AOI 2	West Ramp Fire Extinguisher Training	IAARNG	2011-2013

Based on potential PFAS releases at these AOIs, there is potential for exposure to PFAS contamination in surface soil, surface water, and sediment for site workers, onsite construction workers, and trespassers; and subsurface soil for onsite construction workers. In addition, off-facility residents using groundwater for drinking water surrounding the facility may potentially be exposed to migrating PFAS contamination if the nearby groundwater pathway is determined to be complete.

#### 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 with respect to the use of PFAS in training, firefighting, other non-traditional activities, or 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.

The following table summarizes the uncertainties associated with the PA:

Area of Interest	Source of Uncertainty
All AOIs	No or limited information was available on the type, amount, or concentration of AFFF used at each AOI.
All AOIs	No or limited information about PFAS use prior to 1999.
All AOIs	No information was available regarding the location of fire truck washing activities.
AOI 1	No information was available regarding the final disposition of the cracked asphalt that was replaced with concrete in 2007 or 2008.

Potential off-facility PFAS release areas exist adjacent to the Waterloo AASF. Because the adjacent sources are downgradient of the Waterloo AASF, potential PFAS releases at these areas are not suspected to impact the Waterloo AASF.

#### 7.3 Potential Future Actions

Interviews and records (covering 1999 to present) indicate that ARNG activities may have resulted in potential PFAS releases at the two 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. The following table summarizes the rationale used to determine if the AOIs should be considered for further investigation under the CERCLA process and undergo a Site Inspection (SI).

ARNG evaluates the need for an SI at the Waterloo AASF based on the presence of a PFAS release, potential receptors, and the migration potential of PFAS contamination to receptors.

Area of Interest	AOI Location	Rationale	Potential Future Action
AOI 1 Middle Ramp Fire Extinguisher Training	42°33'15.9"N and 92°23'05.0"W	Tri-Max fire extinguishers emptied between 2001 and 2003.	Proceed to an SI, focus on soil, groundwater, surface water, sediment
AOI 2 West Ramp Fire Extinguisher Training	42°33'18.1"N and 92°23'09.2"W	Tri-Max fire extinguishers emptied between 2011 and 2013.	Proceed to an SI, focus on soil, groundwater, surface water, sediment



# 8. References

lowa Department of Natural Resources. 2012. *Cumulative Risk Calculator, Statewide Standards*. Version 3.0.3604. Available at https://programs.iowadnr.gov/riskcalc/Home/statewidestandards (Accessed 22 October 2018)

lowa Geological Survey (IGS). 2017a. *Silurian-Devonian Aquifer*. Available at https://www.iihr.uiowa.edu/igs/silurian-devonian-aquifer/ (Accessed 23 October 2018)

IGS. 2017b. Cambrian-Ordovician Aquifer. Available at https://www.iihr.uiowa.edu/igs/cambrian-ordovician-aquifer/ (Accessed 23 October 2018)

IGS. 2017c. *Iowan Surface*. Available at https://www.iihr.uiowa.edu/igs/iowa-surface/ (Accessed 23 October 2018)

Iowa Geological and Water Survey. 2010. Bedrock Geological Map of Iowa. March.

lowa Geological and Water Survey. 2013. Surficial Geology of Black Hawk County, Iowa. September.

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

National Weather Service Forecast Office. 2018. *Waterloo Annual Climate Report*. Available at http://w2.weather.gov/climate/index.php?wfo=dvn (Accessed 23 October 2018)

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

Waterloo Water Works. 2018. 2017 Annual Drinking Water Quality Report. Available at http://www.cityofwaterlooiowa.com/departments/water\_works/drinking\_water\_quality\_report.php #revize\_document\_center\_rz116 (Accessed 23 October 2018)

Witzke, B.J and Bunker, B.J. 2017. *Devonian Stratigraphy of the Waterloo South Quarry: Eagle Center Member – Iowa City Member*. Geological Society of Iowa Guidebook 94. April.

World Climate. 2018. *Climate Charts, Waterloo Municipal Airport, Iowa*. https://www.climate-charts.com/USA-Stations/IA/USW00094910.html (Accessed 23 October 2018)

# Appendix A Data Resources

Data Resources will be provided separately on CD. Data Resources for the Waterloo Army Aviation Support Facility include:

#### **Waterloo AASF PFAS Release Information**

- 2016 Halotron I Safety Data Sheet
- 2018 Waterloo AASF Map
- 2018 Waterloo AASF Surrounding Sources Map

### **Waterloo AASF Facility Maps**

- 2018 Waterloo AASF Well Map
- 1972 Waterloo AASF Grading and Surfacing Plan

#### Waterloo AASF EDR Report

• 2018 Waterloo AASF Environmental Data Resource Report

#### SAFETY DATA SHEET

1. IDENTIFICATION

Product Identifier: HALOTRON® I

Synonyms: HCFC Blend B, Halotron® I Pre-Sat Base

Product Code: Reach Registration - N/A

SDS compliant with regulations: (EC) No 1907/2006 (REACH), (EC) No 1272/2008 (CLP)

Manufacturer/Supplier: American Pacific, Halotron

Address: 10622 West 6400 North, Cedar City, UT 84721

Telephone: +1 (435) 865-5000 Fax: +1 (435) 865-5005

Emergency Contact: CHEMTREC

Customer Number: CCN721187 US Tel: 1 (800) 424-9300 Int'l Tel: +1 (703) 741-5970

Use of substance/preparation: Halotron® I is a clean fire-extinguishing agent for streaming and local applications. NFPA 2001, "Standard on Clean Agent Fire Extinguishing Systems" defines a "Clean Agent" to be "electrically non-conducting, volatile, or gaseous fire extinguishant that does not leave a residue upon evaporation." Halotron® I is a safe, effective, environmentally acceptable clean agent. It is discharged as a liquid, which rapidly evaporates (i.e. it is volatile). It is a proprietary three component chemical blend based on HCFC-123 that has been found acceptable by the U.S. EPA under its Significant New Alternatives Policy (SNAP) program (referred to as "HCFC Blend B") for all non-residential use (including commercial/industrial, military, and maritime use) in streaming applications as a substitute for halon 1211 (bromochlorodifluoromethane or "BCF").

#### 2. HAZARDS IDENTIFICATION

#### Hazard Classification:

Specific target organ toxicity, single exposure – Category 3 Gases under pressure – Dissolved gas

#### Pictogram





Warning

Signal word:

Preparation classification:

Physical Hazard:

H280: Contains gas under pressure; may explode if heated

Health Hazard:

H336: May cause drowsiness and dizziness

**Precautionary Statements:** 

P261: Avoid breathing vapors/spray

P271: Use only outdoors or in a well-ventilated area

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing

P 312 Call a POISON CENTER or doctor/physician if you feel unwell P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up

P501: Dispose of contents/container to an approved waste disposal plant

Information pertaining to particular dangers for man and environment: Inhalation of high concentrations of vapour may cause central nervous system effects such as dizziness, drowsiness, anesthesia, or unconsciousness. When used on a fire, hazardous decomposition products are formed, but typically are within safe emergency exposure limits. Misuse or intentional inhalation abuse may lead to death without warning.

Rev: 18 Effective Revision Date: 30 August 2016

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#### 3. COMPOSITION/INFORMATION OR INGREDIENTS

Ingredient N	ame Chemical Makeup	CAS#	EC#	%
HCFC-123	2, 2-Dichloro-1, 1, 1-trifluoroethane	306-83-2	206-190-3	Greater than 93%
Gas Mixture	Proprietary			Less than 7%

#### 4. FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a physician

Routes of exposure	Signs and symptoms of exposure:	Emergency and first aid procedures:
Skin:	Evaporative cooling can result in chilling sensations or frostbite effects. Short exposures, such as when filling equipment or in other situations, should not have a lasting effect.	Wash exposed area with water. If irritation develops and persists, call a physician.
Inhalation:	Significant exposure may cause central nervous system effects such as dizziness, drowsiness, anesthesia, or unconsciousness.  High concentrations of 20,000 ppm (v/v) or higher, may cause cardiac arrhythmia.	Remove to fresh air. Oxygen or artificial respiration if necessary Call a physician if breathing difficulties occur.
Ingestion:	Not likely to occur in industrial use. Highly volatile liquid.	Clean mouth with water and drink plenty of water. Do not induce vomiting. If vomiting occurs, lean person forward to reduce risk of aspiration. Call a physician.
Eyes:	Irritation and tearing may result. Mild to moderate reversible eye effects.	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

#### Description of the most important symptoms or effects:

Halotron<sup>®</sup> I is a colorless volatile, pressurized liquid with a slight ether-like odor. As with any chemical, dose and exposure are critically important variables to understand any potential treatment. Short-term exposure to high concentrations may result in central nervous system and cardiac effects. Long-term exposure to concentrations above those time-weighted averages recommended herein may result in liver effects.

#### Note to Physician:

This material may make the heart more susceptible to arrhythmias. Catecholamines such as adrenaline, and other compounds having similar effects, should be reserved for emergencies and then used only with special caution.

#### 5. FIRE FIGHTING MEASURES

#### Flammable properties:

Flash Point: not flammable.

Flash point method: not applicable.

Auto-ignition temperature: not determined.

Upper flammability limit (volume % in air): not applicable. Lower flammability limit (volume % in air): not applicable.

Extinguishing media: The properties of this chemical make it an ideal extinguishing media itself.

Special firefighting precautions/instructions: Ensure that the area where the fire occurred is well ventilated before re-entering. Wear protective clothing. Use water spray or fog to cool storage containers to help prevent an uncontrolled pressure release. Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Unsuitable extinguishing media: None.

Unusual fire and explosion hazards: The concentrated agent when applied to fire can produce toxic by-products specifically hydrogen halides, which can cause damage. Avoid inhalation of these materials by evacuating and ventilating the area.

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#### 6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Other Release: Prevent further leakage or spillage if safe to do so. Keep away from Incompatible products. In the event of a large spill, allow for adequate ventilation, and do not re-enter an area without a self-contained breathing apparatus (SCBA) until adequate ventilation is accomplished. For spills that might result in overexposure, evacuate the area and use protective gear and SCBA's. Avoid leakage into waterways. The vapours are heavier than air; therefore use caution when large volume releases occur in low-lying areas where concentrated vapors may accumulate.

Recommended 1 Hr. Emergency Exposure Limit: 1000 ppm (v/v) on the same basis as above Recommended 1 Min. Emergency Exposure Limit: 2500 ppm (v/v) on the same basis as above

Advice for emergency responders (large spills): Immediately evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Wear SCBA and protective suit. The product evaporates readily. Ventilate the area.

Environmental precautions: Prevent material from entering into waterways, soil or drains.

Methods and materials for containment and cleaning up: Dam up. Soak up with inert absorbent material. Prevent product from entering drains. Keep in properly labelled containers. Keep in suitable, closed containers for disposal. Refer to other sections and to protective measures listed in Section 8.

Any food items that were directly sprayed by the liquid should be thrown away, and all surfaces that are used for food service should be washed (as normal) before re-use.

Waste Disposal: Observe all federal, state, and local regulations for products of this type when accomplishing disposal

Supplier Notification: (SECTION 313) This product contains more than 93% by weight 2,2-dichloro-1,1,1-trifluoroethane (CAS #306-83-2) which is subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40CFR372).

#### 7. HANDLING AND STORAGE

**Normal Handling:** Precautions for safe handling - transfer material in a closed system. Handle only in well-ventilated areas. Use only equipment and materials which are compatible with the product.

Conditions for storage, including incompatibilities: Keep container closed

Specific use(s): For further information, please contact: Supplier

Additional Note: Approved DOT shipping containers are a normal safe method of storage. Containers should be maintained in good condition. Do not allow material to remain in deteriorating containers. Because this product can volatilize, special care should be taken for over pressurization hazards if the containers are overheated or near a radiant heat source.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Ventilate as necessary to minimize exposure levels. Inspect and clean ventilation systems regularly. Prolonged use should occur only in areas with adequate ventilation. Keep storage containers tightly closed. Vapors are heavier than air posing a potential hazard if large volumes are trapped in enclosed or low places.

Personal Protective Equipment: Protective shoes, such as steel toed shoes, should be worn in addition to the other specified personal protective equipment (PPE) when handling bulk containers. If handling bulk material or transferring the material from fire protection equipment, wear safety glasses with side shields. This statement is not intended to apply to use of a fire extinguisher where the nozzle arrangement is intended to direct the discharge away from the user of the extinguisher. Wear protective clothing when handling a leak in a storage container (does not apply to fire protection equipment servicing, other than safety goggles and gloves if large volumes can be exposed to skin). Short exposures to skin are not likely to pose a hazard. Respiratory protection is not normally needed, however, if handled in enclosed spaces where applicable exposure limits might be exceeded, a SCBA should be used. When performing filling or servicing operations, PERFORM THESE ACTIVITIES IN A WELL-VENTILATED AREA

Time Weighted Exposure Limits: (For persons regularly exposed to material)

Workplace Environmental Exposure Level, WEEL (AIHA) (8 hrs.): 50 ppm (v/v), based on the primary component (HCFC-123)

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#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Pressurized, colorless,	Physical state: Liquid	Molecular weight: Approx. 150.7	Chemical formula: CF <sub>3</sub> CHCl <sub>2</sub> plus Proprietary Gas Mixture	Odor: Slight ether-like odor
Specific gravity (water = 1.0): 1.47 at 25° C (77° F)	Solubility in Water: 0.39% wt. @ 25° C (77° F), 1 atm	pH: Not applicable	Boiling point: 27°C (80.6°F)	Melting point: Not applicable
Relative density, Air = 1: 5.1	Partition coefficient, n-octanol/water, Log Pow: 2.0 - 2.8	Auto-ignition temperature: Not determined	Upper flammability or explosive limits: Not applicable	Lower flammability or explosive limits: Not applicable
Vapor pressure at: 655 kPa (95 psig) at 20° C (70° F)	Vapor density: approx. 6.08 kg/m <sup>3</sup> (0.387 lb./ft <sup>3</sup> ) at 25° C (77° F)	Evaporation rate: Faster than water, slower than ether	Flash point: None	Liquid density: 1.48 kg/l (92.3 lb./ft3) at 25° C (77° F)

#### 10. STABILITY AND REACTIVITY

Reactivity: Decomposes on heating.

Chemical Stability: Normally stable (will decompose if exposed to a high radiant heat source, such as fire). The material is intended for use as a fire extinguishant.

Incompatibilities: Incompatible with alkali or alkaline earth metals, and powdered metals Al, Zn, Be, etc.

Hazardous Decomposition Products: Decomposition products are hazardous. This material can be decomposed by high temperatures (open flames, glowing metal surfaces, etc.) forming hydrochloric and hydrofluoric acids, and possibly carbonyl halide.

Hazardous Polymerization: Will not occur

#### 11. TOXICOLOGICAL INFORMATION

Toxicological Information: Acute toxicity is low.

For 2,2-dichloro-1,1,1-trifluoroethane (CAS # 306-83-2):

LC50 (4 hr.): 3.2% (32,000 ppm), (Inhalation)

Oral Approximate Lethal Dose (ALD): 9 g/kg (body weight)

Cardiotoxic LOAEL (Lowest Observed Adverse Effect Level): 2%vol.

Cardiotoxic NOAEL (No Observed Adverse Effect Level): 1%vol.

Toxicological testing was performed on HCFC-123 by the Program for Alternative Fluorocarbon Testing (PAFT). Data from acute toxicity studies in this program demonstrated that HCFC-123 has very low toxicity by skin application or inhalation.

For the proprietary gas mixture: The toxic effects of the proprietary gas mixture in the absence of extreme temperature are primarily its ability to function as a simple asphyxiant (i.e. displace oxygen).

#### Other Toxicity Information:

Animal Studies: For 2,2-dichloro-1,1,1-trifluoroethane (CAS #306-83-2): Long-term exposure in a two year study (6 hours/day, 5 days/week) at concentrations of 300, 1000 and 5000 ppm decreased body weight, serum cholesterol, triglycerides and glucose, and increased urinary fluoride concentrations in rats. However, survival was significantly improved in all exposed groups compared to control animals. Inhalation of 300, 1000 and 5000 ppm caused an increase in benign tumors of the liver, pancreas, and testis. Tumors occurred late in life and none were assessed to be life threatening. Tumor formation is thought to occur through non-genotoxic mechanisms associated with a peroxisome proliferating potential or with hormonal disturbances in older rats.

Exposure to dogs, guinea pigs or monkeys at 1000 ppm or greater for 6 hours per day,7 days per week, for a total of 3 weeks, induced slight or mild liver damage with altered enzyme levels.

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#### Halotron I Safety Data Sheet

Rodent studies indicate HCFC-123 is easily absorbed via inhalation. It distributes in all organs, more so in the liver. About 90% of inhaled HCFC-123 is eliminated via the lungs unchanged. The remaining amount is metabolized to trifluoroacetic acid and excreted in the urine. Small amounts of trifluoroacetylated proteins were detected in rats in laboratory studies.

HCFC-123 did not affect reproductive performance in rats or harm the unborn animals in rats or rabbits at 5000 and 10,000 ppm.

HCFC-123 was inactive in several test-tube genetic damage studies except the human lymphocyte chromosome aberration assay. HCFC-123 is also inactive in live animal genetic damage studies. Therefore, it is not considered genotoxic.

Carcinogen:

IARC: no

NTP: no

OSHA: no

#### 12. ECOLOGICAL INFORMATION

Aquatic toxicity:

2,2-Dichloro-1,1,1-trifluoroethane (HCFC-123)

96 h LC50: Oncorhynchus mykiss (rainbow trout) 55.5 mg/l

96 h ErC50: Pseudokirchneriella subcapitata (green algae) 96.6 mg/l 96 h EbC50: Pseudokirchneriella subcapitata (green algae) 67.8 mg/l

48 h EC50: Daphnia magna (Water flea) 17.3 mg/l

Environmental Fate:

2,2-Dichloro-1,1,1-trifluoroethane (HCFC-123) Biodegradability: 24%, not readily biodegradable

Bioaccumulation: Bio-concentration factor (BCF): 33, Bioaccumulation is unlikely

The material is a mixture of volatile organic compounds (although exempted from reporting as a VOC under U.S. regulation 40 CFR Part 51.100(s)) and should not be permitted to be mixed with ground or drinking water and should be handled, used, and disposed responsibly in accordance with regulations in the Country, Province, State, County, and locality where it is used.

#### 13. DISPOSAL CONSIDERATIONS

Observe all federal, state, and local regulations for products of this type when accomplishing disposal.

The manufacturer assumes no liability for the use of this product in a manner that causes environmental or other harm.

#### 14. TRANSPORT INFORMATION

UN	Proper Shipping Name:	US DOT	Pack
Number:	UN1956, Compressed Gas,	Hazard Class:	Group:
UN1956	N.O.S., 2.2 (Contains Argon,	2.2,	N/A
	Tetrafluoromethane)	Nonflammable	
		Gas	

#### 15. REGULATORY INFORMATION

Listed in the Toxic Substances Control Act (TSCA) Inventory: Yes, all components are on the TSCA inventory, listed on EPA SARA (313) Hazard Class, and is subject to reporting requirements of EPCRA Section 313

HCFC-123 is listed under EINECS EC Number 206-190-3 for Intermediate Use Only.

All components of the proprietary gas mixture are listed in EINECS based on ESIS lookup for the European Union. This chemical substance is not classified in the Annex I of Directive 67/548/EEC. It is listed as a LPV for Canada, All components listed in Canadian DSL

Information about limitation of use: This blend is intended solely for use as a fire extinguishing agent and should not be used for other purposes without contact and technical discussion with the manufacturer.

This preparation was classified in compliance with the following directives and regulations:

(EC) No 1907/2006 (REACH)

(EC) No 1272/2008 (CLP)

(EC) No 453/2010

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#### 16. OTHER INFORMATION

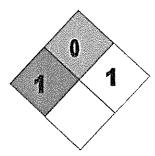
The user is responsible to evaluate the safety and environmental consequences of any intended uses. The manufacturer assumes no liability for any usages that result in adverse consequences.

Hazardous Materials Identification System (HMIS) ratings (scale 0 – 4)

PPE	X
Reactivity	1
Fire Hazard	0
Health Hazard	1

X - Consult your supervisor or S.O.P. for SPECIAL handling directions

National Fire Protection Association (NFPA) ratings (scale 0-4)



IMPORTANT: IMPORTANT: The information presented herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge. NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, IS MADE REGARDING PERFORMANCE, STABILITY OR OTHERWISE. This information is not intended to be all-inclusive as to the manner and conditions of use, handling and storage. Other factors may involve other or additional safety or performance considerations. While our technical personnel will be happy to respond to questions regarding safe handling and use procedures, safe handling and use remains the responsibility of the customer. No suggestions for use are intended as, and nothing herein shall be construed as a recommendation to infringe any existing patents or violate any Federal, Other National Governmental Entity, State, Provincial, or local laws.

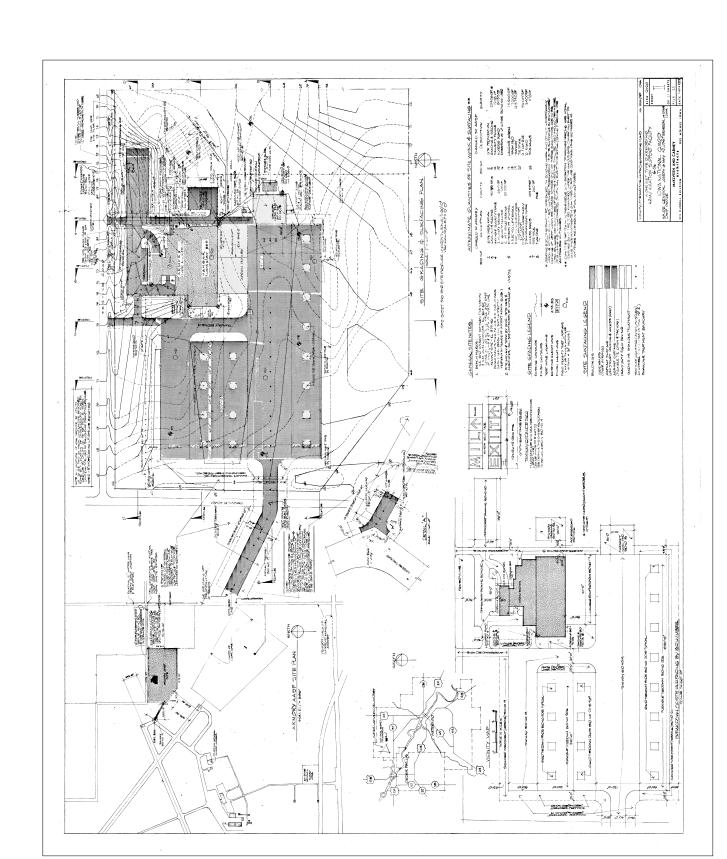
**Rev: 18** 

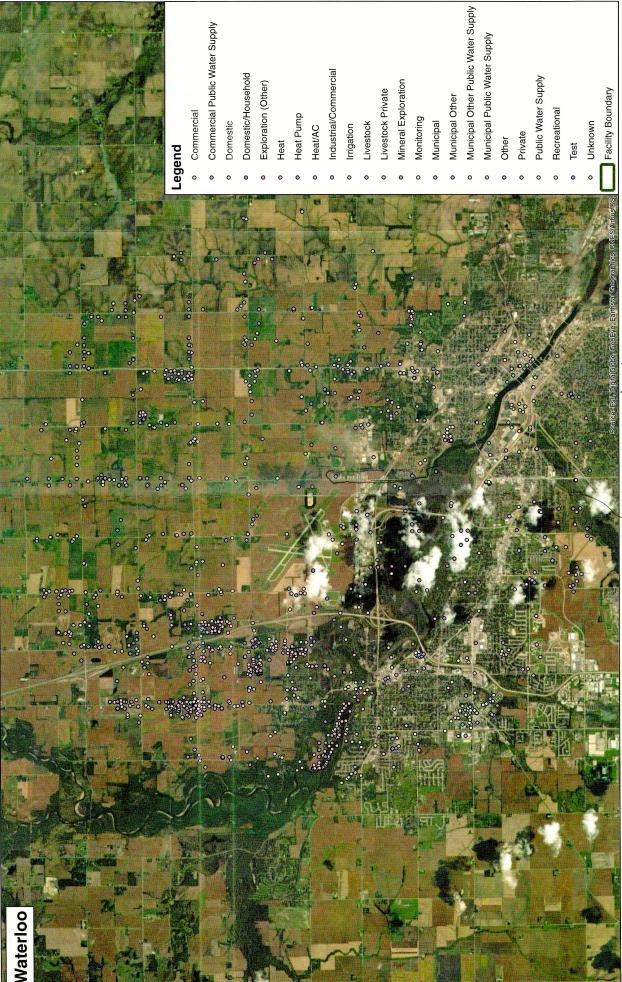
Effective Revision Date: 30 August 2016

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Fax To: AECOM

**Contact: Brittany Kirchmann** 

Fax: 000-000-0000 Date: 10/16/2018 Fax From: Sean McLaughlin

EDR

Phone: 1-800-352-0050

# EDR PUR-IQ® Report

"the intelligent way to conduct historical research"

for Waterloo Big Rock AASF 2245 West Big Rock Road Waterloo, IA 50703 Lat./Long. 42.554788 / 92.383858 EDR Inquiry # 5454370.2s

The EDR PUR-IQ report facilitates historical research planning required to complete the Phase I ESA process. The report identifies the *likelihood* of prior use coverage by searching proprietary EDR-Prior Use Reports<sup>®</sup> comprising nationwide information on: city directories, fire insurance maps, aerial photographs, historical topographic maps, flood maps and National Wetland Inventory maps.

