ANNUAL INSPECTION REPORT FOR COAL COMBUSTION RESIDUALS (CCR) UNITS
SAN MIGUEL ELECTRIC COOPERATIVE POWER PLANT

Prepared For:

San Miguel Electric Cooperative, Inc.
6200 FM 3387
Christine, Texas 78012

Prepared By:

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Texas Engineering Firm No. F-0012

January 10, 2020

Revision 0

Wood Project No.: 6706160039

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1-10-2020

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Executive Summary

Wood Environment & Infrastructure Solutions, Inc. (Wood) was retained to conduct the 2019 Annual Inspections for the coal combustion residuals (CCR) units at the San Miguel Electric Cooperative Inc. (SMECI) Power Plant, located at 6200 FM 3387, six miles south of Christine, Texas. The Annual CCR Inspections were performed to meet the requirements specified in the United States Environmental Protection Agency (USEPA) CCR Rule, 40 Code of Federal Regulations (CFR) §257.83 (b), for the facility's surface impoundments (the Equalization Pond and the Ash Ponds A and B) and 40 CFR §257.84(b) for landfills (i.e., the Ash Pile). The purpose of this inspection report is to provide an engineering opinion as to whether the CCR Units are structurally sound and that the design, operation, and maintenance of the Units are in accordance with generally accepted engineering practices.

The San Miguel Equalization Pond and the Ash Ponds A and B, are considered CCR surface impoundments and are subject to the regulatory requirements stipulated in §257.83 (b). The Ash Pile is considered a CCR Landfill and is subject to the regulatory requirements stipulated in §257.84(b). A summary of the inspection findings is provided, as follows:

Summary Table of CCR Units Annual Inspections

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CCR Unit	CCR Rule Reference	Requirements Summary	Requirement Status
Ash Ponds A and B	§257.83(b)(1)	Annual Inspection	All Requirements Met
	§257.83(b)(2)	Inspection Report	All Requirements Met
	§257.83(b)(4)	Frequency of Inspections	All Requirements Met
	§257.83(b)(5)	Deficiency Identified	None Identified
Equalization Pond	§257.83(b)(1)	Annual Inspection	All Requirements Met
	§257.83(b)(2)	Inspection Report	All Requirements Met
	§257.83(b)(4)	Frequency of Inspections	All Requirements Met
	§257.83(b)(5)	Deficiency Identified	None Identified

Ash Pile	§257.84(b)(1)	Annual Inspection	All Requirements Met
	§257.84(b)(2)	Inspection Report	All Requirements Met
	§257.83(b)(4)	Frequency of Inspections	All Requirements Met
	§257.83(b)(5)	Deficiency Identified	None Identified

1.0 Introduction

Wood Environment & Infrastructure Solutions, Inc. (Wood) was retained to conduct the 2019 Annual Inspections for the coal combustion residuals (CCR) units at the San Miguel Electric Cooperative Power Plant, located near Christine, Texas. The Annual CCR Inspections were performed to meet the requirements specified in the United States Environmental Protection Agency (USEPA) CCR Rule, 40 Code of Federal Regulations (CFR) §257.83 (b), for the facility's surface impoundments (the Equalization Pond and the Ash Ponds A and B) and 40 CFR §257.84(b) for landfills (i.e., the Ash Pile). The purpose of this inspection report is to provide an engineering opinion as to whether the CCR Units are structurally sound and that the design, operation, and maintenance of the units are in accordance with generally accepted engineering practices and meet the applicable CCR requirements.

The San Miguel Equalization Pond and Ash Ponds A and B are considered CCR surface impoundments and are subject to the regulatory requirements stipulated in §257.83 (b). The Ash Pile is considered a CCR Landfill and is subject to the regulatory requirements stipulated in $257.84(b). The CCR Rule requires that the inspection for an existing CCR unit be prepared in a timeframe based on the previous inspection report. The previous inspection report for each of the CCR Units is dated January 10, 2019.

The following table summarizes the documentation required within the CCR Rules for each of the subject CCR Units.

