

# **EXHIBIT 11**



**GEOTEK ENGINEERING  
& TESTING SERVICES, INC.**  
909 East 50<sup>th</sup> Street North  
Sioux Falls, South Dakota 57104  
605-335-5512 Fax 605-335-0773

December 13, 2022

SD Department of Agriculture & Natural Resources  
Inspection, Compliance, and Remediation Program  
Joe Foss Building  
523 East Capitol  
Pierre, South Dakota 57501

Attn: Mr. Nayyer Syed

Subj: Phase I Environmental Site Assessment  
Targeted Brownfield Assessment  
Water Treatment Plant  
401 8<sup>th</sup> Street  
Latitude 42°51'12"N, Longitude 97°53'25"W  
Springfield, SD  
DANR #2022.181  
GeoTek #22-J89

Dear Mr. Syed:

We have completed a Phase I Environmental Site Assessment for the referenced project and are transmitting an electric copy of our report. This work was performed in accordance with the authorization of our September 22, 2022 contract.

Please refer to our conclusions and recommendations for the major findings and recommendations we have made.

If you have any questions or concerns regarding the information presented in this report, or if we can be of additional service, please contact our office (605-335-5512).

GeoTek Engineering & Testing Services, Inc.

Benjamin D. Fischer  
Project Manager  
SD CPRA# 14583



# Phase I Environmental Site Assessment Report

Water Treatment Plant  
401 8th Street  
Springfield, SD 57062



*Prepared by*  
GeoTek Engineering & Testing Services  
909 East 50th Street North  
Sioux Falls, SD 57104

*Prepared for*  
SD DANR - Brownfields Program  
523 E. Capitol Ave  
Pierre, SD 57501

December 13, 2022  
Project # 22-J89

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## 1.0 GENERAL INFORMATION

### Project Information:

Water Treatment Plant

### Project Number:

22-J89

### Consultant Information:

GeoTek Engineering & Testing Services

909 East 50th Street North

Sioux Falls, SD 57104

**Phone:** (605)335-5512

**Fax:** (605)335-0773

**E-mail Address:** bfischer@geotekeng.com

**Inspection Date:** 10/12/2022

**Report Date:** December 13, 2022

### Site Information:

Water Treatment Plant

401 8th Street

Springfield, SD 57062

County: Bon Homme

**Latitude, Longitude:** 42.853741, -97.889956

### Site Access Contact:

### Client Information:

SD DANR - Brownfields Program

Nayyer Syed

523 E. Capitol Ave

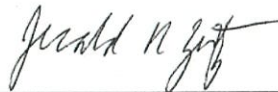
Pierre, SD 57501

### Site Assessor



Benjamin D. Fischer  
Project Manager

### Senior Reviewer



Jerald K. Zutz  
Senior Project Manager

### Certification:

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 40 CFR Part 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Benjamin D. Fischer - Project Manager

## 2.0 EXECUTIVE SUMMARY

GeoTek Engineering & Testing Services performed a Phase I ESA of the subject property in conformance with the scope and limitations of ASTM Standard Practice E 1527-13. This assessment has revealed no evidence of recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs), or historical recognized environmental conditions (HRECs) in connection with the subject property.





## 2.1 Subject Property Description

The subject property consists of approximately 5-acres of land and is developed with a single-story water treatment building with partial basement/water treatment cells, separate slab on grade garage/storage building. Other features on the subject site include a fenced in lime sludge storage area, pump house, and wooded area with intermittent stream for storm water discharge to the Missouri River.

The water treatment plant takes water from the Missouri River, stills and purifies the water, then pumps to city businesses and residents.

## 2.2 Data Gaps

For this report, a data gap occurred. There were six data gaps of 6 to 61 year durations. The data gaps are not considered significant due to a lack of notations of significant site structures or other development around the gap years. In our opinion, there were no additional interviews, records, or data to be reviewed that would be considered likely to be useful within the cost and time frame of this work.

## 2.3 Environmental Report Summary

Historical resources suggest the site was vacant and/or cropland until it was platted in 1870. By 1953 there appears to be a structure located on the northeast corner of the subject property while the rest remains vacant. The water treatment building was constructed in 1966, and garage and former boy scout cabin constructed by 1978. The site continued to operate as the City of Springfield Water Treatment plant through present time. The former boy scout cabin was demolished in 2022.

Site Visit Findings are presented in Section 7.3 Significant indications of potential contamination were not noted.

The site was not found in standard ASTM E1527-13 regulatory listings. The site was found in three non-standard ASTM E1527-13 listings including NPDES, ECHO and FINDs. The three listings are related to Surface Water Discharge Permit SDG860063. The general permit is potentially applicable to all water treatment and distribution facilities. Discharges of pollutants to waters of the state may occur due to an overflow from treatment and/or storage units, filter backwash water, disinfection and line flushing or line breakages. The water discharged from these activities must be relatively uncontaminated and must not contribute non-conventional or toxic pollutant loadings to the receiving waters. One compliance inspection record dated October 2011 was available to review. Violations included were related to note taking and documentation. The Surface Water Discharge Permit and compliance inspection are attached in the Additional Documentation Appendix.

There were several nearby off-site facilities found in the regulatory and non-regulatory listings. Those listings are summarized in Section 6.1 Standard Environmental Review. The off-site listed facilities are not considered environmentally significant with respect to the subject property.

Report Section		No Further Action	REC	HREC	CREC	Issue / Further Investigation	Comments
4.4	Current Use of Subject Property	X					
4.6	Adjoining Property Information	X					
6.1	Standard Environmental Record Resources	X					
6.4.1	Historical Summary	X					



Report Section		No Further Action	REC	HREC	CREC	Issue / Further Investigation	Comments
6.4.6	Previous Environmental Reports	X					
7.3.1	Hazardous Substances	X					
7.3.2	Petroleum Products	X					
7.3.3	USTs	X					
7.3.4	ASTs	X					
7.3.5	Other Suspect Containers	X					
7.3.6	Equipment Likely to Contain PCBs	X					
7.3.7	Interior Staining/Corrosion	X					
7.3.8	Discharge Features	X					
7.3.9	Pits, Ponds, And Lagoons	X					
7.3.10	Solid Waste Dumping/Landfills	X					
7.3.11	Stained Soil/Stressed Vegetation	X					
7.3.12	Wells	X					

## 2.4 Recommendations

Provided there is no future anticipated use of the items around the subject property (empty drums, used water meters, miscellaneous items in storage garage, lime sludge, etc.) we recommend they be removed from the site and properly disposed off-site.

We recommend the facility owner/operator periodically conduct review of the site activities, regulated programs, waste disposition etc., and compare them to various regulatory program requirements, and take action for (continued) rule compliance (i.e. General Surface Water Discharge Permit).

## 3.0 INTRODUCTION

GeoTek Engineering & Testing Services performed a Phase I Environmental Site Assessment (Phase I ESA) of the Water Treatment Plant located at 401 8Th Street in Springfield, Bon Homme County, SD.

The City of Springfield has applied to the Targeted Brownfield Financial Assistance Program of the South Dakota Department of Agriculture & Natural Resources for assessment of the project site. Springfield is nearing the beginning of construction of a new water treatment plant. The expected completion date is December 31, 2023. Once completed, the current facilities will no longer be needed.

## 3.1 Purpose

The purpose of the Phase I Environmental Site Assessment (ESA) was to evaluate the current and historical conditions of the subject property in an effort to identify recognized environmental conditions (RECs) in connection with the subject property.

An REC is defined by ASTM as: The presence or likely presence of any hazardous substances or petroleum products in, on, or at a property due to release to the environment; under conditions indicative of a release to the environment; or conditions that pose a material threat of a future release to the environment. De minimis conditions are not RECs.





The identification of RECs in connection with the subject property may impose an environmental liability on owners or operators of the subject property, reduce the value of the subject property, or restrict the use or marketability of the subject property, and therefore, further investigation may be warranted to evaluate the scope and extent of potential environmental liabilities.