**Potential for EDR Historical (Prior Use) Coverage -** Coverage in the following historical information sources may be used as a guide to develop your historical research strategy:

Building Permits: Building Permits are available for 'WATERLOO', IA (1990 - 2017).
 City Directory: Coverage exists for portions of WATERLOO, IA for 1957-2002

3. Fire Insurance Map: When you order online any EDR Package or the EDR Radius Map with

EDR Sanborn Map Search/Print, you receive site specific Sanborn

Map coverage information at no charge.

**4. Aerial Photograph:** Aerial photography coverage may exist for portions of Black Hawk

County. Please contact your EDR Account Executive for information

about USGS photos available through EDR.

**5. Topographic Map:** The USGS 7.5 min. quad topo sheet(s) associated with this site:

Historical: Coverage exists for BLACK HAWK County

Current: Target Property: TP I 2013 I 5944548 Cedar Falls, IA

Additional required for 1 Mile radius: E I 2013 I 5944028 Waterloo North, IA

EDR's network of professional researchers, located throughout the United States, accesses the most extensive national collections of city directory, fire insurance maps, aerial photographs and historical topographic map resources available for Waterloo, IA. These collections may be located in multiple libraries throughout the country. To ensure maximum coverage, EDR will often assign researchers at these multiple locations on your behalf. Please call or fax your EDR representative to authorize a search.



# **EDR - HISTORICAL SOURCE(S) ORDER FORM**

AECOM Brittany Kirchmann Account # 1861179

Waterloo Big Rock AASF 2245 West Big Rock Road Waterloo, IA 50703 BLACK HAWK County Lat./Long. 42.554788 / 92.383858 EDR Inquiry # 5454370.2s

Should you wish to change or add to your order, fax this form to your EDR account executive:

Donorto

Sean McLaughlin Ph: 1-800-352-0050 Fax: 1-800-231-6802

————		
EDR Sanborn Map $^{ m  ext{ iny B}}$ Search/Print		
EDR Fire Insurance Map Abstract		
EDR Multi-Tenant Retail Facility® Re	eport	
EDR City Directory Abstract		
EDR Aerial Photo Decade Package		
USGS Aerial 5 Package		
USGS Aerial 3 Package		
EDR Historical Topographic Maps		
Paper Current USGS Topo (7.5 min.	)	
Environmental Lien Search		
Chain of Title Search		
NJ MacRaes Industrial Directory Rep	port	
EDR Telephone Interview		
Shipping:		
Email Express, Next Day Delivery Express, Second Day Delivery Express, Next day Delivery	Customer Account	RUSH SERVICE IS AVAILABLE  Acct # Acct #
Express, Second Day Delivery U.S. Mail	Customer Account	Acct #

Waterloo Big Rock AASF 2245 West Big Rock Road Waterloo, IA 50703

Inquiry Number: 5454370.3

October 15, 2018

# **Certified Sanborn® Map Report**



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

# **Certified Sanborn® Map Report**

10/15/18

Site Name: Client Name:

Waterloo Big Rock AASF

2245 West Big Rock Road 12120 Shamrock Plaza Waterloo, IA 50703 Omaha, NE 68154

EDR Inquiry # 5454370.3 Contact: Brittany Kirchmann

AECOM



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 # AC67-4728-93B6

PO# NA

Project Waterloo

#### **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 #: AC67-4728-93B6

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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# **Waterloo Big Rock AASF**

2245 West Big Rock Road Waterloo, IA 50703

Inquiry Number: 5454370.5

October 18, 2018

# The EDR Aerial Photo Decade Package



# **EDR Aerial Photo Decade Package**

10/18/18

Site Name: Client Name:

Waterloo Big Rock AASF

2245 West Big Rock Road 12120 Shamrock Plaza
Waterloo, IA 50703 Omaha, NE 68154
EDR Inquiry # 5454370.5 Contact: Brittany Kirchmann

mrock Plaza E 68154

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.

**AECOM** 

#### Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	Source
2017	1"=500'	Flight Year: 2017	USDA/NAIP
2014	1"=500'	Flight Year: 2014	USDA/NAIP
2011	1"=500'	Flight Year: 2011	USDA/NAIP
2008	1"=500'	Flight Year: 2008	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1994	1"=500'	Acquisition Date: March 31, 1994	USGS/DOQQ
1983	1"=500'	Flight Date: January 01, 1983	USGS
1970	1"=500'	Flight Date: January 01, 1970	ASCS
1964	1"=500'	Flight Date: August 10, 1964	USDA
1958	1"=500'	Flight Date: April 19, 1958	USGS
1952	1"=500'	Flight Date: July 03, 1952	USDA
1937	1"=500'	Flight Date: August 04, 1937	USDA

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Waterloo Big Rock AASF 2245 West Big Rock Road Waterloo, IA 50703

Inquiry Number: 5454370.2s

October 16, 2018

The EDR Radius Map™ Report with GeoCheck®



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

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Physical Setting Source Map Findings	A-19
Physical Setting Source Records Searched	PSGR-1

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

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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**

2245 WEST BIG ROCK ROAD WATERLOO, IA 50703

#### **COORDINATES**

Latitude (North): 42.5547880 - 42° 33' 17.23" Longitude (West): 92.3838580 - 92° 23' 1.88"

Universal Tranverse Mercator: Zone 15 UTM X (Meters): 550583.2 UTM Y (Meters): 4711346.5

Elevation: 876 ft. above sea level

#### USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5944548 CEDAR FALLS, IA

Version Date: 2013

East Map: 5944028 WATERLOO NORTH, IA

Version Date: 2013

#### **AERIAL PHOTOGRAPHY IN THIS REPORT**

Portions of Photo from: 20150913 Source: USDA

## MAPPED SITES SUMMARY

Target Property Address: 2245 WEST BIG ROCK ROAD WATERLOO, IA 50703

Click on Map ID to see full detail.

MAP	OUTE MANAGE	1000000	DATABASE ASBONNAM	RELATIVE	DIST (ft. & mi.)
<u>ID</u>	SITE NAME	ADDRESS	DATABASE ACRONYMS	ELEVATION	DIRECTION
A1	IOWA ARMY NATIONAL G	2245 W BIG ROCK RD	ALLSITES, AIRS		TP
A2	IOWA ARMY NATIONAL G	2245 W BIG ROCK RD	AST		TP
A3	ARMY AVIATION SUPPOR	2245 W. BIG ROCK RD.	NPDES		TP
A4	IA ARNG WATERLOO AVI	2245 WEST BIG ROCK R	TIER 2		TP
A5	BECKER CHAPMAN POST	2245 W BIG ROCK RD	FINDS		TP
<b>A6</b>	IOWA ARMY NATIONAL G	2245 W BIG ROCK RD	US AIRS		TP
A7	IOWA ARMY NATIONAL G	2245 WEST BIG ROCK R	NPDES		TP
A8	AASF #2	AASF #2 2245 W BIG R	FINDS		TP
<b>A9</b>	IOWA ARMY NATIONAL G	2245 WEST BIG ROCK R	FINDS, ECHO		TP
A10	IOWA ARMY NATIONAL G	2245 W BIG ROCK RD	CORRACTS, RCRA-TSDF, RCRA-SQG, RAATS		TP
A11	AASF #2	AASF #2 2245 W BIG R	UST		TP
A12	IOWA ARMY NATIONAL G	2245 W. BIG ROCK RD.	NPDES		TP
A13	IA ARNG WATERLOO AVI	2245 WEST BIG ROCK R	FINDS		TP

## TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
IOWA ARMY NATIONAL G 2245 W BIG ROCK RD WATERLOO, IA 50703	ALLSITES Status: Closed Site Id Number: 1175  AIRS Status: MINOR EI Facility Id: 07-01-115	N/A
IOWA ARMY NATIONAL G 2245 W BIG ROCK RD WATERLOO, IA	AST Registration Number: 18822 Registration Number: 18823 Registration Number: 18824 Registration Number: 18825	N/A
ARMY AVIATION SUPPOR 2245 W. BIG ROCK RD. WATERLOO, IA 50703	NPDES	N/A
IA ARNG WATERLOO AVI 2245 WEST BIG ROCK R WATERLOO, IA 50703	TIER 2 Facility Id: 864 Facility Id: FAIDSIT2A00000864 State Id: IA	N/A
BECKER CHAPMAN POST 2245 W BIG ROCK RD WATERLOO, IA 50703	FINDS Registry ID:: 110070130403	N/A
IOWA ARMY NATIONAL G 2245 W BIG ROCK RD WATERLOO, IA 50703	US AIRS Database: US AIRS MINOR, Date of Government Version: 10	N/A 0/12/2016
IOWA ARMY NATIONAL G 2245 WEST BIG ROCK R WATERLOO, IA 50703	NPDES	N/A
AASF #2 AASF #2 2245 W BIG R WATERLOO, IA 50703	FINDS Registry ID:: 110036255405	N/A
IOWA ARMY NATIONAL G 2245 WEST BIG ROCK R WATERLOO, IA 50703	FINDS	N/A

Registry ID:: 110005756379

**ECHO** 

Registry ID: 110005756379

IOWA ARMY NATIONAL G CORRACTS IAD981504269

2245 W BIG ROCK RD EPA ID:: IAD981504269 WATERLOO, IA 50703

RCRA-TSDF

EPA ID:: IAD981504269

RCRA-SQG

EPA ID:: IAD981504269

RAATS Status: 01

Facility ID: IAD981504269

AASF #2 UST N/A

AASF #2 2245 W BIG R Facility Id: 6228

WATERLOO, IA 50703 Registration: 198605894

IOWA ARMY NATIONAL G NPDES N/A

2245 W. BIG ROCK RD. WATERLOO, IA 50703

IA ARNG WATERLOO AVI FINDS N/A

2245 WEST BIG ROCK R Registry ID:: 110043626234 WATERLOO, IA 50703

#### **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 FACILITYSEMS	Federal Facility Site Information listing Superfund Enterprise Management System
Federal CERCLIS NFRAP sit	to list
SEMS-ARCHIVE	Superfund Enterprise Management System Archive
Federal RCRA generators lis	st
	RCRA - Large Quantity Generators RCRA - Conditionally Exempt Small Quantity Generator
Federal institutional control	s / 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
State- and tribal - equivalent	
SHWS	Registry of Hazardous Waste or Hazardous Substance Disposal Sites
State and tribal landfill and/o	or solid waste disposal site lists
SWF/LF	Permitted Solid Waste Management Facilities
State and tribal leaking stora	ana tank lists
_	Leaking Underground Storage Tank Data
	Leaking Onderground Storage Tank Data  Leaking Aboveground Storage Tank Sites
	Leaking Underground Storage Tanks on Indian Land
State and tribal registered s	torage tank lists
•	Underground Storage Tank Listing
	Underground Storage Tanks on Indian Land
State and tribal institutional	control / engineering control registries
	Sites with Institutional Controls
INOT CONTINUE.	Cites with institutional controls
State and tribal voluntary clo	eanup sites
	Land Recycling Program Sites
INDIAN VCP	Voluntary Cleanup Priority Listing
State and tribal Brownfields	sites

BROWNFIELDS..... Brownfields Site Listing

## ADDITIONAL ENVIRONMENTAL RECORDS

## Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

## Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI Repo	ort on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 Torre	es Martinez Reservation Illegal Dump Site Locations
ODI Oper	·
IHS OPEN DUMPS Oper	Dumps on Indian Land

#### Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL	Delisted National Clandestine Laboratory Register
DEL SHWS	Delisted Contaminated Sites Listing
US CDL	National Clandestine Laboratory Register

#### **Local Land Records**

LIENS	Liens Filed Listing
LIENS 2	<b>CERCLA Lien Information</b>

#### Records of Emergency Release Reports

HMIRS	Hazardous Materials Information Reporting System
SPILLS	Spills Database
SPILLS 90	SPILLS 90 data from FirstSearch

#### Other Ascertainable Records

RCRA NonGen / NLR	. RCRA - Non Generators / No Longer Regulated
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 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	
ROD	
RMP	Risk Management Plans
	. Potentially Responsible Parties
	PCB Activity Database System
	. 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
	Steam-Electric Plant Operation Data
	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

UXO...... Unexploded Ordnance Sites

DOCKET HWC..... Hazardous Waste Compliance Docket Listing

FUELS PROGRAM..... EPA Fuels Program Registered Listing

COAL ASH..... Coal Ash Disposal Site Listing

DRYCLEANERS..... Iowa Drycleaner List

Financial Assurance Information Listing

#### **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

RGA HWS	Recovered (	Government	Archive	State Ha	azardous	Waste Fa	cilities	List
RGA LUST	Recovered (	Government	Archive	Leaking	Undergro	ound Stor	age Tar	nk

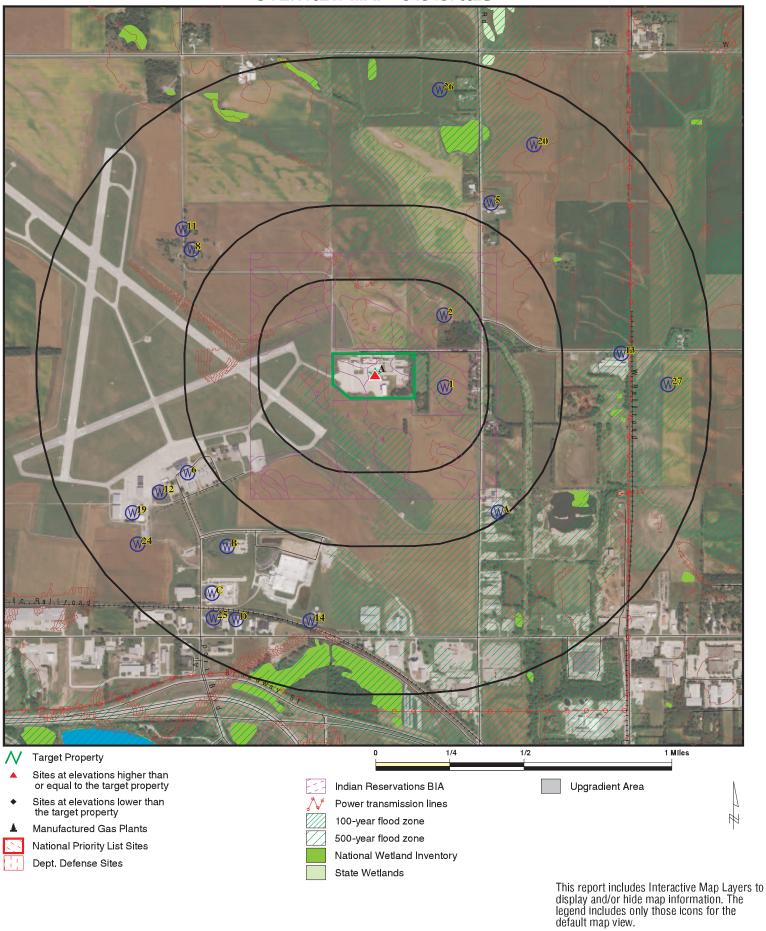
#### **SURROUNDING SITES: SEARCH RESULTS**

Surrounding sites were not identified.

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

There were no unmapped sites in this report.

## **OVERVIEW MAP - 5454370.2S**



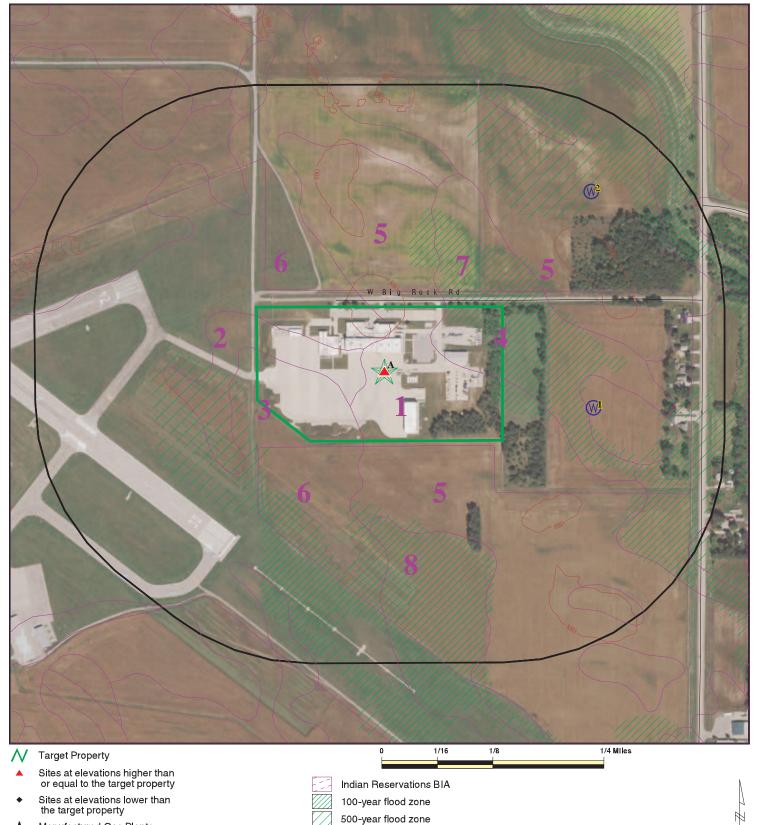
Waterloo Big Rock AASF 2245 West Big Rock Road SITE NAME: ADDRESS: Waterloo IA 50703 LAT/LONG: 42.554788 / 92.383858

CLIENT: CONTACT:

AECOM Brittany Kirchmann INQUIRY #: 5454370.2s

DATE: October 16, 2018 9:00 am

## **DETAIL MAP - 5454370.2S**



Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

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: Waterloo Big Rock AASF ADDRESS: 2245 West Big Rock Road

Waterloo IA 50703 LAT/LONG: 42.554788 / 92.383858 CLIENT: CONTACT:

AECOM Brittany Kirchmann INQUIRY#: 5454370.2s

DATE: October 16, 2018 9:02 am

# **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 Proposed NPL NPL LIENS	1.000 1.000 TP		0 0 NR	0 0 NR	0 0 NR	0 0 NR	NR NR NR	0 0 0				
Federal Delisted NPL site list												
Delisted NPL	1.000		0	0	0	0	NR	0				
Federal CERCLIS list												
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0				
Federal CERCLIS NFRA	P site list											
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0				
Federal RCRA CORRAC	TS facilities li	ist										
CORRACTS	1.000	1	0	0	0	0	NR	1				
Federal RCRA non-COR		acilities list										
RCRA-TSDF	0.500	1	0	0	0	NR	NR	1				
Federal RCRA generator	rs list											
RCRA-LQG RCRA-SQG RCRA-CESQG	0.250 0.250 0.250	1	0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 1 0				
Federal institutional controls / engineering controls registries												
LUCIS US ENG CONTROLS US INST CONTROL	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0				
Federal ERNS list												
ERNS	TP		NR	NR	NR	NR	NR	0				
State- and tribal - equiva	alent CERCLIS	5										
SHWS	1.000		0	0	0	0	NR	0				
State and tribal landfill a solid waste disposal site												
SWF/LF	0.500		0	0	0	NR	NR	0				
State and tribal leaking storage tank lists												
LUST LAST INDIAN LUST	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 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		
UST AST INDIAN UST	0.250 0.250 0.250	1	0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	1 1 0		
State and tribal institutional control / engineering control registries										
INST CONTROL	0.500		0	0	0	NR	NR	0		
State and tribal voluntary cleanup sites										
VCP INDIAN VCP	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0		
State and tribal Brownfields sites										
BROWNFIELDS	0.500		0	0	0	NR	NR	0		
ADDITIONAL ENVIRONMENTAL RECORDS										
Local Brownfield lists										
US BROWNFIELDS	0.500		0	0	0	NR	NR	0		
Local Lists of Landfill / Solid Waste Disposal Sites										
INDIAN ODI DEBRIS REGION 9 ODI IHS OPEN DUMPS	0.500 0.500 0.500 0.500		0 0 0 0	0 0 0 0	0 0 0 0	NR NR NR NR	NR NR NR NR	0 0 0 0		
Local Lists of Hazardous Contaminated Sites										
US HIST CDL ALLSITES DEL SHWS US CDL	TP 0.500 1.000 TP	1	NR 0 0 NR	NR 0 0 NR	NR 0 0 NR	NR NR 0 NR	NR NR NR NR	0 1 0 0		
Local Land Records										
LIENS LIENS 2	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0		
Records of Emergency Release Reports										
HMIRS SPILLS SPILLS 90	TP TP TP		NR NR NR	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 0		
Other Ascertainable Records										
RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST	0.250 1.000 1.000 0.500 TP TP		0 0 0 0 NR NR	0 0 0 0 NR NR	NR 0 0 0 NR NR	NR 0 0 NR NR NR	NR NR NR NR NR	0 0 0 0 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
2020 COR ACTION TSCA TRIS SSTS ROD RMP RAATS PRP PADS ICIS FTTS MLTS COAL ASH DOE COAL ASH EPA PCB TRANSFORMER RADINFO HIST FTTS DOT OPS CONSENT INDIAN RESERV FUSRAP UMTRA LEAD SMELTERS US AIRS US MINES ABANDONED MINES FINDS ECHO UXO DOCKET HWC FUELS PROGRAM AIRS COAL ASH DRYCLEANERS Financial Assurance NPDES TIER 2	0.250 TP TP TP 1.000 TP	1 4 1	ORRNO RRRRRRO RRRRO O O O ORRO RO O O ORRO RRO RO	ORRRORRRRRRRORRROOOORROORORORORRRR	NR R R O R R R R R R O R R R R O O O O R R R R R O R O R R R R N N N N	NN N N N N N N N N N N N N N N N N N N	N N N N N N N N N N N N N N N N N N N	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP EDR Hist Auto EDR Hist Cleaner	1.000 0.125 0.125		0 0 0	0 NR NR	0 NR NR	0 NR NR	NR NR NR	0 0 0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Go			NE	ND	NE	NO	NE	
RGA HWS	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
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals		18	0	0	0	0	0	18

# NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Direction Distance

Elevation Site Database(s) EPA ID Number

A1 IOWA ARMY NATIONAL GUARD - WATERLOO

ALLSITES S107669067 AIRS N/A

**EDR ID Number** 

Target 2245 W BIG ROCK RD Property WATERLOO, IA 50703

# Site 1 of 13 in cluster A

Actual: 876 ft.

