

**ANNUAL INSPECTION REPORT
WEST AND EAST ASH BASINS
WAUKEGAN STATION
18 JANUARY 2016**

Pursuant to 40 CFR 257.83(b), Geosyntec Consultants (Geosyntec) performed an annual inspection of the Ash Basin (West Basin) and East Ash Basin (East Basin) at the Waukegan Station in Waukegan, Illinois (see Figure 1). The inspection included a review of available information regarding the status and condition of the CCR units, a visual inspection of the CCR units, including hydraulic and appurtenant structures, and preparation of this inspection report. The visual inspection was performed by Ms. Jane Soule, P.E., on 12 November 2015. A summary of the inspection findings is presented below and in Tables 1 and 2 following the text.

1. Changes in Geometry - §257.83(b)(2)(i)

This is the initial annual inspection and, as such, there have not been previous annual inspections. Therefore, no changes in geometry from previous inspections could be assessed.

2. Instrumentation – §257.83(b)(2)(ii)

Geosyntec did not observe and is not aware of instrumentation associated with the hydraulic structures, impoundment embankments, or slope performance related to the West and East Basins at the site.

3. Capacity and Impounded Volume – §257.83(b)(2)(iii) through (v)

The capacity and impounded volume of the West and East Basins and estimated depth of impounded water and CCR are presented in Tables 1 and 2, respectively. These volumes and depths were estimated using existing topographic maps and the observations made during the 12 November 2015 inspection.

Because this is the initial annual inspection, the maximum and minimum height of water and CCR in the units since the last inspection could not be assessed.

4. Structural/Operational Observations - §257.83(b)(2)(vi)

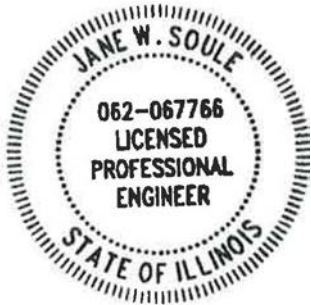
No features were observed that would be indicative of potential or actual structural weakness in the West or East Basins. No conditions were observed that are currently, or have the potential to disrupt operation and safety of the impoundments and appurtenant structures, with the exception of the following items:

- A pipe conveying CCR to a concrete inlet box structure as part of the inlet distribution system for East Basin is disconnected. At the time of inspection, the East Basin was inactive thus the potential to disrupt pond operations and safety is minimal. Geosyntec recommends reconnection of this pipe prior to utilization of the inlet distribution system for East Basin. This pipe should be reconnected as soon as feasible and prior to utilization of the inlet distribution system for East Basin. Documentation of the CCR removal should be prepared in accordance with 40 CFR 257.83(b)(5). The documentation should be placed in the operating record and on the CCR web site, and notice should be provided to the State Director per 40 CFR 257.83(b)(5), 257.105(g)(7), 257.106(g)(6), and 257.107(g)(6).
- At the time of inspection, vegetation exceeding 6 inches in height was present on the northern slopes of both West and East Basin and on the northeastern slopes of East Basin. While the presence of this vegetation is not indicative of a potential or actual structural weakness, this vegetation precludes thorough inspection of slopes surfaces. Geosyntec recommends removal of vegetation exceeding 6 inches in height. Vegetation has been recently removed from the southern slopes of West Basin and southern and eastern slopes of East Basin to comply with 40 CFR 257.73(a)(4). No substantial vegetative cover was present on these slopes at the time of inspection. Geosyntec recommends that these slopes be seeded and covered with erosion control blankets or other suitable erosion control best management practices (BMPs) to limit erosion. Weekly qualified person inspections will document ongoing vegetative conditions on these slopes. Further, animal burrows on the southern embankment slopes should be backfilled with soil or grout. Documentation of the vegetation removal, BMPs to limit erosion, and backfilling of animal burrows should be prepared in accordance with 40 CFR 257.83(b)(5). The documentation should be placed in the operating record and on the CCR web site, and notice should be provided to the State Director per 40 CFR 257.83(b)(5), 257.105(g)(7), 257.106(g)(6), and 257.107(g)(6).