### 3.2 Scope of Work

The Phase I ESA conducted at the subject property was in general accordance with ASTM Standard E 1527-13 and included the following:

1. Review of information on the geology and hydrogeology of the site vicinity. Review of available information, if any, regarding previous sampling and analysis of soil, groundwater or surface water conducted at the site.
2. Conduct a site visit and review of the subject property, records, and interviews of individuals associated with the property regarding the present or past existence of suspect asbestos containing materials, environmental permits or licenses, hazardous or potentially hazardous substances, distressed vegetation, stained soil, unusual grade changes, random dumping or on-site disposal, suspect lead containing materials, suspect polychlorinated biphenyls (PCBs), and underground/aboveground storage tanks.
3. Conduct a site vicinity reconnaissance to identify nearby off-site facilities that could potentially impact the subject property.
4. Review of available historical resources such as aerial photographs, fire insurance maps, tax assessor records, recorded land title records, USGS topographic maps, street directories, county atlases, and building department records, to identify, as nearly as possible, past uses of the property.
5. Review of reasonably available regulatory agency information and records. Verbal and/or written communication with federal, state, and local environmental regulatory agencies having jurisdiction to determine compliance with regulations concerning the usage, storage, treatment, and disposal of hazardous substances.
6. Prepare a report presenting our observations, pertinent documents, opinions, and recommendations.

The scope of our services did not include collecting or analyzing physical evidence for the presence or lack of contaminants such as asbestos, urea formaldehyde, mold, PCBs, petroleum, radon gas, herbicides, pesticides, fertilizers or other substances unless stated above.

Similarly, an assessment of wetlands, mineral rights investigation, drinking water testing, indoor air quality, or environmental audits of operations, environmental practices or management was also not included in the scope of work.

With respect to our review of recorded land title records (if provided by Client), we have not provided an opinion as to marketability of title and have not otherwise warranted as to condition of title.

### 3.3 Significant Assumptions

There is a possibility that even with the proper application of these methodologies, conditions may exist that could not be identified within the scope of the assessment or which were not reasonably identifiable from the available information. GeoTek Engineering & Testing Services believes that the information obtained from the record review and the interviews concerning the subject property is reliable. However, GeoTek Engineering & Testing Services cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The methodologies of this assessment are not intended to produce all inclusive or comprehensive results, but rather to provide SD DANR - Brownfields Program with information relating to the subject property.



### 3.4 Limitations and Exceptions

Information contained herein was obtained through a limited work scope by means of interviews, document research, and on-site observations. Conclusions are based on available information. However, this is not to imply that this is all of the information that exists which may be pertinent to the environmental liabilities of the site. The intent of this study was to identify environmental problems that would be evident to an environmental professional and was not intended to represent an exhaustive research of all potential hazards which may exist.

Furthermore, certain potential environmental hazards reported in this study may require more comprehensive analysis to fully assess their magnitude and financial impact.

This report is representative of present conditions only. Situations or activities which occur subsequent to this report and which result in adverse environmental impacts are not relevant to this study.

Along with all of the limitations set forth in various sections of the ASTM E 1527-13 protocol, the accuracy and completeness of this report may be limited by the following:

Access Limitations - None  
Physical Obstructions to Observations - None  
Outstanding Information Requests - None  
Historical Data Resource Failure - As Noted  
Other - None

#### STANDARD OF CARE STATEMENT

The conclusions and recommendations contained in this report present our professional opinions. These opinions were arrived in accordance with currently accepted hydrogeological and engineering practices at this time and location. Other than this, no warranty is implied or intended.

### 3.5 Deviations

There is one deviation from American Society for Testing and Materials (ASTM) Standard E1527-13. Chain of title documents were not available or provided for the referenced site.

#### Data Failure

The All Appropriate Inquiry standard requires that standard historical sources be consulted to develop a history of the previous uses of the site at a maximum of five year intervals. Standard historical sources include aerial photographs, fire insurance maps, property tax files, recorded land title records, local street directories, building department records, zoning/land use records, and other sources. Standard historical sources that are reasonably ascertainable, publicly available, available at reasonable time and cost, and are practically reviewable must be reviewed from the present back to the first developed use (which includes agricultural use or placement of fill dirt) or back to 1940, whichever is earlier. Review of standard historical sources may be excluded if they are not reasonably ascertainable or not likely to be sufficiently useful, accurate or complete.

Data failure occurs when all standard historical sources that are reasonably ascertainable and likely to be used have been reviewed, and yet the objective of the research has not been met. Data failure is not uncommon in trying to identify previous uses of property back to 1940 or earlier. If data failure occurs, the report shall document the failure, and if any standard historical resources were excluded, give the reasons for exclusion.

For this report, data failure occurred. Historical resources were reviewed for the site prior to 1940, however specific site use details were not always presented in the data. Historical zoning/land use records were not reviewed as they were deemed not likely to be useful/available. Please refer to the Historical Summary Sect. 6.4.1 for a summary of historical site use.





## Data Gaps

A data gap is defined as a lack of or inability to obtain the required information for this report despite a good faith effort, such as the inability to perform the site reconnaissance, interviews, etc. A data gap may not always be considered significant, and data failure of standard historical source review may or may not be considered a data gap. This report must identify and comment on significant data gaps that affect the ability to identify recognized environmental conditions, and identify sources of information that were consulted to address the data gaps (if any).

For this report, a data gap occurred. There were six data gaps of 6 to 61 year durations. The data gaps are not considered significant due to a lack of notations of significant site structures or other development around the gap years. In our opinion, there were no additional interviews, records, or data to be reviewed that would be considered likely to be useful within the cost and time frame of this work.

## 3.6 Special Terms and Conditions

Authorization to perform this assessment was given by the client on 10/03/2022. Instructions as to the location of the subject property, access, and an explanation of the subject property and facilities to be assessed were provided by SD DANR - Brownfields Program .

## 3.7 Reliance

This report presents the results of our work performed at the referenced site. This work was authorized by acceptance of the 9/22/2022 contract. No individual, corporation, or interest other than SD DANR - Brownfields Program or their lender may rely on this report without prior authorization from GeoTek Engineering & Testing Services, Inc.

## 4.0 SUBJECT PROPERTY DESCRIPTION

### 4.1 Location and Legal Description

The subject property is the City of Springfield water treatment plant and is located at 401 8Th Street, Springfield, SD. Information obtained from the Bon Homme County Director of Equalization indicates that the eastern portion of the subject property is not platted nor has a legal description (located at the dead-end of of Ash Street, owned by the City of Springfield) . The southern most portion of the subject property is land owned by the State of South Dakota Department of Game Fish & Parks with a legal address: Lot 4 and Accretion Land Adjacent to Afford said Lots. Other existing legal descriptions for the subject property (owned by the City of Springfield) include Block 38 of Original Addition and Lot 7 of Surprise Addition.

### 4.2 Activity/Use Limitations

GeoTek Engineering & Testing Services has performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13 of the subject property. Any exceptions to or deletions from this practice are described in Section 3.5 of this report. This assessment has revealed no evidence of Recognized Environmental Conditions in connection with the subject property.

### 4.3 Subject Property and Vicinity Description

The subject property consists of approximately 5-acres of land owned by the City of Springfield and an easement on land owned by the South Dakota Department of Game Fish and Parks that make up the City of Springfield Water Treatment Plant, built in 1966 and 1967.

The vicinity consists mostly of residential homes. The Lewis and Clark Lake/Missouri River is located adjacent/south of the subject property.



#### 4.4 Current Use of Subject Property

The water treatment plant takes water from the Missouri River, stills and purifies the water, then pumps to city businesses and residents.

#### 4.5 Description of Structures and Other Improvements

The site includes an approximate 2,500 square foot single-story water treatment building with partial basement/water treatment cells. The building is heated with electric heaters and contains one window-air conditioner. Water and sewer are through the City of Springfield.

The subject site also includes an approximate 400 square foot slab on grade garage/storage building, fenced in lime sludge storage area (two 0.15-acre ponds), pump house, and wooded area with intermittent stream, and holding pond that discharge to the Missouri River.

#### 4.6 Adjoining Property Information

During the vicinity reconnaissance, GeoTek Engineering & Testing Services, Inc. observed the land use on properties in the immediate vicinity of the subject property listed in the adjoining Property Information Table below.