CCR Rule Cross Reference Table

Regulatory Requirements	Ash Pile	Ash Ponds A and B	Equalization Pond
Annual Inspection	§257.84(b)(1)	§257.83(b)(1)	§257.83(b)(1)
Inspection Report	§257.84(b)(2)	§257.83(b)(2)	§257.83(b)(2)
Frequency of Inspections	§257.84 (b)(4)	§257.83(b)(4)	§257.83(b)(4)
Deficiency Identified	§257.84 (b)(5)	§257.83(b)(5)	§257.83(b)(5)

1.1 Brief Description of the CCR Units

The San Miguel Plant is located in south central Atascosa County south of Christine, Texas. The plant is surrounded by pasturelands used primarily for livestock production and oil and gas exploration and production. **Figure 1** in the Figures section shows the San Miguel Plant with each of the CCR Units identified. Each of the CCR Units are briefly described, as follows:

- **Ash Pond A and B** - The two Ash Ponds (A and B) are oriented east-west and were constructed as a side-hill earthen berm impoundment with the northern embankment at or near the natural grade. The A and B "cells" are partially divided by a central dike with a connecting weir located near the eastern end of the central dike. The Ash Pond cells are only closed to isolate the north or south cells for periodic ash removal. According to a San Miguel representative, the Ash Pond was partially dredged in 2016. In 2019, Ash Pond A was isolated and dewatered. The dewatering and excavation of the ash in Ash Pond A began in January of 2019. Ash Pond A was being excavated at the time of the site inspection.

  The perimeter of the Ash Pond is approximately 5,750 feet, and the approximate surface area is 26 acres. The maximum pond depth is approximately 16.5 feet. The side slopes range from 2.5 to 1.0 (horizontal to vertical) to 3.0 to 1.0 (horizontal to vertical) on the downstream faces. The berm crests have an average width of over 10 feet. After improvements that were performed by SMECI during the fourth quarter of 2018, the elevation of the embankment crest was approximately 316 feet with a normal pool water

surface elevation of approximately 313.5 feet. Drone surveys are flown periodically or as needed to determine the volume of ash material in the Ash Ponds A and B.

- **Equalization Pond** - The Equalization Pond is an earthen berm impoundment that shares its western embankment with a water storage pond (Raw Water). The raw water for the storage pond is obtained from nearby water wells. The perimeter crest around the Equalization Pond is approximately 4,500 feet in length, and the surface area is approximately 25 acres. The designed pond depth is approximately 16.5 feet with 3.0 to 1.0 (horizontal to vertical) side slopes on the downstream faces and an average crest width of over 10 feet. With improvements made during the fourth quarter of 2018, the elevation of the embankment crest is approximately 295 feet with a normal pool level gage elevation of approximately 293.0 feet. Drone surveys are flown periodically or as needed to determine the volume of ash material within the Equalization Pond.

- **Ash Pile** - The Ash Pile is a temporary storage area approximately 1.0 acre in size. The Ash Pile is used to stage a stabilized mixture of fly ash and flue gas desulfurization (FGD) scrubber waste treatment sludge. A concrete wall partially contains the Ash Pile on the eastern side and a steel wall contains the Ash Pile on the southern side. The Ash Pile material is loaded onto dump trucks using a front-end loader. The Ash Pile material is then transported to San Miguel's surface lignite mines located outside the operating Power Plant boundaries for disposal. The Ash Pile does not have a permanent cover due to the transient nature of operations (i.e., daily dump truck loading). Starting in late January of 2019, the Ash Pile material has been supplemented with the ash material that is being excavated from Ash Pond A. The ash materials are typically blended daily when loading occurs. The two ash materials are blended together within the Ash Pile perimeter and then loaded into dump trucks for disposal within previously mined areas.

2.0 Annual Inspection Requirements

The annual inspection requirements applicable to each of the three CCR Units at the Plant, are described in the following sections.