West and East Ash Basins, Waukegan Station
Initial Annual Inspection
18 January 2016

5. **Other Changes – §257.83(b)(2)(vii)**

This is the initial annual inspection and there have not been previous annual inspections. Therefore, no changes affecting the operation or stability of the units could be assessed.



Jane W. Soule

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Expiration Date: 11/30/2017

Table 1: Inspection Summary – West Basin

Category	Regulation Reference	Evaluation	Recommended Action
Changes In Geometry	§257.83(b)(2)(i)	Not Applicable ⁽¹⁾	None
Instrumentation	§257.83(b)(2)(ii)	None	None
Water Depth Estimate	§257.83(b)(2)(iii)	9 feet ⁽²⁾	None
CCR Depth Estimate	§257.83(b)(2)(iii)	18 feet ⁽³⁾	None
Estimated Storage Capacity ⁽⁴⁾	§257.83(b)(2)(iv)	138.5 acre-feet 223,513 cy	None
Impounded Water Volume Estimate	§257.83(b)(2)(v)	< 62.6 acre-feet < 100,960 cy	None
Impounded CCR Volume Estimate	§257.83(b)(2)(v)	< 33.2 acre-feet < 53,616 cy	None
Structural/Operational Observations	§257.83(b)(2)(vi)	Slopes bare of vegetation and evidence of animal burrows	Vegetation removal on northern slope; BMPs applied to southern slope; and animal burrows backfilled on southern slope
Other Changes	§257.83(b)(2)(vii)	Not Applicable ⁽¹⁾	None

Notes:

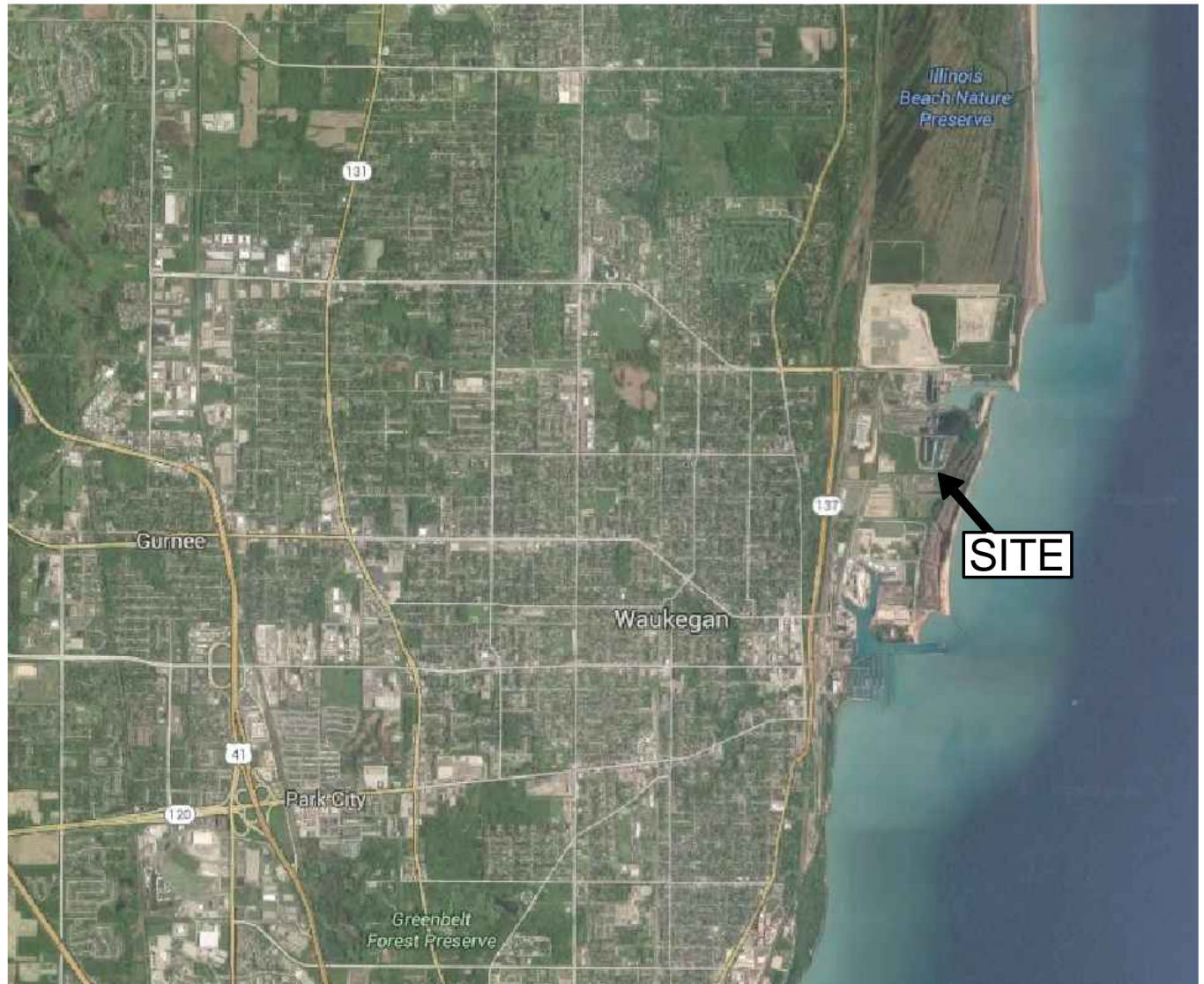
1. This report documents the initial annual inspection.
2. Estimated maximum depth of water at the time of the inspection. The maximum and minimum depths since the last inspection are not applicable since this is the initial annual inspection.
3. Estimated maximum depth of CCR at the time of the inspection. The maximum and minimum depths since the last inspection are not applicable since this is the initial annual inspection.
4. Capacity was computed using computer-aided design computation methods based on 2015 topography by Geo Terra within the basin footprint and a maximum pool elevation of 602.5 feet MSL, based on the lowest embankment crest elevation.