A drive-by survey of the immediate site vicinity (approximately 500') revealed no items of apparent significance such as suspect UST locations, potential waste generators, industrial properties, etc:

Adjoining Property Information			
Direction From Subject Property	Occupant	Use	Comments
North	8th Street, Residential	Residential	
South	Residential, Lewis and Clark Lake/Missouri River	Residential	
East	Ash Street, Residential	Residential	
West	Oak Street, Residential	Residential	

#### 5.0 USER PROVIDED INFORMATION

As part of this Phase I ESA, GeoTek Engineering & Testing Services requested certain information from the "User" Client Company. This section describes tasks to be performed by the User.

##### 5.1 Specialized Knowledge

The user of this report may conduct certain tasks to assist in identifying possible recognized environmental conditions of the site. An application for targeted Brownfields assessment was submitted to the SD DANR on September 2, 2022. Environmental conditions and items of concern were not noted. The completed application is in the Additional Documentation Appendix.

We have not been informed of environmental liens, activity or land use limitations, or a value reduction of the subject property due to environmental reasons. An abstract of title or other title records for the subject property were not available for review.

Previous environmental reports are not known to exist for the site.





## 5.2 Valuation Reduction for Environmental Issues

GeoTek Engineering & Testing Services, Inc. has not been informed of a valuation reduction of the subject property due to environmental issues.

## 5.3 Owner, Subject Property Manager, and Occupant Information

No written or verbal communication with the subject property owner, manager and/or tenants revealed information which suggested that there are currently or historically recognized environmental conditions associated with the subject property.

## 5.4 Reason For Performing Phase I ESA

The purpose of this Phase I Environmental Site Assessment (ESA) was to identify existing or potential Recognized Environmental Conditions (as defined by ASTM Standard E 1527-13) in connection with the subject property. GeoTek Engineering & Testing Services understands that the findings of this study will be used to evaluate a pending financial transaction in connection with the subject property.

The Phase I ESA is being conducted as part of environmental due diligence prior to property transfer, financing or redevelopment.

## 6.0 RECORDS REVIEW

The purpose of the records review is to obtain and review records that will help identify RECs in connection with the subject property.

A review was made of reasonably available, applicable regulatory agency lists of known or potential hazardous waste sites or landfills, and sites currently under investigation for environmental violation from the lists of the U.S. Environmental Protection Agency and the S.D. Department of Agriculture and Natural Resources.

## 6.1 Standard Environmental Record Resources

GeoTek Engineering & Testing Services contracted Environmental Data Resources, Inc. (EDR) to conduct a search of Federal and State databases containing known and suspected sites of environmental contamination. The number of listed sites identified within the approximate minimum search distance (AMSD) from the Federal and State environmental records database listings specified in ASTM Standard E 1527-13 are summarized in the following table. Detailed information for sites identified within the AMSDs is provided below, along with an opinion about the significance of the listing to the analysis of recognized environmental conditions in connection with the subject property.. Copies of the EDR research data and a description of the databases are included in the Regulatory Records Appendix of this report.

Map Findings Summary								
Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FINDS	1	0.001	0	NR	NR	NR	NR	1
EDR Hist Auto	0	0.125	1	NR	NR	NR	NR	1
ECHO	1	0.001	0	NR	NR	NR	NR	1
LUST	0	0.5	2	2	3	NR	NR	7
NPDES	1	0.001	0	NR	NR	NR	NR	1
INDIAN RESERV	0	1	0	0	0	1	NR	1
SD DANR	0	0.5	2	2	7	NR	NR	11



Detail Summary	
Site Name:	SPRINGFIELD WATER TREATMENT FACILITY
Databases:	NPDES, ECHO, FINDS
Address:	PO BOX 446
Distance:	Subject Property
Direction:	n/a
Elevation:	n/a
Comments:	<p>Non-Standard ASTM E1527-13</p> <p>NPDES: Surface Water Discharge Permit SDG860063 - The general permit is potentially applicable to all water treatment and distribution facilities. Discharges of pollutants to waters of the state may occur due to an overflow from treatment and/or storage units, filter backwash water, disinfection and line flushing or line breakages. The water discharged from these activities must be relatively uncontaminated and must not contribute non-conventional or toxic pollutant loadings to the receiving waters.</p> <p>One compliance inspection record dated October 2011 was available to review. Violations included were related to note taking and documentation.</p> <p>The Surface Water Discharge Permit and compliance inspection are attached in the Additional Documentation Appendix.</p> <p>ECHO/FINDS - Related to the Surface Water Discharge Permit</p>

Site Name:	CLEAN ATP - LEOLA HORNSTRA PROPERTY
Databases:	LUST, SD DANR, EDR Hist Auto
Address:	514 6TH STREET
Distance:	364
Direction:	SSW
Elevation:	Higher
Comments:	<p>Standard ASTM E1527-13</p> <p>LUST/SD DANR #2001073.000 - removal of a 270-gallon UST. Based on the information available, a release of petroleum had not occurred.</p> <p>Non-Standard ASTM E1527-13</p> <p>EDR Hist Auto - Gasoline Service Station 1970 &amp; 1971</p>

Site Name:	CLEAN ATP - BRUNKEN PROPERTY
Databases:	LUST, SD DANR
Address:	612 7TH STREET
Distance:	461
Direction:	WSW
Elevation:	Higher
Comments:	<p>Standard ASTM E1527-13</p> <p>LUST/SD DANR #2002132.000 - removal of a 560-gallon UST. Based on the information available, a release of petroleum had not occurred.</p>

Site Name:	YOUTH SERVICES CENTER - TANK LEAK
Databases:	LUST, SD DANR
Address:	709 EAST 6TH STREET (SE AT 6TH & CHESTNUT)
Distance:	945
Direction:	WSW
Elevation:	Higher
Comments:	<p>Standard ASTM E1527-13</p> <p>LUST/SD DANR #1993.336</p>

Site Name:	ATP - LOIS' CAFE (FORMER TEXACO)
Databases:	LUST, SD DANR
Address:	713 8TH STREET (8TH & CHESTNUT)
Distance:	1099
Direction:	West
Elevation:	Higher





<b>Comments:</b>	Standard ASTM E1527-13 LUST/SD DANR #2001.211
<b>Site Name:</b>	Carb Cleaner Disposal - Mr. Golf Cart
<b>Databases:</b>	SD DANR
<b>Address:</b>	822 8th Street Alley
<b>Distance:</b>	1538
<b>Direction:</b>	West
<b>Elevation:</b>	Higher
<b>Comments:</b>	Standard ASTM E1527-13 SD DANR #2007.210
<b>Site Name:</b>	GEORGE'S ONE STOP - TANK REMOVALS
<b>Databases:</b>	LUST, SD DANR
<b>Address:</b>	901 8TH STREET (COLLEGE & 8TH)
<b>Distance:</b>	1692
<b>Direction:</b>	West
<b>Elevation:</b>	Higher
<b>Comments:</b>	Standard ASTM E1527-13 LUST/SD DANR #1998.278
<b>Site Name:</b>	SPRINGFIELD MOTORS INC (FORMER)
<b>Databases:</b>	LUST, SD DANR, ECHO, FINDS, RCRA NonGen / NLR,
<b>Address:</b>	904 8TH STREET
<b>Distance:</b>	1889
<b>Direction:</b>	West
<b>Elevation:</b>	Higher
<b>Comments:</b>	Standard ASTM E1527-13 LUST/SD DANR#1999.298 Non-Standard ASTM E1527-13 FINDS/ECHO RCRA NonGen
<b>Site Name:</b>	ATP - EMMANUEL REFORMED CHURCH
<b>Databases:</b>	LUST, SD DANR
<b>Address:</b>	1108 COLLEGE STREET (SE AT COLLEGE & 12TH)
<b>Distance:</b>	1987
<b>Direction:</b>	Northwest
<b>Elevation:</b>	Higher
<b>Comments:</b>	Standard ASTM E1527-13 LUST/SD DANR #2001.182
<b>Site Name:</b>	Bituminous Paving - Road Equipment Leak
<b>Databases:</b>	SD DANR
<b>Address:</b>	Sandbar Marina: State Park along Missouri Rlver
<b>Distance:</b>	2335
<b>Direction:</b>	East
<b>Elevation:</b>	Lower
<b>Comments:</b>	Standard ASTM E1527-13 SD DANR #1991.347
<b>Site Name:</b>	ATP - Mike Durfee State Prison - Armory
<b>Databases:</b>	SD DANR
<b>Address:</b>	College, between 12th & 13th St
<b>Distance:</b>	2505
<b>Direction:</b>	Northwest
<b>Elevation:</b>	Higher