2.1 Ash Pile

The Ash Pile is subject to annual inspection by a qualified engineer, pursuant to 40 CFR §257.84(b)(1), "…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 components are, as follows:

- *40 CFR §257.84 (b)(1)(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., the results of inspections by a qualified person, and results of previous annual inspections).*

- *40 CFR §257.84 (b)(1)(ii) - A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit.*

The results of the inspection must be documented pursuant to the inspection reporting requirements of 40 CFR §257.84 (b)(2):

> *(i) Any changes in geometry of the structure since the previous annual inspection.*
>
> *(ii) The approximate volume of CCR contained in the unit at the time of the inspection*
>
> *(iii) 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.*
>
> *(iv) Any other change(s) which may have affected the stability or operation of the CCR unit since the previous annual inspection.*

The frequency of inspections at the Ash Pile is pursuant to 40 CFR §257.84 (b)(4), as follows*:*

- *The owner or operator of the CCR unit must conduct the inspection required by paragraphs (b)(1) and (2) of this section on an annual basis. The date of completing the initial inspection report is the basis for establishing the deadline to complete the first subsequent inspection. Any required inspection may be conducted prior to the required deadline provided the owner or operator places the completed inspection report into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent inspection reports is based on the date of completing the previous inspection report. For purposes of this section, the owner or operator has completed an inspection when the inspection report has been placed in the facility's operating record as required by §257.105(g)(9).*

2.2 Equalization Pond

The Equalization Pond is subject to annual inspection by a qualified engineer, pursuant to 40 CFR §257.83(b)(1), "… *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 components are, as follows:

- 40 CFR &257.83(b)(1)*(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).*

- *40 CFR §257.83 (b)(1)(ii) - A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit.*

The results of the inspection must be documented pursuant to the inspection reporting requirements of *40 CFR §257.83 (b)(2)*:

> *(i) Any changes in geometry of the impounding structure since the previous annual inspection.*
>
> *(ii) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection*
>
> *(iii) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection*
>
> *(iv) The storage capacity of the impounding structure at the time of the inspection.*
>
> *(v) The approximate volume of the impounded water and CCR at the time of the inspection.*
>
> *(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 and appurtenant structures.*

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

The frequency of inspections at the Equalization Pond is pursuant to 40 CFR §257.83 (b)(4), as follows:

- *(i) Except as provided for in paragraph (b)(4)(ii) of this section, the owner or operator of the CCR unit must conduct the inspection required by paragraphs (b)(1) and (2) of this section on an annual basis. The date of completing the initial inspection report is the basis for establishing the deadline to complete the first subsequent inspection. Any required inspection may be conducted prior to the required deadline provided the owner or operator places the completed inspection report into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent inspection reports is based on the date of completing the previous inspection report. For purposes of this section, the owner or operator has completed an inspection when the inspection report has been placed in the facility's operating record as required by §257.105 (g)(6).*

2.3 Ash Ponds A and B

Annual Inspection requirements for the Ash Ponds A and B are the same as for the Equalization Pond. The Ash Pond A and B are subject to annual inspection by a qualified engineer, pursuant to 40 CFR §257.83(b)(1), "…*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 components are, as follows:

- 40 CFR &257.83(b)(1)*(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).*

- *40 CFR §257.83 (b)(1)(ii) - A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit.*

The results of the inspection must be documented pursuant to the following inspection reporting requirements of 40 CFR §257.83 (b)(2):

(i) - Any changes in geometry of the impounding structure since the previous annual inspection.

(ii) - The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection

(iii) - The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection

(iv) - The storage capacity of the impounding structure at the time of the inspection.

(v) - The approximate volume of the impounded water and CCR at the time of the inspection.

(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 and appurtenant structures.

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

The frequency of inspections at Ash Ponds A and B is pursuant to 40 CFR §257.83 (b)(4), as follows:

–(i) Except as provided for in paragraph (b)(4)(ii) of this section, the owner or operator of the CCR unit must conduct the inspection required by paragraphs (b)(1) and (2) of this section on an annual basis. The date of completing the initial inspection report is the basis for establishing the deadline to complete the first subsequent inspection. Any required inspection may be conducted prior to the required deadline provided the owner or operator places the completed inspection report into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent inspection reports is based on the date of completing the previous inspection report. For purposes of this section, the owner or operator has completed an inspection when the inspection report has been placed in the facility's operating record as required by §257.105 (g)(6).

