2025 Annual Landfill Inspection Report

CCR Landfill

Flint Creek Plant

Southwestern Electric Power Company

Gentry, AR

November 2025

Prepared for: Southwestern Electric Power Company – Flint Creek Plant

Prepared by: American Electric Power Service Corporation
1 Riverside Plaza
Columbus, OH 43215

Document ID: GERS-25-030

2025 Annual Landfill Inspection Report

Flint Creek Plant

CCR Landfill

Document Number: GERS-25-030

Inspection Date: October 29, 2025

PREPARED BY: _____ DATE: 11-10-2025

Shah S. Baig, P.E.

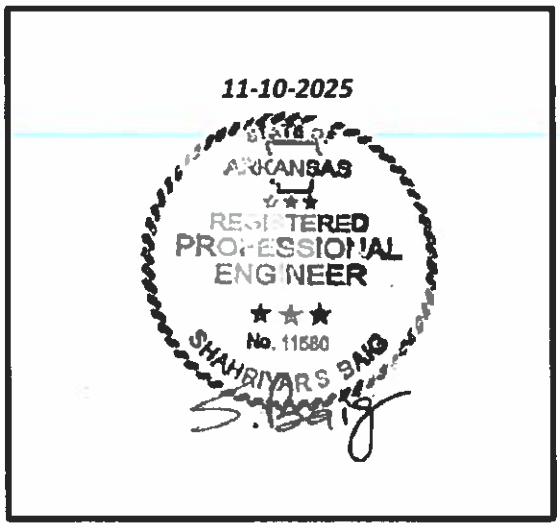
REVIEWED BY: _____ DATE: 11/18/2025

W. Greg Carter, P.E.

APPROVED BY: _____ DATE: 12/1/2025

Dan W. Pizzino, P.E.

Director – AEP Civil Engineering



I certify to the best of my knowledge, information, and belief that the information contained in this report meets the requirements of 40 CFR § 257.84(b).

Table of Contents 3

1.0 INTRODUCTION 4
2.0 DESCRIPTION OF LANDFILL 4
3.0 REVIEW OF AVAILABLE INFORMATION 5
4.0 INSPECTION 5
4.1 Changes in Geometry since Last Inspection 5
4.2 Volume 5
4.3 Definitions of Observations and Deficiencies 5
4.4 Visual Inspection 7
4.5 Changes that Effect Stability or Operation 9
5.0 SUMMARY OF FINDINGS 9
5.1 General Observations 9
5.2 Maintenance Items 9
5.3 Items to Monitor 10
5.4 Deficiencies 10

LIST OF FIGURES

▪Figure 1 – Site Location Map
▪Figure 2 – Landfill Facility Map
▪Figure 3 – Inspection Photograph Location Map

ATTACHMENT

▪Inspection Photographs

1.0 INTRODUCTION

This report was prepared by AEP- Geotechnical Engineering Services (GES) section, in part, to fulfill requirements of 40 CFR 257.84 and to provide the Flint Creek Plant an evaluation of the facility. Landfill facility is located northeast of the Flint Creek Power Plant. Figure 1, Site Location Map illustrates the location of the Landfill facility. Shah Baig, P.E. of the AEP-Geotechnical Engineering performed the 2025 inspection of the Landfill at the Flint Creek Plant. Greg Carter of the AEP-Plant Engineering coordinated the Landfill inspection and Scott Carney of the Flint Creek Plant facilitated the inspection of the Landfill facility. The inspection was performed on October 29, 2025. Weather conditions were foggy, windy, visibility was fair, and the temperature ranged mid to high 40 degrees Fahrenheit. On the day of inspection 0.34 inch of rain was recorded and in the last 7 days prior to the inspection, 2.22 inches of rain was recorded.

The last annual landfill inspection of this facility was performed on November 7, 2024.