<b>Comments:</b>	Standard ASTM E1527-13 LUST/SD DANR #2004.043
<b>Site Name:</b>	ATP - Eleanor Bussey
<b>Databases:</b>	SD DANR
<b>Address:</b>	809 14th Street
<b>Distance:</b>	2510
<b>Direction:</b>	Northwest
<b>Elevation:</b>	Higher
<b>Comments:</b>	Standard ASTM E1527-13 LUST/SD DANR #2001.206
<b>Site Name:</b>	SANTEE RESERVATION
<b>Databases:</b>	INDIAN RESERV
<b>Address:</b>	
<b>Distance:</b>	4406
<b>Direction:</b>	ESE
<b>Elevation:</b>	
<b>Comments:</b>	Non-Standard ASTM E1527-13 Indian Reserv

## 6.2 Additional Environmental Record Resources

### National Pipeline Mapping System

This publicly available database of pipelines was searched on October 27, 2022. Pipelines were not shown within an approximate one-mile radius of the subject property.

## 6.3 Physical Setting

The subject property consists of approximately 5-acres of land in southeastern Springfield, Bon Homme County, South Dakota. The site lies in the SW 1/4 of the SW 1/4, Section 23, Township 93 North, Range 60 West.

### 6.3.1 Topography

Based on a review of the 1978 USGS topographic map for the subject property area, the land surface elevation is approximately 1215-1280' above mean sea level, sloping southeast down the intermittent stream on the subject property. The groundwater gradient may be in the same direction as the land surface slope. If so, the groundwater gradient may slope to the southeast toward the Lewis and Clark Lake/Missouri River.

### 6.3.2 Surface Water Bodies

Surface Water bodies in the subject site include the two fenced in lime sludge storage areas and holding pond within the intermittent stream. The intermittent stream is suspected to have surface water seasonally during snow melt and rainfall events. The Lewis and Clark Lake/Missouri River is located adjacent/south of the subject property.

### 6.3.3 Geology and Hydrology

#### Geology

The surficial deposits on the north part of the subject property is likely Till (Ground Moraine). It is a boulder clay till that is calcareous, friable, and locally sandy (Christensen, 1974). Till may contain buried outwash (sand and gravel) deposits. The geologic unit averages about 50' in thickness.





The site has a poor probability of surficial sand or gravel deposits (Christensen, 1970).

The bedrock units underlying the till and likely found at the surface on the south part of the subject property is the Niobrara Marl Formation. The top of the Niobrara Marl is about 1245-1225' above mean sea level (Christensen, 1974).

#### Groundwater

Shallow groundwater is likely present in the subsurface within about 5' to 20' of the land surface, with exception of the portion of the subject property that is the bank/shore of the Lewis and Clark Lake/Missouri River. The groundwater gradient is often in the same direction as the topographic gradient. Therefore, the shallow groundwater gradient may be to the southeast. Normally, groundwater within glacial till is not considered an aquifer due to poor quality and quantity.

The site is likely underlain by the following bedrock aquifers: Niobrara, Codell, and Dakota (Jorgensen, 1971).

Bon Homme County has one ordinance that pertains to water source or aquifer protection zones. Bon Homme County has Animal Feeding Operations Performance Standards that have facility setback requirements from wells, fisheries, floodplains, etc. This facility would not be subject to these standards.

#### Soils

The soil found on the northern part of the site is Eltree silt loam, 2 to 6 percent slopes. It is a deep, well drained gently sloping soil formed in loess on uplands. Permeability is moderate (Ward, 1983).

The soil found on the southern part of the site is Eltree-Ethan complex, 9 to 40 percent slopes. It is a deep, well drained strongly sloping to steep soil found on uplands. Permeability is moderate and runoff is rapid (Ward, 1983).

## 6.4 Historical Use

The objective of reviewing historical resources is to develop a history of the previous uses of the subject property and surrounding area, in order to help identify the likelihood of past uses which might have led to RECs in connection with the subject property.

### 6.4.1 Historical Summary

Historical information identifying the past use of the subject property was obtained from a variety of sources as detailed in the Historical Resources Appendix of this report and included Standard Historical Resources (City Directories, Aerial Photographs, Sanborn Fire Insurance Maps, and/or Topographic Maps).

Historical resources suggest the site was vacant and/or cropland until it was platted in 1870. By 1953 there appears to be a structure located on the northeast corner of the subject property while the rest remains vacant. The water treatment building was constructed in 1966, and garage and former boy scout cabin constructed by 1978. The site continued to operate as the City of Springfield Water Treatment plant through present time. The former boy scout cabin was demolished in 2022.

Historical Summary		
Period	Source	Property Uses
1870	Register of Deeds	The City of Springfield Original addition was platted in May, 1870
Data Gap		
1931	Fire Insurance Map	Subject property not shown indicating little or no commercial development.
Data Gap		



Period	Source	Property Uses
1953	Aerial Photos	One apparent building can be seen at the southwest corner of Ash Street and 8th Street at the northeast corner of the subject property. An intermittent stream surrounded by trees passes through the center of the subject from north to south. Other parts of the subject property appear to be vacant/grass.
Data Gap		
1966	Register of Deeds	The land of which the water treatment building lies at the south dead end of Ash Street was vacated in 1966.
Data Gap		
1973	Aerial Photos	This photo is poor quality. Ash Street extends south of 8th Street and the water treatment building can be seen on the subject property
1974	Register of Deeds	Surprise Addition was platted in June 1974, vacating/replacing Original Lots 8, 9, and 10 of Block 38. The land located near the southeast corner of the subject property adjacent/south of Block 38 (7th Street) was vacated on July, 10 1974. On July 22, 1974 Surprise addition was included within the corporate limits of the City of Springfield.
1977	Aerial Photos	The garage building can be seen west of the water treatment building. There is a building near the north center of the subject property east of the intermittent stream with a driveway coming off 8th Street. A driveway appears to extend south of that building to the south part of the subject property next to Lewis and Clark Lake/Missouri River.
1978	Historical Topographic Map	Two buildings are shown on the subject property. One at Ash Street dead-end (water treatment building) and another at the southwest corner of the 8th Street and Ash Street Intersection. A majority of the subject property is shaded in green, indicating that it's wooded. The site is about 1215-1280' above mean sea level, sloping southeast down the intermittent stream on the subject property.
Data Gap		
1984	Aerial Photos	The pump house can be seen next to Lewis and Clark Lake/Missouri River. The land southeast of the 8th Street and Oak Street intersection (northwest corner of the subject property) appears to be heavily vegetated that may be evidence of sludge holding ponds.
Data Gap		
1992	City Directories	Subject property not listed.
1993	Aerial Photos	A small pond can be seen within the intermittent stream near the south part of the subject property before it enters the Lewis and Clark Lake/Missouri River. There doesn't appear to be a structure at the northeast corner of the subject property near the southwest intersection of 8th Street and Ash Street.
1995	City Directories	Subject property not listed.
1999	Aerial Photos	There are no apparent significant changes to the subject property from the previous aerial photo.
2000	City Directories	Subject property not listed.
2005	City Directories	Subject property not listed.
2006	Aerial Photos	Two fenced in sludge holding ponds are present near the northwest corner of the subject property.
2009	Aerial Photos	There are no apparent significant changes to the subject property from the previous aerial photo.
2010	City Directories	Subject property not listed.
2012	Aerial Photos	There are no apparent significant changes to the subject property from the previous aerial photo.
2012	Historical Topographic Map	This map does not show buildings. There are no apparent significant changes to the subject property from the previous topographic map.
2014	City Directories	Subject property not listed.
2015	Historical Topographic Map	This map does not show buildings. There are no apparent significant changes to the subject property from the previous topographic map.