ALLSITES:

Site Id Number: 1175
Project Manager: Dan Cook
Ownership Type: State
Status: Closed

Status: Closed
Program: Chapter 133
Site Type: Federal
Brownfield Eligible: False
Registry: False
Institutional Control: False
Priority: 0

Latitude: 42.554658 Longitude: -92.380764 XCoord: 550836.76 YCoord: 4711548.21

AIRS:

Facility Number: 07-01-115
Status: MINOR EI
Closed?: Not reported
Region: EAST

 Site ID:
 10000012808

 Contact Phone:
 515-252-4396

 Facility Contact Phone:
 Not reported

Mailing Address: NGIA-DIM\_E, BLDG 3535, CAMP DODGE

Not reported

Not reported

Not reported

Not reported

Mailing Address 2:Not reportedSIC Primary:Not reportedNAICS Primary:Not reported

AIRS:

Cokeoven:

Cyanide:

Finemat:

Glycol:

07-01-115 Facility ID: NAICS Code: Not reported Year: 2015 PM25: Not reported PM10: Not reported SO2: Not reported NOX: Not reported VOC: Not reported CO: Not reported Not reported Lead: Not reported Ozone: Ammonia: Not reported HAP: Not reported Antimony: Not reported Arsenic: Not reported Beryllium: Not reported Cadmium: Not reported Chromium: Not reported Not reported Cobalt:

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# IOWA ARMY NATIONAL GUARD - WATERLOO (Continued)

S107669067

H2SO4: Not reported Manganese: Not reported Mercury: Not reported Nickel: Not reported Pom: Not reported Radionclide: Not reported Selenium: Not reported

**IOWA ARMY NATIONAL GUARD** 

**A2** Target 2245 W BIG ROCK RD **Property** WATERLOO, IA

A100408818 AST

N/A

### Site 2 of 13 in cluster A

Actual: 876 ft.

AST:

Not reported Key:

HOWARD R CLEGG -ENV PROTECTION SPECIALIST Owners Name:

7105 NW 70TH AVE BLDG 3535 Owners Address:

Owners City,St,Zip: Johnston, IA 50131

Tank Key Num: Not reported Registration Number: 18824 Year Of Manufacture (age): Not reported Size: 10000 Type: Not reported Contents: iet fuel Plan Date: Not reported Registration Date: Not reported Plan Number: Not reported Out of Service Date: Not reported Amount Received: 20.00 12/24/2014 Date Received:

Tank Key Num: Not reported Registration Number: 18823 Year Of Manufacture (age): Not reported 10000 Size: Not reported Type: jet fuel Contents: Plan Date: Not reported Registration Date: Not reported Plan Number: Not reported Out of Service Date: Not reported 20.00 Amount Received: Date Received: 12/24/2014

Tank Key Num: Not reported Registration Number: 18822 Year Of Manufacture (age): Not reported Size: 10000 Type: Not reported Contents: jet fuel Plan Date: Not reported Registration Date: Not reported Plan Number: Not reported Out of Service Date: Not reported 20.00 Amount Received:

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# **IOWA ARMY NATIONAL GUARD (Continued)**

A100408818

Date Received: 12/24/2014

Tank Key Num: Not reported Registration Number: 18825 Year Of Manufacture (age): Not reported 10000 Type: Not reported Contents: jet fuel Plan Date: Not reported Registration Date: Not reported Plan Number: Not reported Out of Service Date: Not reported Amount Received: 20.00 Date Received: 12/24/2014

**ARMY AVIATION SUPPORT FACILITY #2 A3** 

**NPDES** S122561870

N/A

**Target** 2245 W. BIG ROCK RD. WATERLOO, IA 50703 **Property** 

#### Site 3 of 13 in cluster A

Actual: NPDES: 876 ft.

Permit Number: Not reported Epa Npdes Id Number: Not reported Permit Expiration Date: 09/30/2018

ARMY AVIATION SUPPORT FACILITY #2 Facility Name:

Facility Address1: 2245 W. BIG ROCK RD.

Facility City: **WATERLOO** Facility Phone Number: Not reported Facility Type: Not reported Facility Class: Not reported Standard Industrial Classification Code: Not reported

IOWA ARMY NATIONAL GUARD Owner Name: Owner Add1: Not reported

Owner Add2: Not reported Owner City: Not reported Owner State: Not reported Owner Zip: Not reported Not reported Owner Phone: Indr Regional/Field Office Number: Not reported Section: Not reported Township: Not reported Range: Not reported Not reported Latitude Degree: Longitude Degree: Not reported River Basin: Not reported Type Of Treatment: Not reported Design Number: Not reported Design Population Equivalent: Not reported Design Biochemical Oxygen Demand: Not reported Design Avg Dry Weather Flow (Mll Glns Per Dy): Not reported Design Avg Wet Weather Flow (MII Glns Per Dy): Not reported

Operator Certification Facility Type: Not reported File No: 576 Authorization No: 422 10/01/1992 Authorization Date: Permit Status: Current

Permit Type: GP #1 - Industrial Activity

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# **ARMY AVIATION SUPPORT FACILITY #2 (Continued)**

S122561870

Legal Status: Federal

Α4 IA ARNG WATERLOO AVIATION 2245 WEST BIG ROCK ROAD ROAD **Target** 

TIER 2 S109946710 N/A

WATERLOO, IA 50703 **Property** 

### Site 4 of 13 in cluster A

Actual: TIER 2: 876 ft.

Report Year: 2017 Facility Id: 864 ld: 9711

> NATIONAL SECURITY SIC Description:

Last Modified: Not reported

ld: 928110

Description: National Security NAICS

Last Modified: Not reported

State Id: Not reported

Waterloo Fire Department Fire District:

Site Map: Not reported Not reported Site Coord Abbreviation: 01/14/2008 Date Signed: Date Modified: 01/02/2018 Dike Or Other Safeguard: Not reported Mailing Address: Not reported Mail City: Not reported

Mail State: IΑ

Mail Zip: Not reported Latitude: 42.55598 Longitude: -92.37820 Notes: Not reported

Contact:

Report Year: 2017 Contact Id: 199181 Not reported Date Modified: First Name: Harlan Last Name: Ratcliff Title: Not reported

Email: harlan.r.ratcliff.nfg@mail.mil 7105 NW 70th Avenue Address:

City: Johnston Country: US State: IΑ Zip Code: 50131

Type1: Owner / Operator Last Modified: Not reported 515-252-4396 Telephone:

Telephone Type: Work

Chemical:

Report Year: 2017 Chem Inv Record Id: 5032 CICAS: 8008-20-6 EHS Chemical: Not reported

Chemical Name: Jet Fuel Kerosene (F24)

Acute: Not reported

Direction Distance

Elevation Site Database(s) **EPA ID Number** 

# IA ARNG WATERLOO AVIATION (Continued)

S109946710

**EDR ID Number** 

Ave Amount: 200000 Ave Amount Code: 10 370000 Max Amount: Max Amount Code: 10

Chronic: Not reported Not reported Last Modified:

Days On Site: 365

Fire: Not reported Gas: Not reported Liquid: True Mixture: True

Pressure: Not reported Pure: Not reported Reactive: Not reported Not reported Solid: Trade Secret: Not reported

Report Year: 2016 Facility Id: 864

State Id: Not reported

Fire District: Waterloo Fire Department

Site Map: Not reported Site Coord Abbreviation: Not reported Date Signed: 01/14/2008 Date Modified: 01/06/2017 Dike Or Other Safeguard: Not reported Mailing Address: Not reported Mail City: Not reported Mail State: IΑ

Mail Zip: Not reported Latitude: 42.55598 Longitude: -92.37820 Notes: Not reported

Report Year: 2015 Facility Id: 864

State Id: Not reported

Fire District: Waterloo Fire Department

Site Map: Not reported Site Coord Abbreviation: Not reported Date Signed: 01/14/2008 Date Modified: 01/14/2016 Dike Or Other Safeguard: Not reported Mailing Address: Not reported Mail City: Not reported Mail State: IΑ

Mail Zip: Not reported Latitude: 42.55598 -92.37820 Longitude: Notes: Not reported

2014 Report Year: Facility Id: 864

State Id: Not reported

Fire District: Waterloo Fire Department

Site Map: Not reported

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# IA ARNG WATERLOO AVIATION (Continued)

S109946710

Site Coord Abbreviation: Not reported 01/14/2008 Date Signed: Date Modified: 02/06/2015 Dike Or Other Safeguard: Not reported Mailing Address: Not reported Mail City: Not reported

Mail State: IΑ

Mail Zip: Not reported Latitude: 42.55598 Longitude: -92.37820 Notes: Not reported

2013 Report Year: Facility Id: 864

State Id: Not reported

Fire District: Waterloo Fire Department

Not reported Site Map: Site Coord Abbreviation: Not reported Date Signed: 01/14/2008 02/26/2014 Date Modified: Dike Or Other Safeguard: Not reported Mailing Address: Not reported Mail City: Not reported Mail State: IΑ Mail Zip: Not reported Latitude: 42.55598 Longitude: -92.37820 Notes: Not reported

Report Year: 2012

Facility Id: FAIDSIT2A00000864

State Id: Not reported

Fire District: Waterloo Fire Department

Site Map: False Site Coord Abbreviation: False Date Signed: 02/12/2007 Date Modified: 02/23/2012 Dike Or Other Safeguard: False Mailing Address: Not reported Mail City: Not reported Mail State: Not reported Mail Zip: Not reported Latitude: 42.55598 Longitude: -92.37820

Notes: FROM 2006 DATA: Please attempt to contact emergency contacts through

work then home phones first. The cell phone should be used if neither

person can be contacted.

Report Year: 2012

Facility Id: FAIDSIT2A00000864

State Id: Not reported

Fire District: Waterloo Fire Department

Site Map: False Site Coord Abbreviation: False Date Signed: 02/14/2013 Date Modified: 02/14/2013 Dike Or Other Safeguard: False

Direction Distance

Elevation Site Database(s) EPA ID Number

# IA ARNG WATERLOO AVIATION (Continued)

S109946710

**EDR ID Number** 

Mailing Address: Not reported
Mail City: Not reported
Mail State: Not reported
Mail Zip: Not reported
Latitude: 42.55598
Longitude: -92.37820
Notes: Not reported

Report Year: 2010

Facility Id: FAIDSIT2A00000864

State Id: Not reported

Fire District: Waterloo Fire Department

Site Map: False Site Coord Abbreviation: False

Date Signed: 2011-01-20T16:13:56

Date Modified: 3/30/2011

Dike Or Other Safeguard: False

Mailing Address: Not reported

Mail City: Not reported

Mail State: Not reported

Mail Zip: Not reported

Latitude: 42.55598599999997 Longitude: -92.378204999999994

Notes: FROM 2006 DATA: Please attempt to contact emergency contacts through

work then home phones first. The cell phone should be used if neither

person can be contacted.

Report Year: 2009

Facility Id: FAIDSIT2A00000864

State Id: IA

Fire District: Waterloo Fire Department

Site Map: False Site Coord Abbreviation: False

Date Signed: 2010-02-18T16:24:13
Date Modified: 2010-02-18T16:23:24

Dike Or Other Safeguard: False
Mailing Address: Not reported
Mail City: Not reported
Mail State: Not reported
Mail Zip: Not reported

Latitude: 42.55598599999997 Longitude: -92.378204999999994

Notes: FROM 2006 DATA: Please attempt to contact emergency contacts through

work then home phones first. The cell phone should be used if neither

person can be contacted.

A5 BECKER CHAPMAN POST RIFLE RANGE

2245 W BIG ROCK RD WATERLOO, IA 50703

Site 5 of 13 in cluster A

Actual: FINDS:

876 ft.

Target

**Property** 

Registry ID: 110070130403

Environmental Interest/Information System

IDNR-EFD (Iowa Department Of Natural Resources - Emission Factor

1024047188

N/A

**FINDS** 

Direction Distance

Distance EDR ID Number
Elevation Site EDR ID Number

# BECKER CHAPMAN POST RIFLE RANGE (Continued)

1024047188

Documentation) provides information about existing emission factors

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

\_\_\_\_\_

A6 IOWA ARMY NATIONAL GUARD - WATERLOO Target 2245 W BIG ROCK RD US AIRS 1016935615 N/A

Property WATERLOO, IA 50703

Site 6 of 13 in cluster A

Actual: US AIRS MINOR:

**876 ft.** Envid: 1016935615

Region Code: 07

Programmatic ID: AIR IA0000001901300247

Facility Registry ID: 110005756379
D and B Number: Not reported
Primary SIC Code: 9711
NAICS Code: 928110
Default Air Classification Code: MIN
Facility Type of Ownership Code: STF
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:

Region Code: 07

Programmatic ID: AIR IA0000001901300247

Facility Registry ID: 110005756379

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1998-05-20 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 07

Programmatic ID: AIR IA0000001901300247

Facility Registry ID: 110005756379

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2000-02-04 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

US AIRS MINOR:

Envid: 1016935615

Region Code: 07

Programmatic ID: AIR IA0000001901300247

Facility Registry ID: 110005756379
D and B Number: Not reported
Primary SIC Code: 9711

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# IOWA ARMY NATIONAL GUARD - WATERLOO (Continued)

1016935615

NAICS Code: 928110 Default Air Classification Code: MIN Facility Type of Ownership Code: STF Air CMS Category Code: Not reported **HPV Status:** Not reported

US AIRS MINOR:

07 Region Code:

Programmatic ID: AIR IA000001901300247

Facility Registry ID: 110005756379 Air Operating Status Code: **OPR** 

Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1998-05-20 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Inspection/Evaluation Activity Type: Activity Status: Not reported

Region Code: 07

AIR IA0000001901300247 Programmatic ID:

Facility Registry ID: 110005756379

Air Operating Status Code: **OPR** Default Air Classification Code:

State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards Air Program:

2000-02-04 00:00:00 Activity Date:

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

**Activity Status:** Not reported

**IOWA ARMY NATIONAL GUARD AASF 2** Α7

**Target** 2245 WEST BIG ROCK RD. **Property** WATERLOO, IA 50703

**NPDES** S122537119 N/A

### Site 7 of 13 in cluster A

NPDES: Actual:

876 ft. Permit Number: Not reported Epa Npdes Id Number: Not reported Permit Expiration Date: 07/02/2010

> **IOWA ARMY NATIONAL GUARD AASF 2** Facility Name:

Facility Address1: 2245 WEST BIG ROCK RD.

Facility City: **WATERLOO** Facility Phone Number: Not reported Facility Type: Not reported Facility Class: Not reported Standard Industrial Classification Code: Not reported

**IOWA ARMY NATIONAL GUARD** Owner Name:

Owner Add1: Not reported Owner Add2: Not reported Owner City: Not reported Owner State: Not reported Not reported Owner Zip: Owner Phone: Not reported Indr Regional/Field Office Number: Not reported Not reported Section:

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# **IOWA ARMY NATIONAL GUARD AASF 2 (Continued)**

S122537119

1011288083

1016085222

N/A

N/A

**FINDS** 

**FINDS** 

**ECHO** 

Township: Not reported Not reported Range: Latitude Degree: Not reported Longitude Degree: Not reported River Basin: Not reported Type Of Treatment: Not reported Not reported Design Number: Design Population Equivalent: Not reported Design Biochemical Oxygen Demand: Not reported Design Avg Dry Weather Flow (Mll Glns Per Dy): Not reported Design Avg Wet Weather Flow (MII Glns Per Dy): Not reported Operator Certification Facility Type: Not reported File No: 13802 Authorization No: 13591 Authorization Date: 07/02/2007 Discontinued Permit Status:

Permit Type: GP #2 - Construction Activity

Legal Status: Federal

**A8** AASF #2

AASF #2 2245 W BIG ROCK RD **Target Property** WATERLOO, IA 50703

Site 8 of 13 in cluster A

Actual: FINDS:

876 ft.

Registry ID: 110036255405

Environmental Interest/Information System

IDNR-EFD (Iowa Department Of Natural Resources - Emission Factor Documentation) provides information about existing emission factors

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

Α9 **IOWA ARMY NATIONAL GUARD - WATERLOO** 

Target 2245 WEST BIG ROCK ROAD **Property** WATERLOO, IA 50703

Site 9 of 13 in cluster A

Actual: FINDS:

876 ft.

Registry ID: 110005756379

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans

to comply with regulatory programs and by EPA as an input for the

Direction Distance

Elevation Site Database(s) **EPA ID Number** 

# IOWA ARMY NATIONAL GUARD - WATERLOO (Continued)

1016085222

**EDR ID Number** 

estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

AIR MINOR

IDNR-EFD (Iowa Department Of Natural Resources - Emission Factor Documentation) provides information about existing emission factors

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1016085222 Registry ID: 110005756379

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005756379

A10 **IOWA ARMY NATIONAL GUARD - AASF 2** 

**Target** 2245 W BIG ROCK RD WATERLOO, IA 50703 **Property** 

CORRACTS 1000439559 RCRA-TSDF IAD981504269 **RCRA-SQG RAATS** 

Site 10 of 13 in cluster A

Actual: CORRACTS:

876 ft.

EPA ID: IAD981504269

EPA Region:

Area Name: **ENTIRE FACILITY** 

Actual Date: 20091211

Action: CA400 - Date For Remedy Selection (CM Imposed)

NAICS Code(s): 92811

**National Security** 

Original schedule date: Not reported Schedule end date: Not reported

EPA ID: IAD981504269

EPA Region:

Area Name: **ENTIRE FACILITY** 

Actual Date: 20091211

CA999NF - Corrective Action Process Terminated, No Further Action Action:

NAICS Code(s): 92811

National Security Original schedule date: Not reported Not reported

EPA ID: IAD981504269

EPA Region:

Schedule end date:

Area Name: **ENTIRE FACILITY** Actual Date: 20091211 CA550NR Action:

Direction Distance

Elevation Site Database(s) EPA ID Number

# IOWA ARMY NATIONAL GUARD - AASF 2 (Continued)

1000439559

**EDR ID Number** 

NAICS Code(s): 92811

Original schedule date: Not reported Schedule end date: Not reported

EPA ID: IAD981504269

EPA Region: 7

Area Name: ENTIRE FACILITY

Actual Date: 19960905

Action: CA225NR - Stabilization Measures Evaluation, This facility is, not

amenable to stabilization activity at the, present time for reasons

other than (1) it appears to be technically, infeasible or

inappropriate (NF) or (2) there is a lack of technical, information (IN). Reasons for this conclusion may be the status of, closure at the facility, the degree of risk, timing considerations, the status of corrective action work at the facility, or other, administrative

considerations

NAICS Code(s): 92811

National Security

Original schedule date: 19960930 Schedule end date: Not reported

EPA ID: IAD981504269

EPA Region: 7

Area Name: ENTIRE FACILITY

Actual Date: 19950321

Action: CA225IN - Stabilization Measures Evaluation, This facility is not,

amenable to stabilization activity because of, a lack of technical data. An evaluation has been completed, but further data is necessary to determine stabilization measures, feasibility or appropriateness. This status should be changed when data becomes available

NAICS Code(s): 92811

National Security

Original schedule date: 19950930 Schedule end date: Not reported

EPA ID: IAD981504269

EPA Region: 7

Area Name: ENTIRE FACILITY

Actual Date: 19940801

Action: CA075ME - CA Prioritization, Facility or area was assigned a medium

corrective action priority

NAICS Code(s): 92811

National Security

Original schedule date: Not reported Schedule end date: Not reported

EPA ID: IAD981504269

EPA Region:

Area Name: ENTIRE FACILITY

Actual Date: 19930818

Action: CA075LO - CA Prioritization, Facility or area was assigned a low

corrective action priority

NAICS Code(s): 92811

National Security

Original schedule date: Not reported Schedule end date: Not reported

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

### IOWA ARMY NATIONAL GUARD - AASF 2 (Continued)

1000439559

RCRA-TSDF:

Date form received by agency: 09/11/2014

IOWA ARMY NATIONAL GUARD - AASF 2 Facility name:

Facility address: 2245 W BIG ROCK RD

WATERLOO, IA 50703-9643

EPA ID: IAD981504269

NW 70TH AVE, ENV OFFICE Mailing address:

BLDG B61 (3535) CAMP DODGE

JOHNSTON, IA 50131-1824

Contact: **CURTIS L MADSEN** 

Contact address: NW 70TH AVE, ENV OFFICE BLDG B61 (3535) CAMP DODGE

JOHNSTON, IA 50131-1824

Contact country: US

Contact telephone: 515-252-4557

CURTIS.L.MADSEN.NFG@MAIL.MIL Contact email:

EPA Region: 07 Land type: State Classification: **TSDF** 

Description: Handler is engaged in the treatment, storage or disposal of hazardous

waste

Owner/Operator Summary:

Owner/operator name: IOWA ARMY NATIONAL GUARD

Owner/operator address: NW 70TH AVE, ENV OFFICE BLDG B61 (3535) CAMP DODGE

JOHNSTON, IA 50131

Owner/operator country: US

Owner/operator telephone: 515-252-4557 Owner/operator email: Not reported Owner/operator fax: Not reported Not reported Owner/operator extension: Legal status: State Owner/Operator Type: Operator Owner/Op start date: 12/31/1992 Owner/Op end date: Not reported

IOWA ARMY NATIONAL GUARD Owner/operator name:

Owner/operator address: NW 70TH AVE, ENV OFFICE BLDG B61 (3535) CAMP DODGE

JOHNSTON, IA 50131

Not reported

Owner/operator country: US

Owner/operator telephone: 515-252-4557 Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: State Owner/Operator Type: Owner Owner/Op start date: 12/31/1992

Handler Activities Summary:

Owner/Op end date:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: Nο Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: No

Direction Distance Elevation

Site Database(s) EPA ID Number

### IOWA ARMY NATIONAL GUARD - AASF 2 (Continued)

1000439559

**EDR ID Number** 

Furnace exemption: No Used oil fuel burner: No Used oil processor: Nο 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

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D006
Waste name: CADMIUM

Waste code: D007

Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

. Waste code: F003

. Waste name: THE FOLLOWING SPENT NON-HALOGENATED 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 NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED 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 NON-HALOGENATED 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 NON-HALOGENATED 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: UOIL . Waste name: UOIL

Historical Generators:

Date form received by agency: 07/06/2010

Site name: IOWA ARMY NATIONAL GUARD - AASF 2
Classification: Conditionally Exempt Small Quantity Generator

. Waste code: D001

Direction Distance Elevation

stance EDR ID Number evation Site Database(s) EPA ID Number

### IOWA ARMY NATIONAL GUARD - AASF 2 (Continued)

1000439559

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D009
. Waste name: MERCURY

. Waste code: UOIL . Waste name: UOIL

Date form received by agency:01/08/2010

Site name: IOWA ARMY NATIONAL GUARD - AASF 2
Classification: Conditionally Exempt Small Quantity Generator

Date form received by agency: 06/30/2008

Site name: IOWA ARMY NATIONAL GUARD-AASF 2

Classification: Large Quantity Generator

Waste code: D002

. Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS

CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE

DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS 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: D039

Waste name: TETRACHLOROETHYLENE

Waste code: F001

. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING:

TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED

FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING 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 F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE

Distance Elevation

vation Site Database(s) EPA ID Number

# IOWA ARMY NATIONAL GUARD - AASF 2 (Continued)

1000439559

**EDR ID Number** 

SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. 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 LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

SPENT SOLVENT MIXTURES.

