Annual Inspection Report
Tecumseh Energy Center
Bottom Ash Surface Impoundments

Prepared for:

Westar Energy

Tecumseh Energy Center

Tecumseh, Kansas

Prepared by:

APTIM Environmental & Infrastructure, Inc.

Janurary 2018

TABLE OF CONTENTS

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LIST OF FIGURES AND APPENDICES

FIGURES

APPENDICES

CCR Regulatory Requirements

USEPA CCR Rule Criteria 40 CFR §257.83	Tecumseh Energy Center (TEC) Annual Inspection Report
§257.83(b)(1)(i) stipulates: *"(b) Annual inspections by a qualified professional engineer. (1) If the existing or new CCR surface impoundment or any lateral expansion of the CCR surface impoundment is subject to the periodic structural stability assessment requirements under §257.73(d) or §257.74(d), the CCR unit must additionally be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include:* *(i) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., CCR unit design and construction information required by §§257.73(c)(1) and 257.74(c)(1), previous periodic structural stability assessments required under §§257.73(d) and 257.74(d), the results of inspections by a qualified person, and results of previous annual inspections);"*	Section 3.0
§257.83(b)(1)(ii) stipulates: *"(ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures;"*	Section 4.1

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USEPA CCR Rule Criteria 40 CFR §257.83	Tecumseh Energy Center (TEC) Annual Inspection Report
§257.83(b)(1)(iii) stipulates: *"(iii) A visual inspection of any hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit for structural integrity and continued safe and reliable operation."*	Section 4.2
§257.83(b)(2)(i) stipulates: *"(2) Inspection report. The qualified professional engineer must prepare a report following each inspection that addresses the following:* *(i) Any changes in geometry of the impounding structure since the previous annual inspection;"*	Section 5.1
§257.83(b)(2)(ii) stipulates: *"(ii) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection;"*	Section 5.2
§257.83(b)(2)(iii) stipulates: *"(iii) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection;"*	Section 5.3

USEPA CCR Rule Criteria 40 CFR §257.83	Tecumseh Energy Center (TEC) Annual Inspection Report
§257.83(b)(2)(iv) stipulates: *"(iv) The storage capacity of the impounding structure at the time of the inspection;"*	Section 5.4
§257.83(b)(2)(v) stipulates: *"(v) The approximate volume of the impounded water and CCR at the time of the inspection;"*	Section 5.5
§257.83(b)(2)(vi) stipulates: *"(vi) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures;"*	Section 5.6
§257.83(b)(2)(vii) stipulates: *"(vii) Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection."*	Section 5.7

USEPA CCR Rule Criteria 40 CFR §257.83	Tecumseh Energy Center (TEC) Annual Inspection Report
§257.83(b)(4) stipulates: *"(4) Frequency of inspections. (i) Except as provided for in paragraph (b)(4)(ii) of this section, the owner or operator of the CCR unit must conduct the inspection required by paragraphs (b)(1) and (2) of this section on an annual basis. The date of completing the initial inspection report is the basis for establishing the deadline to complete the first subsequent inspection. Any required inspection may be conducted prior to the required deadline provided the owner or operator places the completed inspection report into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent inspection reports is based on the date of completing the previous inspection report. For purposes of this section, the owner or operator has completed an inspection when the inspection report has been placed in the facility's operating record as required by §257.105(g)(6)."*	Section 1.0
§257.83(b)(5) stipulates: *"(5) If a deficiency or release is identified during an inspection, the owner or operator must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken."*	Section 6.0
§257.83(c) stipulates: *"(c) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in §257.105(g), the notification requirements specified in §257.106(g), and the internet requirements specified in §257.107(g)."*	Section 7.0

1.0 INTRODUCTION

APTIM Environmental and Infrastructure, Inc. (Aptim) has prepared the following Annual Inspection Report (Report) at the request of Westar Energy (Westar) for the Bottom Ash Surface Impoundments (Surface Impoundments) located at the Tecumseh Energy Center (TEC) in Tecumseh, Kansas. TEC is a coal-fired power plant that has been in operation since 1925. The Surface Impoundments have been deemed to be a regulated coal combustion residue (CCR) units by the United States Environmental Protection Agency (USEPA), through the Disposal of Coal Combustion Residuals from Electric Utilities Final Rule (CCR Rule) 40 CFR §257 and §261.

In support of compliance to the CCR Rule, Mr. Richard Southorn (a qualified professional engineer with Aptim) conducted an annual site inspection of the Surface Impoundments on November 7th 2017. Prior to inspection, Aptim personnel reviewed the relevant portions of the facility's operating record and the 2016 Annual Inspection Report in relation to this Report, under the direct supervision of Mr. Southorn. This Report meets the requirements set forth within 40 CFR §257.83(b)(1) and (b)(2) based on the review of available information and visual observation, to evaluate if the design, construction, operation, and maintenance of the Surface Impoundments is consistent with good engineering standards. The annual landfill inspection has been conducted and completed in compliance with the frequency of inspection timeframe set forth in §257.83(b)(4).

