

**2018 ANNUAL CCR UNIT INSPECTION REPORT
MARTIN LAKE STEAM ELECTRIC STATION
ASH POND AREA**

LUMINANT



Luminant

(b)(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); (ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures; and (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.

SITE INFORMATION

Site Name / Address	West Ash Pond (WAP) Martin Lake Steam Electric Station Rusk County, Texas 75804
Operator Name / Address	Luminant Generation Company, LLC 6555 Sierra Drive, Irving, TX 75658
CCR unit	CCR Surface Impoundment

INSPECTION REPORT 40 CFR § 257.83(b)(2)

Date of Inspection 11/01/2018

(b)(2)(i) Any changes in geometry of the structure since the previous annual inspection.	Based on a review of the CCR unit's records and visual observation during the on-site inspection, no changes in geometry of the structure have taken place since the previous annual inspection.
(b)(2)(ii) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection	Not Applicable – No Instrumentation
b)(2)(iii) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection;	The WAP has a design operating water surface elevation of 328 feet MSL (plus freeboard). At the time of the 2018 annual inspection, the elevation of impounded water and CCR in the WAP was approximately 326.25 feet MSL. The impounded fluid level has fluctuated between 329.42 and 323.83 feet MSL since the previous annual inspection.
b)(2)(iv) The storage capacity of the impounding structure at the time of the inspection	Approximately 76,000,000 gallons
(b)(2)(v) The approximate volume of the impounded water and CCR contained in the unit at the time of the inspection.	Approximately 68,000,000 gallons (Total impounded volume). Estimated 190,000 cubic yards of CCR.
(b)(2)(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	No appearances of actual or potential structural weakness of the CCR unit were visually observed during the on-site inspection. A review of weekly inspection reports in the operating record also indicates no existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit. Consistent with generally accepted engineering practices, routine periodic maintenance is performed to address minor erosion and capacity of drainage features to maintain the safe operation of the CCR unit.

INSPECTION REPORT 40 CFR § 257.83(b)(2)

Date of Inspection 11/01/2018

(b)(2)(vii) Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.

Based on a review of the CCR unit's records and visual observation during the on-site inspection, no other changes which may have affected the stability or operation of the CCR unit have taken place since the previous annual inspection.

40 CFR § 257.83(b) - Annual inspection by a qualified professional engineer.

I, Brian Thomas, certify under penalty of law that the information submitted in this report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the state of Texas. The information submitted, is to the best of my knowledge and belief, true, accurate and complete. Based on the annual inspection, the design, construction, operation, and maintenance of the CCR Unit is consistent with recognized and generally accepted good engineering standards.

Brian Thomas, PE
Texas PE No. 91192, Expires: 12/31/2019
Date: 01/16/2019



(b)(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); (ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures; and (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.

SITE INFORMATION

Site Name / Address	East Ash Pond (EAP) Martin Lake Steam Electric Station Rusk County, Texas 75804
Operator Name / Address	Luminant Generation Company, LLC 6555 Sierra Drive, Irving, TX 75658
CCR unit	CCR Surface Impoundment

INSPECTION REPORT 40 CFR § 257.83(b)(2)

Date of Inspection 11/01/2018

(b)(2)(i) Any changes in geometry of the structure since the previous annual inspection.	Based on a review of the CCR unit's records and visual observation during the on-site inspection, no changes in geometry of the structure have taken place since the previous annual inspection.
(b)(2)(ii) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection	Not Applicable – No Instrumentation
b)(2)(iii) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection;	The EAP has a design operating water surface elevation of 328 feet MSL (plus freeboard). At the time of the 2018 annual inspection, the elevation of impounded water and CCR in the EAP was approximately 325.75 feet MSL. The impounded fluid level has fluctuated between 329.67 and 312 feet MSL since the previous annual inspection.
b)(2)(iv) The storage capacity of the impounding structure at the time of the inspection	Approximately 41,000,000 gallons
(b)(2)(v) The approximate volume of the impounded water and CCR contained in the unit at the time of the inspection.	Approximately 34,000,000 gallons (Total impounded volume). Estimated 40,000 cubic yards of CCR.
(b)(2)(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	No appearances of actual or potential structural weakness of the CCR unit were visually observed during the on-site inspection. A review of weekly inspection reports in the operating record also indicates no existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit. Consistent with generally accepted engineering practices, routine periodic maintenance is performed to address minor erosion and capacity of drainage features to maintain the safe operation of the CCR unit.