Waste code: F003

Waste name: THE FOLLOWING SPENT NON-HALOGENATED 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 NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED 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: F004

. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC

ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE

SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005

Waste name: THE FOLLOWING SPENT NON-HALOGENATED 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 NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS

LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency:02/19/2004

Site name: IOWA ARMY NATIONAL GUARD-AASF 2
Classification: Conditionally Exempt Small Quantity Generator

Waste code: D002

Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS

CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE

DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

. Waste code: D006 . Waste name: CADMIUM

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

IOWA ARMY NATIONAL GUARD - AASF 2 (Continued)

1000439559

. 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: D039

. Waste name: TETRACHLOROETHYLENE

Waste code: F001

. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING:

TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED

FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING 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 F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE

SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

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 LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

SPENT SOLVENT MIXTURES.

. Waste code: F003

Waste name: THE FOLLOWING SPENT NON-HALOGENATED 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 NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED 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: F004

Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC

ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE

SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

# IOWA ARMY NATIONAL GUARD - AASF 2 (Continued)

1000439559

. Waste name: THE FOLLOWING SPENT NON-HALOGENATED 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 NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF

THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 03/06/2000

Site name: IOWA ARMY NATIONAL GUARD-AASF 2

Classification: Small Quantity Generator

Waste code: D000
Waste name: Not Defined

Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT

WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Waste code: D002

. Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS

CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE

DISPOSED. THE WASTE WOULD BE A CORROSIVE HAZARDOUS 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: D039

Waste name: TETRACHLOROETHYLENE

Waste code: F001

. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING:

TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED

FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF

Elevation Site

Distance

Site Database(s) EPA ID Number

# IOWA ARMY NATIONAL GUARD - AASF 2 (Continued)

1000439559

**EDR ID Number** 

ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. 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 LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

SPENT SOLVENT MIXTURES.

Waste code: F003

Waste name: THE FOLLOWING SPENT NON-HALOGENATED 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 NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED 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: F004

. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC

ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE

SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Waste code: F005

. Waste name: THE FOLLOWING SPENT NON-HALOGENATED 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 NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF

THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency:08/02/1994

Site name: IOWA ARMY NATIONAL GUARD-AASF 2

Classification: Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF

LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

# IOWA ARMY NATIONAL GUARD - AASF 2 (Continued)

1000439559

MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D002

. Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS

CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

. Waste code: D006 . Waste name: CADMIUM

Waste code: D007

Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

Waste code: D018
Waste name: BENZENE

Waste code: D039

. Waste name: TETRACHLOROETHYLENE

Waste code: F001

. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING:

TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED

FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING 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 F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE

SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

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 LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

SPENT SOLVENT MIXTURES.

Waste code: F003

Waste name: THE FOLLOWING SPENT NON-HALOGENATED 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 NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED 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

Direction Distance

Elevation Site Database(s) EPA ID Number

# IOWA ARMY NATIONAL GUARD - AASF 2 (Continued)

1000439559

**EDR ID Number** 

BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT

MIXTURES.

. Waste code: F004

. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC

ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE

SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005

Waste name: THE FOLLOWING SPENT NON-HALOGENATED 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 NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF

THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency:07/13/1993

Site name: IOWA ARMY NATIONAL GUARD-AASF 2

Classification: Not a generator, verified

Corrective Action Summary:

Event date: 08/18/1993

Event: CA PRIORITIZATION-LOW CA PRIORITY

Event date: 08/01/1994

Event: CA PRIORITIZATION-MEDIUM CA PRIORITY

Event date: 03/21/1995

Event: STABILIZATION MEASURES EVALUATION-FURTHER INVESTIGATION NECESSARY

Event date: 09/05/1996

Event: STABILIZATION MEASURES EVALUATION-FACILITY NOT AMENABLE TO

**STABILIZATION** 

Event date: 12/11/2009

Event: REMEDY DECISION

Event date: 12/11/2009

Event: REMEDY CONSTRUCTION-NO REMEDY CONSTRUCTED

Event date: 12/11/2009

Event: CA PROCESS IS TERMINATED-NO FURTHER ACTION

Facility Has Received Notices of Violations:

Regulation violated: FR - CFR 262.34(a)(2)
Area of violation: Generators - Pre-transport

Date violation determined: 02/22/1995
Date achieved compliance: 03/31/1995
Violation lead agency: EPA

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 02/22/1995 Enf. disposition status: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

### IOWA ARMY NATIONAL GUARD - AASF 2 (Continued)

1000439559

**EDR ID Number** 

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 - CFR 268.7(a)(7)
Area of violation: LDR - General
Date violation determined: 02/22/1995
Date achieved compliance: 03/03/1995
Violation lead agency: EPA

Enforcement action: WRITTEN INFORMAL

Enforcement action date: 02/22/1995
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: TSD - Closure/Post-Closure

Date violation determined: 04/27/1993
Date achieved compliance: 09/27/1995

Violation lead agency: EPA

Enforcement action: INITIAL 3008(A) COMPLIANCE

Enforcement action date: 06/30/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Paid penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported

Area of violation: TSD - Closure/Post-Closure

Date violation determined: 04/27/1993
Date achieved compliance: 09/27/1995
Violation lead agency: EPA

Enforcement action: FINAL 3008(A) COMPLIANCE ORDER

Enforcement action date: 10/17/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA

Proposed penalty amount: Not reported Final penalty amount: 35000 Paid penalty amount: 35000

Regulation violated: FR - Disposed of Lead Waste

Area of violation: Generators - General

Date violation determined: 09/15/1992
Date achieved compliance: 09/27/1995
Violation lead agency: EPA

Enforcement action: INITIAL 3008(A) COMPLIANCE

Enforcement action date: 06/30/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

Direction Distance

Elevation Site Database(s) EPA ID Number

# IOWA ARMY NATIONAL GUARD - AASF 2 (Continued)

1000439559

**EDR ID Number** 

Enforcement lead agency: EPA
Proposed penalty amount: 263450
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - Disposed of Lead Waste

Area of violation: Generators - General

Date violation determined: 09/15/1992
Date achieved compliance: 09/27/1995
Violation lead agency: EPA

Enforcement action: FINAL 3008(A) COMPLIANCE ORDER

Enforcement action date: 10/17/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: 35000
Paid penalty amount: 35000

**Evaluation Action Summary:** 

Evaluation date: 05/25/2010

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Evaluation lead agency: EPA Contractor/Grantee

Evaluation date: 09/27/1995

Evaluation: NOT A SIGNIFICANT NON-COMPLIER

Area of violation:

Date achieved compliance:

Evaluation lead agency:

Not reported

Not reported

EPA

Evaluation date: 06/15/1995

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported

Evaluation lead agency: EPA Contractor/Grantee

Evaluation date: 02/22/1995

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Generators - Pre-transport

Date achieved compliance: 03/31/1995 Evaluation lead agency: EPA

Evaluation date: 02/22/1995

Evaluation: FOCUSED COMPLIANCE INSPECTION

Area of violation: LDR - General Date achieved compliance: 03/03/1995 Evaluation lead agency: EPA

Evaluation date: 02/22/1995

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: LDR - General Date achieved compliance: 03/03/1995 Evaluation lead agency: EPA

Evaluation date: 08/02/1994

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

# IOWA ARMY NATIONAL GUARD - AASF 2 (Continued)

1000439559

Evaluation: FOCUSED COMPLIANCE INSPECTION

Area of violation: Not reported Not reported Date achieved compliance:

Evaluation lead agency: EPA Contractor/Grantee

Evaluation date: 04/27/1993

SIGNIFICANT NON-COMPLIER Evaluation:

Area of violation: Not reported Not reported Date achieved compliance: Evaluation lead agency: **EPA** 

Evaluation date: 04/27/1993

NON-FINANCIAL RECORD REVIEW Evaluation:

Area of violation: TSD - Closure/Post-Closure

Date achieved compliance: 09/27/1995 Evaluation lead agency: **EPA** 

Evaluation date: 09/15/1992

Evaluation: SIGNIFICANT NON-COMPLIER

6228

Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: **EPA** 

Evaluation date: 09/15/1992

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation:

Area of violation: Generators - General

Date achieved compliance: 09/27/1995 Evaluation lead agency: **EPA** 

A11 AASF #2

Target AASF #2 2245 W BIG ROCK RD **Property** WATERLOO, IA 50703

Site 11 of 13 in cluster A

UST: Actual:

876 ft. Facility Id:

> Loc Id: 6228 198605894 Registration: Owner Type: State Financial Code: Not reported Insurer's Name: Not reported Policy Number: Not reported Policy Start Date: Not reported Policy End Date: Not reported Registration Sign Date: 03/10/1986 Created By: migration Created Date: 01/08/2007 Changed By: migration 01/08/2007 Last Changed: Latitude: 42.56091 Longitude: -92.39604 Otype ID Decode: State

Tank Info:

Tank Num: 17188 In Use: False Tank Type: 4

Tank Brand Id: Not reported UST

U003634984

N/A

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

AASF #2 (Continued) U003634984

Inert Material Id: Not reported Not reported Filled In Place: Double Wall Steel Material Construction: Emergency Power Gen: Not reported

17189 Tank Num: In Use: False Tank Type:

Tank Brand Id: Not reported Inert Material Id: Not reported Filled In Place: Not reported Material Construction: Double Wall Steel **Emergency Power Gen:** Not reported

A12 **IOWA ARMY NATIONAL GUARD AASF2 - TRUCK LOADING RAM** S122545207 **NPDES Target** 2245 W. BIG ROCK RD. N/A

WATERLOO, IA 50703 **Property** 

Site 12 of 13 in cluster A

Actual: NPDES: 876 ft.

Permit Number: Not reported Epa Npdes Id Number: Not reported Permit Expiration Date: 12/16/2012

IOWA ARMY NATIONAL GUARD AASF2 - TRUCK LOADING RAMP CONSTRUCTION Facility Name:

Facility Address1: 2245 W. BIG ROCK RD.

Facility City: **WATERLOO** Facility Phone Number: Not reported Facility Type: Not reported Facility Class: Not reported Standard Industrial Classification Code: Not reported

IOWA ARMY NATIONAL GUARD NGIA-DIM-E Owner Name:

Owner Add1: Not reported Owner Add2: Not reported Owner City: Not reported Owner State: Not reported Owner Zip: Not reported Not reported Owner Phone: Indr Regional/Field Office Number: Not reported Section: Not reported Township: Not reported Range: Not reported Not reported Latitude Degree: Longitude Degree: Not reported

River Basin: Not reported Type Of Treatment: Not reported Design Number: Not reported Design Population Equivalent: Not reported Design Biochemical Oxygen Demand: Not reported Design Avg Dry Weather Flow (MII Glns Per Dy): Not reported Design Avg Wet Weather Flow (MII Glns Per Dy): Not reported Operator Certification Facility Type: Not reported File No: 21097 Authorization No: 20865 Authorization Date: 12/16/2011 Permit Status: Discontinued

GP #2 - Construction Activity Permit Type:

Map ID MAP FINDINGS Direction Distance **EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

State

IOWA ARMY NATIONAL GUARD AASF2 - TRUCK LOADING RAMP CONSTRUC (Continued)

S122545207

A13 IA ARNG WATERLOO AVIATION **FINDS** 1014699342 2245 WEST BIG ROCK ROAD **Target** N/A

WATERLOO, IA 50703 Property

Site 13 of 13 in cluster A

Legal Status:

FINDS: Actual: 876 ft.

> 110043626234 Registry ID:

Environmental Interest/Information System

IDNR-EFD (Iowa Department Of Natural Resources - Emission Factor Documentation) provides information about existing emission factors

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

Database(s)	
Zip	
Site Address	
Site Name	
EDR ID	
City	

ORPHAN SUMMARY

Count: 0 records.

NO SITES FOUND

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: 07/17/2018 Source: EPA
Date Data Arrived at EDR: 08/09/2018 Telephone: N/A

Number of Days to Update: 29 Next Scheduled EDR Contact: 01/14/2019
Data Release Frequency: Quarterly

**NPL Site Boundaries** 

Sources

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 EPA Region 8

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 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.

Source: EPA

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 09/07/2018

Telephone: N/A Last EDR Contact: 10/04/2018

Number of Days to Update: 29 Next Scheduled EDR Contact: 01/14/2019

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: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 29

Source: EPA Telephone: N/A

Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 01/14/2019 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: 11/07/2016 Date Data Arrived at EDR: 01/05/2017 Date Made Active in Reports: 04/07/2017

Number of Days to Update: 92

Source: Environmental Protection Agency Telephone: 703-603-8704

Last EDR Contact: 07/06/2018

Next Scheduled EDR Contact: 10/15/2018 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: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 29

Source: EPA Telephone: 800-424-9346 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 10/29/2018 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: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 09/07/2018

Number of Days to Update: 29

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 01/14/2019 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: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019 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: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: 913-551-7003 Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019 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: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency Telephone: 913-551-7003

Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019 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: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: 913-551-7003 Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019
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: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: 913-551-7003 Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019 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: 05/14/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 07/16/2018

Next Scheduled EDR Contact: 11/26/2018 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: 07/31/2018 Date Data Arrived at EDR: 08/28/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 17

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 08/28/2018

Next Scheduled EDR Contact: 12/10/2018 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: 07/31/2018 Date Data Arrived at EDR: 08/28/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 17

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 08/28/2018

Next Scheduled EDR Contact: 12/10/2018

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: 06/18/2018 Date Data Arrived at EDR: 06/27/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 79

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 09/25/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

### State- and tribal - equivalent CERCLIS

SHWS: Registry of Hazardous Waste or Hazardous Substance 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: 12/31/2017 Date Data Arrived at EDR: 01/24/2018 Date Made Active in Reports: 02/23/2018

Number of Days to Update: 30

Source: Department of Natural Resources

Telephone: 515-281-8801 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Annually

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

SWF/LF: Permitted Solid Waste Management Facilities

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: 09/04/2018 Date Data Arrived at EDR: 09/05/2018 Date Made Active in Reports: 10/02/2018

Number of Days to Update: 27

Source: Department of Natural Resources

Telephone: 515-281-8801 Last EDR Contact: 09/05/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Quarterly

# State and tribal leaking storage tank lists

LAST: Leaking Aboveground Storage Tank Sites
A listing of leaking aboveground storage tank sites.

Date of Government Version: 07/16/2018 Date Data Arrived at EDR: 07/18/2018 Date Made Active in Reports: 08/24/2018

Number of Days to Update: 37

Source: Department of Natural Resources

Telephone: 515-281-6001 Last EDR Contact: 07/18/2018

Next Scheduled EDR Contact: 10/29/2018 Data Release Frequency: Quarterly

LUST: Leaking Underground Storage Tank Data

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: 08/30/2018 Date Data Arrived at EDR: 09/07/2018 Date Made Active in Reports: 10/02/2018

Number of Days to Update: 25

Source: Department of Natural Resources

Telephone: 515-281-6001 Last EDR Contact: 08/29/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Quarterly

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: 04/12/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/12/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 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: 04/10/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: Environmental Protection Agency Telephone: 415-972-3372 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 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: 04/25/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 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: 04/24/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 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: 04/01/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 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: 05/08/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 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: 04/13/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 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: 10/10/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Varies

UST: Underground Storage Tank Data

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: 08/30/2018 Date Data Arrived at EDR: 09/07/2018 Date Made Active in Reports: 10/02/2018

Number of Days to Update: 25

Source: Department of Natural Resources

Telephone: 515-281-6001 Last EDR Contact: 08/29/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Quarterly

AST: Aboveground Storage Tank Sites

Bulk fuel facilities, commercial fuel operations, private farm sites, and any other storage facility that meets the Department of Public Safety?s registration criteria. They register any class I, II or III petroleum product (gas, diesel and oil) above 1,100 gallons.

Date of Government Version: 07/31/2018 Date Data Arrived at EDR: 08/02/2018 Date Made Active in Reports: 08/24/2018

Number of Days to Update: 22

Source: Department of Public Safety Telephone: 515-281-5821

Last EDR Contact: 09/28/2018

Next Scheduled EDR Contact: 01/07/2019 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: 04/12/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 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: 04/10/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 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: 04/24/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 Data Release Frequency: Varies

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: 04/01/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 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: 04/12/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 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: 05/08/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 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: 04/25/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 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: 04/13/2018 Date Data Arrived at EDR: 05/18/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 63

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 Data Release Frequency: Varies

#### State and tribal institutional control / engineering control registries

INST CONTROL: Sites with Institutional Controls

Sites currently enrolled in the Land Recycling Program that have Institutional Controls.

Date of Government Version: 07/16/2018 Date Data Arrived at EDR: 07/18/2018 Date Made Active in Reports: 08/24/2018

Number of Days to Update: 37

Source: Department of Natural Resources

Telephone: 515-242-5818 Last EDR Contact: 07/18/2018

Next Scheduled EDR Contact: 10/29/2018 Data Release Frequency: Varies

#### State and tribal voluntary cleanup sites

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

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: 09/24/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Varies

VCP: Land Recycling Program Sites

Sites currently enrolled in the Land Recycling Program.

Date of Government Version: 07/16/2018 Date Data Arrived at EDR: 07/18/2018 Date Made Active in Reports: 08/23/2018

Number of Days to Update: 36

Source: Department of Natural Resources

Telephone: 515-242-5818 Last EDR Contact: 07/18/2018

Next Scheduled EDR Contact: 10/29/2018 Data Release Frequency: Varies

#### State and tribal Brownfields sites

BROWNFIELDS: Brownfields Site Listing

Brownfields are abandoned, idled, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.

Date of Government Version: 07/16/2018 Date Data Arrived at EDR: 07/18/2018 Date Made Active in Reports: 08/23/2018

Number of Days to Update: 36

Source: Department of Natural Resources

Telephone: 515-281-8489 Last EDR Contact: 07/18/2018

Next Scheduled EDR Contact: 10/29/2018 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: 06/18/2018 Date Data Arrived at EDR: 06/20/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: 202-566-2777 Last EDR Contact: 09/18/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: Semi-Annually

#### Local Lists of Landfill / Solid Waste Disposal Sites

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: 07/30/2018

Next Scheduled EDR Contact: 11/12/2018 Data Release Frequency: Varies

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

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: 07/17/2018

Next Scheduled EDR Contact: 11/05/2018

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: 08/03/2018

Next Scheduled EDR Contact: 11/12/2018

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: 05/18/2018 Date Data Arrived at EDR: 06/20/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 86

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 08/28/2018

Next Scheduled EDR Contact: 12/10/2018

Data Release Frequency: No Update Planned

ALLSITES: Contaminated Sites Tracking Database

All the sites included in the Contaminated Sites Tracking Database. The database includes several regulatory complinace programs and actions.

Date of Government Version: 07/16/2018 Date Data Arrived at EDR: 07/18/2018 Date Made Active in Reports: 08/23/2018

Number of Days to Update: 36

Source: Department of Natural Resources Telephone: 515-281-4171

Last EDR Contact: 07/18/2018

Next Scheduled EDR Contact: 10/29/2018 Data Release Frequency: Quarterly

DEL SHWS: Delisted Contaminated Sites Listing

A listing of sites delisted from the Contaminated Sites Listing.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 01/24/2018 Date Made Active in Reports: 02/23/2018

Number of Days to Update: 30

Source: Department of Natural Resources

Telephone: 515-281-8801 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/28/2019 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: 05/18/2018 Date Data Arrived at EDR: 06/20/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 86

Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 08/28/2018

Next Scheduled EDR Contact: 12/10/2018 Data Release Frequency: Quarterly

Local Land Records

LIENS: Liens Filed Listing

A listing of liens filed with the Iowa Comprehensive Petroleum Underground Storage Tank Fund.

Date of Government Version: 07/05/2018 Date Data Arrived at EDR: 07/24/2018 Date Made Active in Reports: 08/24/2018

Number of Days to Update: 31

Source: Department of Natural Resources

Telephone: 515-281-5523 Last EDR Contact: 07/17/2018

Next Scheduled EDR Contact: 11/05/2018 Data Release Frequency: Varies

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: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 57

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 01/14/2019 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: 03/26/2018 Date Data Arrived at EDR: 03/27/2018 Date Made Active in Reports: 06/08/2018

Number of Days to Update: 73

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 09/25/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

SPILLS: Spills Database

Spill reporting data that is collected during the initial report of an incident.

Date of Government Version: 09/04/2018 Date Data Arrived at EDR: 09/06/2018 Date Made Active in Reports: 10/02/2018

Number of Days to Update: 26

Source: Department of Natural Resources

Telephone: 515-281-4367 Last EDR Contact: 09/06/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Annually

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: 10/17/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 03/05/2013

Number of Days to Update: 61

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: 03/01/2018 Date Data Arrived at EDR: 03/28/2018 Date Made Active in Reports: 06/22/2018

Number of Days to Update: 86

Source: Environmental Protection Agency

Telephone: 913-551-7003 Last EDR Contact: 09/19/2018

Next Scheduled EDR Contact: 01/07/2019 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: 01/31/2015 Date Data Arrived at EDR: 07/08/2015 Date Made Active in Reports: 10/13/2015

Number of Days to Update: 97

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 08/24/2018

Next Scheduled EDR Contact: 12/03/2018 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: 10/12/2018

Next Scheduled EDR Contact: 01/21/2019 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: 10/12/2018

Next Scheduled EDR Contact: 01/21/2019

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: 08/17/2018

Next Scheduled EDR Contact: 11/26/2018

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: 05/31/2018 Date Data Arrived at EDR: 06/27/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 100

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 09/25/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Quarterly

#### 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: 08/03/2018

Next Scheduled EDR Contact: 11/19/2018 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: 08/10/2018

Next Scheduled EDR Contact: 11/19/2018 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: 09/21/2018

Next Scheduled EDR Contact: 12/31/2018 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: 08/24/2018

Next Scheduled EDR Contact: 12/03/2018 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: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 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: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 57

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 12/17/2018 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: 08/01/2018
Date Data Arrived at EDR: 08/22/2018
Date Made Active in Reports: 10/05/2018

Number of Days to Update: 44

Source: Environmental Protection Agency

Telephone: 202-564-8600 Last EDR Contact: 07/20/2018

Next Scheduled EDR Contact: 11/05/2018 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: 10/25/2013 Date Data Arrived at EDR: 10/17/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 3

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 11/19/2018 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: 06/01/2017 Date Data Arrived at EDR: 06/09/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 126

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 10/11/2018

Next Scheduled EDR Contact: 01/21/2019 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: 10/09/2018

Next Scheduled EDR Contact: 01/21/2019 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: Quarterly

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: Quarterly

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: 09/28/2018

Next Scheduled EDR Contact: 11/05/2018 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: 09/07/2018

Next Scheduled EDR Contact: 12/17/2018 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: 09/04/2018

Next Scheduled EDR Contact: 12/17/2018
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: 07/27/2018

Next Scheduled EDR Contact: 11/05/2018 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: 07/02/2018 Date Data Arrived at EDR: 07/05/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 92

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 10/03/2018

Next Scheduled EDR Contact: 01/14/2019 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: 07/31/2012 Date Data Arrived at EDR: 08/07/2012 Date Made Active in Reports: 09/18/2012

Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 08/09/2018

Next Scheduled EDR Contact: 11/12/2018

Data Release Frequency: Varies

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: 06/30/2018 Date Data Arrived at EDR: 07/17/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 80

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 10/01/2018

Next Scheduled EDR Contact: 12/31/2018

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: 08/24/2018

Next Scheduled EDR Contact: 12/03/2018 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: 10/09/2018

Next Scheduled EDR Contact: 01/21/2019 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: 09/11/2018

Next Scheduled EDR Contact: 11/19/2018 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: 08/20/2018

Next Scheduled EDR Contact: 12/03/2018 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 07/17/2018 Date Data Arrived at EDR: 08/09/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 57

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 10/04/2018

Next Scheduled EDR Contact: 01/14/2019 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: 08/01/2018 Date Data Arrived at EDR: 08/29/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 37

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 08/29/2018

Next Scheduled EDR Contact: 12/10/2018 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: 08/31/2018

Next Scheduled EDR Contact: 12/10/2018 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: 08/31/2018

Next Scheduled EDR Contact: 12/10/2018 Data Release Frequency: Varies

### 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: 09/10/2018 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 Interior Telephone: 202-208-2609 Last EDR Contact: 09/10/2018

Next Scheduled EDR Contact: 12/24/2018
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: 08/07/2018 Date Data Arrived at EDR: 09/05/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 30

Source: EPA

Telephone: (913) 551-7003 Last EDR Contact: 09/18/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Quarterly

### ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/02/2018 Date Data Arrived at EDR: 09/05/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 9

Source: Environmental Protection Agency

Telephone: 202-564-2280 Last EDR Contact: 09/05/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Quarterly

#### UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2017 Date Data Arrived at EDR: 06/19/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 87

Source: Department of Defense Telephone: 703-704-1564 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Varies

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: 08/31/2018

Next Scheduled EDR Contact: 12/10/2018 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: 08/22/2018 Date Data Arrived at EDR: 08/22/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 44

Source: EPA

Telephone: 800-385-6164 Last EDR Contact: 08/22/2018

Next Scheduled EDR Contact: 12/03/2018 Data Release Frequency: Quarterly

AIRS: Minor and Title V Sources Listing
A listing of Minor and Title V sources.