2.0 TEC SURFACE IMPOUNDMENTS OVERVIEW

Westar owns and operates a surface impoundment system at TEC near Tecumseh, Shawnee County, Kansas. TEC is located approximately 6.5 miles east of Topeka, Kansas and approximately 2 miles north of Highway 70 and resides in Sections 31, Township 11 South, and Range 17 East. The location of the Surface Impoundments is depicted as Area 1 in **Figure 1.**

The Area 1 is located due west of the TEC power plant. Area 1 is comprised of two ponds: the North Pond is the northernmost pond and the South Pond is the southernmost pond. The Area 1 is approximately 4.0 acres. A perimeter berm surrounds the North and South Ponds. The interior slope of the North and South ponds varies from 1H:1V to a shallow slope along the eastern side slope. The top elevation of Area 1 varies between approximate 884 to 886 feet mean sea level (ft MSL). The north and west berms slope towards Tecumseh Creek. The perimeter berm prevents overland flow of stormwater into the North and South Pond of Area 1. Recent site topography is depicted in **Figure 2.**

The North Pond and South Pond are separated by a stabilized berm. Process water, bottom ash slurry, and stormwater are pumped to the ponds from the Cinder Pit and the process facility. A diversion structure is utilized so that one pond can be filled while the other is dewatered and dredged of CCR material. A central 12-inch pipe is used to discharge water from either the North or South Pond to the Clear Pond prior to discharge into Tecumseh Creek. The 12-inch pipe inlet is located in a structure within the berm separating the North and South Ponds. A sluice gate is located on either end of the structure, allowing the operator to allow water to discharge from either pond (with one sluice gate open and the other closed), both ponds (with both sluice gates opened), or neither pond (both sluice gates closed). The outlet from the Clear Pond is permitted under the National Pollutant Discharge Elimination System (NPDES) Permit No. I-KS72-BO01 and 40 CFR Part §257.82(b).

3.0 REVIEW OF AVAILABLE INFORMATION

Prior to the on-site inspection, Mr. Southorn reviewed the available information for the Surface Impoundment as provided by Westar:

- Kansas Department of Health and Environment – Bureau of Waste Management (KDHE-BWM) Industrial Landfill Permit No. 0322, October 15, 2015.
- Tecumseh Energy Center Weekly Inspection Reports, January through October 2017.
- Annual Inspection Report Tecumseh Energy Center Bottom Ash Surface Impoundments, CB&I Environmental & Infrastructure, Inc., January 2017.
- "Overtopping Incident at Tecumseh Energy Center Area 1 Surface Impoundment, North Pond" Memorandum, APTIM, September 20, 2017 and associated documents (including the Incident Report to KDHE).

Mr. Southorn verified the available information during the on-site inspection on November 7th 2017.

3.1 Summary of Inspection Reports

All routine inspections at the Surface Impoundments were reviewed. Minor animal burrows were noted and the United States Department of Agriculture (USDA) and Wildlife Services were contacted for an investigation. No animals were trapped and the holes were filled in. Routine maintenance of woody vegetation along the Surface Impoundments' side slopes have been documented throughout the year, including mowing and treatment of the sideslopes. There were no other deficiencies or malfunctions noted throughout the year.

3.2 Summary of Previous Annual Inspection Report

Based on a review of the 2016 Annual Inspection Report, it was determined that the following deficiencies were observed:

- Erosion and incising within the drainage ditch along SE 2nd Street at the base of the southern perimeter berm.
- Minor erosion on the inside slopes of the Surface Impoundments.

3.3 Summary of 2017 Overtopping Incident

On July 1, 2017, the North Pond of the Tecumseh Energy Center (TEC) Area 1 Surface Impoundment overtopped its western bank and released water into Tecumseh Creek. The incident was caused by the operational error of not opening a sluice gate while water was being pumped into the North Pond. Upon observation, the gate was opened to allow the controlled release of water into the normally receiving clarifying basin (the "Clear Pond"). No erosion or structural damage occurred during or after the overtopping event. While the total volume of water that overtopped the impoundment is known, it is estimated that the quantity of water released is minimal based on a review of inflow rates and freeboard.

3.4 Summary of 2017 Routine and Remedial Activities

The following routine and remedial actions have been completed to resolve deficiencies noted in the 2016 Annual Inspection Report and ensure stability of the impoundment.

- ❑ Inspection for animal burrows is completed throughout the year, which are promptly filled upon identification.
- ❑ Vegetation on slopes have been cut and maintained to an appropriate height.
- ❑ Regrading of the SE 2nd Street drainage ditch has been completed to address incising.

Following the 2016 annual inspection, the Surface Impoundments has been properly maintained and operated in conjunction with the facility operating procedures to continue safe and reliable operation.

4.0 INSPECTION SUMMARY

During the on-site inspection, Mr. Southorn focused on standard geotechnical signs of distress or malfunction of the CCR unit. Condition and design of the hydraulic and appurtenant structures passing through the perimeter berm was also assessed. The inspection focused on slumping at the toe of slopes, tensile cracking, abnormal or excessive erosion on the side slopes and drainage channels, groundwater/surface water seepage, and conveyance structure function and design. These visual signs are potential indicators of structural weakness or malfunction at the Surface Impoundments.

4.1 Visual Signs of Distress or Malfunction

During the on-site inspection, slope appearance, slope stability, and overall site conditions were assessed. Minor erosion was present on the inside slopes of the Surface Impoundment, but is not presenting as a stability concern. No animal burrows were observed. The overflow location from the release incident was inspected. No damage to the surface impoundment or evidence of the release was observed at this location. The drainage ditch along SE 2nd Street was inspected and found to have been regraded to correct incising that was observed in 2016. The ditch is functioning as intended and is not impacting the safety of the impoundment.