3.0 Inspection Results

3.1 Previous Inspections

The most recent report of inspection performed at the facility was performed by Wood, on December 18-19, 2018. The purpose of the inspection was to establish the status of the corrective actions taken in response to prior Annual Inspections findings, as documented in each of SMECI's individual Annual Inspection Reports, beginning in 2015.

3.2 Current Inspections

The visual inspections of the CCR Units for the 2019 Annual Inspections were performed under the direction of a qualified professional engineer, on November 21, 2019. Prior to the inspections, SMECI had recently mowed the impoundment areas to allow for improved visual inspection for seeps and/or structural weaknesses. The available information pertaining to each CCR Unit, including operational records and results of previous annual inspections performed by others, was provided by SMECI for Wood's review during the course of the inspections. In addition to past inspection records, the available information also included Wood's Safety Factor Assessment report, dated November 14, 2018. The Safety Factor Assessment report documents contain construction improvements made to the Ash Ponds A and B during the fourth quarter of 2018.

The results of the 2019 Annual Inspection for the Equalization Pond and Ash Ponds A and B, are presented, as follows:

2019 Annual Inspection for the Equalization Pond and Ash Ponds A and B Results

Regulatory Citation	***Ash Ponds A and B***	***Equalization Pond***
40 CFR §257.83 (b)(2) (i) - Any changes in geometry of the impounding structure since the previous annual inspection.	No changes in geometry were noted following the 2018 slope realignment on the eastern side of the Ash Ponds, the 2018 installation of the toe drain on the west side of the Ash Ponds, and the 2018 placement of compacted clay soil along the crest of the berms on the eastern and southern sides of the Ash Ponds. **(**See **Figures 1 and 3)**	No changes in geometry were noted other than the 2018 addition of compacted clay soils along the crest of the Equalization Pond on the northern, eastern, and southern portions of the berm crest. (See **Figures 1 and 2)**

40 CFR §257.83 (b)(2) (ii) - The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection.	The float gage has been relocated at the eastern end of the central dike to within Ash Pond B. This is due to the ongoing dewatering and excavation within Ash Pond A. (see **Figure 3**). The maximum reading was 12 inches above normal pool elevation (anpe) (314.5 feet).	The stationary partially submerged gage is located on a steel pier near the southwest corner (See **Figure 2**). The maximum reading was 24 inches anpe.
40 CFR §257.83 (b)(2)(iii) - The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection	The minimum reading for the impounded water was 6 inches bnpe (Elevation 313.0 feet). The depth of the Water and CCR was 16 feet at that time. The maximum reading for the impounded water was 12 inches above normal pool elevation (anpe) (Elevation 314.5 feet). The depth of water was 17.5 feet at that time. The Elevation of the water at the time of the inspection was 11 inches anpe (Elevation 314.42 feet). The depth of the water and CCR was 17.42 feet.	The minimum reading was -24 inches bnpe (Elevation 291.0 feet). The depth of the water and CCR was 14.5 feet at that time. The maximum reading for the impounded water was 24 inches anpe (Elevation 295 feet). The depth of the water and CCR was 18.5 feet at that time. The depth of water at the time of the inspection was 12 inches anpe (Elevation 294 feet). The depth of the water and CCR was 17.5 feet.
40 CFR §257.83 (b)(2)(iv) - The storage capacity of the impounding structure at the time of the inspection.	The storage capacity was estimated to be 432 acre-feet by SMECI	The storage capacity was estimated to be 410 acre-feet by SMECI.
40 CFR §257.83 (b)(2)((v) - The approximate volume of the impounded water and CCR at the time of the inspection	The approximate volume of impounded water at the time of the inspection was 214,000 cubic yards (cy). (Minimal (0%) water in Pond A and 58% water in Pond B). At the time of the inspection, the estimated CCR in Pond A was 27% and in Pond B was 42%. The estimated volume of CCR at the time of the inspection was estimated at 255,000 cy.	The approximate volume of impounded water and CCR at the time of the inspection was 663,451 cy. A total of 21% water (a volume of 142,145 cy) and an estimated total of 79% CCR (a volume of 521,306 cy).