Date of Government Version: 06/26/2018 Date Data Arrived at EDR: 07/31/2018 Date Made Active in Reports: 08/24/2018

Number of Days to Update: 24

Source: Department of Natural Resources

Telephone: 515-281-8468 Last EDR Contact: 09/24/2018

Next Scheduled EDR Contact: 01/07/2019 Data Release Frequency: Varies

COAL ASH: Coal Ash Disposal Site Listing

A listing of coal combustion residue landfill locations.

Date of Government Version: 09/04/2018 Date Data Arrived at EDR: 09/05/2018 Date Made Active in Reports: 10/02/2018

Number of Days to Update: 27

Source: Department of Natural Resources

Telephone: 515-281-8308 Last EDR Contact: 09/05/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Quarterly

DRYCLEANERS: Iowa Drycleaner List A listing of drycleaners in Iowa.

Date of Government Version: 07/06/2018 Date Data Arrived at EDR: 07/27/2018 Date Made Active in Reports: 08/24/2018

Number of Days to Update: 28

Source: Department of Natural Resources

Telephone: 515-242-5100 Last EDR Contact: 10/15/2018

Next Scheduled EDR Contact: 01/28/2019 Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tank 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: 08/30/2018 Date Data Arrived at EDR: 09/07/2018 Date Made Active in Reports: 10/02/2018

Number of Days to Update: 25

Source: Department of Natural Resources

Telephone: 515-242-5086 Last EDR Contact: 08/29/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Quarterly

Financial Assurance 2: Financial Assurance Information Listing

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: 08/29/2018 Date Data Arrived at EDR: 08/30/2018 Date Made Active in Reports: 10/02/2018

Number of Days to Update: 33

Source: Department of Natural Resources

Telephone: 515-242-5818 Last EDR Contact: 08/29/2018

Next Scheduled EDR Contact: 12/17/2018 Data Release Frequency: Varies

NPDES: List of NPDES Permittees

The files listed below contain information on facilities that hold NPDES permits, or those that are authorized to discharge wastewater to surface waters in lowa.

Date of Government Version: 08/08/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 08/24/2018

Number of Days to Update: 14

Source: Department of Natural Resources

Telephone: 515-281-4736 Last EDR Contact: 08/09/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: Varies

TIER 2: Tier 2 Information Listing

A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 09/18/2018 Date Made Active in Reports: 10/02/2018

Number of Days to Update: 14

Source: Department of Natural Resources

Telephone: 515-725-0302 Last EDR Contact: 09/17/2018

Next Scheduled EDR Contact: 12/31/2018 Data Release Frequency: 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 Source: EDR, Inc. Date Data Arrived at EDR: N/A Telephone: N/A Date Made Active in Reports: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A Number of Days to Update: 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 Iowa.

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 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 Iowa.

Date of Government Version: N/A Date Data Arrived at EDR: 07/01/2013 Date Made Active in Reports: 12/26/2013

Number of Days to Update: 178

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: 08/10/2018 Date Data Arrived at EDR: 08/10/2018 Date Made Active in Reports: 09/10/2018

Number of Days to Update: 31

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 08/09/2018

Next Scheduled EDR Contact: 11/26/2018 Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 07/13/2018 Date Made Active in Reports: 08/01/2018

Number of Days to Update: 19

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 10/09/2018

Next Scheduled EDR Contact: 01/21/2019 Data Release Frequency: Annually

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: 07/01/2018 Date Data Arrived at EDR: 08/01/2018 Date Made Active in Reports: 08/31/2018

Number of Days to Update: 30

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 08/01/2018

Next Scheduled EDR Contact: 11/12/2018 Data Release Frequency: Quarterly

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: 08/21/2018

Next Scheduled EDR Contact: 12/03/2018 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: 09/06/2018

Next Scheduled EDR Contact: 12/24/2018 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: Child Care Facilities Source: Department of Human Services

Telephone: 515-281-4357

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 Iowa

Source: Department of Natural Resources

Telephone: 319-335-1575

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

### STREET AND ADDRESS INFORMATION

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### **GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM**

#### **TARGET PROPERTY ADDRESS**

WATERLOO BIG ROCK AASF 2245 WEST BIG ROCK ROAD WATERLOO, IA 50703

#### **TARGET PROPERTY COORDINATES**

Latitude (North): 42.554788 - 42° 33' 17.24" Longitude (West): 92.383858 - 92° 23' 1.89"

Universal Tranverse Mercator: Zone 15 UTM X (Meters): 550583.2 UTM Y (Meters): 4711346.5

Elevation: 876 ft. above sea level

### **USGS TOPOGRAPHIC MAP**

Target Property Map: 5944548 CEDAR FALLS, IA

Version Date: 2013

East Map: 5944028 WATERLOO NORTH, IA

Version Date: 2013

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.

### **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).

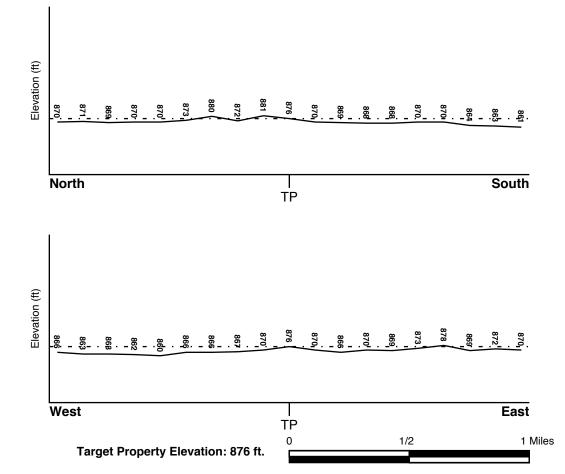
### **TOPOGRAPHIC INFORMATION**

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 SSW

### 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.

### 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

19013C0167F FEMA FIRM Flood data

Additional Panels in search area: FEMA Source Type

19013C0180FFEMA FIRM Flood data19013C0159FFEMA FIRM Flood data19013C0186FFEMA FIRM Flood data

**NATIONAL WETLAND INVENTORY** 

NWI Electronic
NWI Quad at Target Property
Data Coverage

CEDAR FALLS 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.

LOCATION GENERAL DIRECTION

MAP ID FROM TP GROUNDWATER FLOW

Not Reported

### **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**

### **GEOLOGIC AGE IDENTIFICATION**

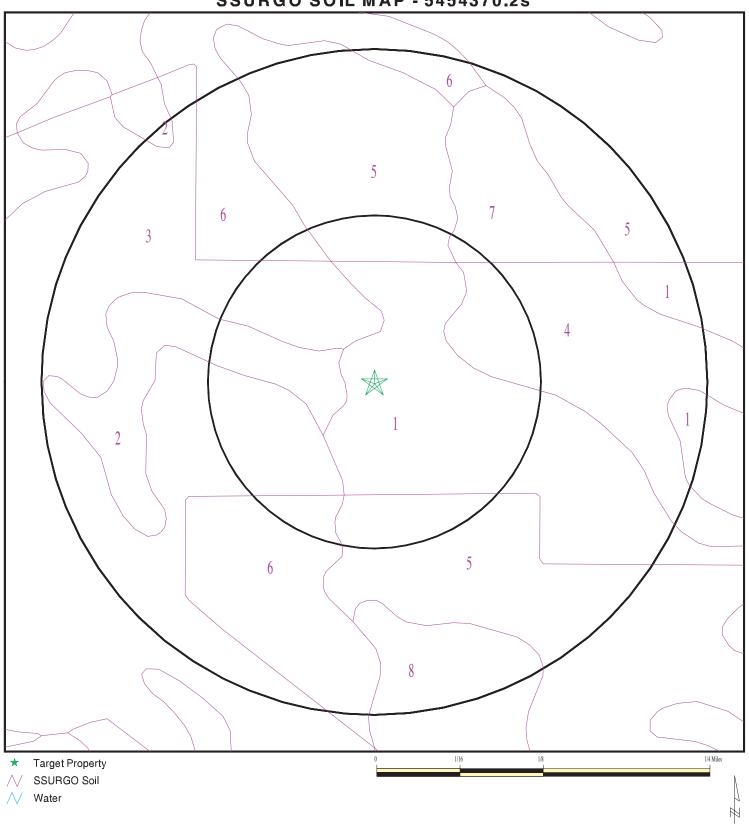
Era: Paleozoic Category: Stratified Sequence

System: Devonian
Series: Middle Devonian

Code: D2 (decoded above as Era, System & Series)

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 - 5454370.2s



SITE NAME: Waterloo Big Rock AASF ADDRESS: 2245 West Big Rock Road

Waterloo IA 50703 42.554788 / 92.383858 LAT/LONG:

CLIENT: AECOM CONTACT: Brittany Kirchmann

INQUIRY#: 5454370.2s

DATE: October 16, 2018 9:03 am

### 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: Sparta

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to

excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

	Soil Layer Information							
	Bou	ındary		Classit	ication	Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)	
1	0 inches	11 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1	
2	11 inches	14 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1	
3	14 inches	33 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1	

	Soil Layer Information						
	Boundary			Classification		Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	0011 1104011011
4	33 inches	59 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1

Soil Map ID: 2

Soil Component Name: Urban land

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 30 inches

No Layer Information available.

Soil Map ID: 3

Soil Component Name: Sparta

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to

excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

# **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE SUMMARY**

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

	Bou	ındary		Classi	fication	Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	11 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
2	11 inches	14 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
3	14 inches	33 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
4	33 inches	59 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1

Soil Map ID: 4

Soil Component Name: Flagler

Soil Surface Texture: fine sandy 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: Somewhat excessively drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

#### **Soil Layer Information** Saturated **Boundary** Classification hydraulic conductivity Layer Upper Lower Soil Texture Class **AASHTO Group Unified Soil Soil Reaction** micro m/sec (pH) 1 0 inches 7 inches fine sandy loam Granular **COARSE-GRAINED** Max: 705 Max: 7.3 SOILS, Sands, materials (35 Min: 141.11 Min: 5.1 pct. or less Clean Sands, Poorly graded passing No. 200), Silty, or sand. Clayey Gravel **COARSE-GRAINED** SOILS, Sands, and Sand. Sands with fines, Silty Sand. 2 7 inches 14 inches fine sandy loam Granular COARSE-GRAINED Max: 705 Max: 7.3 materials (35 SOILS, Sands, Min: 141.11 Min: 5.1 pct. or less Clean Sands, passing No. Poorly graded 200), Silty, or sand. Clayey Gravel **COARSE-GRAINED** and Sand. SOILS, Sands, Sands with fines, Silty Sand. COARSE-GRAINED Max: 705 Max: 7.3 3 14 inches 22 inches sandy loam Granular materials (35 SOILS, Sands, Min: 141.11 Min: 5.1 pct. or less Clean Sands, passing No. Poorly graded 200), Silty, or sand. Clayey Gravel COARSE-GRAINED and Sand. SOILS, Sands, Sands with fines, Silty Sand.

	Soil Layer Information							
	Bou	ındary		Classi	fication	Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec		
4	22 inches	33 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141.11	Max: 7.3 Min: 5.1	
5	33 inches	64 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141.11	Max: 7.3 Min: 5.1	

### Soil Map ID: 5

Soil Component Name: Sparta

Soil Surface Texture: loamy fine sand

Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels. Hydrologic Group:

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

			Soil Layer	Information			
	Bou	ndary		Classit	ication	Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	<b>AASHTO Group</b>	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	11 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
2	11 inches	14 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
3	14 inches	33 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
4	33 inches	59 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1

### Soil Map ID: 6

Soil Component Name: Sparta

Soil Surface Texture: loamy fine sand

Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels. Hydrologic Group:

Soil Drainage Class: Excessively drained

# **GEOCHECK<sup>®</sup> - 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	r Information			
	Bou	ındary		Classi	Classification		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	hydraulic conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	11 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
2	11 inches	14 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
3	14 inches	33 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
4	33 inches	59 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1

Soil Map ID: 7

Soil Component Name: Flagler

Soil Surface Texture: fine sandy loam

Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse Hydrologic Group:

textures.

Soil Drainage Class: Somewhat excessively 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							
	Воц	ındary		Classi	Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)	
1	0 inches	7 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141.11	Max: 7.3 Min: 5.1	
2	7 inches	14 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141.11	Max: 7.3 Min: 5.1	
3	14 inches	22 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141.11	Max: 7.3 Min: 5.1	

			Soil Laye	r Information			
	Bou	ındary		Classi	fication	Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	
4	22 inches	33 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141.11	Max: 7.3 Min: 5.1
5	33 inches	64 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141.11	Max: 7.3 Min: 5.1

### Soil Map ID: 8

Soil Component Name: Lawler

Soil Surface Texture: 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: Somewhat poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 30 inches

			Soil Layer	r Information			
	Bou	Boundary		Classification		Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
1	7 inches	14 inches	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: 14.11 Min: 4.23	Max: 6.5 Min: 5.1
2	20 inches	31 inches	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: 14.11 Min: 4.23	Max: 6.5 Min: 5.1
3	37 inches	59 inches	very gravelly loamy sand	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: 14.11 Min: 4.23	Max: 6.5 Min: 5.1
4	0 inches	7 inches	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: 14.11 Min: 4.23	Max: 6.5 Min: 5.1
5	14 inches	20 inches	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: 14.11 Min: 4.23	Max: 6.5 Min: 5.1
6	31 inches	37 inches	sandy 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: 14.11 Min: 4.23	Max: 6.5 Min: 5.1

### **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
11	USGS40000319678	1/2 - 1 Mile NW
19	USGS40000319606	1/2 - 1 Mile WSW

### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID WELL ID 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	IAPU40000201303	1/8 - 1/4 Mile East
2	IAPU40000201300	1/4 - 1/2 Mile NE
A3	IAPU40000295263	1/2 - 1 Mile SE
A4	IAPR40000083898	1/2 - 1 Mile SE
5	IAPU40000037647	1/2 - 1 Mile NE
6	IAPU40000037450	1/2 - 1 Mile WSW
B7	IAPU40000073131	1/2 - 1 Mile SW
8	IAPU40000037393	1/2 - 1 Mile NW
B9	IAPU40000186776	1/2 - 1 Mile SW
B10	IAPW40000091594	1/2 - 1 Mile SW
12	IAPU40000037427	1/2 - 1 Mile WSW
13	IAPU40000073204	1/2 - 1 Mile East
14	IAPU40000073155	1/2 - 1 Mile SSW
C15	IAPU40000186779	1/2 - 1 Mile SW
C16	IAPW4000011005	1/2 - 1 Mile SW
C17	IAPU40000186778	1/2 - 1 Mile SW
C18	IAPW4000030505	1/2 - 1 Mile SW
20	IAPU40000324156	1/2 - 1 Mile NE
D21	IAPU40000295217	1/2 - 1 Mile SSW
D22	IAPU40000073138	1/2 - 1 Mile SSW
D23	IAPR40000073495	1/2 - 1 Mile SSW
24	IAPU40000037425	1/2 - 1 Mile SW
25	IAPU40000073134	1/2 - 1 Mile SSW
26	IAPU40000201287	1/2 - 1 Mile NNE

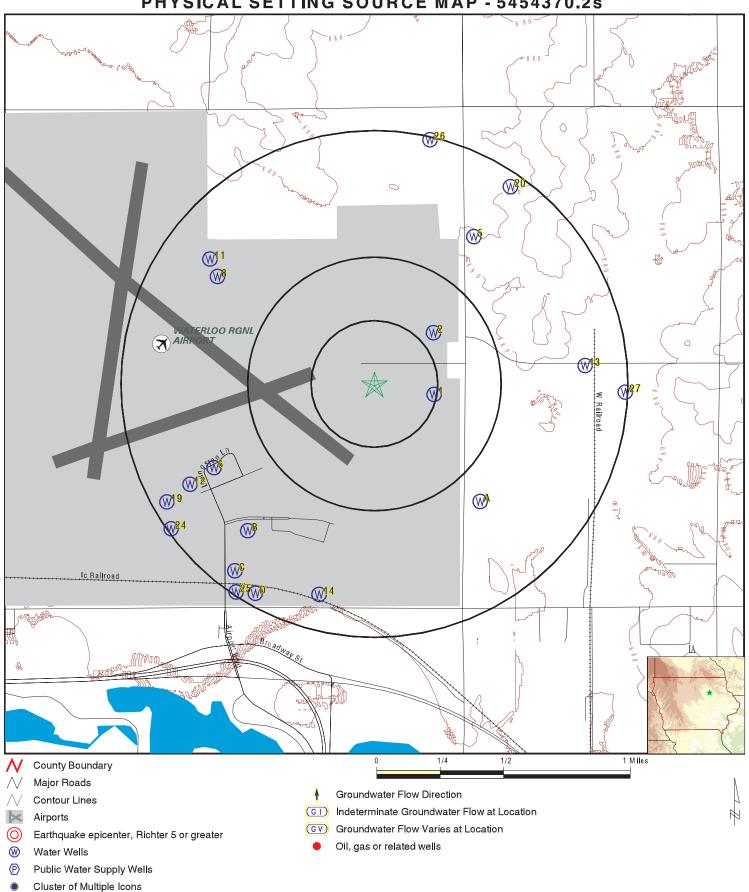
# **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE SUMMARY**

### STATE DATABASE WELL INFORMATION

MAP ID WELL ID FROM TP

27 IAPU40000211048 1/2 - 1 Mile East

# PHYSICAL SETTING SOURCE MAP - 5454370.2s



SITE NAME: Waterloo Big Rock AASF ADDRESS: 2245 West Big Rock Road

Waterloo IA 50703 LAT/LONG: 42.554788 / 92.383858

CLIENT: AECOM CONTACT: Brittany Kirchmann

INQUIRY #: 5454370.2s

DATE: October 16, 2018 9:02 am

### **GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS**

Map ID Direction Distance

Elevation Database EDR ID Number

East

IA WELLS IAPU40000201303

1/8 - 1/4 Mile Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 21878 Well Type: Permitted private wells

Well Depth: 175 Construction/Permit Date: unkn

Notes: Primary use: Domestic/household

2 NE IA WELLS IAPU4000201300

1/4 - 1/2 Mile Higher

Database: All Known Water Wells in the State of Iowa

Well ID: 17390 Well Type: Permitted private wells

Well Depth: 150 Construction/Permit Date: unkn

Notes: Primary use: Heating and air conditioning

A3 SE IA WELLS IAPU40000295263

1/2 - 1 Mile Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 83899 Well Type: Wells registered for testing

Well Depth: 160 Construction/Permit Date: unkn

Notes: Drilling method: Drilled; Known well depth

A4

A4 SE 1/2 - 1 Mile Lower

Database: Private Wells Tested Well Depth: 160

Depth Reliability: K Private Permit #: Not Reported Sample Date: Analysis Date: Not Reported

Sampling Location: KITCHEN FAUCET Safe/Unsafe Bacteria Level: U

Bacteria Results: 0 Bacteria Remarks: Not Reported

Safe/Unsafe Nitrate Level: S Nitrate Results: 0

Nitrate Remarks: Not Reported Construction Method: **DRILLED** Not Reported STEEL Method Accuracy: Casing Material: Not Reported Casing Diameter: Material Accuracy: 6 Diameter Accuracy: Κ Year Constructed: 0

Year Accuracy: U Agent: Not Reported

**IA WELLS** 

IAPR40000083898

Map ID Direction Distance

Elevation Database EDR ID Number

NE 1/2 - 1 Mile IA WELLS IAPU40000037647

Higher

Database: All Known Water Wells in the State of Iowa

Well ID: 77148 Well Type: IGS well database

Well Depth: 105 Construction/Permit Date: 7/18/1969

Notes: Bedrock depth: 26; Well type: Unknown

6 WSW IA WELLS IAPU4000037450

1/2 - 1 Mile Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 2717 Well Type: IGS well database Well Depth: 60 Construction/Permit Date: 12/28/1946

Notes: Bedrock depth: 41; Well type: Public Supply

B7 SW IA WELLS IAPU4000073131

1/2 - 1 Mile Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 73533 Well Type: IGS well database

Well Depth: 140 Construction/Permit Date: 4/1/2011

Notes: Bedrock depth: 80; Well type: Heat Pump

0

NW 1/2 - 1 Mile Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 78078 Well Type: IGS well database Well Depth: IO1 Construction/Permit Date: 6/11/1974

Notes: Bedrock depth: 50; Well type: Unknown

B9 SW IA WELLS IAPU40000186776

1/2 - 1 Mile Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 2153248 Well Type: Private well tracking system

Well Depth: 140 Construction/Permit Date: 4/1/2011

Notes: Status: Active Logged

**IA WELLS** 

IAPU40000037393

Map ID Direction Distance

Database EDR ID Number Elevation **B10** 

SW 1/2 - 1 Mile

Lower

**IA WELLS** IAPW40000091594

USGS40000319678

**FED USGS** 

Database: Private Well Tracking System Wells

PWTS Well #: 2153248 34064 Permit #: Tier #: 89 Range #: 13

Elevation: 0 Elevation Accuracy: Not Reported

Total Well Depth: 140 Bedrock Depth:

Depth to Water: 11 Well Finished: 01-APR-11 Driller: Shawver Well Co. Construction Method: Rotary Drill Not Reported Well Use: Commercial Remarks:

Active Log Well Status: Heat Pump Wells:

Permitted Private Well: Abandoned Well: Not Reported Renovated Well: Not Reported Not Reported Registered for Tests:

NW 1/2 - 1 Mile Lower

> USGS-IA Organization ID: Organization Name: USGS Iowa Water Science Center

Monitor Location: 090N13W33CBB Well Type:

Across from airports mgrs home north side airport Description:

Not Reported HUC: 07080205 Drainage Area: Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported

Contrib Drainage Area Unts: Not Reported Aquifer: Silurian-Devonian aquifers

Aquifer Type: Formation Type: Devonian System Not Reported

Construction Date: Well Depth: Not Reported 120 Well Depth Units: ft Well Hole Depth: 120