4.2 Review of Hydraulic Structures

With no evidence to the contrary, the hydraulic structures at the Surface Impoundments are believed to be in good operating condition and functioning as intended. At the time of inspection, stormwater conveyance systems such as the diversion structure, sluice gate system, and conveyance pipe were operating as designed. No obstructions to flow were observed.

5.0 CONCLUSIONS

Based on a review of the available facility information and on-site inspection, the following conclusions were developed.

5.1 Changes in Geometry

Topographic information from the 2016 Annual Landfill Inspection Report and the images from the most recent site visit were utilized to determine changes in geometry of the impounding structure at the Surface Impoundments. It was determined that no changes have occurred to the impounding structure.

5.2 Instrumentation Readings

No instrumentation associated with the hydraulic structures, impoundment embankments, or slope performance has been installed at the Surface Impoundments, thus a maximum piezometer reading is not applicable.

5.3 Impounded Water and CCR Depths and Elevations

At the time of inspection, the impounded water elevation at the North and South Ponds was approximately 882 feet mean sea level (MSL). The lowest point in the North and South Ponds is estimated to be 877 feet MSL because bathymetric data is not available. As a result, the average water depth of the impoundments is visually estimated to be 5 feet. Maximum and minimum depths of impounded water since the previous annual inspection have not deviated from the initial depths.

CCR depths vary within the Surface Impoundments due to the continual deposit, dewatering, and dredging of CCR materials. Maximum and minimum depths of CCR since the previous annual inspection have not deviated from the initial depths.

5.4 Remaining Storage Capacity

The remaining CCR material storage capacity within the Surface Impoundments was calculated by determining the volume between the most recent survey, conducted in June 2016, and the minimum elevation of the perimeter berm. The remaining storage capacity within the Surface Impoundments changes due to the continued cycling of the water between the North and South Ponds. At the time of the annual inspection the approximate capacity of the ponds is 3,951 cubic yards (cy).

5.5 Impounded Water and CCR Volumes

The impounded water volume within the Surface Impoundments was calculated by determining the volume between the most recent survey, conducted in June 2016, and the impounded water elevation observed during the site inspection. The impounded water volume within the Surface Impoundments is approximately 8,067 cy.

The CCR material volume within the Surface Impoundments could not be accurately calculated due to the continual inflow of material, periodic cycling between the North and South Ponds, and dewatering and dredging processes.

5.6 Structural Weakness and Disrupting Conditions

At the time of this inspection, there were no significant signs of distress or malfunction that would indicate actual or potential structural weakness at the Surface Impoundments. There was no indication that existing conditions at the Surface Impoundments have disrupted or have the potential to disrupt safety or operations. Routine inspections are utilized to document any signs of distress, malfunction, or disruption and resolve the issues immediately.

5.7 Changes Affecting Stability and Operations

There have been no changes to the Surface Impoundments that pose a threat or concern to the stability of the perimeter berm. Operations and maintenance have not deviated from the original designed plan.

6.0 RECOMMENDATIONS

Based on the on-site inspection performed on November 7th, 2017, Aptim recommend the following actions:

- ❑ Continue to monitor erosion controls and vegetative cover in line with the routine inspections.
- ❑ Continue proper management of the inflow control system and outlet structure.
- ❑ Continue to monitor all conveyance features for signs of erosion, damage, obstructions, or malfunction in line with the routine inspections.

7.0 RECORDS RETENTION AND MAINTENANCE

7.1 Incorporation of Plan into Operating Record

§257.105(g) of 40 CFR Part §257 provides record keeping requirements to ensure that this Report will be placed in TEC's operating record. Specifically, §257.105(g) stipulates:

> §257.105(g)*: "(g) Operating criteria. The owner or operator of a CCR unit subject to this subpart must place the following information, as it becomes available, in the facility's operating record: (6) The periodic inspection report as required by §257.83(b)(2)."*

This Report will be placed within the Facility Operating Record upon Westar's review and approval.

7.2 Notification Requirements

§257.106(g) of 40 CFR Part §257 provides guidelines for the notification of the availability of the initial and periodic plan. Specifically, §257.106(g) stipulates:

> §257.106(g): *(g) Operating criteria. The owner or operator of a CCR unit subject to this subpart must notify the State Director and/or appropriate Tribal authority when information has been placed in the operating record and on the owner or operator's publicly accessible internet site. The owner or operator must: (5) Provide notification of the availability of the periodic inspection reports specified under §257.105(g)(6)."*

The State Director and appropriate Tribal Authority will be notified upon placement of this Report in the Facility Operating Record.

§257.107(g) of 40 CFR Part §257 provides publicly accessible Internet site requirements to ensure that this Report is accessible through the Westar webpage. Specifically, §257.107(g) stipulates:

> §257.107(g): *(g) Operating criteria. The owner or operator of a CCR unit subject to this subpart must place the following information on the owner or operator's CCR Web site: (5) The periodic inspection reports specified under §257.105(g)(6)."*

This Report will be uploaded to Westar's CCR Compliance reporting Website upon Westar's review and approval.

