

INITIAL JRPS EAST POND ANNUAL INSPECTION REPORT

CITY UTILITIES OF SPRINGFIELD, MISSOURI

PREPARATION DATE: 7/18/2017

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JRPS EAST POND INSPECTION REPORT CERTIFICATION

Gerad Fox, Missouri Professional Engineer, License Number 2013019048, hereby certifies that the Initial JRPS East Pond Inspection Report herein meets the requirements of 40 CFR Section 257.83.

Name: Gerad Fox

Signature: 

Date: 7/18/17

Affix Seal Here:



1. WEEKLY POND INSPECTIONS REVIEW

A City Utilities of Springfield MO (CU) qualified person performed weekly pond visual inspections of the JRPS East Pond beginning April 13th, 2017, as required by the Extension Rule provisions finalized August 5, 2016 (81FR 51807) for existing inactive CCR units. Inspections were completed using a Pond Inspection Checklist prepared by CU. Inspection items include:

- Visible settlement of the crest and outer slope
- Visible sign of structural weakness on the crest
- Visible sign of misalignments on the crest
- Visible slope erosion of the inner and outer slope
- Abnormally high or low pool level
- Transverse, longitudinal, or desiccation cracks of the inner and outer slope
- Any depressions, bulges, boils, scarps, sloughs, sinkholes or slides of the inner and outer slope
- Debris or trash present on the inner and outer slope
- Visible animal burrows on the inner and outer slope
- Visible signs of internal impoundment erosion
- Adequate vegetation of the outer slope
- Excessive, turbid or sediment-laden seepage on the outer slope
- Soft or spongy zones present on the outer slope
- Discharge of the impoundment
- Abnormal discharge discoloration or flow
- Any discharge of debris or sediment
- Signs of visible piping erosion
- Emergency spillway present
- Signs of emergency spillway degradation
- Changes in impoundment operation
- Is there a larger impoundment upstream
- Any recent downstream development
- Type(s) of instrumentation installed and operational

During this process each weekly Pond Inspection Checklist was reviewed along with the corrective action(s), if any, taken for each issue noted on the weekly Pond Inspection Checklist. CU performed the weekly inspections at least every 7 days as required by the Coal Combustion Residual (CCR) rule. No major concerns were noted on the weekly inspections reviewed. No presence of vegetation on the outer slope was noted on the weekly inspections. CU was in the process of clean closing (i.e., closure by removal) this pond therefore all vegetation had been removed to ensure all CCR present was removed and taken to the onsite permitted landfill.

2. ANNUAL POND INSPECTION REVIEW

On July 13, 2017, a CU qualified professional engineer performed an annual inspection on the JRPS East Pond. The inspection was completed using the Pond Inspection Checklist – Annual form. The annual inspection checklist is attached to this report. Inspection items include:

- Visible settlement of the crest and outer slope
- Visible sign of structural weakness on the crest
- Visible sign of misalignments on the crest
- Visible slope erosion of the inner and outer slope
- Abnormally high or low pool level
- Transverse, longitudinal, or desiccation cracks of the inner and outer slope
- Any depressions, bulges, boils, scarps, sloughs, sinkholes or slides of the inner and outer slope
- Debris or trash present on the inner and outer slope
- Visible animal burrows on the inner and outer slope
- Visible signs of internal impoundment erosion
- Adequate vegetation of the outer slope
- Excessive, turbid or sediment-laden seepage on the outer slope
- Soft or spongy zones present on the outer slope
- Discharge of the impoundment
- Abnormal discharge discoloration or flow
- Any discharge of debris or sediment
- Signs of visible piping erosion
- Emergency spillway present
- Signs of emergency spillway degradation
- Changes in impoundment operation
- Is there a larger impoundment upstream
- Any recent downstream development
- Type(s) of instrumentation installed and operational

The JRPS East Pond ceased receiving CCR prior to the October 19, 2015 and is in the process of being clean closed. Therefore, most inspection items listed above were checked as being not applicable. As noted on the annual inspection checklist there has been a change in operation going from an inactive ash pond (i.e. surface impoundment) to a clean closed pond. The North, South and West embankments of the clean closed pond are still present but there is no water or CCR impounded. CU is currently regrading these areas to allow storm water runoff to flow to the James River. CU is also preparing the area for the fall seeding season so vegetation can be established. CU is awaiting a third-party soil sample verification report regarding CCR removal from the JRPS East Pond to officially submit the clean closure notification.

Initial JRPS East Pond Inspection Report

Per 257.83 (b)(1) the design and construction information and any stability assessments of this CCR unit are to be reviewed as part of the annual inspection. Due to current state of the JRPS East Pond being clean closed this review was deemed unnecessary as the CCR unit no longer exists.

The JRPS East Pond operating records were reviewed. The JRPS East Pond operating record to date included rainfall records, discharge records and sample results as well as the amount of CCR that was removed in preparation of clean closure.

As stated in the Weekly Inspection Report Review section of this report the weekly pond inspections were reviewed, verified and determined to be satisfactory.

The CCR rule states that any geometry changes since the last annual inspection and the previous annual inspections reports are to be reviewed as part of this report. As this is the initial annual inspection report for the JRPS East Pond this activity was not applicable at the time of this review.

As part of this annual inspection CU is required to estimate the amount of water and CCR within the JRPS East Pond. CU has clean closed this CCR unit therefore there is no water or CCR present nor is there any capacity available.

In conclusion, the JRPS East Pond will be officially clean closed upon receipt of the third-party verification report that all CCR has been removed. Vegetation will be established during the fall seeding season and the area will no longer be considered a CCR unit.