Well Hole Depth Units: ft

Ground water levels, Number of Measurements: 8 Level reading date: 1999-02-25 Feet to sea level: Not Reported

Feet below surface: 10.40

Note: Not Reported

Feet below surface: Level reading date: 1998-12-29 9.50

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1998-10-27 Feet below surface: 8.92

Feet to sea level: Not Reported Not Reported Note:

Level reading date: 1998-08-25 Feet below surface: 7.44

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1998-07-21 Feet below surface: 6.70

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1998-06-25 Feet below surface:

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1998-04-27 Feet below surface: 8.83

Feet to sea level: Not Reported Note: Not Reported

Level reading date: 1998-03-04 Feet below surface: 13.00

Feet to sea level: Not Reported Note: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

12 WSW 1/2 - 1 Mile

IA WELLS IAPU40000037427

Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 77323 Well Type: IGS well database Well Depth: 130 Construction/Permit Date: 10/23/1972

Notes: Bedrock depth: 60; Well type: Unknown

13 East IA WELLS IAPU4000073204

1/2 - 1 Mile Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 56749 Well Type: IGS well database Well Depth: 170 Construction/Permit Date: 10/11/2002

Notes: Bedrock depth: 63; Well type: Commercial

14 SSW IA WELLS IAPU4000073155

1/2 - 1 Mile Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 32329 Well Type: IGS well database

Well Depth: 100 Construction/Permit Date: 12/1/1990

Notes: Bedrock depth: 25; Well type: Public Supply

C15

SW 1/2 - 1 Mile Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 2088585 Well Type: Private well tracking system

Well Depth: unkn Construction/Permit Date: unkn

Notes: Status: Retired

C16 SW IA WELLS IAPW40000011005

1/2 - 1 Mile Lower

Database: Private Well Tracking System Wells

 PWTS Well #:
 2088585
 Permit #:
 13329

 Tier #:
 89
 Range #:
 13

Elevation: 0 Elevation Accuracy: Not Reported

Total Well Depth: 0 Bedrock Depth: 0

Depth to Water: 0 Well Finished: Not Reported Driller: Construction Method: Not Reported

**IA WELLS** 

IAPU40000186779

Remarks: Not Reported Well Use: Heat pump

Well Status: Retired Heat Pump Wells: 50

Permitted Private Well: X Abandoned Well: Not Reported Renovated Well: Not Reported Registered for Tests: Not Reported

C17 SW IA WELLS IAPU40000186778

1/2 - 1 Mile Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 2104767 Well Type: Private well tracking system

Well Depth: unkn Construction/Permit Date: unkn

Notes: Status: Retired

C18
SW
IA WELLS
IAPW40000030505
1/2 - 1 Mile

Lower

Database: Private Well Tracking System Wells

 PWTS Well #:
 2104767
 Permit #:
 18132

 Tier #:
 89
 Range #:
 13

Elevation: 0 Elevation Accuracy: Not Reported

Total Well Depth: 0 Bedrock Depth: 0

Depth to Water:0Well Finished:Not ReportedDriller:Not ReportedConstruction Method:Not ReportedRemarks:Not ReportedWell Use:Heat pump

Well Status: Retired Heat Pump Wells: 1

Permitted Private Well: X Abandoned Well: Not Reported Renovated Well: Not Reported Registered for Tests: Not Reported

WSW FED USGS USGS40000319606 1/2 - 1 Mile Lower

Organization ID: USGS-IA Organization Name: USGS lowa Water Science Center Monitor Location: 089N13W05DABA 04413 1950Waterloo Airport

Type: Well Description: Not Reported HUC: 07080205 Drainage Area: Not Reported Not Reported Contrib Drainage Area: Not Reported Drainage Area Units: Contrib Drainage Area Unts: Not Reported Not Reported Aquifer: Formation Type: Cedar Valley Limestone Aquifer Type: Not Reported

Construction Date: 1950 Well Depth: 125

Well Depth Units: ft Well Hole Depth: Not Reported

Well Hole Depth Units: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

20 NE

IA WELLS IAPU40000324156

1/2 - 1 Mile Higher

Database: All Known Water Wells in the State of Iowa

Well ID: 11671 Well Type: Registered abandoned wells

Well Depth: 32 Construction/Permit Date: n.a.

Notes: Well plugged: nil; Well type: < 18" dia.

D21
SSW IA WELLS IAPU40000295217

1/2 - 1 Mile Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 73496 Well Type: Wells registered for testing

Well Depth: 120 Construction/Permit Date: unkn

Notes: Drilling method: Drilled; Known well depth

D22 SSW IA WELLS IAPU4000073138

1/2 - 1 Mile Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 29727 Well Type: IGS well database

Well Depth: 135 Construction/Permit Date: 5/20/1986

Notes: Bedrock depth: 110; Well type: Private

D23

SSW 1/2 - 1 Mile Lower

Database: Private Wells Tested Well Depth: 120

Depth Reliability: K Private Permit #: Not Reported Sample Date: Analysis Date: Not Reported

Sampling Location: KITCHEN FAUCET Safe/Unsafe Bacteria Level: S

Bacteria Results: 0 Bacteria Remarks: Not Reported

Safe/Unsafe Nitrate Level: S Nitrate Results: 0

Nitrate Remarks: < Construction Method: DRILLED

Method Accuracy: Not Reported Casing Material: STEEL

Material Accuracy: Not Reported Casing Diameter: 6
Diameter Accuracy: K Year Constructed: 0

Year Accuracy: U Agent: BRETT MEYERS

**IA WELLS** 

IAPR40000073495

Map ID Direction Distance

Elevation Database EDR ID Number

24 SW

IA WELLS IAPU40000037425

1/2 - 1 Mile Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 4413 Well Type: IGS well database

Well Depth: 125 Construction/Permit Date: 1/7/1950

Notes: Bedrock depth: 54; Well type: Public Supply

25 SSW IA WELLS IAPU4000073134

1/2 - 1 Mile Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 29728 Well Type: IGS well database

Well Depth: 135 Construction/Permit Date: 9/20/1986

Notes: Bedrock depth: 112; Well type: Private

26 NNE IA WELLS IAPU40000201287

1/2 - 1 Mile Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 17399 Well Type: Permitted private wells

Well Depth: 150 Construction/Permit Date: unkn

Notes: Primary use: Domestic/household

27
East IA WELLS IAPU40000211048

1/2 - 1 Mile Lower

Database: All Known Water Wells in the State of Iowa

Well ID: 19421 Well Type: Permitted private wells

Well Depth: 130 Construction/Permit Date: unkn

Notes: Primary use: Domestic/household

## **AREA RADON INFORMATION**

State Database: IA Radon

Radon Test Results

Zipcode	Num Tests	Minimum	Maximum	Average
50703	46	0.5	19.6	4.8

Federal EPA Radon Zone for BLACK HAWK County: 1

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: 50703

Number of sites tested: 8

Area Average Activity % <4 pCi/L % 4-20 pCi/L % >20 pCi/L Living Area - 1st Floor Not Reported Not Reported Not Reported Not Reported Living Area - 2nd Floor Not Reported Not Reported Not Reported Not Reported 4.225 pCi/L Basement 50% 50% 0%

## 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 Iowa

Source: Department of Natural Resources

Telephone: 319-335-1575

## HYDROGEOLOGIC INFORMATION

AQUIFLOW<sup>R</sup> 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

All Known Water Wells in the State of Iowa Source: Department of Natural Resources

Telephone: 319-335-1353

Well types included are agricultural drainage, permitted private, public, registered abandoned, SDWIS public, water use permit sites, wells registered for testing.

## Agricultural Drainage Wells

Source: Department of Natural Resources

Telephone: 515-281-5029

Agricultural drainage wells are required to be registered both with the lowa Department of Natural Resources as a part of the 1987 Groundwater Protection Act, and with the U.S. Environmental Protection Agency as a part of the Underground Injection Control Program.

## Private Well Tracking System Wells

Source: Department of Natural Resources

Telephone: 319-335-1353

## Water Use Permits

Source: Department of Natural Resources

Telephone: 515-725-0336

Wells under Water Use permits. A water use permit is required of any person or entity that withdraws or diverts at least 25,000 gallons of water in a 24-hour period during any calendar year.

## Private Wells Tested

Source: Department of Natural Resources

Telephone: 515-335-1353

This is a point coverage for private wells which have been tested for bacteria and nitrate contamination under the Grants to Counties program.

## OTHER STATE DATABASE INFORMATION

Oil and Gas Well Database

Source: Department of Natural Resources

Oil and gas well locations.

## RADON

State Database: IA Radon

Source: Department of Public Health

Telephone: 515-281-4340 Radon Test Results

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

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

## STREET AND ADDRESS INFORMATION

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Waterloo Big Rock AASF 2245 West Big Rock Road Waterloo, IA 50703

Inquiry Number: 5454370.2s

October 16, 2018

## **EDR Summary Radius Map Report**



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

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

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## **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**

2245 WEST BIG ROCK ROAD WATERLOO, IA 50703

## **COORDINATES**

Latitude (North): 42.5547880 - 42° 33' 17.23" Longitude (West): 92.3838580 - 92° 23' 1.88"

Universal Tranverse Mercator: Zone 15 UTM X (Meters): 550583.2 UTM Y (Meters): 4711346.5

Elevation: 876 ft. above sea level

## USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property: TF

Source: U.S. Geological Survey

Target Property: E

Source: U.S. Geological Survey

## **AERIAL PHOTOGRAPHY IN THIS REPORT**

Portions of Photo from: 20150913 Source: USDA

## MAPPED SITES SUMMARY

Target Property Address: 2245 WEST BIG ROCK ROAD WATERLOO, IA 50703

Click on Map ID to see full detail.

MAP	OUTE MANAGE	1000000	DATABASE ASBONNAM	RELATIVE	DIST (ft. & mi.)
<u>ID</u>	SITE NAME	ADDRESS	DATABASE ACRONYMS	ELEVATION	DIRECTION
A1	IOWA ARMY NATIONAL G	2245 W BIG ROCK RD	ALLSITES, AIRS		TP
A2	IOWA ARMY NATIONAL G	2245 W BIG ROCK RD	AST		TP
A3	ARMY AVIATION SUPPOR	2245 W. BIG ROCK RD.	NPDES		TP
A4	IA ARNG WATERLOO AVI	2245 WEST BIG ROCK R	TIER 2		TP
A5	BECKER CHAPMAN POST	2245 W BIG ROCK RD	FINDS		TP
<b>A6</b>	IOWA ARMY NATIONAL G	2245 W BIG ROCK RD	US AIRS		TP
A7	IOWA ARMY NATIONAL G	2245 WEST BIG ROCK R	NPDES		TP
A8	AASF #2	AASF #2 2245 W BIG R	FINDS		TP
<b>A9</b>	IOWA ARMY NATIONAL G	2245 WEST BIG ROCK R	FINDS, ECHO		TP
A10	IOWA ARMY NATIONAL G	2245 W BIG ROCK RD	CORRACTS, RCRA-TSDF, RCRA-SQG, RAATS		TP
A11	AASF #2	AASF #2 2245 W BIG R	UST		TP
A12	IOWA ARMY NATIONAL G	2245 W. BIG ROCK RD.	NPDES		TP
A13	IA ARNG WATERLOO AVI	2245 WEST BIG ROCK R	FINDS		TP

## **EXECUTIVE SUMMARY**

## TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
IOWA ARMY NATIONAL G 2245 W BIG ROCK RD WATERLOO, IA 50703	ALLSITES Status: Closed Site Id Number: 1175  AIRS Status: MINOR EI Facility Id: 07-01-115	N/A
IOWA ARMY NATIONAL G 2245 W BIG ROCK RD WATERLOO, IA	AST Registration Number: 18822 Registration Number: 18823 Registration Number: 18824 Registration Number: 18825	N/A
ARMY AVIATION SUPPOR 2245 W. BIG ROCK RD. WATERLOO, IA 50703	NPDES	N/A
IA ARNG WATERLOO AVI 2245 WEST BIG ROCK R WATERLOO, IA 50703	TIER 2 Facility Id: 864 Facility Id: FAIDSIT2A00000864 State Id: IA	N/A
BECKER CHAPMAN POST 2245 W BIG ROCK RD WATERLOO, IA 50703	FINDS Registry ID:: 110070130403	N/A
IOWA ARMY NATIONAL G 2245 W BIG ROCK RD WATERLOO, IA 50703	US AIRS Database: US AIRS MINOR, Date of Government Version: 10	N/A 0/12/2016
IOWA ARMY NATIONAL G 2245 WEST BIG ROCK R WATERLOO, IA 50703	NPDES	N/A
AASF #2 AASF #2 2245 W BIG R WATERLOO, IA 50703	FINDS Registry ID:: 110036255405	N/A
IOWA ARMY NATIONAL G 2245 WEST BIG ROCK R WATERLOO, IA 50703	FINDS	N/A

## **EXECUTIVE SUMMARY**

Registry ID:: 110005756379

**ECHO** 

Registry ID: 110005756379

IOWA ARMY NATIONAL G 2245 W BIG ROCK RD

2245 W BIG ROCK RD WATERLOO, IA 50703

EPA ID:: IAD981504269

RCRA-TSDF

**CORRACTS** 

EPA ID:: IAD981504269

RCRA-SQG

EPA ID:: IAD981504269

RAATS Status: 01

Facility ID: IAD981504269

AASF #2 UST

AASF #2 2245 W BIG R Facility Id: 6228 WATERLOO, IA 50703 Registration: 198605894

IOWA ARMY NATIONAL G NPDES N/A

2245 W. BIG ROCK RD. WATERLOO, IA 50703

IA ARNG WATERLOO AVI FINDS N/A

2245 WEST BIG ROCK R Registry ID:: 110043626234 WATERLOO, IA 50703

## **SURROUNDING SITES: SEARCH RESULTS**

Surrounding sites were not identified.

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

IAD981504269

N/A

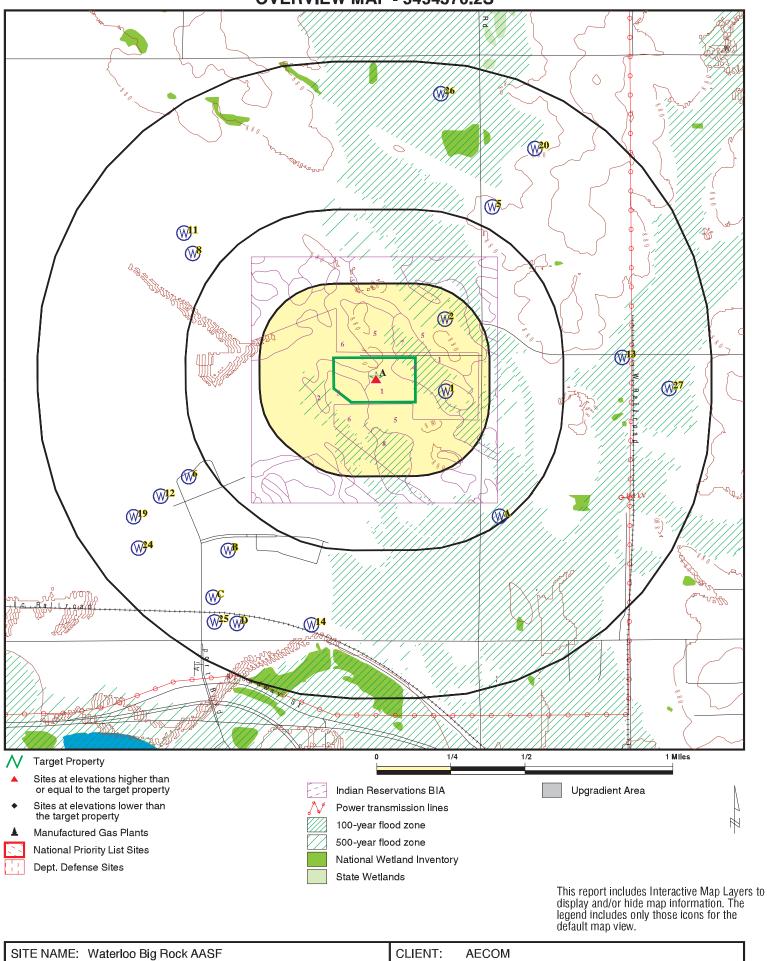
Database(s)	
Zip	
Site Address	
Site Name	
EDR ID	
City	

ORPHAN SUMMARY

Count: 0 records.

NO SITES FOUND

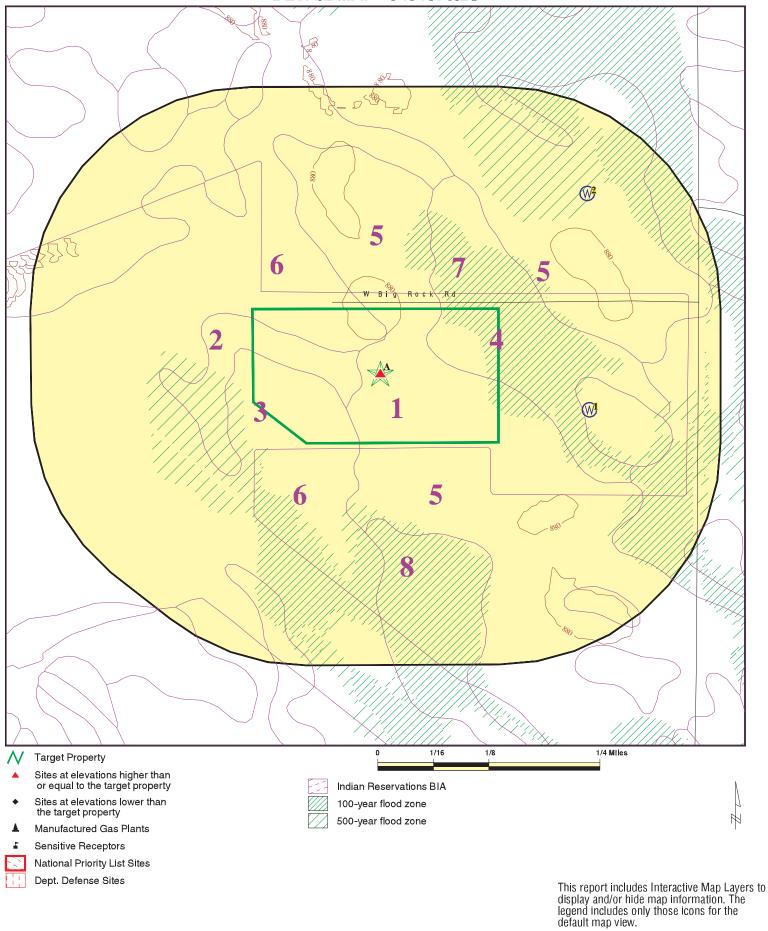
## **OVERVIEW MAP - 5454370.2S**



SITE NAME: Waterloo Big Rock AASF
ADDRESS: 2245 West Big Rock Road
Waterloo IA 50703
LAT/LONG: 42.554788 / 92.383858

CLIENT: AECOM
CONTACT: Brittany Kirchmann
INQUIRY #: 5454370.2s
DATE: October 16, 2018 9:00 am

## **DETAIL MAP - 5454370.2S**



SITE NAME: Waterloo Big Rock AASF
ADDRESS: 2245 West Big Rock Road Waterloo IA 50703
LAT/LONG: 42.554788 / 92.383858

CLIENT: AECOM CONTACT: Brittany Kirchmann INQUIRY #: 5454370.2s
DATE: October 16, 2018 9:02 am

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	Total Plotted
STANDARD ENVIRONMEN	TAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 TP		0 0 NR	0 0 NR	0 0 NR	0 0 NR	NR NR NR	0 0 0
Federal Delisted NPL sit	e list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Federal CERCLIS NFRA	P site list							
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRAC	TS facilities li	st						
CORRACTS	1.000	1	0	0	0	0	NR	1
Federal RCRA non-COR	RACTS TSD f	acilities list						
RCRA-TSDF	0.500	1	0	0	0	NR	NR	1
Federal RCRA generator	rs list							
RCRA-LQG RCRA-SQG RCRA-CESQG	0.250 0.250 0.250	1	0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 1 0
Federal institutional con engineering controls reg								
LUCIS US ENG CONTROLS US INST CONTROL	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equiva	alent CERCLIS	3						
SHWS	1.000		0	0	0	0	NR	0
State and tribal landfill a solid waste disposal site								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking	storage tank l	ists						
LUST LAST INDIAN LUST	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
State and tribal register	ed storage tar	ık lists						
FEMA UST	0.250		0	0	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	Total Plotted
UST AST INDIAN UST	0.250 0.250 0.250	1	0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	1 1 0
State and tribal institutio control / engineering cor		s						
INST CONTROL	0.500		0	0	0	NR	NR	0
State and tribal voluntary	/ cleanup site	es						
VCP INDIAN VCP	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
State and tribal Brownfie	lds sites							
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMEN	TAL RECORDS	<u>3</u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites	olid							
INDIAN ODI DEBRIS REGION 9 ODI IHS OPEN DUMPS	0.500 0.500 0.500 0.500		0 0 0 0	0 0 0 0	0 0 0 0	NR NR NR NR	NR NR NR NR	0 0 0 0
Local Lists of Hazardous Contaminated Sites	waste /							
US HIST CDL ALLSITES DEL SHWS US CDL	TP 0.500 1.000 TP	1	NR 0 0 NR	NR 0 0 NR	NR 0 0 NR	NR NR 0 NR	NR NR NR NR	0 1 0 0
Local Land Records								
LIENS LIENS 2	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0
Records of Emergency R	Release Repo	rts						
HMIRS SPILLS SPILLS 90	TP TP TP		NR NR NR	NR NR NR	NR NR NR	NR NR NR	NR NR NR	0 0 0
Other Ascertainable Rec	ords							
RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST	0.250 1.000 1.000 0.500 TP TP		0 0 0 0 NR NR	0 0 0 0 NR NR	NR 0 0 0 NR NR	NR 0 0 NR NR NR	NR NR NR NR NR	0 0 0 0 0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	Total Plotted
2020 COR ACTION TSCA TRIS SSTS ROD RMP RAATS PRP PADS ICIS FTTS MLTS COAL ASH DOE COAL ASH EPA PCB TRANSFORMER RADINFO HIST FTTS DOT OPS CONSENT INDIAN RESERV FUSRAP UMTRA LEAD SMELTERS US AIRS US MINES ABANDONED MINES FINDS ECHO UXO DOCKET HWC FUELS PROGRAM AIRS COAL ASH DRYCLEANERS Financial Assurance NPDES TIER 2	0.250 TP TP TP 1.000 TP	1 4 1	ORRNO RRRRRRO RRRRO O O O ORRO RO O O ORRO RRO RO	ORRRORRRRRRRORRROOOORROORORORORRRR	NR R R O R R R R R R O R R R R O O O O R R R R R O R O R R R R N N N N	NN N N N N N N N N N N N N N N N N N N	N N N N N N N N N N N N N N N N N N N	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
EDR HIGH RISK HISTORICA		·						
EDR Exclusive Records								
EDR MGP EDR Hist Auto EDR Hist Cleaner	1.000 0.125 0.125		0 0 0	0 NR NR	0 NR NR	0 NR NR	NR NR NR	0 0 0
EDR RECOVERED GOVERN	MENT ARCHIV	<u>'ES</u>						
Exclusive Recovered Go			NE	ND	NE	NO	NE	
RGA HWS	TP		NR	NR	NR	NR	NR	0

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals		18	0	0	0	0	0	18

## NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID MAP FINDINGS

Direction Distance

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

A1 IOWA ARMY NATIONAL GUARD - WATERLOO ALLSITES S107669067
Target 2245 W BIG ROCK RD AIRS N/A

Property WATERLOO, IA 50703

Click here for full text details

Actual: 876 ft.