8.0 PROFESSIONAL ENGINEER CERTIFICATION

The undersigned registered professional engineer is familiar with the requirements of the CCR Rule and has visited and examined TEC or has supervised examination of TEC by appropriately qualified personnel. I hereby certify based on a review of available information within the facility's operating records and observations from my personal on-site inspection (including the photographs contained in **Appendix A**), that the Surface Impoundments do not exhibit any appearances of actual/potential structural weakness that would be disruptive to the normal operations of the Surface Impoundments. The unit is being operated and maintained consistent with recognized and generally accepted good engineering standards and practices. This certification was prepared as required by 40 CFR Part §257.83(b).

Name of Professional Engineer: Richard Southorn

Company: Aptim

Signature:

Date: JAN 5, 2018

PE Registration State: Kansas

PE Registration Number: PE25201

Professional Engineer Seal:

APTIM

FIGURES

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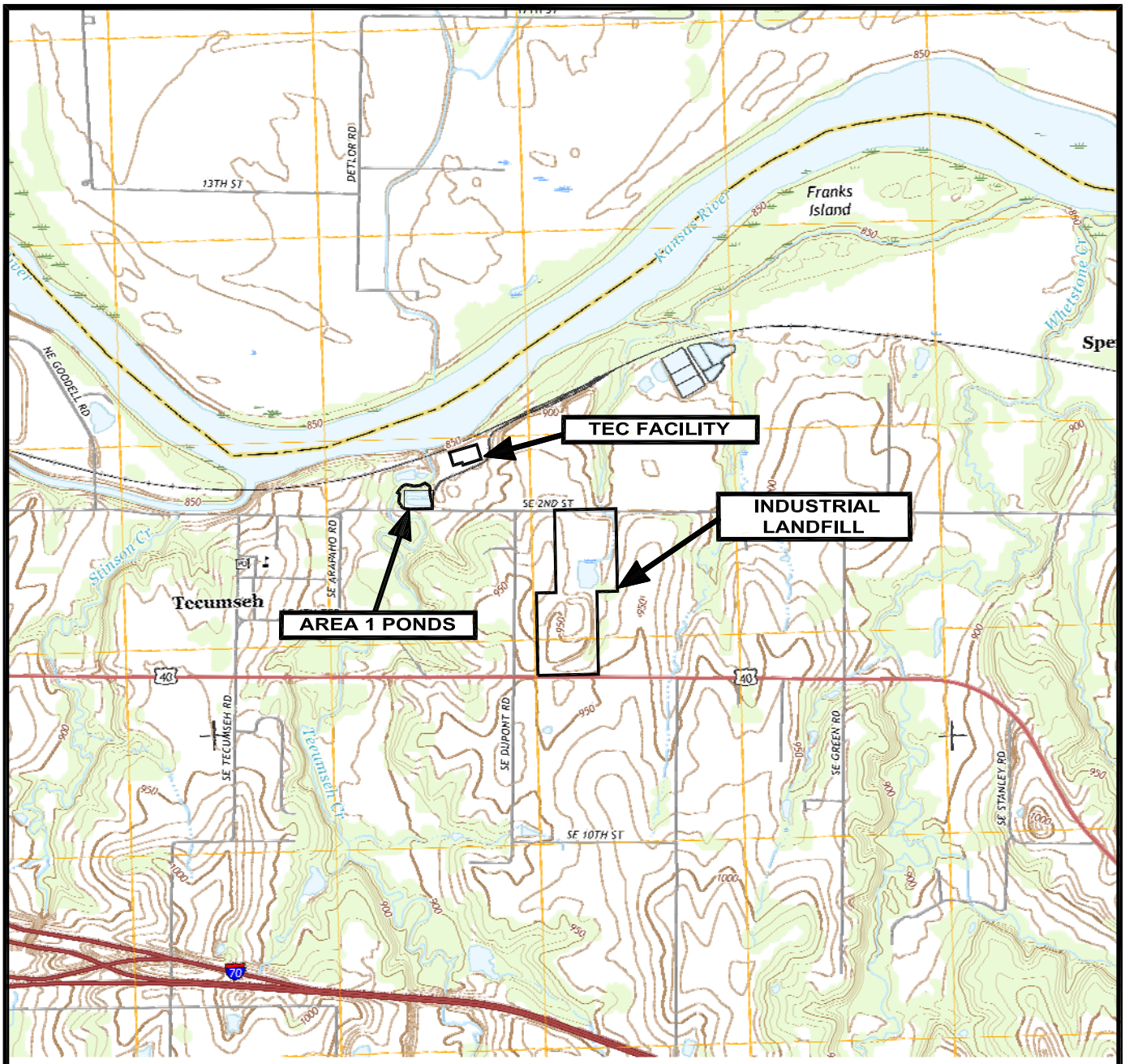


LEGEND

APPROXIMATE CCR UNIT BOUNDARY

N

0 2500'