2.0 DESCRIPTION OF LANDFILL

Figure 2, Landfill Facility Map illustrates major components of the Landfill facility that includes waste placement active area (Area 3) and inactive (Area 1, 2, and 4), leachate collection pond, contact water pond, and stormwater pond. Inactive area are those areas where the landfill has reached close to its maximum capacity. Area 3 of the landfill was recently certified and is the last area remaining for placement of CCR materials.

At the time of the Landfill inspection, operational activities were not performed in the active Landfill areas. The waste placement and operational activities were performed in accordance with the approved permit. Landfill areas outside slopes of the current active fill area or below the intermediate geomembrane liner were covered with the permanent soil cap.

The overall features of the Landfill were categorized into the following components as a means of organizing the inspection and reporting:

- Active Landfill Disposal Area
- Inactive Landfill Areas
- Leachate Collection/Contact Water Pond
- Storm Water Drainage Ditches

- Closed Areas

All areas of the landfill are constructed and certified. CCR waste is being placed primarily in the active areas, but inactive area could receive CCR waste to finish the final grading.

3.0 REVIEW OF AVAILABLE INFORMATION (257.84(b)(1)(i))

A review of available information regarding the status and condition of the Landfill which include files available in the operating record, such as design and construction information, previous 7-day inspection reports, and previous annual inspections has been conducted. Based on the review of the data there were no signs of actual or potential structural weakness or adverse conditions.

4.0 INSPECTION (257.84(b)(1)(ii))

4.1 CHANGES IN GEOMETRY SINCE LAST INSPECTION (257.84(b)(2)(i))

No modifications have been made to the design geometry of the landfill since the last annual inspection. The geometry of the landfill has remained essentially unchanged, except for the change in topography of the active and inactive disposal areas.

4.2 VOLUME (257.84(b)(2)(ii))

The total volume of CCR disposed at the landfill through the inspection date was estimated to be 2,387,466 (2,355,471 last inspection + 31,995 to date) cubic yards.

4.3 DEFINITIONS OF VISUAL OBSERVATIONS AND DEFICIENCIES

This summary of the visual observations uses terms to describe the general appearance or condition of an observed item, activity or structure. The meaning of these terms is as follows:

Good:	A condition or activity that is generally better or slightly better than what is minimally expected or anticipated from a design or maintenance point of view.
Fair/ Satisfactory:	A condition or activity that generally meets what is minimally expected or anticipated from a design or maintenance point of view.

Poor: A condition or activity that is generally below what is minimally expected or anticipated from a design or maintenance point of view.

Minor: A reference to an observed item (e.g., erosion, seepage, vegetation, etc.) where the current maintenance condition is below what is normal or desired, but which is not currently causing concern from a structure safety or stability point of view.

Significant: A reference to an observed item (e.g. erosion, seepage, vegetation, etc.) where the current maintenance program has neglected to improve the condition. Usually conditions that have been identified in the previous inspections, but have not been corrected.

Excessive: A reference to an observed item (e.g., erosion, seepage, vegetation, etc.) where the current maintenance condition is above or worse than what is normal or desired, and which may have affected the ability of the observer to properly evaluate the structure or particular area being observed or which may be a concern from a structure safety or stability point of view.

This document also uses the definition of a "deficiency" as referenced in the CCR rule section §257.84(b)(5) Inspection Requirements for CCR Landfills. This definition has been assembled using the CCR rule preamble as well as guidance from MSHA, "Qualifications for Impoundment Inspection" CI-31, 2004. These guidance documents further elaborate on the definition of deficiency. Items not defined by deficiency are considered maintenance or items to be monitored.

A "deficiency" is some evidence that a landfill has developed a problem that could impact the structural integrity of the landfill. There are four general categories of deficiencies. These four categories are described below:

1. Uncontrolled Seepage (Leachate Outbreak)

   Leachate outbreak is the uncontrolled release of leachate from the landfill.