Period	Source	Property Uses
2016	Aerial Photos	There are no apparent significant changes to the subject property from the previous aerial photo.
2017	City Directories	401 8th Street listed as City of Springfield
2017	Historical Topographic Map	This map does not show buildings. There are no apparent significant changes to the subject property from the previous topographic map.
2022	Director of Equilization	Boy scout cabin removed from subject property Parcel #52.02.38.11

#### 6.4.2 City Directories

An EDR City Directory Report was requested. The years provided are listed in the table below. A summary of city directories are provided below. For a full listing, consult the EDR Report in the Historical Research Appendix.

Date(s)	Property Comments	Surrounding Area Comments
1992	Subject property not listed.	8th Street (300s - 500s) Residential Listings Only Ash Street (700s - 800s) Residential Listings Only Oak Street (600s - 800s) Residential Listings Only
1995	Subject property not listed.	8th Street (300s - 500s) Residential Listings Only Ash Street (700s - 800s) Residential Listings Only Oak Street (600s - 800s) Residential Listings Only
2000	Subject property not listed.	8th Street (300s - 500s) Residential Listings Only Ash Street (700s - 800s) Residential Listings Only Oak Street (600s - 800s) Residential Listings Only
2005	Subject property not listed.	8th Street (300s - 500s) Residential Listings Only Ash Street (700s - 800s) Residential Listings Only Oak Street (600s - 800s) Residential Listings Only
2010	Subject property not listed.	8th Street (300s - 500s) Residential Listings Only Ash Street (700s - 800s) Residential Listings Only Oak Street (600s - 800s) Residential Listings Only
2014	Subject property not listed.	8th Street (300s - 500s) Residential Listings Only Ash Street (700s - 800s) Residential Listings Only Oak Street (600s - 800s) Residential Listings Only
2017	8th Street 401 - City of Springfield	8th Street (300s - 500s) Residential Listings Only Ash Street (700s - 800s)



Date(s)	Property Comments	Surrounding Area Comments
		Residential Listings Only Oak Street (600s - 800s) Residential Listings Only

### 6.4.3 Aerial Photos

Available aerial photographs from EDR were reviewed for this Environmental Site Assessment. Copies of photographs are included in the Historical Research Appendix. A summary of aerial photos are provided below.

Aerial Photos		
Date(s)	Property Comments	Surrounding Area Comments
1953	One apparent building can be seen at the southwest corner of Ash Street and 8th Street at the northeast corner of the subject property. An intermittent stream surrounded by trees passes through the center of the subject from north to south. Other parts of the subject property appear to be vacant/grass.	8th Street is adjacent/north and Oak Street is adjacent/west of the subject property. Land to the north appears to be vacant. There appears to be residential homes to the west and southwest along Oak Street. It appears the Missouri River in it's natural state prior to being dammed (Gavin's Point Dam, Yankton, SD).
1973	This photo is poor quality. Ash Street extends south of 8th Street and the water treatment building can be seen on the subject property	This photo is poor quality. Apparent residential homes can be seen to the north across 8th Street. The rest of the immediate vicinity appears similar to the previous aerial photo. Lewis and Clark Lake can be seen adjacent south (post Gavin's Point Dam).
1977	The garage building can be seen west of the water treatment building. There is a building near the north center of the subject property east of the intermittent stream with a driveway coming off 8th Street. A driveway appears to extend south of that building to the south part of the subject property next to Lewis and Clark Lake/Missouri River.	There are no apparent significant changes to the immediate vicinity from the previous aerial photo.
1984	The pump house can be seen next to Lewis and Clark Lake/Missouri River. The land southeast of the 8th Street and Oak Street intersection (northwest corner of the subject property) appears to be heavily vegetated that may be evidence of sludge holding ponds.	Apparent residential homes are shown adjacent/east of the subject property along 8th Street and Ash Street.
1993	A small pond can be seen within the intermittent stream near the south part of the subject property before it enters the Lewis and Clark Lake/Missouri River. There doesn't appear to be a structure at the northeast corner of the subject property near the southwest intersection of 8th Street and Ash Street.	There are no apparent significant changes to the immediate vicinity from the previous aerial photo.
1999	There are no apparent significant changes to the subject property from the previous aerial photo.	There are no apparent significant changes to the immediate vicinity from the previous aerial photo.





Date(s)	Property Comments	Surrounding Area Comments
2006	Two fenced in sludge holding ponds are present near the northwest corner of the subject property.	There are no apparent significant changes to the immediate vicinity from the previous aerial photo.
2009	There are no apparent significant changes to the subject property from the previous aerial photo.	There are no apparent significant changes to the immediate vicinity from the previous aerial photo.
2012	There are no apparent significant changes to the subject property from the previous aerial photo.	There are no apparent significant changes to the immediate vicinity from the previous aerial photo.
2016	There are no apparent significant changes to the subject property from the previous aerial photo.	There are no apparent significant changes to the immediate vicinity from the previous aerial photo.

#### 6.4.4 Sanborn/Historical Maps

Sanborn Fire Insurance maps for the subject property and surrounding area were apparently not made. A no coverage certificate is attached in the Historical Research Appendix.

A Fire Underwriters Inspection Bureau map of Springfield from 1931 was reviewed; however, the subject property was not shown indicating little or no commercial development for the year mapped.

Sanborn/Historical Maps		
Date(s)	Property Comments	Surrounding Area Comments
1931 - Fire Underwriters Inspection Bureau Map	Subject property not shown indicating little or no commercial development.	Immediate vicinity not shown indicating little or no commercial development.

#### 6.4.5 Historical Topographic Maps

Available topographic maps from the years below from EDR were reviewed for this Environmental Site Assessment. Copies of selected maps are included in the Historical Research Appendix of this report. A summary of topographic maps are provided below.

Historical Topographic Maps			
Date(s)	Quad	Property Comments	Surrounding Area Comments
1978	Santee, Kingsburg, Tyndall, Springfield	Two buildings are shown on the subject property. One at Ash Street dead-end (water treatment building) and another at the southwest corner of the 8th Street and Ash Street Intersection. A majority of the subject property is shaded in green, indicating that it's wooded. The site is about 1215-1280' above mean sea level, sloping southeast down the intermittent stream on the subject property.	Oak Street, 8th Street and Ash Street are shown adjacent to the subject property. One building is shown adjacent/west across Oak Street and two adjacent/north across 8th Street. The Lewis and Clark Lake/Missouri river is shown adjacent/south.
2012	Springfield, Kingsburg, Tyndall	This map does not show buildings. There are no apparent significant changes to the subject property from the previous topographic map.	This map does not show buildings. There are no apparent significant changes to the immediate vicinity from the previous topographic map.



Date(s)	Quad	Property Comments	Surrounding Area Comments
2015	Springfield, Kingsburg, Tyndall, Sandee	This map does not show buildings. There are no apparent significant changes to the subject property from the previous topographic map.	This map does not show buildings. There are no apparent significant changes to the immediate vicinity from the previous topographic map.
2017	Springfield, Sandee, Kingsburg, Tyndall	This map does not show buildings. There are no apparent significant changes to the subject property from the previous topographic map.	This map does not show buildings. There are no apparent significant changes to the immediate vicinity from the previous topographic map.

#### 6.4.6 Previous Environmental Reports

No previous environmental reports were identified or made available by the client/user during the Phase I ESA.

#### 6.4.7 Title Records

No title records were provided by the user/client. Please refer to the Records Review section for current and historical ownership/use of the subject property.

The following information was obtained from the Bonne Homme County Register of Deeds:

The City of Springfield Original town was platted in May, 1870. Records indicate that the land of which the water treatment building lies at the south dead end of Ash Street was vacated in 1966. Surprise Addition was platted in June 1974, vacating/replacing Original Lots 8, 9, and 10 of Block 38. The land located near the southeast corner of the subject property adjacent/south of Block 38 (7th Street) was vacated on July, 10 1974. On July 22, 1974 Surprise addition was included within the corporate limits of the City of Springfield.

Copies of the plat maps and related documents are attached in the Additional Documentation Appendix.