GRAPHIC SCALE

NOTES

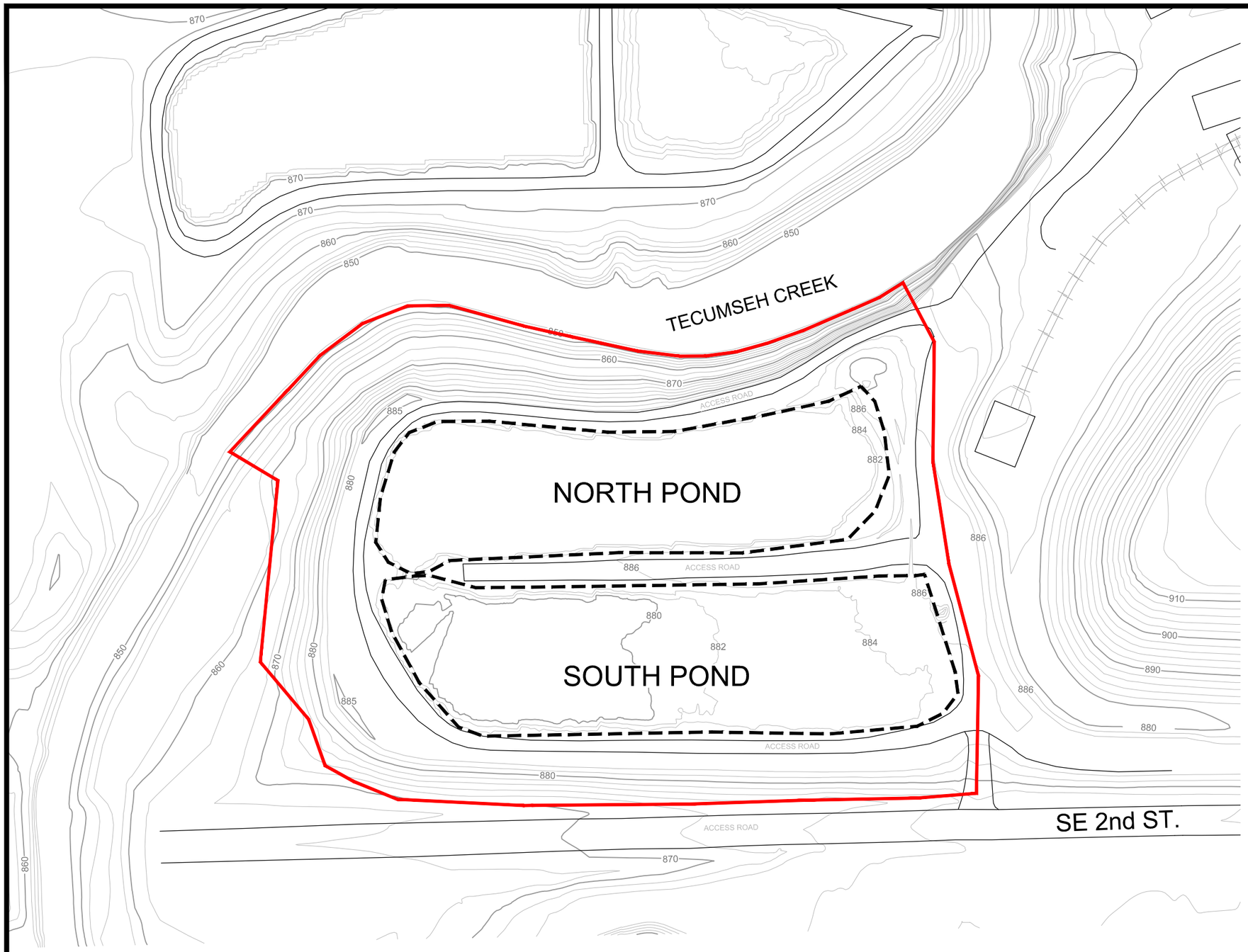
1. AERIAL TOPO OBTAINED FROM USGS 7.5-MINUTE SERIES, GRANTVILLE QUADRANGLE, KANSAS, 2014.
2. ALL BOUNDARIES ARE APPROXIMATE

APTIM Environmental & Infrastructure, Inc.

TECUMSEH ENERGY CENTER
5636 SE 2nd ST., TECUMSEH, KS

FIGURE 1
AREA 1 SURFACE IMPOUNDMENT
SITE LOCATION PLAN

APPROVED BY: RDS	PROJ. NO.: 631214397	DATE: JANUARY 2018



N

0 80'

GRAPHIC SCALE

LEGEND

CCR UNIT BOUNDARY

POND BOUNDARY

NOTES

1. EXISTING CONTOURS DEVELOPED BY PROFESSIONAL ENGINEERING CONSULTANTS IN JUNE 2016.
2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
3. ALL BOUNDARIES SHOWN ARE APPROXIMATE.

