

**ANNUAL INSPECTION REPORT
WEST AND EAST ASH BASINS
WAUKEGAN STATION
OCTOBER 2017**

Pursuant to 40 CFR 257.83(b), Geosyntec Consultants (Geosyntec) performed an annual inspection of the West 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 Mr. Jesse Varsho, P.E., on 7 September 2017. 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)

During the early Fall of 2016, the crest of the east embankment of the East Ash Basin was lowered approximately 3 feet and the eastern exterior embankment slope was flattened. Development of the plans and specifications, as well as construction were overseen by a licensed Professional Engineer.

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

Geosyntec observed instrumentation within the outlet structure related to monitoring water levels in the West and East Basins. The instrumentation was functioning properly based on visual observations of water levels to software readout.

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 observations made during the 7 September 2017 inspection. The present, maximum and minimum height of water and CCR in the units are summarized in Tables 1 and 2.

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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.

5. Other Changes – §257.83(b)(2)(vii)

There were no other observed changes that could affect the operation or stability of the units.



 10-9-17

Jesse P. Varsho, P.E.
Illinois Professional Engineer No. 062-059069
Expiration Date: 11/30/2017

Table 1: Inspection Summary – West Basin

Category	Regulation Reference	Inspection Report Section	Evaluation	Recommended Action
Changes In Geometry	§257.83(b)(2)(i)	4.1	None	None
Instrumentation	§257.83(b)(2)(ii)	4.2	Water level at outlet structure	None
Water Depth Estimate	§257.83(b)(2)(iii)	4.3, Appendix B	9 feet (min.) 14.5 feet (present) 14.5 feet (max)	None
CCR Depth Estimate	§257.83(b)(2)(iii)	4.3, Appendix B	10 to 18 feet ⁽²⁾ (min., present, max.)	None
Estimated Storage Capacity	§257.83(b)(2)(iv)	4.3, Appendix B	138.5 acre-feet 223,513 cy	None
Impounded Water Volume Estimate	§257.83(b)(2)(v)	4.3, Appendix B	85.7 acre-feet 138,200 cy	None
Impounded CCR Volume Estimate	§257.83(b)(2)(v)	4.3, Appendix B	< 32.8 acre-feet < 53,400 cy	None
Structural/Operational Observations	§257.83(b)(2)(vi)	4.4	None	None
Other Changes	§257.83(b)(2)(vii)	4.5	None	None

Notes:

1. This report assesses changes in geometry since the initial annual inspection (2016).
2. Estimated maximum depth of CCR at the time of the inspection, located in the northwestern corner of West Basin.

Table 2: Inspection Summary – East Basin

Category	Regulation Reference	Inspection Report Section	Evaluation	Recommended Action
Changes In Geometry	§257.83(b)(2)(i)	4.1	Flattening of eastern exterior embankment slopes	None
Instrumentation	§257.83(b)(2)(ii)	4.2	Water level at outlet structure	None
Water Depth Estimate	§257.83(b)(2)(iii)	4.3, Appendix B	1 foot (min.) 1 foot (present) 2 feet (max.)	None
CCR Depth Estimate	§257.83(b)(2)(iii)	4.3, Appendix B	15 feet ⁽²⁾ (min., present, max.)	None
Estimated Storage Capacity	§257.83(b)(2)(iv)	4.3, Appendix B	113.7 acre-feet 183,400 cy	None
Impounded Water Volume Estimate	§257.83(b)(2)(v)	4.3, Appendix B	1.7 acre-feet 2,700 cy	None
Impounded CCR Volume Estimate	§257.83(b)(2)(v)	4.3, Appendix B	32.8 acre-feet 53,400 cy	None
Structural Weakness	§257.83(b)(2)(vi)	4.4	None	None
Other Changes	§257.83(b)(2)(vii)	4.5	None	None

Notes:

1. This report assesses changes in geometry since the initial annual inspection (2016).
2. Estimated maximum depth of CCR at the time of inspection, located in the southern portion of East Basin.