INSPECTION REPORT 40 CFR § 257.83(b)(2)**Date of Inspection 11/01/2018**

(b)(2)(vii) Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.

Based on a review of the CCR unit's records and visual observation during the on-site inspection, no other changes which may have affected the stability or operation of the CCR unit have taken place since the previous annual inspection.

40 CFR § 257.83(b) - Annual inspection by a qualified professional engineer.

I, Brian Thomas, certify under penalty of law that the information submitted in this report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the state of Texas. The information submitted, is to the best of my knowledge and belief, true, accurate and complete. Based on the annual inspection, the design, construction, operation, and maintenance of the CCR Unit is consistent with recognized and generally accepted good engineering standards.



Brian Thomas, PE
Texas PE No. 91192, Expires: 12/31/2019
Date: 01/16/2019



(b)(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); (ii) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures; and (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.

SITE INFORMATION	
Site Name / Address	New Scrubber Pond (SP) Martin Lake Steam Electric Station Rusk County, Texas 75804
Operator Name / Address	Luminant Generation Company, LLC 6555 Sierra Drive, Irving, TX 75658
CCR unit	CCR Surface Impoundment

INSPECTION REPORT 40 CFR § 257.83(b)(2) Date of Inspection 11/01/2018	
(b)(2)(i) Any changes in geometry of the structure since the previous annual inspection.	Based on a review of the CCR unit's records and visual observation during the on-site inspection, no changes in geometry of the structure have taken place since the previous annual inspection.
(b)(2)(ii) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection	Not Applicable – No Instrumentation
(b)(2)(iii) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection;	The SP has a design operating water surface elevation of 328 feet MSL (plus freeboard). At the time of the 2018 annual inspection, the elevation of impounded water and CCR in the SP was approximately 327.75 feet MSL. The impounded fluid level has fluctuated between 329.75 and 324 feet MSL since the previous annual inspection.
(b)(2)(iv) The storage capacity of the impounding structure at the time of the inspection	Approximately 64,000,000 gallons
(b)(2)(v) The approximate volume of the impounded water and CCR contained in the unit at the time of the inspection.	Approximately 64,000,000 gallons (Total impounded volume). Estimated 285,000 cubic yards of CCR.

INSPECTION REPORT 40 CFR § 257.83(b)(2)

Date of Inspection 11/01/2018

<p>(b)(2)(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</p>	<p>Shallow sloughing of unconsolidated road base material (accumulated near the top of the slope) and topsoil occurred on the southern embankment of the SP in November 2018 during an extended period of heavy rain. Visual inspection indicates that the shallow slope failure has not affected the structural integrity of the embankment.</p> <p>No other appearances of actual or potential structural weakness of the CCR unit were visually observed during the on-site inspection. A review of weekly inspection reports in the operating record also indicates no existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit. Consistent with generally accepted engineering practices, routine periodic maintenance is performed to address minor erosion and capacity of drainage features to maintain the safe operation of the CCR unit</p>
<p>(b)(2)(vii) Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.</p>	<p>Based on a review of the CCR unit's records and visual observation during the on-site inspection, no other changes which may have affected the stability or operation of the CCR unit have taken place since the previous annual inspection.</p>

40 CFR § 257.83(b) - Annual inspection by a qualified professional engineer.

I, Brian Thomas, certify under penalty of law that the information submitted in this report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the state of Texas. The information submitted, is to the best of my knowledge and belief, true, accurate and complete. Based on the annual inspection, the design, construction, operation, and maintenance of the CCR Unit is consistent with recognized and generally accepted good engineering standards.

Brian Thomas, PE
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