Table 2: Inspection Summary – East Basin

Category	Regulation Reference	Evaluation	Recommended Action
Changes In Geometry	§257.83(b)(2)(i)	Not Applicable ⁽¹⁾	None
Instrumentation	§257.83(b)(2)(ii)	None	None
Water Depth Estimate	§257.83(b)(2)(iii)	1 foot ⁽²⁾	None
CCR Depth Estimate	§257.83(b)(2)(iii)	15 feet ⁽³⁾	None
Estimated Storage Capacity ⁽⁴⁾	§257.83(b)(2)(iv)	143.8 acre-feet 231,933 cy	None
Impounded Water Volume Estimate	§257.83(b)(2)(v)	3.0 acre-feet 4,778 cy	None
Impounded CCR Volume Estimate	§257.83(b)(2)(v)	33.2 acre-feet 53,616 cy	None
Structural/Operational Observations	§257.83(b)(2)(vi)	Inlet pipe disconnected and slopes bare of vegetation	Inlet pipe reconnected prior to basin operation; vegetation removal on northern and northeastern slopes; and BMPs applied to southern and eastern slopes
Other Changes	§257.83(b)(2)(vii)	Not Applicable ⁽¹⁾	None

Notes:

1. This report documents the initial annual inspection.
2. Estimated maximum depth of water at the time of the inspection. The maximum and minimum depths since the last inspection are not applicable since this is the initial annual inspection.
3. Estimated maximum depth of CCR at the time of the inspection. The maximum and minimum depths since the last inspection are not applicable since this is the initial annual inspection.
4. Capacity was computed using computer-aided design computation methods based on 2015 topography by Geo Terra within the basin footprint and a maximum pool elevation of 602.5 feet MSL, based on the lowest embankment crest elevation.



VICINITY MAP



SITE PLAN

WEST BASIN

EAST BASIN



NOT TO SCALE

REFERENCE: GOOGLE, 2016.

VICINITY MAP AND SITE PLAN
 WAUKEGAN STATION
 WAUKEGAN, ILLINOIS

Geosyntec
 consultants

DATE: JANUARY 2016

PROJECT NO. SW0251-08

FIGURE

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