#### 6.4.8 Other Historical Records

Bon Homme County Director of Equalization assessment records were reviewed to provide basic information about the property. The site is assessed as seven parcels including the southern most portion of the subject property that is part of larger parcel owned by the State of South Dakota Department of Game. The eastern portion of the subject property is not platted nor has a legal description (located at the dead-end of Ash Street, owned by the City of Springfield).

Owner

City of Springfield

Legal Description

Original Lots 1, 2, and 3 of Block 38

Address

401 Ash Street

Land Area

19,008 square feet

Improvements

none listed

Assessed Value

exempt

Owner

City of Springfield

Legal Description

Original Lot 4 of Block 38





Address

not listed

Land Area

6,336 square feet

Improvements

none listed

Assessed Value

exempt

Owner

City of Springfield

Legal Description

Original Lots 5, 6 and 7 of Block 38

Address

not listed

Land Area

19,008 square feet

Improvements

non listed

Assessed Value

exempt

Owner

City of Springfield

Legal Description

Original Lots 11, 12, 13, and 14 of Block 38 including 88' of vacated 7th Street

Address

not listed

Land Area

40,832 square feet

Improvements

Boy scout cabin removed 2022

Assessed Value

exempt

Owner

City of Springfield

Legal Description

Lot 7 of Surprise Addition

Address

not listed

Land Area

24,816 square feet

Improvements

none listed

Assessed Value

exempt

Owner

City of Springfield

Legal Description

Lot 8 of Surprise Addition

Address

not listed

Land Area

9,150 square feet

Improvements



none listed

Assessed Value

exempt

Owner

State of South Dakota (Department of Game Fish & Parks)

Legal Description

Lot 4 and Accretion adjacent to aforesaid Lots, Portions which were within limits of the City of Springfield.

Address

not listed

Land Area

20.80 acres

Improvements

none listed

Assessed Value (2022)

Land: \$45,683

Improvements: \$0

Total: \$45,683

## 6.5 Environmental Liens and Activity/Use Limitations

Environmental liens or activity use limitations were not identified by the user or documents reviewed for this environmental site assessment.

## 7.0 SITE RECONNAISSANCE

The objective of the site reconnaissance is to collect information and make observations to help identify RECs in connection with the subject property. In identifying RECs, CRECs, and de minimis conditions, the environmental professional shall exercise professional judgment and consider the observations made during the site reconnaissance in concert with other relevant information gathered as part of the Phase I ESA.

Site reconnaissance was performed on 10/12/2022.

### 7.1 Methodology and Limiting Conditions

The site reconnaissance consisted of observing the boundaries of the subject property and systematically traversing the subject property to provide an overlapping field of view, wherever possible. The site reconnaissance consisted of walking the subject property perimeter and exterior areas. Building interiors were entered and observed. Inaccessible areas of the subject property (densely vegetated) include the land surface around the lime sludge storage areas and area around the intermittent stream. The adjoining properties were visually observed from curbside, but were not entered. The inability to inspect these areas does not represent a significant data gap.

### 7.2 General Subject Property Setting

The subject property consists of approximately 5-acres of land and is developed with a single-story water treatment building with partial basement/water treatment cells, separate slab on grade garage/storage building. Other features on the subject site include a fenced in lime sludge storage area, pump house, and wooded area with intermittent stream for storm water discharge to the Missouri River.





## 7.3 Site Visit Findings

Observation was made of the following items:

### 7.3.1 Hazardous Substances

Hazardous or potentially hazardous substances were observed or suspected to exist on-site were: mercury (thermostats, fluorescent lamps, sump, switches), PCBs (lamp ballasts, capacitors, one larger pad-mounted electrical transformer), mineral oil, lead (paint, batteries, misc items), refrigerant (AC), hydraulic oil, paints & solvents, water treatment chemicals, salt, lab supplies, etc.

A hazardous materials survey was conducted for the property and has been reported separately (GeoTek report #22-J89, Hazardous Material Survey, dated 11-14-22). Many hazardous or potentially hazardous items were identified.

Agricultural chemicals such as herbicides, pesticides, insecticides, fertilizers, etc., may have been applied to the site in the past. If used or handled on-site, there is potential for uncontrolled releases to have occurred. We presume there is no concern regarding ag chemical usage at crop/lawn application rates.

Commercial facilities may be subject to several federal rules regarding hazardous materials:

**Risk Management Plan** - Under federal rules (40 CFR 68), certain stationary sources that store greater than threshold quantities of regulated hazardous substances (i.e. chlorine greater than 2500lbs) are required to prepare and submit a Risk Management Plan to the US Environmental Protection Agency (EPA). The plan components include registration, hazard assessment, an accidental release prevention program, and an emergency response program. The site is not thought to currently have regulated substances in quantities greater than the thresholds subject to this rule.

**Hazardous Waste** — The facility is not currently listed as a hazardous waste generator. Universal wastes might be used oil or used mercury-containing light bulbs.

**Mercury** - Fluorescent light bulbs, other lamps, switches, thermostats, etc., may contain mercury, a toxic substance. Unless a business on-site is considered a small or large quantity generator of hazardous waste (>100 kg/month), disposal of mercury containing items as municipal solid waste is currently acceptable according to EPA and SD DANR rules. For small or large quantity generators of hazardous waste, mercury containing items must be shipped to a permitted facility for recycling or disposal. If low concentration ("green label") mercury light bulbs are used, then lamp manufacturer data could be submitted to DANR in lieu of recycling. For conditionally exempt small quantity generators (not small or large quantity generators) conducting commercial building renovation or demolition, a one-time generation of over 100 kg (220 pounds) of mercury containing items (about 344 four foot fluorescent tubes or 183 eight foot tubes) would need to be shipped to a permitted facility for recycling or disposal, and notification to DANR as a hazardous waste generator would be necessary. If fluorescent light bulbs are left in place for demolition of commercial buildings, building debris must go to a municipal solid waste landfill (not a restricted use or rubble site). Demolition of single-family residences is exempt from these requirements.

**Refrigerants** - We understand federal law requires the recovery of refrigerants such as Freon when taking a refrigerant system out of service.

**SARA** — Reporting requirements under the EPA SARA Title III Section 302 community right to know for hazardous and toxic chemicals would apply to the site if any substance is present in quantities above 10,000 lbs at one time. There are also lower reporting thresholds (i.e. 1 lb.) for many extremely hazardous substances. The program is administered by the SD Department of Agriculture and Natural Resources (DANR).



**Storm Water Pollution (Industrial)** - Federal rules under 40 CFR 122-3 require certain industrial facilities with storm water discharges to prepare and implement a storm water pollution prevention plan. The EPA program has been delegated in South Dakota to the DANR. Administrative Rules of South Dakota Chapters 74:52:01-11 authorize discharges under a state general permit. A letter of authorization from DANR sanctions the discharge of storm water from regulated industrial sites. Facilities which are considered an industrial facility are subject to the rules "if the material handling equipment or activities, raw materials, intermediate products, final products, waste material, by-products, or industrial machinery are exposed to storm water".

**Storm Water Pollution (Construction)** — If there is proposed land disturbance of over one acre, the facility may also be subject to federal rules for construction storm water pollution, and we would recommend discussing the situation with DANR. Construction activities involving disturbance of over one acre of land must file a notice of intent for coverage under the state general permit for discharges of construction storm water. The general permit has several requirements, such as a pollution prevention plan, erosion and sediment control, inspections, etc.

**SPCC** - Federal law under 40 CFR 112 requires owners and operators of facilities that could reasonably be expected to discharge oil in harmful quantities to waters to prepare and implement a Spill Prevention Control and Countermeasure (SPCC) plan. The law is applicable for facilities with oil storage capacities of over 42,000 gallons underground or 1320 gallons aboveground (when counting containers 55 gallons and larger). USTs registered with the state would not be counted toward the 42,000-gallon limit. Mixtures with oil are counted if a discharge would violate applicable water quality standards, or cause a film, sheen, sludge, or emulsion. The definition of oil includes both liquids and solids. The (non-exempt) on-site oil storage may include seven pole-mounted electrical transformer, which would not exceed 1320 gallons. An SPCC plan does not appear to be necessary for the site itself.