2. Displacement of the Embankment

   Displacement of the embankment is large scale movement of part of the landfill or perimeter berm. Common signs of displacement are cracks, scarps, bulges, depressions, sinkholes and slides.

3. Blockage of Control Features

   Blockage of Control Features is the restriction of flow at spillways, culverts, or leachate pipes drains.

4. Erosion

   Erosion is the gradual movement of surface material by water, wind or ice. Erosion is considered a deficiency when it is more than a minor routine maintenance item.

4.4 VISUAL INSPECTION (257.84(b)(1)(ii))

A visual inspection of the Landfill was conducted to identify any signs of distress or malfunction of the landfill and appurtenant structures. Specific items inspected included all structural elements of the landfill perimeter berms, final and intermediate cover, drainage features, leachate/contact water ponds, and the open cell.

Overall, the facility is in good condition. The Landfill is functioning as intended with no signs of potential structural weakness or conditions which are disrupting to the safe operation of the Landfill. Inspection description are illustrated in Figure 3, Inspection Photograph Location Map and inspection photographs. Additional pictures taken during the inspection are available upon request.

1. The east and west sections of the south slope and the drainage ditch (Photograph Nos. 1 and 2) appeared in good and stable condition with controlled vegetation. The toe ditch appeared to have positive drainage without any signs of standing water. A minor erosion (8 foot in length and 6-inch deep) was encountered mid-way of the south slope.
2. The southeast exterior slope of the landfill is illustrated in Photograph No. 4. The landfill cover slope and vegetation appeared well maintained and in good condition. The fabriform ditch section and the toe ditch were functioning as designed.
3. Photographs No. 5 and 6 illustrate overall condition of the east slope of the landfill and access road. The lower section of the slope downstream of the access road is steeper

than the upper slope section. The slope appeared to be in good and stable condition. Slightly excessive vegetation was observed along the lower section of the slope.

4. Surface runoff drainage ditch and pipe culvert located in the northeast corner of the landfill appeared in functioning condition without any obstruction to flow (Photographs No. 7 and 8). Minor vegetation and small bushes were observed in the ditch area.
5. Typical condition of the north landfill slope that has final cover is illustrated in Photographs No. 9-11. There were no observed erosion gullies, sloughs, or other signs of settlement. All areas had adequate and good vegetative cover.
6. The active area of the landfill was in good condition, well graded, without any water ponding, or erosion (Photograph No. 12). Overall the area is well maintained and good contact water control in place.
7. Typical condition of the west landfill slope adjacent to Areas 2 and 3 that consists of CCR material (Photographs No. 13 and 14). The landfill cover appeared in good condition and the contact water is directed to the contact water pond. The west slope landfill cover appeared well maintained. The letdown fabriform channel (Photograph No. 15) to the stormwater pond appeared in good functioning condition.
8. The north perimeter contact water channel outlet end is illustrated in Photograph No 16. Water was flowing through the pipe culvert to the contact water pond. It appears that solids were caried from the upstream end of the channel to the contact water pond. The contact water pond dikes appeared in good and stable condition with good concrete cover. The pond appeared functioning as designed.
9. Overall view of the leachate pond is shown in Photographs No. 17 and 18. A new protective geosynthetic cover was installed this year over the primary liner of the pond. The protective cover is intact in place properly protecting the primary liner. Leachate pond is functioning as designed after repairs were performed.
10. A new rock filter berm was reinstalled in the southwest corner of the contact water pond per the design (Photographs No. 19 and 20). Water was observed to be leaking underneath the 24-inch diameter HDPE pipe.

4.5 CHANGES THAT EFFECT STABILITY OR OPERATION (257.84(b)(2)(iv))

Based on interviews with plant personnel and field observation there were no changes to the landfill operation since the last annual inspection that would affect the stability of the landfill.