REV. NO.	DATE	DESCRIPTION

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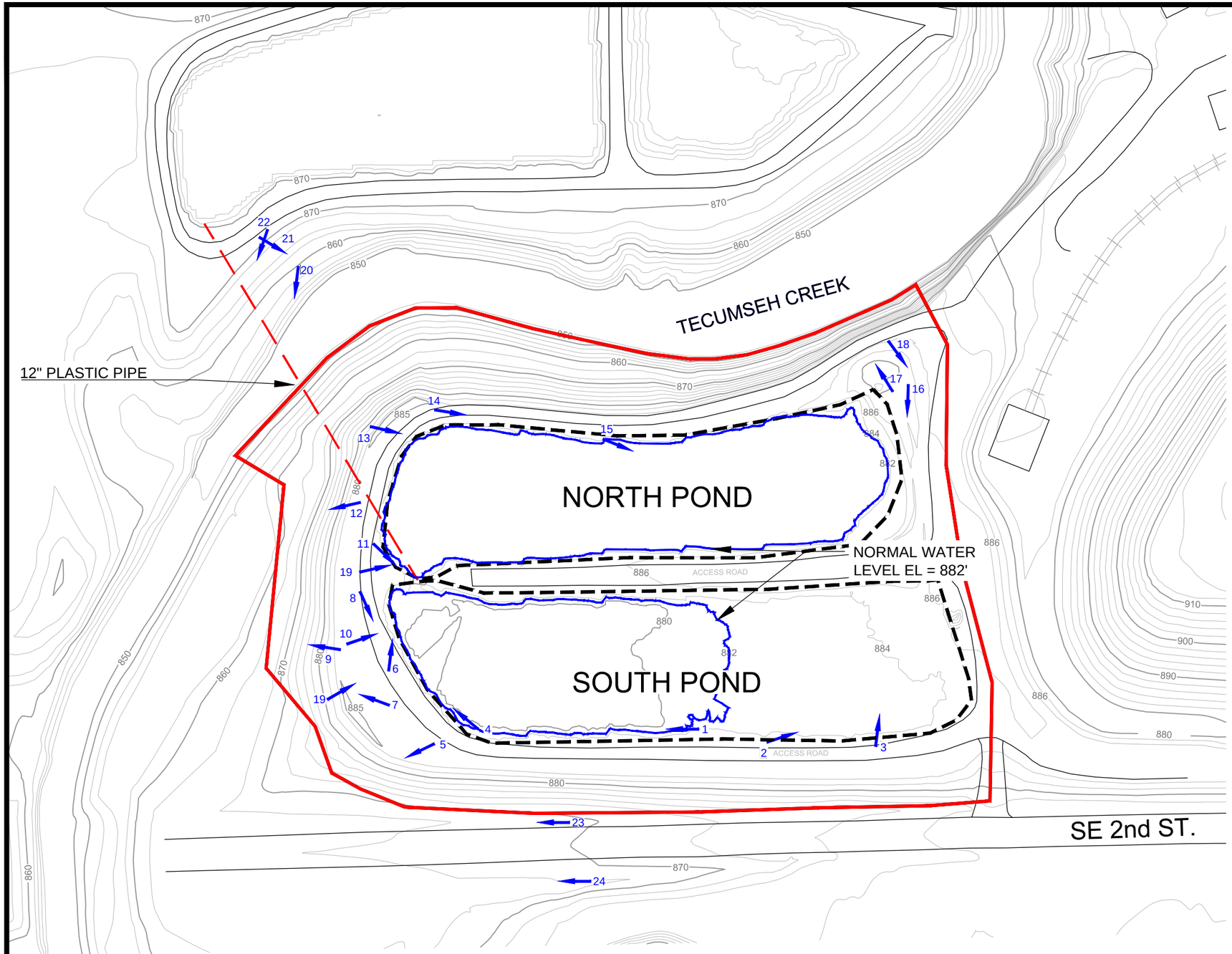
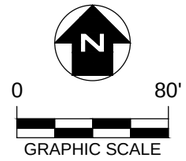
5636 SE 2nd ST., TECUMSEH, KANSAS

FIGURE 2
AREA 1 SURFACE IMPOUNDMENT
EXISTING SITE TOPOGRAPHY

DRAWN BY:	APPROVED BY:	PROJ. NO.:	DATE:
NV	RDS	631214397	JANUARY 2018





LEGEND

- CCR UNIT BOUNDARY
- POND BOUNDARY
- NORMAL WATER ELEVATION
- STORMWATER CONVEYANCE FEATURE
- 2017 ANNUAL INSPECTION PHOTOGRAPH (ARROW DENOTES DIRECTION OF VIEW)

NOTES

1. EXISTING CONTOURS DEVELOPED BY PROFESSIONAL ENGINEERING CONSULTANTS IN JUNE 2016.
2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
3. ALL BOUNDARIES SHOWN ARE APPROXIMATE.
4. REFER TO APPENDIX A FOR PHOTOGRAPHIC DOCUMENTATION.

REV. NO.	DATE	DESCRIPTION

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5636 SE 2nd ST., TECUMSEH, KANSAS