**TRIS** — SARA Title III Section 313 Toxic Release Inventory reporting requirements would apply if a business has a Standard Industrial Classification (SIC) between 2000 and 3999 (plus a few others), there are 10 or more employees, and if there are losses of >25,000 lbs of Section 313 chemicals (or >10,000 lbs/one chemical) annually. It would appear the site is not subject to the rule. The facility was not listed on the most recent DANR database under this program.

### 7.3.2 Petroleum Products

No petroleum products were identified on the subject property during the site reconnaissance.

### 7.3.3 USTs

Evidence of underground storage tanks (USTs) (gages, bents, fill pipes, etc.) were not observed other than a 200,000-gallon underground water storage tank north of the water treatment building (non-regulated substance).

### 7.3.4 ASTs

One 12 ton liquid CO<sub>2</sub> aboveground storage tank (AST) was observed on the subject property west of the water treatment building (non-regulated substance).

### Federal Rules

Federal law under 40 CFR 112 requires owners and operators of facilities that could reasonably be expected to discharge oil in harmful quantities to waters to prepare and implement a Spill Prevention Control and Countermeasure (SPCC) plan. The law is applicable for facilities with oil storage capacities of over 42,000 gallons underground or 1320 gallons aboveground (when counting containers 55 gallons and larger). USTs registered with the state would not be counted toward the 42,000 gallon limit. Mixtures with oil are counted if a discharge would violate applicable water quality standards, or cause a film, sheen, sludge, or emulsion. The





definition of oil includes both liquids and solids. The on-site abovegrade storage tank does not contain oil, therefore an SPCC plan does not appear necessary.

#### State Rules

SD Department of Agriculture and Natural Resources (DANR) administrative rules regarding ASTs (i.e. notification, release detection, release notification plan, overflow control, corrosion protection, and spill catchment basins) may apply to the site. However several ASTs are exempt from notification and most other rules, including: ASTs used for storing heating oil or motor fuels for consumptive use on the premises where stored, and ASTs above floors inside buildings. Rules for reporting and remediation of releases of substances, if present, could apply.

#### 7.3.5 Other Suspect Containers

Apparent empty containers were observed (detailed in Section 7.3.1 Hazardous Substances). The empty containers are reportedly recycled at periodic collection events.

#### 7.3.6 Equipment Likely to Contain PCBs

Older transformer oil is typically suspected to contain polychlorinated biphenyls (PCBs). However, electrical transformers were not observed on or adjacent to the subject property. Seven pole-mounted transformers were observed on the subject property near the water treatment building and one adjacent/west of the subject property. Two of the transformers on the subject property contained markings indicating no PCB content. The others are suspected to contain PCBs. No leaks or releases were observed with respect to the pole-mounted transformers.

Older (<1979), fluorescent light lamp ballasts or other small dry capacitors located in the buildings may contain polychlorinated biphenyls (PCBs). PCBs may be present within both the capacitor and potting material of fluorescent light and other lamp ballasts. The potting compound is a black, tar-like substance that encapsulates the internal electrical components. Congress banned the manufacture of PCBs in the United States in 1977. In 1979, EPA banned the processing or use of PCBs, except in totally enclosed equipment. Ballasts manufactured through 1979 may contain PCBs. Ballasts manufactured between 1979 and 1998 that do not contain PCBs should be labeled "No PCBs". If a ballast is not labeled "No PCBs", it is best to assume it contains PCBs.

Renovation or Demolition - According to 40 CFR 761.50 (b) (2) (i-ii) and 40 CFR 761.60 (b) (2) (ii), except for manufacturers of PCB equipment, fluorescent light ballasts containing PCBs only in an intact and non-leaking PCB small capacitor (<3 lbs of dielectric fluid or <100 cubic inches) can be disposed of as municipal solid waste (not a restricted use or rubble site). However, the MSW landfill would need to be informed of the PCB waste, and that would subject the landfill to future monitoring for potential PCB releases. Therefore, PCB small capacitors should be removed from buildings pending demolition, and properly disposed. Fluorescent light ballasts containing PCBs in the potting material, or PCB small capacitors no longer intact and non-leaking, are regulated as PCB bulk product waste under 40 CFR 761.62. PCB bulk product waste would need to go to appropriate facility. Demolition of single family residences is exempt from these requirements.

#### 7.3.7 Interior Staining/Corrosion

No significant interior staining or corrosion was observed in the subject building during the site reconnaissance.

#### 7.3.8 Discharge Features

Discharge features (floor drains, catch basins, oil/water separators, etc.) were observed on the subject property during the site reconnaissance. Features observed include floor drains throughout the water treatment building. We understand the floor drains are plumbed to a catch basin located in the lowest level of the water treatment building before discharging to the city's sanitary sewer. However, the on-site personnel have the ability to discharge water from the catch basin to the holding pond located within the intermittent stream on the south side of the subject property on an as-needed basis (outlined in the General Surface Water Discharge



Permit attached in the Additional Documentation Appendix). No unusual observations were made with respect to the floor drains or catch basin during the site reconnaissance (odor, sheen, etc.).

### 7.3.9 Pits, Ponds, And Lagoons

Two lime sludge storage ponds are located on the northwest corner of the subject property. An intermittent stream containing a dam and small pond are located on the south side of the subject property. The pond collects run-off to the stream from nearby drainage ditches as well as water discharged from the water treatment building (See Section 7.3.8 Discharge Features and General Surface Water Discharge Permit in the Additional Documentation Appendix). No unusual observations were made with to the lime sludge storage ponds or small pond within the intermittent stream during the site reconnaissance (odor, sheen, etc.).

### 7.3.10 Solid Waste Dumping/Landfills

Minor wind blown trash was observed throughout the subject property. Concrete rubble was observe within the intermittent stream on the south part of the subject property. Several used water meters were observed on the ground near the northeast corner of the water treatment building.

### 7.3.11 Stained Soil/Stressed Vegetation

No Stained Soil/Stressed Vegetation (from something other than insufficient water) was observed on the subject property during the site reconnaissance.

### 7.3.12 Wells

One "well" is located on the subject property. The pump house is located adjacent to the Missouri River. We understand that the "well" collects surface water from a horizontal pipe extending south from the pump house into the Missouri River.

### 7.3.13 Other

Other conditions suitable for discussion per ASTM include:

- Strong, Pungent, or Noxious Odors and Their Sources
- Standing Surface Water and Pools or Sumps Containing Liquids Likely to be Hazardous Substances or Petroleum Products
- Heating/Cooling—The means of heating and cooling the buildings on the subject property, including the fuel source (example: natural-gas furnace, heating oil fueled boiler, electric baseboards, municipally-supplied steam, etc.).
- Stains or Corrosion on Floors, Walls, or Ceilings (except for staining from water).
- Drains and Sumps
- Stained Pavement
- Solid Waste—Areas that are apparently graded by non-natural causes or filled with fill of unknown origin, and mounds or depressions may suggest trash, construction debris, demolition debris, or other solid waste disposal.
- Septic Systems or Cesspools

The above items have not been identified, besides those discussed in other sections of this report.

## 8.0 INTERVIEWS

The objective of interviews is to obtain information indicating possible recognized environmental conditions of the site. An interview of the key site manager, and occupant(s) if different than manager, and at least one state and/or local government official are required. Significant items are discussed:





Site Supervisor Mr. Joe Pruss was present during the site reconnaissance on October 12, 2022 and interviewed over the phone on December 12, 2022. Mr. Pruss has been working at the Springfield Water Treatment plant since 2009. He indicated that the lime sludge ponds are cleaned out approximately every two months and distributed to local farmers who apply it to agricultural fields. He indicated that empty drums and other waste are picked up periodically by vendors. Mr. Pruss indicated that the only water discharged to the holding pond in the intermittent stream is filter backwash water as allowed and outlined in the General Surface Water Discharge Permit. Mr. Pruss is not aware of any spills, leaks, releases or other environmental conditions at the subject property.

Additionally, past owners, operators and occupants who are likely to have significant information about possible contamination shall also be interviewed. In this case, contamination from on or off-site sources are not known to impact the site. In the case of abandoned properties where there is evidence of unauthorized use or uncontrolled access, interviews of one or more neighboring owners or occupants are required. The site is not abandoned. Therefore, an interview with a neighbor was not conducted.