**ALLSITES** 

Site Id Number: 1175 Status: Closed

**AIRS** 

Facility Id: 07-01-115 Status: MINOR EI

A2 IOWA ARMY NATIONAL GUARD AST A100408818
Target 2245 W BIG ROCK RD N/A

Target 2245 W BIG ROCK RD Property WATERLOO, IA

\_\_\_\_

Click here for full text details

Actual: 876 ft.

**AST** 

Registration Number: 18822 Registration Number: 18823 Registration Number: 18824 Registration Number: 18825

A3 ARMY AVIATION SUPPORT FACILITY #2 NPDES \$122561870

Target 2245 W. BIG ROCK RD. Property WATERLOO, IA 50703

Click here for full text details

Actual: 876 ft.

A4 IA ARNG WATERLOO AVIATION TIER 2 \$109946710
Target 2245 WEST BIG ROCK ROAD ROAD N/A

Property WATERLOO, IA 50703

Click here for full text details

Actual: 876 ft.

TIER 2

Facility Id: 864

Facility Id: FAIDSIT2A00000864

State Id: IA

N/A

Map ID MAP FINDINGS

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

Α5 **BECKER CHAPMAN POST RIFLE RANGE FINDS** 1024047188 N/A

Target 2245 W BIG ROCK RD **Property** WATERLOO, IA 50703

Click here for full text details

Actual: 876 ft.

**FINDS** 

Registry ID:: 110070130403

**A6 IOWA ARMY NATIONAL GUARD - WATERLOO US AIRS** 1016935615

2245 W BIG ROCK RD **Target** 

**Property** WATERLOO, IA 50703

Click here for full text details

Actual: 876 ft.

Α7 **IOWA ARMY NATIONAL GUARD AASF 2** NPDES S122537119 N/A

Target 2245 WEST BIG ROCK RD. WATERLOO, IA 50703 **Property** 

Click here for full text details

Actual: 876 ft.

**A8** AASF #2 FINDS 1011288083

Target AASF #2 2245 W BIG ROCK RD

**Property** WATERLOO, IA 50703

Click here for full text details

Actual: 876 ft.

**FINDS** 

Registry ID:: 110036255405

Α9 **IOWA ARMY NATIONAL GUARD - WATERLOO FINDS** 1016085222

Target 2245 WEST BIG ROCK ROAD

**Property** WATERLOO, IA 50703

Click here for full text details

Actual: 876 ft.

**FINDS** 

Registry ID:: 110005756379

Registry ID: 110005756379

N/A

N/A

N/A

**ECHO** 

MAP FINDINGS Map ID

Direction Distance

**EDR ID Number** Elevation Site Database(s) **EPA ID Number** 

A10 **IOWA ARMY NATIONAL GUARD - AASF 2** 

Target 2245 W BIG ROCK RD **Property** WATERLOO, IA 50703

CORRACTS 1000439559 RCRA-TSDF **RCRA-SQG** 

**RAATS** 

IAD981504269

N/A

N/A

1014699342

N/A

**FINDS** 

Click here for full text details

Actual: 876 ft.

**CORRACTS** 

EPA ID:: IAD981504269

**RCRA-TSDF** 

EPA Id: IAD981504269

**RCRA-SQG** 

EPA Id: IAD981504269

**RAATS** 

Status: 01

Facility ID: IAD981504269

U003634984 A11 AASF #2 UST

**Target** AASF #2 2245 W BIG ROCK RD

WATERLOO, IA 50703 **Property** 

Click here for full text details Actual:

876 ft.

UST

Registration: 198605894 Facility Id: 6228

A12 **IOWA ARMY NATIONAL GUARD AASF2 - TRUCK LOADING RAM** NPDES S122545207

2245 W. BIG ROCK RD. **Target** 

Property WATERLOO, IA 50703

Click here for full text details Actual:

876 ft.

A13 **IA ARNG WATERLOO AVIATION** 

Target **Property** WATERLOO, IA 50703

Click here for full text details

2245 WEST BIG ROCK ROAD

Actual: 876 ft.

Registry ID:: 110043626234

# **GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING**

ξ	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
≤	AIRS	Minor and Title V Sources Listing	Department of Natural Resources	06/26/2018	07/31/2018	08/24/2018
≤	ALLSITES	Contaminated Sites Tracking Database	Department of Natural Resources	07/16/2018	07/18/2018	08/23/2018
⊴	AST	Aboveground Storage Tank Sites	Department of Public Safety	07/31/2018	08/02/2018	08/24/2018
≤	BROWNFIELDS	Brownfields Site Listing	Department of Natural Resources	07/16/2018	07/18/2018	08/23/2018
⊴	COAL ASH	Coal Ash Disposal Site Listing	Department of Natural Resources	09/04/2018	09/05/2018	10/02/2018
⊴	DEL SHWS	Delisted Contaminated Sites Listing	Department of Natural Resources	12/31/2017	01/24/2018	02/23/2018
⊴	DRYCLEANERS	Iowa Drycleaner List	Department of Natural Resources	07/06/2018	07/27/2018	08/24/2018
⊴	Financial Assurance 1	Financial Assurance Information Listing	Department of Natural Resources	08/30/2018	09/07/2018	10/02/2018
⊴	Financial Assurance 2	Financial Assurance Information Listing	Department of Natural Resources	08/29/2018	08/30/2018	10/02/2018
⊴	INST CONTROL	Sites with Institutional Controls	Department of Natural Resources	07/16/2018	07/18/2018	08/24/2018
⊴	LAST	Leaking Aboveground Storage Tank Sites	Department of Natural Resources	07/16/2018	07/18/2018	08/24/2018
⊴	LIENS	Liens Filed Listing	Department of Natural Resources	07/05/2018	07/24/2018	08/24/2018
⊴	LUST	Leaking Underground Storage Tank Data	Department of Natural Resources	08/30/2018	09/07/2018	10/02/2018
≤	NPDES	List of NPDES Permittees	Department of Natural Resources	08/08/2018	08/10/2018	08/24/2018
≤	RGA HWS	Recovered Government Archive State Hazardous Waste Facilitie	Department of Natural Resources		07/01/2013	01/03/2014
≤	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	Department of Natural Resources		07/01/2013	12/26/2013
≤	SHMS	Registry of Hazardous Waste or Hazardous Substance Disposal	Department of Natural Resources	12/31/2017	01/24/2018	02/23/2018
≤	SPILLS	Spills Database	Department of Natural Resources	09/04/2018	09/06/2018	10/02/2018
≤	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	10/17/2012	01/03/2013	03/05/2013
≤	SWF/LF	Permitted Solid Waste Management Facilities	Department of Natural Resources	09/04/2018	09/05/2018	10/02/2018
⊻	TIER 2	Tier 2 Information Listing	Department of Natural Resources	12/31/2017	09/18/2018	10/02/2018
≤	UST	Underground Storage Tank Data	Department of Natural Resources	08/30/2018	09/07/2018	10/02/2018
⊻	VCP	Land Recycling Program Sites	Department of Natural Resources	07/16/2018	07/18/2018	08/23/2018
SN	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
SN	ABANDONED MINES	Abandoned Mines	Department of Interior	09/10/2018	09/11/2018	09/14/2018
SN	BRS	Biennial Reporting System	EPA/NTIS	12/31/2015	02/22/2017	09/28/2017
SN	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
SN	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
SN	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	06/30/2018	07/17/2018	10/05/2018
SN	CORRACTS	Corrective Action Report	EPA	03/01/2018	03/28/2018	06/22/2018
SN	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
SN	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	05/31/2018	07/26/2018	10/05/2018
SN	DOD	Department of Defense Sites	NSGS	12/31/2005	11/10/2006	01/11/2007
SN	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	07/31/2012	08/07/2012	09/18/2012
SN	Delisted NPL	National Priority List Deletions	EPA	07/17/2018	08/09/2018	09/07/2018
SN	ЕСНО	Enforcement & Compliance History Information	Environmental Protection Agency	09/02/2018	09/05/2018	09/14/2018
SN	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
SN	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
SN	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
SN	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
SN	ERNS	Emergency Response Notification System	National Response Center, United States Coast	06/18/2018	06/27/2018	09/14/2018
SN	FEDERAL FACILITY	Federal Facility Site Information listing	Environmental Protection Agency	11/07/2016	01/05/2017	04/07/2017
SN	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
SN	FEMA UST	Underground Storage Tank Listing	FEMA	05/15/2017	05/30/2017	10/13/2017
SN	FINDS	Facility Index System/Facility Registry System	EPA	08/07/2018	09/05/2018	10/05/2018
Sn	FTTS		EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
NS	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ί	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
SN	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	01/31/2015	07/08/2015	10/13/2015
SN	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	08/22/2018	08/22/2018	10/05/2018
S		Formerly Utilized Sites Bemedial Action Program	Department of Energy	08/08/2017	09/11/2018	09/14/2018
<u>v</u>		FIFBA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
2	_	FIERA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
2 2		Hazardone Materials Information Deporting System	II S Department of Transportation	03/26/2018	03/02/2007	06/06/06/06
3 =		Hazardous Marenias miormation Operation Operation	C.C. Department of Transportation	11/10/2016	11/00/0016	00/00/2018
) ( ) :		megrated compliance information system	Environmental Protection Agency	0102/01/11	11/23/2010	102/01/20
ns		Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	04/01/2014	08/06/2014	01/29/2015
SN		Leaking Underground Storage Tanks on Indian Land	EPA Region 1	04/13/2018	05/18/2018	07/20/2018
SN	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	04/12/2018	05/18/2018	07/20/2018
SN	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	05/08/2018	05/18/2018	07/20/2018
SN		Leaking Underground Storage Tanks on Indian Land	EPA. Region 5	04/12/2018	05/18/2018	07/20/2018
S		Leaking Underground Storage Tanks on Indian Land	FPA Begion 6	04/01/2018	05/18/2018	07/20/2018
200		Leaking Underground Storage Tanks on Indian Land	FPA Region 7	04/24/2018	05/18/2018	07/20/2018
<u> </u>		Leaking Underground Storage Tanks on Indian Land	EDA Begion 8	04/25/2018	05/18/2018	07/20/2018
2		Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	04/10/2018	05/18/2018	07/20/2018
3 2		Benort on the Status of Onen Dumps on Indian Lands	Environmental Protection Agency	10/31/1008	10/03/2007	01/20/2008
2 2	_			12/31/2001	02/14/2015	01/10/2017
5 5		וומומון הפשבות מוסווא אויים וייבין בייבין בי		12/31/2014	01/14/2013	01/10/201/
2 :		Underground Storage Lanks on Indian Land	EFA, Region 1	04/13/2018	8102/81/20	01/20/2018
ns		Underground Storage Tanks on Indian Land	EPA Region 10	04/12/2018	05/18/2018	07/20/2018
SN	_	Underground Storage Tanks on Indian Land	EPA Region 4	05/08/2018	05/18/2018	07/20/2018
SN	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	04/12/2018	05/18/2018	07/20/2018
SN	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	04/01/2018	05/18/2018	07/20/2018
SN	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	04/24/2018	05/18/2018	07/20/2018
<u>v.</u>	_	Underground Storage Tanks on Indian Land	FPA Begion 8	04/25/2018	05/18/2018	07/20/2018
2 2		Traderational Oterago Tanko on Indian Land		04/20/2018	05/10/2010	07/20/2018
5 5		Valuation Of come Primate Tailor	BLA Hegion 9	04/10/2010	03/10/2010	07/20/2010
2 :		Voluntary Cleanup Priority Listing	EFA, Region 1	01/2//2015	C102/62/60	02/18/2010
ns	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
SN	LEAD SMELTER	Lead Smelter Sites	Environmental Protection Agency	07/17/2018	08/09/2018	10/05/2018
SN	_	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
SN	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	07/17/2018	08/09/2018	10/05/2018
SN	FUCIS	Land Use Control Information System	Department of the Navy	05/14/2018	05/18/2018	07/20/2018
SN		Material Licensing Tracking System	Nuclear Regulatory Commission	08/30/2016	09/08/2016	10/21/2016
SN	NPL	National Priority List	EPA	07/17/2018	08/09/2018	09/07/2018
SN	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
SN	_	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
SN	PADS	PCB Activity Database System	EPA	06/01/2017	06/09/2017	10/13/2017
SN		PCB Transformer Registration Database	Environmental Protection Agency	05/24/2017	11/30/2017	12/15/2017
SN		Potentially Responsible Parties	EPA	10/25/2013	10/17/2014	10/20/2014
SN		Proposed National Priority List Sites	EPA	07/17/2018	08/09/2018	09/07/2018
200		RCBA Administrative Action Tracking System	FPA	04/17/1995	07/03/1995	08/07/1995
<u>S</u>		Badiation Information Database	Environmental Protection Agency	07/02/2018	07/05/2018	10/05/2018
2		BCBA - Non Generators / No Longer Beginsted	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
2 2		DODA - Conditionally Exampt Omal Cuantity Constants	Environmental Protoction Agency	03/01/2010	03/26/2010	06/22/2010
3 =		DODA   250 Ottombia Constants	Environmental Protection Agency	03/01/2018	03/20/2010	06/22/2010
ט ני		DODA - Large Qualitity definerators	Environmental Protection Agency	03/01/2010	03/20/2010	00/22/2010
S :		HCHA - Small Quantity Generators	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018
S	RCRA-ISDF	HCHA - I reatment, Storage and Disposal	Environmental Protection Agency	03/01/2018	03/28/2018	06/22/2018

ស	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
SN	RMP	Risk Management Plans	Environmental Protection Agency	08/01/2018	08/22/2018	10/05/2018
SN	ROD	Records Of Decision	EPA	07/17/2018	08/09/2018	10/05/2018
SN	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	01/01/2017	02/03/2017	04/07/2017
SN	SEMS	Superfund Enterprise Management System	EPA	07/17/2018	08/09/2018	09/07/2018
SN	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	07/17/2018	08/09/2018	09/07/2018
SN	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
SN	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2016	01/10/2018	01/12/2018
SN	TSCA	Toxic Substances Control Act	EPA	12/31/2016	06/21/2017	01/05/2018
NS	UMTRA	Uranium Mill Tailings Sites	Department of Energy	06/23/2017	10/11/2017	11/03/2017
SN	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
SN	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
SN	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	06/18/2018	06/20/2018	09/14/2018
SN	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	05/18/2018	06/20/2018	09/14/2018
SN	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	07/31/2018	08/28/2018	09/14/2018
SN	_	Financial Assurance Information	Environmental Protection Agency	05/31/2018	06/27/2018	10/05/2018
SN	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	05/18/2018	06/20/2018	09/14/2018
SN	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	07/31/2018	08/28/2018	09/14/2018
SN	_	Mines Master Index File	Department of Labor, Mine Safety and Health A	08/01/2018	08/29/2018	10/05/2018
SN	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	12/05/2005	02/29/2008	04/18/2008
SN	_	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
<u>U</u>		Unexploded Ordnance Sites	Denartment of Defense	09/30/2017	06/19/2018	09/14/2018
3						
CT	CT MANIFEST	Hazardous Waste Manifest Data	Department of Energy & Environmental Protecti	08/10/2018	08/10/2018	09/10/2018
2	NJ MANIFEST	Manifest Information	Department of Environmental Protection	12/31/2017	07/13/2018	08/01/2018
ž		Facility and Manifest Data	Department of Environmental Conservation	07/01/2018	08/01/2018	08/31/2018
丽		Manifest information	Department of Environmental Management	12/31/2017	02/23/2018	04/09/2018
≷	WI MANIFEST	Manifest Information	Department of Natural Resources	12/31/2017	06/15/2018	07/09/2018
NS	AHA Hospitals	Sensitive Receptor: AHA Hospitals	American Hospital Association, Inc.			
SN	Medical Centers	Sensitive Receptor: Medical Centers	Centers for Medicare & Medicaid Services			
NS	Nursing Homes	Sensitive Receptor: Nursing Homes	National Institutes of Health			
NS		Sensitive Receptor: Public Schools	National Center for Education Statistics			
NS	_	Sensitive Receptor: Private Schools	National Center for Education Statistics			
⊻	Daycare Centers	Sensitive Receptor: Child Care Facilities	Department of Human Services			
NS	Flood Zones	100-year and 500-year flood zones	Emergency Management Agency (FEMA)			
NS		National Wetlands Inventory	U.S. Fish and Wildlife Service			
⊴ :	0, 1	National Wetland Inventory of Iowa	Department of Natural Resources			
S			U.S. Geological Survey			
מ מ	_		Pennvell Corporation			
S	Electric Power Transmission Line Data	Jata	Pennwell Corporation			

# **GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING**

St Acronym

**Full Name** 

**Government Agency** 

Gov Date Arvl. Date Active Date

## STREET AND ADDRESS INFORMATION

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## **GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM**

## **TARGET PROPERTY ADDRESS**

WATERLOO BIG ROCK AASF 2245 WEST BIG ROCK ROAD WATERLOO, IA 50703

## **TARGET PROPERTY COORDINATES**

Latitude (North): 42.554788 - 42° 33' 17.24" Longitude (West): 92.383858 - 92° 23' 1.89"

Universal Tranverse Mercator: Zone 15 UTM X (Meters): 550583.2 UTM Y (Meters): 4711346.5

Elevation: 876 ft. above sea level

## **USGS TOPOGRAPHIC MAP**

Target Property Map: 5944548 CEDAR FALLS, IA

Version Date: 2013

East Map: 5944028 WATERLOO NORTH, IA

Version Date: 2013

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.

## **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).

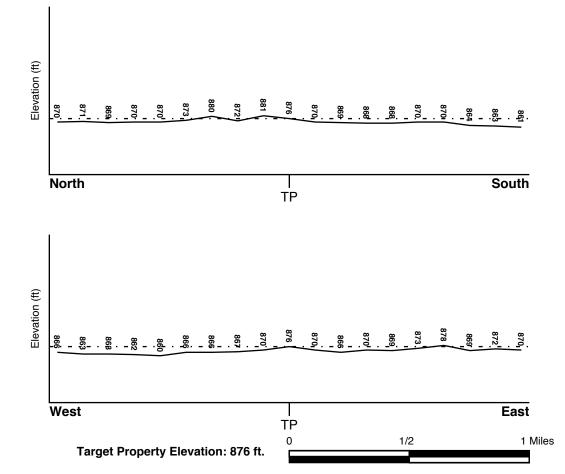
## **TOPOGRAPHIC INFORMATION**

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 SSW

## 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.

## **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

19013C0167F FEMA FIRM Flood data

Additional Panels in search area: FEMA Source Type

19013C0180FFEMA FIRM Flood data19013C0159FFEMA FIRM Flood data19013C0186FFEMA FIRM Flood data

**NATIONAL WETLAND INVENTORY** 

NWI Electronic
NWI Quad at Target Property
Data Coverage

CEDAR FALLS 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.

LOCATION GENERAL DIRECTION

MAP ID FROM TP GROUNDWATER FLOW

Not Reported

## **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**

## **GEOLOGIC AGE IDENTIFICATION**

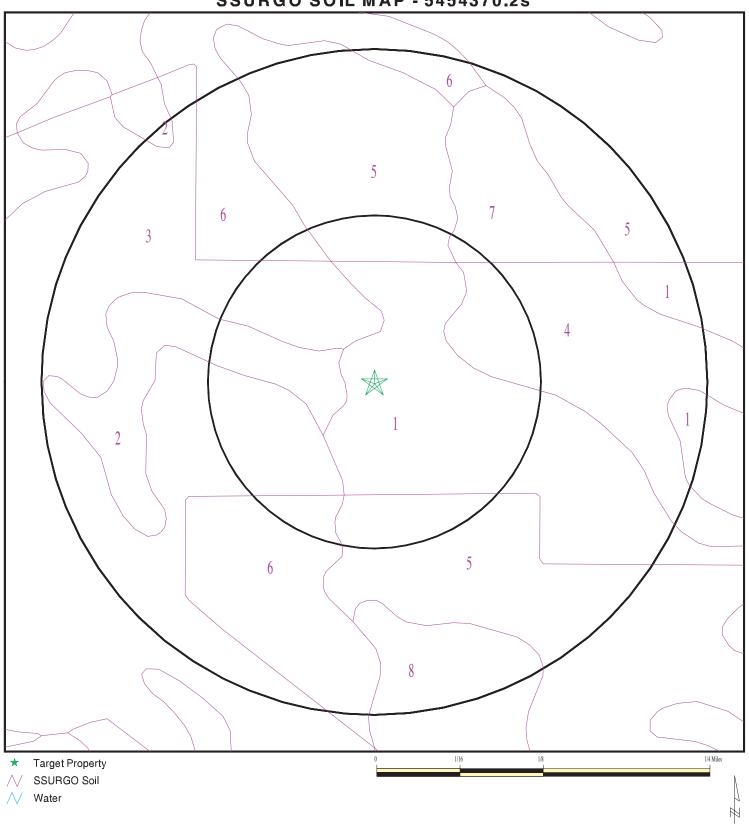
Era: Paleozoic Category: Stratified Sequence

System: Devonian
Series: Middle Devonian

Code: D2 (decoded above as Era, System & Series)

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 - 5454370.2s



SITE NAME: Waterloo Big Rock AASF ADDRESS: 2245 West Big Rock Road

Waterloo IA 50703 42.554788 / 92.383858 LAT/LONG:

CLIENT: AECOM CONTACT: Brittany Kirchmann

INQUIRY#: 5454370.2s

DATE: October 16, 2018 9:03 am

## 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: Sparta

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to

excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	11 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
2	11 inches	14 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
3	14 inches	33 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1

	Soil Layer Information						
	Boundary			Classit	Classification		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	hydraulic conductivity micro m/sec	0011 11000011011
4	33 inches	59 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1

Soil Map ID: 2

Soil Component Name: Urban land

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures.

Soil Drainage Class: Somewhat poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 30 inches

No Layer Information available.

Soil Map ID: 3

Soil Component Name: Sparta

Soil Surface Texture: loamy fine sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to

excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

# **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE SUMMARY**

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

	Bou	ındary		Classi	fication	Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	11 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
2	11 inches	14 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
3	14 inches	33 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
4	33 inches	59 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1

Soil Map ID: 4

Soil Component Name: Flagler

Soil Surface Texture: fine sandy 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: Somewhat excessively drained

Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

#### **Soil Layer Information** Saturated **Boundary** Classification hydraulic conductivity Layer Upper Lower Soil Texture Class **AASHTO Group Unified Soil Soil Reaction** micro m/sec (pH) 1 0 inches 7 inches fine sandy loam Granular **COARSE-GRAINED** Max: 705 Max: 7.3 SOILS, Sands, materials (35 Min: 141.11 Min: 5.1 pct. or less Clean Sands, Poorly graded passing No. 200), Silty, or sand. Clayey Gravel **COARSE-GRAINED** SOILS, Sands, and Sand. Sands with fines, Silty Sand. 2 7 inches 14 inches fine sandy loam Granular COARSE-GRAINED Max: 705 Max: 7.3 materials (35 SOILS, Sands, Min: 141.11 Min: 5.1 pct. or less Clean Sands, passing No. Poorly graded 200), Silty, or sand. Clayey Gravel **COARSE-GRAINED** and Sand. SOILS, Sands, Sands with fines, Silty Sand. COARSE-GRAINED Max: 705 Max: 7.3 3 14 inches 22 inches sandy loam Granular materials (35 SOILS, Sands, Min: 141.11 Min: 5.1 pct. or less Clean Sands, passing No. Poorly graded 200), Silty, or sand. Clayey Gravel COARSE-GRAINED and Sand. SOILS, Sands, Sands with fines, Silty Sand.