5.0 SUMMARY OF FINDINGS

5.1 GENERAL OBSERVATIONS

The following general observations were identified during the visual inspection:

1) In general, the landfill overall is functioning as intended design.
2) The Plant is performing inspections and routine maintenance as required.
3) The intermediate soil cover should be placed in the areas where the CCR waste has reached final grades.
4) A minor erosion gully was encountered on the east slope of Area 4 (Photograph No. 3).
5) Excessive vegetation, trees, bushes, and minor erosion as noted in the report should be addressed as part of regular maintenance item.
6) Solids were found at the north contact water channel.
7) The leachate collection protective cover liner installation was completed this year.
8) A leak was observed under the 24-inch pipe in the southwest corner of the contact water pond.

5.2 MAINTENANCE ITEMS

The following specific maintenance items were identified during this inspection.

1) Excessive grass/vegetation at the east lower slope area should be mowed on a regular basis during the year to facilitate inspections and keep woody vegetation to minimum. Any trees at or around the slopes should be removed. Alternately, remote control mower could be used if manual access is difficult for the operator.

2) Minor erosion gully at the south slope of the landfill should be repaired by backfilling and/or regrading.

3) CCR waste placement should be properly contained within the landfill areas and contact water should be conveyed via interior temporary ditches and/or piping system as designed.

4) The waste grades should be completed in accordance to the design drawings and intermediate cover should be placed thereafter.

5) The accumulation of ash at the north contact water channel pipe culvert should be removed and control to minimize solid accumulation in the contact water pond.

5.3 ITEMS TO MONITOR

1. Monitor the leak under the 24-inch pipe at the southwest corner of the contact water pond.

5.4 DEFICIENCIES (257.84(b)(2)(iii))

There were no signs of structural weakness or disruptive conditions that were observed at the time of the inspection that would require additional investigation or remedial action. There were no deficiencies noted during this inspection.

If you have any questions regarding this report, please contact AEP-Geotechnical Engineering Shah Baig (Phone: 614-716-2241, email: sbaig@aep.com) or Daniel W Pizzino (Phone: 614-716-1472, email: dwpizzino@aep.com.

LIST OF FIGURES

- Figure 1 – Site Location Map
- Figure 2 – Landfill Facility Map
- Figure 3 – Inspection Photograph Location Map