APPENDIX A
(Annual Pond Inspection Checklist)



POND INSPECTION CHECKLIST-ANNUAL INSPECTION BY PROFESSIONAL ENGINEER

The CCR pond is visually examined annually by a licensed professional engineer as required by §257.83 and is recorded in the facility’s operating record as required under § 257.105(g)(5).

ID:		Date Inspected:		Inspector:	
Inspection Type: Annual (Conducted by a licensed PE)					
	YES	NO	COMMENTS		
CREST					
A. Signs of structural weakness?	<input type="checkbox"/>	<input type="checkbox"/>			
B. Any visible settlement?	<input type="checkbox"/>	<input type="checkbox"/>			
C. Any visible misalignments?	<input type="checkbox"/>	<input type="checkbox"/>			
INNER SLOPE					
A. Any visible slope erosion?	<input type="checkbox"/>	<input type="checkbox"/>			
B. Abnormally high or low pool level?	<input type="checkbox"/>	<input type="checkbox"/>			
C. Transverse, longitudinal, or desiccation cracks?	<input type="checkbox"/>	<input type="checkbox"/>			
D. Any depressions, bulges, boils, scarps sloughs, sinkholes, or slides?	<input type="checkbox"/>	<input type="checkbox"/>			
E. Debris or trash present?	<input type="checkbox"/>	<input type="checkbox"/>			
F. Any visible animal borrows?	<input type="checkbox"/>	<input type="checkbox"/>			
G. Signs of internal impoundment erosion?	<input type="checkbox"/>	<input type="checkbox"/>			
OUTER SLOPE					
A. Any visible slope erosion?	<input type="checkbox"/>	<input type="checkbox"/>			
B. Adequate vegetation?	<input type="checkbox"/>	<input type="checkbox"/>			
C. Transverse, longitudinal, or desiccation cracks?	<input type="checkbox"/>	<input type="checkbox"/>			
D. Any depressions, bulges, boils, scarps sloughs, sinkholes, or slides?	<input type="checkbox"/>	<input type="checkbox"/>			
E. Debris or trash present?	<input type="checkbox"/>	<input type="checkbox"/>			
F. Any visible animal borrows?	<input type="checkbox"/>	<input type="checkbox"/>			
G. Any visible settlement?	<input type="checkbox"/>	<input type="checkbox"/>			
H. Excessive, turbid, or sediment-laden seepage?	<input type="checkbox"/>	<input type="checkbox"/>			
I. Soft or spongy zones present?	<input type="checkbox"/>	<input type="checkbox"/>			



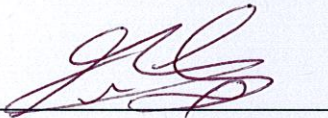
POND INSPECTION CHECKLIST-ANNUAL INSPECTION BY PROFESSIONAL ENGINEER
(continued)

	YES	NO	COMMENTS
OUTLET / DISCHARGE			
A1. Is impoundment discharging? If Yes see A2 and A3.	<input type="checkbox"/>	<input type="checkbox"/>	
A2. Abnormal discharge discoloration or flow?	<input type="checkbox"/>	<input type="checkbox"/>	
A]3. Any discharge of debris or sediment?	<input type="checkbox"/>	<input type="checkbox"/>	
B. Signs of visible piping erosion?	<input type="checkbox"/>	<input type="checkbox"/>	
C1. Emergency spillway? If yes see C2.	<input type="checkbox"/>	<input type="checkbox"/>	
C2. Signs of spillway degradation?	<input type="checkbox"/>	<input type="checkbox"/>	
SURFACE IMPOUNDMENT CONTROL			
A. Change in impoundment operation?	<input type="checkbox"/>	<input type="checkbox"/>	
B. Large impoundment upstream?	<input type="checkbox"/>	<input type="checkbox"/>	
C. Recent downstream development?	<input type="checkbox"/>	<input type="checkbox"/>	
INSTRUMENTATION			
A. Type(s) of instrumentation installed and operational:			
ADDITIONAL ANNUAL INSPECTION ITEMS			
A. Review of available operating records?	<input type="checkbox"/>	<input type="checkbox"/>	
B. Review previous stability assessment?	<input type="checkbox"/>	<input type="checkbox"/>	
C. Review results of weekly inspections?	<input type="checkbox"/>	<input type="checkbox"/>	
D. Review monthly instrument inspections?	<input type="checkbox"/>	<input type="checkbox"/>	
E. Review previous annual inspections?	<input type="checkbox"/>	<input type="checkbox"/>	
F. Visible stress/malfunction of unit or structures?	<input type="checkbox"/>	<input type="checkbox"/>	
G. Safe/reliable operation of piping/outlet?	<input type="checkbox"/>	<input type="checkbox"/>	
H. Any visible changes in geometry?	<input type="checkbox"/>	<input type="checkbox"/>	
I. Any changes in instrument locations?	<input type="checkbox"/>	<input type="checkbox"/>	
J. Storage capacity adequate?	<input type="checkbox"/>	<input type="checkbox"/>	
K1. Yearly maximum water depth instrument readings:			
K2. Yearly minimum water depth instrument readings:			
K3. Present water depth instrument readings:			
L. Approximate volume of water and CCR in unit:			

ADDITIONAL COMMENTS:

The JRPS East Pond no longer exists as it has been clean closed. All CCR, including the liner materials, has been removed from the CCR unit and relocated to the permitted on-site landfill storage area. The North, South and West embankments of the clean closed pond are still present but there is no water or CCR impounded. CU is currently regrading these areas to allow storm water runoff to flow to the James River and is preparing the area for the fall seeding season so vegetation can be established.

Inspector Signature and Seal:



7/18/17