FIGURE 3
AREA 1 SURFACE IMPOUNDMENT
PHOTO LOG PLAN VIEW

DRAWN BY:	NV	APPROVED BY:	RDS	PROJ. NO.:	631214397	DATE:	JANUARY 2018

APPENDIX A

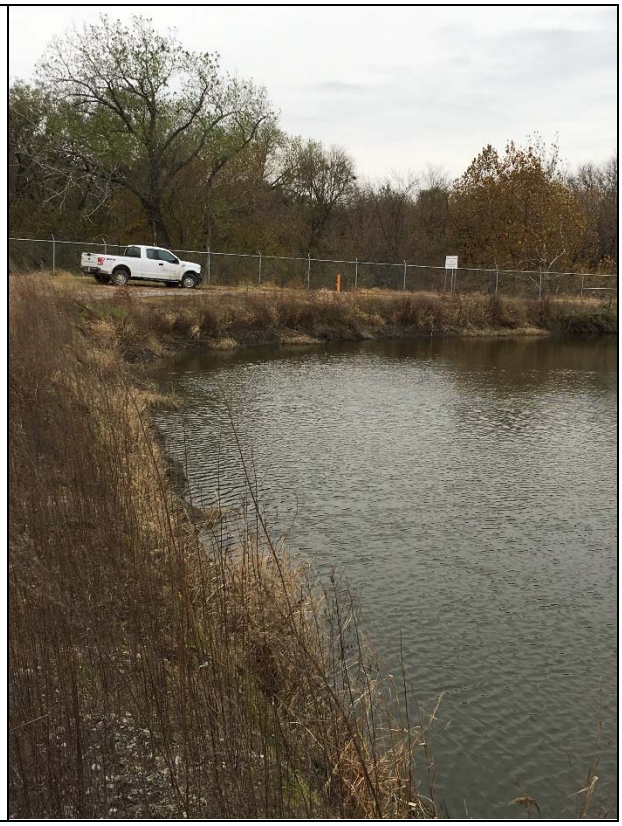
Annual Inspection Photo Log

Project: Tecumseh Surface Impoundment
Photographer: Richard Southorn

Photograph No. 1 **Date:** November 7, 2017 **Direction:** 270° W **Description:** Overview of South Pond looking toward open water area on the west side of the pond. The South Pond was not currently receiving process water at the time of Annual Inspection; process water was being directed to the North Pond. The eastern 1/2 of the pond is filled with CCR material. This material will be removed as part of routine site maintenance activities. The interior sideslopes are stable with safety or structural concerns evident.	

Photograph No. 2 **Date:** November 7, 2017 **Direction:** 72° E **Description:** Overview of the east side of the pond, where CCR material has accumulated. This material will be removed as part of routine site maintenance activities.	

Project: Tecumseh Surface Impoundment
Photographer: Richard Southorn

Photograph No. 3 **Date:** November 7, 2017 **Direction:** 7° N **Description:** Overview of eastern ½ of the South Pond looking toward the location where process water enters the pond when operating. Minor erosion rills shown in photo are within the settled CCR material that is contained within the impoundment, and therefore do not pose stability concerns. This CCR material will be removed as part of routine site operations.	
Photograph No. 4 **Date:** November 7, 2017 **Direction:** 287° W **Description:** Open water area of the South Pond, located on the western side. The interior slopes of the impoundment are shown with healthy vegetation. No stability concerns were observed.	

Project: Tecumseh Surface Impoundment
Photographer: Richard Southorn

Photograph No. 5 **Date:** November 7, 2017 **Direction:** 310° NW **Description:** Open water area of the South Pond, located on the western side. The interior slopes of the impoundment are shown with healthy vegetation. No stability concerns are observed.	
Photograph No. 6 **Date:** November 7, 2017 **Direction:** 244° SW **Description:** Monitoring well MW-11, located at the southeast corner of the impoundment.	

Project: Tecumseh Surface Impoundment
Photographer: Richard Southorn

Photograph No. 7 **Date:** November 7, 2017 **Direction:** 7° N **Description:** Sign showing the name of the Impoundment. A sluice gate is shown in the background. This sluice gate allows water to be directed from either the North of South Ponds to a common pipe that serves as both ponds' outlet.	
Photograph No. 8 **Date:** November 7, 2017 **Direction:** 207° SW **Description:** Observing the outer west slope. Vegetation is well established. No evidence of erosion or slope stability concerns despite steep slopes.	

Project: Tecumseh Surface Impoundment
Photographer: Richard Southorn

Photograph No. 9 **Date:** November 7, 2017 **Direction:** 279° W **Description:** Observing the outer west slope. Vegetation is well established and maintained. No evidence of slope stability concerns or erosion despite steep slopes.	

Photograph No. 10 **Date:** November 7, 2017 **Direction:** 71° E **Description:** Observing the sluice gate system between the North and South Ponds. Structure is clear of obstructions and operating appropriately.	

Project: Tecumseh Surface Impoundment
Photographer: Richard Southorn

Photograph No. 11 **Date:** November 7, 2017 **Direction:** 134° SE **Description:** Observing the sluice gate system between the North and South Ponds from the north. Structure is clear of obstructions and free-flowing.	

Photograph No. 12 **Date:** November 7, 2017 **Direction:** 257° W **Description:** Observing the outer west slope. Vegetation is well established and maintained. No evidence of slope stability concerns or erosion despite steep slopes.	

Project: Tecumseh Surface Impoundment
Photographer: Richard Southorn

Photograph No. 13

Date:
November 7, 2017

Direction:
103° E

Description:
Ground area near MW-9. This was the general location of an overtopping incident that occurred in 2017 due to the sluice gate being closed, thereby removing access to the outlet pipe. There is no evidence of erosion, damage to vegetation, soil migration, or stability issues in this area. There is no visual evidence of the overtopping incident.

Photograph No. 14

Date:
November 7, 2017

Direction:
99° E

Description:
Observing the north interior slopes of the North Pond. Vegetation is healthy. No evidence of stability concerns.

Project: Tecumseh Surface Impoundment
Photographer: Richard Southorn

Photograph No. 15 **Date:** November 7, 2017 **Direction:** 112° E **Description:** Observing the north interior slopes of the North Pond. Vegetation is healthy. No evidence of stability concerns.	

Photograph No. 16 **Date:** November 7, 2017 **Direction:** 178° S **Description:** Flume that directs process water to South Pond. The flume is free of obstructions and well maintained.	

Project: Tecumseh Surface Impoundment
Photographer: Richard Southorn

Photograph No. 17

Date:
November 7, 2017

Direction:
328° NW

Description:
Process water entry point into pond system. Process water enters from the large pipes into a central plunge pool. Water is then directed to either the North or South Pond by opening the appropriate gate. Process water was being directed to the North Pond at the time of inspection. The system was functioning as intended.