One or more state/local government officials to be interviewed are: local fire department, state/regional/local health agency, state/regional/local environmental or hazardous waste office, local agencies that issue building permits or groundwater use permits that document Activity and Use Limitations (AULs).

The City of Springfield Mayor Mr. Scott Kostal. Mr. Kostal is a lifelong resident of Springfield and Mayor since May 2022. He indicated that there may have been an artesian well on the subject property before the current existing water treatment facility (1966). He is not aware of there ever being residential homes on any of the subject site. Mr. Kostal is not aware of any spills, leaks, releases or environmental conditions at the subject property.

## 9.0 OTHER ENVIRONMENTAL CONSIDERATIONS

Other environmental consideration included the following:

### Asbestos-Containing Materials

An asbestos building survey was conducted for the site structure and has been reported separately (GeoTek report #22-J89, Asbestos Survey, dated 11-22-22). Approximately two asbestos materials were detected by the survey.

An inspection and sampling of suspect asbestos containing building materials is usually required by EPA (NESHAPs rules in 40 CFR 61) and SD Department of Agriculture and Natural Resources (DANR) rules prior to construction, demolition, or renovation activities involving the materials. Additionally, a notification form must be submitted to DANR at least 10 working days prior to demolition (including those where no asbestos is present), and prior to disturbing or removing certain quantities of asbestos. Asbestos materials may require special disposal.

Federal OSHA rules may apply to contractors and employees working with asbestos containing materials. Notification of the existence of suspected and confirmed asbestos building materials is required. Thermal system insulations, spray or trowelled surfacing materials, and asphalt or vinyl flooring must be presumed to contain asbestos in buildings constructed before 1980 unless tested otherwise. For employees such as custodial and maintenance workers, an asbestos awareness course is required in buildings with confirmed or presumed asbestos containing materials.

Historical documents indicate other structures were previously located on-site, and there may be potential for subsurface debris (if present, may contain suspect asbestos materials).



## Lead-Based Paint

A lead-based paint (LBP) survey was conducted for the site structure and has been reported separately (GeoTek report #22-K35, LBP Survey, dated 10-13-22). Approximately one LBP item was detected by the survey.

Older paint on walls, ceilings, and other surfaces on-site may contain lead. Most definitions of lead-based paint define it as paint containing 0.5% or more lead. Beginning in 1955, voluntary industry standards were 1% or less lead in residential interior paint. In 1971, a federal law prohibited the use of paint with over 1% lead in federal government residences. In 1973, federal law lowered the allowable amount to 0.5%. In 1977, federal law lowered the allowable amount of lead in residential interior paint to 0.06%.

For residential buildings constructed before 1978, we understand the Federal Residential Lead-Based Paint Hazard Act of 1992 requires disclosure to occupants of known lead hazards, notice prior to work that may disturb paint, and lead-safe work practices.

The Federal Lead Renovation, Repair, and Painting Rule of 2010 requires property owners who renovate, repair, or prepare surfaces for painting in pre-1978 rental housing to provide tenants with a copy of EPA's lead hazard information pamphlet and to use only lead-safe work practices and certified persons to perform the work. We understand this rule applies to residences and child occupied facilities.

We recommend that contractors comply with OSHA lead exposure rules during work involving potential lead-based paint (29 CFR 1926.62).

Water supply piping and fixtures may also contain lead solder joints and/or consist of brass or lead components. If the potential for lead in drinking water is of concern, tap water sampling could be performed.

## 10.0 FINDINGS AND OPINIONS

### FINDINGS

Historical resources suggest the site was vacant and/or cropland until it was platted in 1870. By 1953 there appears to be a structure located on the northeast corner of the subject property while the rest remains vacant. The water treatment building was constructed in 1966, and garage and former boy scout cabin constructed by 1978. The site continued to operate as the City of Springfield Water Treatment plant through present time. The former boy scout cabin was demolished in 2022.

Site Visit Findings are presented in Section 7.3 Significant indications of potential contamination were not noted.

The site was not found in standard ASTM E1527-13 regulatory listings. The site was found in three non-standard ASTM E1527-13 listings including NPDES, ECHO and FINDs. The three listings are related to Surface Water Discharge Permit SDG860063. The general permit is potentially applicable to all water treatment and distribution facilities. Discharges of pollutants to waters of the state may occur due to an overflow from treatment and/or storage units, filter backwash water, disinfection and line flushing or line breakages. The water discharged from these activities must be relatively uncontaminated and must not contribute non-conventional or toxic pollutant loadings to the receiving waters. One compliance inspection record dated October 2011 was available to review. Violations included were related to note taking and documentation. The Surface Water Discharge Permit and compliance inspection are attached in the Additional Documentation Appendix.

There were several nearby off-site facilities found in the regulatory and non-regulatory listings. Those listings are summarized in Section 6.1 Standard Environmental Review. The off-site listed facilities are not considered environmentally significant with respect to the subject property.

### OPINION





There is potential for undetected or unknown releases from both on-site (i.e. chemicals/substances, water treatment, vehicles, etc.) and off-site (i.e. unknown operations, etc.) sources. Releases originating off-site would be the responsibility of those owners or operators. A deceased, unwilling, or insolvent owner or operator would complicate the situation. There may be some difficulty or expense in proving the origin of a release. And a release, even if another's responsibility, could limit or prohibit full use of the subject property. If encountered, excavated construction-derived contaminated soil may need to be taken to a permitted facility for disposal.

The South Dakota Petroleum Release Compensation Fund (PRCF) may reimburse a covered party for eligible expenses related to assessment and remediation of motor fuel or fuel oil releases. Waste or motor oil or other substance releases are typically not eligible for reimbursement. The PRCF has a \$10,000 deductible with coverage up to \$1,000,000 for eligible expenses related to releases of fuel oil or motor fuels. If other insurance companies cover expenses, PRCF would not provide reimbursement.

Abandoned petroleum USTs can be removed at no expense to the property owner under a current DANR program. Abandoned petroleum USTs are eligible for the DANR Tank Yank Program unless they are at a commercially operated motor fuel station operated on or after April 1, 1988 (some USTs at such sites may be eligible). USTs storing motor fuel, heating oil, waste oil, etc., are eligible. DANR hires private contractors and consultants to conduct the work. UST contents are removed. Soil samples are collected at the time of UST removal. Contaminated backfill soils, if present, are removed. Replacement soil is minimally compacted. If there is pavement over the UST, it would not be replaced. The state also pays for "any additional cleanup that is needed". Currently, there is no known ending date for this program.

If part of a larger project and there is proposed land disturbance of over one acre, the facility may also be subject to federal and state rules for construction storm water pollution, and we would recommend discussing the situation with DANR. Construction activities involving disturbance of over one acre of land must file a notice of intent for coverage under the state general permit for discharges of construction storm water. The general permit has several requirements, such as a pollution prevention plan, erosion and sediment control, inspections, etc.

## 11.0 CONCLUSIONS

GeoTek Engineering & Testing Services performed a Phase I ESA of the subject property in conformance with the scope and limitations of ASTM Standard Practice E 1527-13. This assessment has revealed no evidence of recognized environmental conditions (RECs), controlled recognized environmental conditions (CRECs), or historical recognized environmental conditions (HRECs) in connection with the subject property.

## 12.0 RECOMMENDATIONS

Provided there is no future anticipated use of the items around the subject property (empty drums, used water meters, miscellaneous items in storage garage, lime sludge, etc.) we recommend they be removed from the site and properly disposed off-site.

We recommend the facility owner/operator periodically conduct review of the site activities, regulated programs, waste disposition et., and compare them to various regulatory program requirements, and take action for (continued) rule compliance (i.e. General Surface Water Discharge Permit).

## 13.0 REFERENCES

Christensen, Cleo M., Geology and Water Resources of Bon Homme County, South Dakota, Part I: Geology, South Dakota Geological Survey Bulletin No. 21, 1974.

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Ward, Elmer M., Soil Survey of Bon Homme County, South Dakota, USDA Soil Conservation Service, 1983.

US Geological Survey, 1978 Springfield, South Dakota Quadrangle, 7.5-minute series map.