	Soil Layer Information							
	Bou	ındary		Classi	fication	Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity		
4	22 inches	33 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141.11	Max: 7.3 Min: 5.1	
5	33 inches	64 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141.11	Max: 7.3 Min: 5.1	

#### Soil Map ID: 5

Soil Component Name: Sparta

Soil Surface Texture: loamy fine sand

Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels. Hydrologic Group:

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

			Soil Layer	Information			
	Bou	Boundary		Classit	ication	Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	<b>AASHTO Group</b>	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	11 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
2	11 inches	14 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
3	14 inches	33 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
4	33 inches	59 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1

#### Soil Map ID: 6

Soil Component Name: Sparta

Soil Surface Texture: loamy fine sand

Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels. Hydrologic Group:

Soil Drainage Class: Excessively drained

# **GEOCHECK<sup>®</sup> - 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	r Information			
	Bou	ndary		Classi	fication	Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)
1	0 inches	11 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
2	11 inches	14 inches	loamy fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
3	14 inches	33 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1
4	33 inches	59 inches	fine sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141.11 Min: 42.33	Max: 6 Min: 5.1

Soil Map ID: 7

Soil Component Name: Flagler

Soil Surface Texture: fine sandy loam

Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse Hydrologic Group:

textures.

Soil Drainage Class: Somewhat excessively 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			Classi	fication	Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec		
1	0 inches	7 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141.11	Max: 7.3 Min: 5.1	
2	7 inches	14 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141.11	Max: 7.3 Min: 5.1	
3	14 inches	22 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141.11	Max: 7.3 Min: 5.1	

			Soil Laye	r Information			
	Bou	ındary		Classi	fication	Saturated hydraulic	
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	
4	22 inches	33 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141.11	Max: 7.3 Min: 5.1
5	33 inches	64 inches	loamy sand	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Clean Sands, Poorly graded sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 705 Min: 141.11	Max: 7.3 Min: 5.1

#### Soil Map ID: 8

Soil Component Name: Lawler

Soil Surface Texture: 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: Somewhat poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 30 inches

			Soil Layer	r Information			
	Bou	ndary		Classi	Classification		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec (p	Soil Reaction (pH)
1	7 inches	14 inches	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: 14.11 Min: 4.23	Max: 6.5 Min: 5.1
2	20 inches	31 inches	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: 14.11 Min: 4.23	Max: 6.5 Min: 5.1
3	37 inches	59 inches	very gravelly loamy sand	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: 14.11 Min: 4.23	Max: 6.5 Min: 5.1
4	0 inches	7 inches	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: 14.11 Min: 4.23	Max: 6.5 Min: 5.1
5	14 inches	20 inches	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: 14.11 Min: 4.23	Max: 6.5 Min: 5.1
6	31 inches	37 inches	sandy 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: 14.11 Min: 4.23	Max: 6.5 Min: 5.1

## **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
11	USGS40000319678	1/2 - 1 Mile NW
19	USGS40000319606	1/2 - 1 Mile WSW

#### FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID WELL ID 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	IAPU40000201303	1/8 - 1/4 Mile East
2	IAPU4000201300	1/4 - 1/2 Mile NE
A3	IAPU40000295263	1/2 - 1 Mile SE
A4	IAPR4000083898	1/2 - 1 Mile SE
5	IAPU4000037647	1/2 - 1 Mile NE
6	IAPU4000037450	1/2 - 1 Mile WSW
B7	IAPU4000073131	1/2 - 1 Mile SW
8	IAPU4000037393	1/2 - 1 Mile NW
B9	IAPU40000186776	1/2 - 1 Mile SW
B10	IAPW4000091594	1/2 - 1 Mile SW
12	IAPU4000037427	1/2 - 1 Mile WSW
13	IAPU4000073204	1/2 - 1 Mile East
14	IAPU4000073155	1/2 - 1 Mile SSW
C15	IAPU40000186779	1/2 - 1 Mile SW
C16	IAPW4000011005	1/2 - 1 Mile SW
C17	IAPU40000186778	1/2 - 1 Mile SW
C18	IAPW4000030505	1/2 - 1 Mile SW
20	IAPU40000324156	1/2 - 1 Mile NE
D21	IAPU40000295217	1/2 - 1 Mile SSW
D22	IAPU4000073138	1/2 - 1 Mile SSW
D23	IAPR4000073495	1/2 - 1 Mile SSW
24	IAPU4000037425	1/2 - 1 Mile SW
25	IAPU4000073134	1/2 - 1 Mile SSW
26	IAPU40000201287	1/2 - 1 Mile NNE

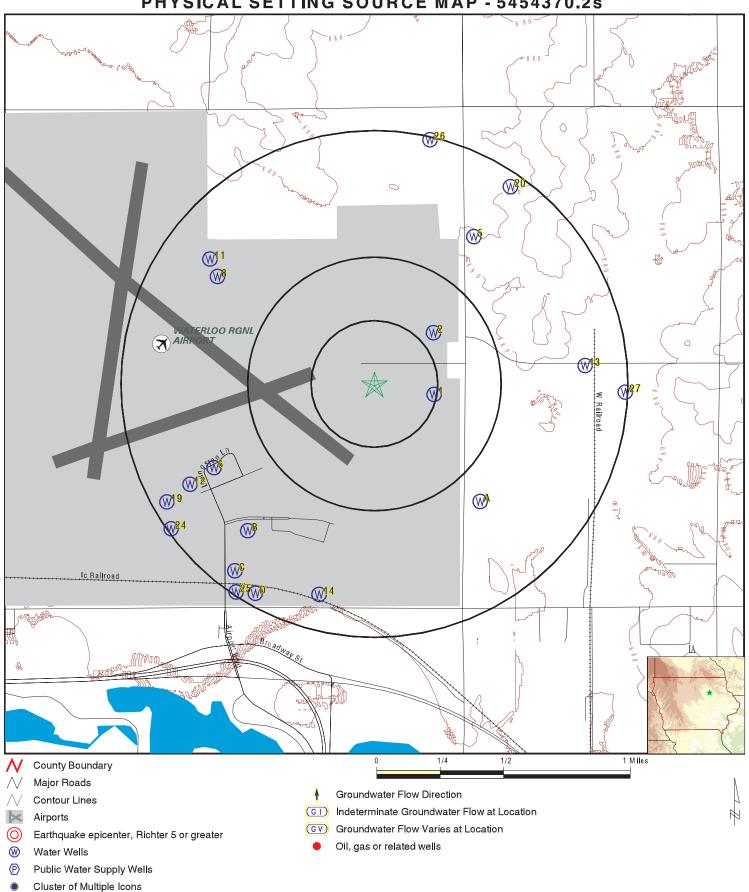
# **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE SUMMARY**

## STATE DATABASE WELL INFORMATION

MAP ID WELL ID FROM TP

27 IAPU40000211048 1/2 - 1 Mile East

# PHYSICAL SETTING SOURCE MAP - 5454370.2s



SITE NAME: Waterloo Big Rock AASF ADDRESS: 2245 West Big Rock Road

Waterloo IA 50703 LAT/LONG: 42.554788 / 92.383858

CLIENT: AECOM CONTACT: Brittany Kirchmann

INQUIRY #: 5454370.2s

DATE: October 16, 2018 9:02 am

# **GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS**

Map ID Direction Distance Elevation		Database	EDR ID Number
1 East 1/8 - 1/4 Mile Lower	Click here for full text details	IA WELLS	IAPU40000201303
2 NE 1/4 - 1/2 Mile Higher	Click here for full text details	IA WELLS	IAPU40000201300
A3 SE 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPU40000295263
A4 SE 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPR40000083898
5 NE 1/2 - 1 Mile Higher	Click here for full text details	IA WELLS	IAPU40000037647
6 WSW 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPU40000037450
B7 SW 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPU40000073131
8 NW 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPU40000037393
B9 SW 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPU40000186776

# **GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS**

Map ID Direction Distance Elevation		Database	EDR ID Number
B10 SW 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPW4000091594
11 NW 1/2 - 1 Mile Lower	Click here for full text details	FED USGS	USGS40000319678
12 WSW 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPU40000037427
13 East 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPU40000073204
14 SSW 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPU40000073155
C15 SW 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPU40000186779
C16 SW 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPW4000011005
C17 SW 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPU40000186778
C18 SW 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPW4000030505

# **GEOCHECK®- PHYSICAL SETTING SOURCE MAP FINDINGS**

Map ID Direction Distance Elevation		Database	EDR ID Number
19 WSW 1/2 - 1 Mile Lower	Click here for full text details	FED USGS	USGS40000319606
20 NE 1/2 - 1 Mile Higher	Click here for full text details	IA WELLS	IAPU40000324156
D21 SSW 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPU40000295217
D22 SSW 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPU40000073138
D23 SSW 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPR40000073495
24 SW 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPU40000037425
25 SSW 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPU40000073134
26 NNE 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPU40000201287
27 East 1/2 - 1 Mile Lower	Click here for full text details	IA WELLS	IAPU40000211048

# **GEOCHECK®-PHYSICAL SETTING SOURCE MAP FINDINGS RADON**

#### **AREA RADON INFORMATION**

State Database: IA Radon

Radon Test Results

Zipcode	Num Tests	Minimum	Maximum	Average
	<del></del>			
50703	46	0.5	19.6	4.8

Federal EPA Radon Zone for BLACK HAWK County: 1

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: 50703

Number of sites tested: 8

% <4 pCi/L Area Average Activity % 4-20 pCi/L % >20 pCi/L Not Reported Living Area - 1st Floor Not Reported Not Reported Not Reported Not Reported Not Reported Living Area - 2nd Floor Not Reported Not Reported 0%

Basement 4.225 pCi/L 50% 50%

### 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.

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 Iowa

Source: Department of Natural Resources

Telephone: 319-335-1575

#### **HYDROGEOLOGIC INFORMATION**

AQUIFLOW<sup>R</sup> 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

All Known Water Wells in the State of Iowa Source: Department of Natural Resources

Telephone: 319-335-1353

Well types included are agricultural drainage, permitted private, public, registered abandoned, SDWIS public, water use permit sites, wells registered for testing.

#### Agricultural Drainage Wells

Source: Department of Natural Resources

Telephone: 515-281-5029

Agricultural drainage wells are required to be registered both with the lowa Department of Natural Resources as a part of the 1987 Groundwater Protection Act, and with the U.S. Environmental Protection Agency as a part of the Underground Injection Control Program.

#### Private Well Tracking System Wells

Source: Department of Natural Resources

Telephone: 319-335-1353

#### Water Use Permits

Source: Department of Natural Resources

Telephone: 515-725-0336

Wells under Water Use permits. A water use permit is required of any person or entity that withdraws or diverts at least 25,000 gallons of water in a 24-hour period during any calendar year.

#### Private Wells Tested

Source: Department of Natural Resources

Telephone: 515-335-1353

This is a point coverage for private wells which have been tested for bacteria and nitrate contamination under the Grants to Counties program.

#### OTHER STATE DATABASE INFORMATION

Oil and Gas Well Database

Source: Department of Natural Resources

Oil and gas well locations.

#### RADON

State Database: IA Radon

Source: Department of Public Health

Telephone: 515-281-4340 Radon Test Results

### PHYSICAL SETTING SOURCE RECORDS SEARCHED

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

#### STREET AND ADDRESS INFORMATION

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# Appendix B Preliminary Assessment Documentation

# Appendix B.1 Interview Records

# **PA Interview Questionnaire - Other**

Facility: Waterloo AASF Interviewer: Date/Time: 8/22/2018, 13:00

Interviewee: Mark Boevers	Can your name/role be used in the Pa	A Report? $\underline{\mathbf{Y}}$ or N		
Title: First Sergeant	Can you recommend anyone we can	interview?		
Phone Number: 319-231-1138	<b>Y</b> or N (1970s-2001)			
Email: mark.a.boevers.mil@mail.mil	(3,100,200)			
Roles or activities with the Facility/Years wor	king at the Facility:			
First Sergeant has been with the facility	since 1999. The facility was built in 1	971 or 1972.		
<b>PFAS Use:</b> Identify accidental/intentional release storage container size (maintenance, fire training builts), fueling stations, crash sites, pest manager waterproofing). How are materials ordered/purch	, firefighting, buildings with suppressinent, recreational, dining facilities, m	on systems (as		
Mr. Bowers indicated TriMax and Halotron fire		Known Uses		
Waterloo AASF. Halotron fire extinguishers are extinguishers. Currently, the facility has five Hal	Use			
two TriMax-30 fire extinguishers on the ramp im	Procurement			
one TriMax-60 fire extinguisher in the motor pool area. Bulk AFFF is used at the facility to refill the TriMax fire extinguishers. AFFF is procured through USPFO and				
is returned to Camp Dodge if not used. During th	Storage (Mixed)			
6% AFFF were observed at the Waterloo AASF.		Storage (Solution)		
Halotron fire extinguishers. Mr. Rosson recalled		- · · · · ·		
on the ramp at Waterloo AASF during fire exting occurred near the middle of the ramp, south of th		Inventory, Off-Spec		
time of this release, the ramp had concrete pads s	•	Containment		
ramp was expanded from 2007-2008 during which	*	SOP on Filling		
replaced by concrete. In addition, detention pond ends of the ramp were added. The second potenti		Leaking Vehicles		
west end of the ramp around 2011-2013. The rele have most likely washed into the detention pond	ease occurred to concrete and would	Nozzle and Suppression System Testing		
Mr. Howers also indicated that a fire truck was p	-	Dining Facilities		
arrived in 1999. The truck was turned back in to because of several issues (e.g., broken or worn page 1999).		Vehicle Washing		
the truck was not used at the facility from 1999 u	ntil the time it was returned. During	Ramp Washing		
the site visit, Mr. Houses contacted Mr. Land W.		Fuel Spill Washing and		
Airport using the Waterloo AASF fire truck at the		Fueling Stations		
Dunkerton Road on Waterloo Regional Airport p available regarding the amount or type of AFFF	roperty. No information was	Chrome Plating or Waterproofing		

# **PA Interview Questionnaire - Other**

Facility: Waterloo AASF Interviewer: Date/Time: 8/22/2018, 13:00

washing activities occurred. Currently, the City of Waterloo and the Waterloo Airport provide fire-fighting services for the Waterloo AASF. To Mr. knowledge, neither the City of Waterloo nor the Waterloo airport has ever responded to an emergency event at or near the Waterloo AASF. The closest emergency event was a plane crash 20-25 miles away from the facility.	
According to Mr. Whatson the Waterloo AASF was served by a septic system until the 1994.	

# Appendix B.2 Visual Site Inspection Checklists

# **Visual Site Inspection Checklist**

Names(s) of people pe	erforming VSI: Pady Harrington, Jennifer Zorinsky
	Recorded by:
Α	RNG Contact: Curis Madsa
I	Date and Time: 8/22/2018; 1300
Method of visit (walking, driv	ing, adjacent): walking
Source/Release Information	
Site Name / Area Name / Unique ID:	Waterloo Army Aviation Support Facility (AASF)
Site / Area Acreage:	26 acres
Historic Site Use (Brief Description):	Waterloo AASF was built in 1971 or 1972 and is located on State of Iowa property.
Current Site Use (Brief Description):	Waterloo AASF operations
Physical barriers or access restrictions:	Access to the area is restricted to AASF personnel.
Was PFAS used (or spilled) at the site/are     1a. If yes, document h	a? $\underline{\underline{Y}}/N$ now PFAS was used and usage time (e.g., fire fighting training 2001 to 2014):
Two potential PFAS	release events occurred on the ramp during fire extinguisher training.
2. Has usage been documented?	Y/N
	and (place electronic files on a disk): Table. Potential releases were recalled by First Sergeant (Mark Bassa)
	inesses are located near the site
Residences and farm	land to the north and east; Waterloo Regional Airport to the west and south
4. Is this site located at an airport/flightline?  4a. If yes, provide a d  Waterloo Regional A	escription of the airport/flightline tenants:

# **Visual Survey Inspection Log**

Other Significant Si				
1. Does the facility ha	ave a fire suppression system? $Y / \underline{N}$			
	1a. If yes, indicate which type of AFFF has been use	ed:		
	N/A			
	1b. If yes, describe maintenance schedule/leaks:			
	N/A			
	1c. If yes, how often is the AFFF replaced:			
	N/A			
	1d. If yes, does the facility have floor drains and wh	ere do they l	ead? Can we	obtain an as built drawing?
	N/A			
	IVA			
Transport / Pathy	way Information			
<b>Migration Potential</b>	<u></u> _			
1. Does site/area drai	nage flow off installation? Y / N			
	1a. If so, note observation and location:			
2 Is there shownships	d flow within the site/area?		V/N	<u> </u>
2. Is there channelize			Y / <u>N</u>	
	2a. If so, please note observation and location:			
3. Are monitoring or	drinking water wells located near the site?		<u>Y</u> / N	
_	3a. If so, please note the location:			•
	Municipal/Commercial Public Water Supply well le	ess than one	miles south of	the facility
		1		Т
4. Are surface water i	intakes located near the site?		Y / <u>N</u>	
	4a. If so, please note the location:			
5 Can wind dispersion	on information be obtained? $\underline{Y} / N$			
o. cum winu unoperon	5a. If so, please note and observe the location.			
	Waterloo Regional Airport			
	· · · · · · · · · · · · · · · · · · ·			
6. Does an adjacent n	on-ARNG PFAS source exist? $\underline{\underline{Y}}/\underline{N}$			
	6a. If so, please note the source and location.			
	Waterloo Regional Airport, off-facility FTA			
	Cl. Will aff aids and aid and a do	Y/N		
	6b. Will off-site reconnaissance be conducted?	I / IN		

# **Visual Survey Inspection Log**

Significant Topogra	phical Features:		
1. Has the infrastructu	ure changed at the site/area? Y/N		
	1a. If so, please describe change (ex. Structures no longe	r exist):	
	Septic system was replaced in the early 2000s; asphalt or	ramp was replaced wi	th concrete in 2007-2008.
2. Is the site/area vege	etated? <u>Y</u> /N		
	2a. If not vegetated, briefly describe the site/area compos	sition:	
	vegetated except for ramp and parking areas		
3. Does the site or are	a exhibit evidence of erosion? Y / N		
	3a. If yes, describe the location and extent of the erosion:		
		<u>·</u>	
4 Does the site/area	exhibit any areas of ponding or standing water?	<u>Y</u> / N	
4. Does the site/area (	4a. If yes, describe the location and extent of the ponding		
	detention ponds to the west, southwest, and south of the		
	determining points to the west, southwest, and south of the	Turrip	
Receptor Informa	ution		
1. Is access to the site			
1. 15 400055 to the 5110	1a. If so, please note to what extent:		
	The facility has controlled access		
	•		
		1 /m /	
2. Who can access the	Site Workers / Construction Workers / Ecological	rkers / Trespassers / 1	Residential / Recreational
2. Who can access the			
	2a. Circle all that apply, note any not covered above:		
3. Are residential area	as located near the site?	<u>Y</u> / N	
	3a. If so, please note the location/distance:		
	0.25 mile to the east		
4 Are any schools/da	y care centers located near the site?	<u>Y</u> / N	
1. The diff selfoois, du	4a. If so, please note the location/distance/type:	= / 1 /	
	school and daycare approximately 2.5 miles southwest of	f facility	
		-9	
F. A		X7 / X7	
5. Are any wetlands le		<u>Y</u> /N	
	5a. If so, please note the location/distance/type:	gouthoogt a mix	hitat 0.25 miles to the east
	freshwater pond habitat approximately 0.75 miles to the freshwater emergent wetland habitat 0.75 miles to the no		onat 0.23 iiiies to the east, a
	noon make emergent wettand naonat 0.75 miles to the no	1117401	

# **Visual Survey Inspection Log**

Additional Notes			

## Photographic Log

Photo ID/Name	Date & Location	Photograph Description
Photograph No. 1	8/22/2018 Waterloo AASF	Looking south. Ramp
Photograph No. 2	8/22/2018 Waterloo AASF	Looking southwest. Southwest detention pond.
Photograph No. 3	8/22/2018 Waterloo AASF	TriMax-60 AFFF fire extinguisher.
Photograph No. 4	8/22/2018 Waterloo AASF	Halotron non-AFFF fire extinguisher.
Photograph No. 5	8/22/2018 Waterloo AASF	5-gallon buckets of 6% AFFF.

# Appendix B.3 Conceptual Site Model Information

# **Preliminary Assessment – Conceptual Site Model Information**

Site Name: Waterloo Army Aviation Support Facility (AASF) Why has this location been identified as a site? Interview indicated potential PFAS release during fire extinguisher training. Are there any other activities nearby that could also impact this location? Yes – adjacent Waterloo Regional Airport **Training Events** Have any training events with AFFF occurred at this site? AFFF fire extinguishers emptied on ramp If so, how often? One release between 2001 and 2003; one release between 2011 and 2013 How much material was used? Is it documented? *Unknown, not documented* 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? South and southwest Average rainfall? 35 inches Any flooding during rainy season? No Direct or indirect pathway to ditches? *No* Direct or indirect pathway to larger bodies of water? No Does surface water pond any place on site? Detention ponds to the west, southwest, and south of ramp Any impoundment areas or retention ponds? Yes Any NPDES location points near the site? Yes How does surface water drain on and around the flight line? Drainages have been diverted around the AASF and Waterloo Regional Airport

# **Preliminary Assessment – Conceptual Site Model Information**

Groundwater:
Groundwater flow direction? South
Depth to groundwater? Approximately 5 to 15 feet
Uses (agricultural, drinking water, irrigation)? Unknown
Any groundwater treatment systems? No Any groundwater monitoring well locations near the site? Yes, municipal/commercial public water supply well located less than one mile south of the facility
Is groundwater used for drinking water? No
Are there drinking water supply wells on installation? No
Do they serve off-post populations? No
Are there off-post drinking water wells downgradient? Yes
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? <i>N/A</i>
Is surface water from potential contaminated sites treated? N/A
E · AD· WA
Equipment Rinse Water  1. Is firefighting equipment washed? Where does the rinse water go? No – fire fighting services are provided by the City of Waterloo and the Waterloo Regional Airport.
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? <i>N/A</i>

# **Preliminary Assessment – Conceptual Site Model Information**

Identify Potential Receptors:
Site Worker: Yes
Construction Worker: Yes
Recreational User: No
Residential: Yes
Child: No
Ecological: Yes
Note what is located near by the site (e.g. daycare, schools, hospitals, churches, agricultural, livestock)?
Residences and farm land to the north and east; Waterloo Regional Airport to the west and south
Documentation
Ask for Engineering drawings (if applicable).
Has there been a reconstruction or changes to the drainage system? When did that occur?
Septic system was replaced in the early 2000s; asphalt on ramp was replaced with concrete in 2007-2008.

Appendix C
Photographic Log

APPENDIX C – Photographic Log			
Army National Guard, Preliminary Assessment for PFAS	Waterloo AASF	Waterloo, Iowa	

# Photograph No. 1

## **Description:**

Looking south. Ramp.



## Photograph No. 2

## **Description:**

Looking southwest. Southwest detention pond.



# APPENDIX C – Photographic Log

Army National Guard, Preliminary
Assessment for PFAS

Waterloo AASF

Waterloo, Iowa

## Photograph No. 3

#### **Description:**

TriMax-60 AFFF fire extinguisher.



## Photograph No. 4

## **Description:**

Halotron non-AFFF fire extinguisher.



Army National Guard, Preliminary Assessment for PFAS	Waterloo AASF	Waterloo, Iowa
Photograph No. 5		ws.
Description:		
5-gallon buckets of 6% AFFF.	ATSUTION AND ADDRESS OF THE PARTY OF THE PAR	