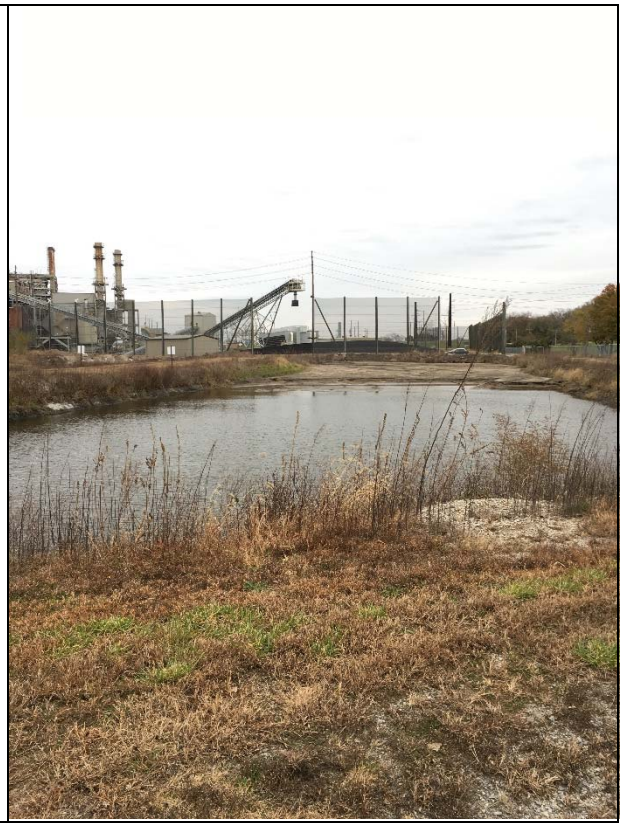
Photograph No. 18

Date:
November 7, 2017

Direction:
144° SE

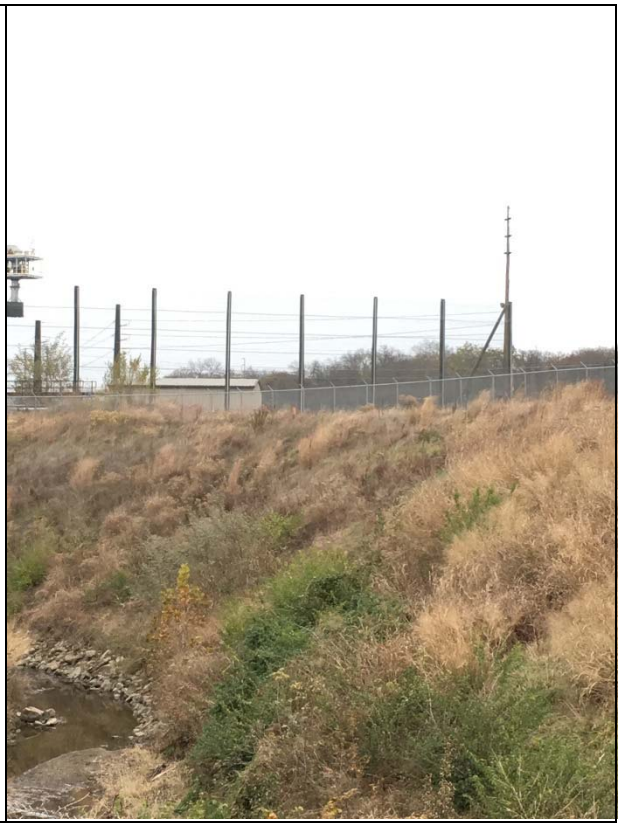
Description:
Plunge pool of Photograph 17 looking at the pond entry points. The pipe on the right side of the photograph allows water to enter the North Pond. The flume in the upper portion of the photograph conveys water to the South Pond when operating. The flume currently has a gate preventing entry of process water, while the North Pond inlet is open.

Project: Tecumseh Surface Impoundment
Photographer: Richard Southorn

Photograph No. 19 **Date:** November 7, 2017 **Direction:** 60° NE **Description:** Observing the North Pond interior. In good condition and functioning as intended.	

Photograph No. 20 **Date:** November 7, 2017 **Direction:** 187° S **Description:** Observing the outer west slope. Vegetation is well established and maintained. No evidence of slope stability concerns or erosion.	

Project: Tecumseh Surface Impoundment
Photographer: Richard Southorn

Photograph No. 21 **Date:** November 7, 2017 **Direction:** 121° SE **Description:** Observing the outer north slope. Vegetation is well established and maintained. No evidence of slope stability concerns or erosion despite steep slopes.	

Photograph No. 22 **Date:** November 7, 2017 **Direction:** 199° S **Description:** Observing the outer north slope. Vegetation is well established and maintained. No evidence of slope stability concerns or erosion.	

Project: Tecumseh Surface Impoundment
Photographer: Richard Southorn

Photograph No. 23

Date:
November 7, 2017

Direction:
263° W

Description:
South berm of South Pond along SE 2nth St. Channelizing of perimeter ditch that were observed during previous Annual Inspection have been corrected through regrading. Vegetation is established and well maintained. Drainage channel at the toe of the slope is now functioning as intended.

Photograph No. 24

Date:
November 7, 2017

Direction:
266° W

Description:
Upgradient well MW-7.