Figure 1 – Site Location Map
Flint Creek Landfill, Gentry, AR

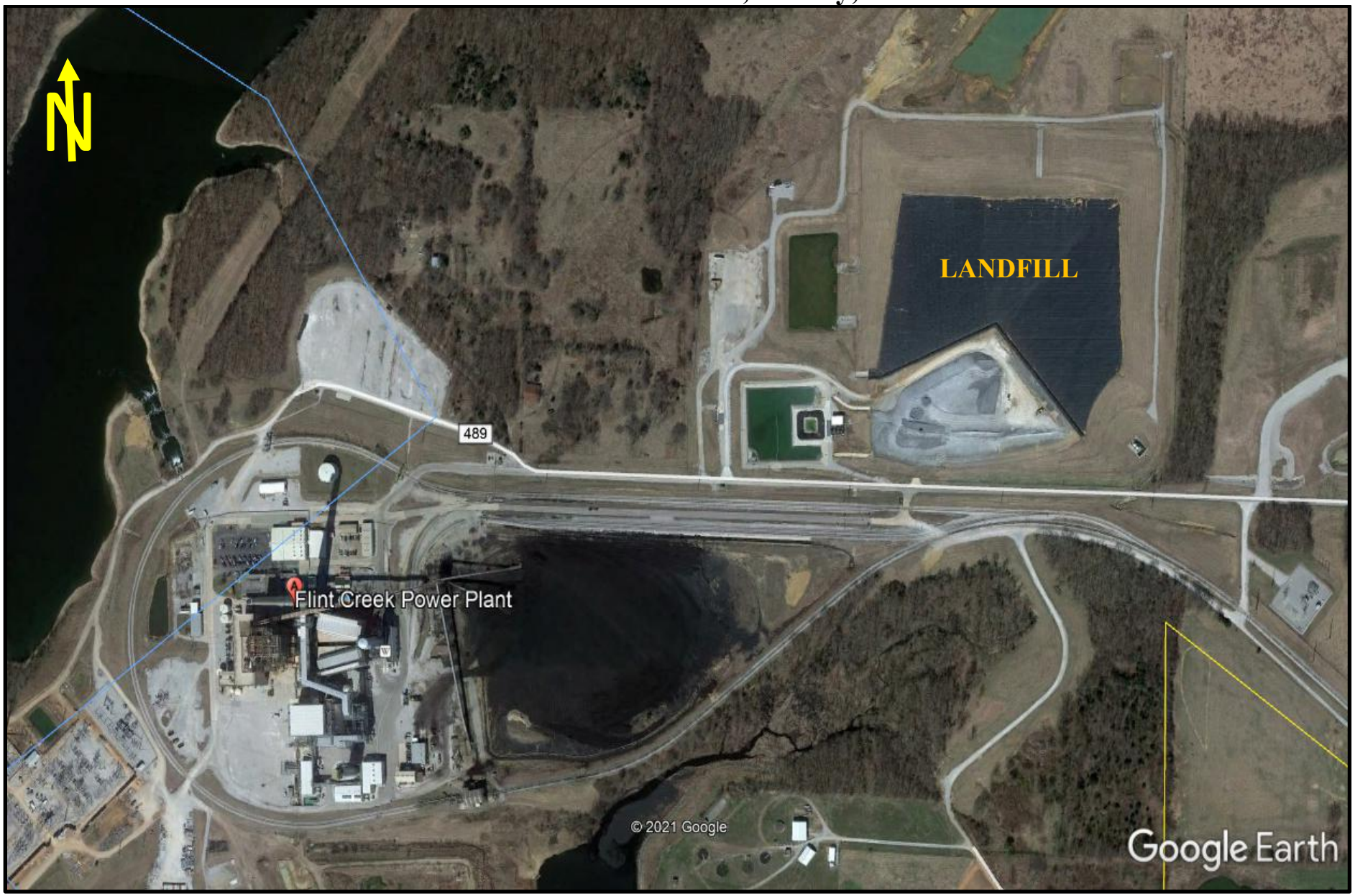


Figure 2 – Landfill Facility Map
Flint Creek Landfill, Gentry, AR

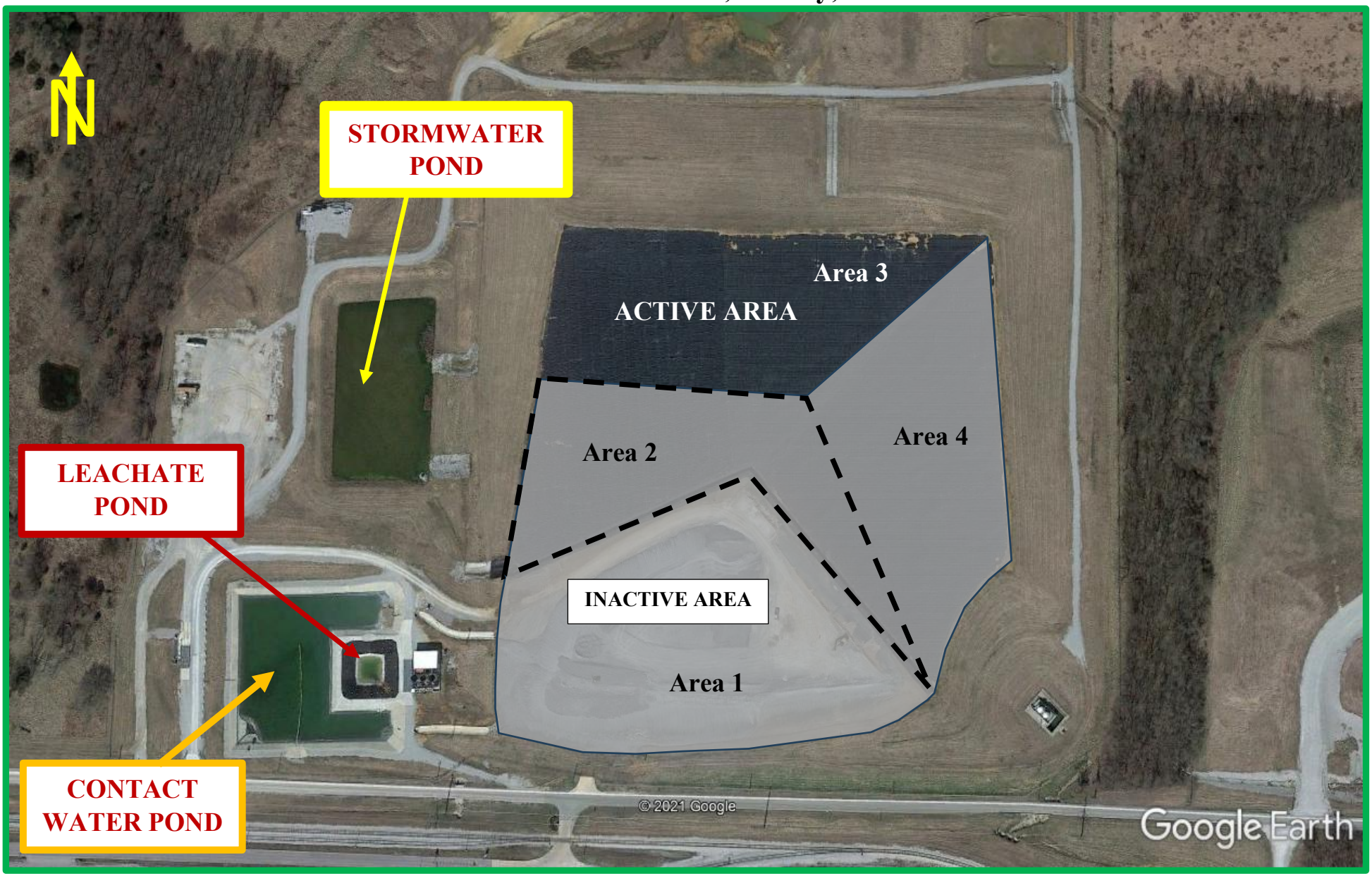


Figure 3 – Inspection Photograph Location Map
Flint Creek Landfill, Gentry, AR

Photograph No. 1 The south slope and the toe ditch (looking west).	
Photograph No. 2 Overall view of the south slope (looking east).	
Photograph No. 3 Minor erosion gully.	

Photograph No. 4 Southeast area of the lower slope.	
Photograph No. 5 East slope of the landfill (looking south).	
Photograph No. 6 Access road and lower east slope of the landfill (looking north).	

Photograph No. 7 Offsite drainage channel and pipe culvert located in the northeast corner.	
Photograph No. 8 Fabriform lined channel in the northeast corner of the landfill.	
Photograph No. 9 Typical view of the north slope toe area (looking west).	

Photograph No. 10 Typical view of the north slope toe area (looking east).	
Photograph No. 11 North slope upper section.	
Photograph No. 12 Active area of the landfill.	

Photograph No. 13 West slope of the landfill (looking north).	
Photograph No. 14 Slightly excessive vegetation at the northeast corner.	
Photograph No. 15 Fabriform ditch letdown to the stormwater pond.	

Photograph No. 16 Contact water pond north area.	
Photograph No. 17 Overall view of he leachate pond.	
Photograph No. 18 New protective liner cover.	

Photograph No. 19 Rock filter berm.	
Photograph No. 20 Water dewatering pipe.