40 CFR §257.83 (b)(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 and appurtenant structures.	There were no appearances or conditions identified that would indicate an actual or potential structural weakness or disruption of the operation and safety of this CCR Unit and appurtenant structures.	There were no appearances or conditions identified that would indicate an actual or potential structural weakness or disruption of the operation and safety of this CCR Unit and appurtenant structures.
40 CFR §257.83 (b)(2) (vii) - Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.	The only conditions noted that would bear on the stability or operation of this CCR Unit is the various improvements that were made in the fourth quarter of 2018, as documented in Wood's December 2018 Inspections. The current dewatering and excavations within Ash Pond A and the proposed cell liner should positively impact the stability of Ash Pond A when completed.	The only conditions noted that would bear on the stability or operation of this Unit is the various improvements that were made in the fourth quarter of 2018, as documented in Wood's December 2018 Inspections. The crest enhancements appear to be operating as planned with minimal erosion along the interior bank.

The results of the 2019 Annual Inspection for the Ash Pile are presented, as follows:

2019 Ash Pile Annual Inspection Results

Regulatory Citations	***Ash Pile***
40 CFR §257.84 (b)(2) (i) - Any changes in geometry of the structure since the previous annual inspection.	No changes in the CCR unit geometry were noted.
40 CFR §257.84 (b)(2) (ii) - (ii) - The approximate volume of CCR contained in the unit at the time of the inspection	The approximate volume of ash material located at the Ash Pile at the time of the inspection was 1,500 cubic yards. This included the ash material from the plant and the excavated ash material from Ash Pond A.
40 CFR §257.84 (b)(2)(iii) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are	No such conditions were identified. Recent maintenance repairs in the fourth quarter of 2018 were made to the concrete wall of the CCR Unit and to the steel portion of the

disrupting or have the potential to disrupt the operation and safety of the CCR unit.	CCR containment, and to the associated drainageways, as documented in Wood's the 2018 inspections.
40 CFR §257.84 (b)(2)(iv) - Any other change(s) which may have affected the stability or operation of the CCR unit since the previous annual inspection.	A new sprinkler system was installed in 2018 to aid in dust suppression and to help eliminate the migration of ash from the Ash Pile. During 2019, the ash material from the plant is wetter than usual to facilitate blending with the ash material form Ash Pond A. No other changes were noted.

Based on the inspection findings, as described herein, Wood has determined that the CCR Units are structurally sound and that the design, operation, and maintenance of the CCR Units are in accordance with generally accepted engineering practices and meet all applicable CCR requirements. Specifically, pursuant to 40 CFR §257.83 (b)(5) and 40 CFR §257.84 (b)(5), no deficiencies or release conditions requiring a response action were identified.

FIGURES

SOURCE/REFERENCES: GOOGLE EARTH PRO, 2/14/2014

N

0 400

Approximate Scale in Feet

wood.
Environment & Infrastructure Solutions, Inc.

TX Engineering Firm F-0012
TX Geoscience Firm #50814

SITE MAP
San Miguel Electric Cooperative Inc.
Atascosas County, Texas

Project No.: 6706160039
Date.: 1/3/2019

Figure 1

Plot Date: 01/09/19 - 9:25am Plotted by: susan.l.brown
Drawing Path: P:\1 670616 Projects\6706160039 - Jackson Walker\San Miguel Power Plant\Figures\ Drawing Name: environmental TB_2018.dwg

Surface Water Flow

N

0 250

Approximate Scale in Feet

SOURCE: GOOGLE EARTH PRO, 2/14/2014

wood.

Environment & Infrastructure Solutions, Inc.

TX Engineering Firm F-0012

EQUALIZATION POND SITE MAP

San Miguel Electric Cooperative Inc.
Atascosas County, Texas

Project No. 6706160039

Date. 01/03/2019 By. SLB

Figure 2

Plot Date: 01/09/19 - 10:41am, Plotted by: susan.l.brown
Drawing Path: P:\1 670616 Projects\6706160039 - Jackson Walker\San Miguel Power Plant\Figures\, Drawing Name: environmental TB_2018.dwg

SOURCE: GOOGLE EARTH PRO, 2/14/2014

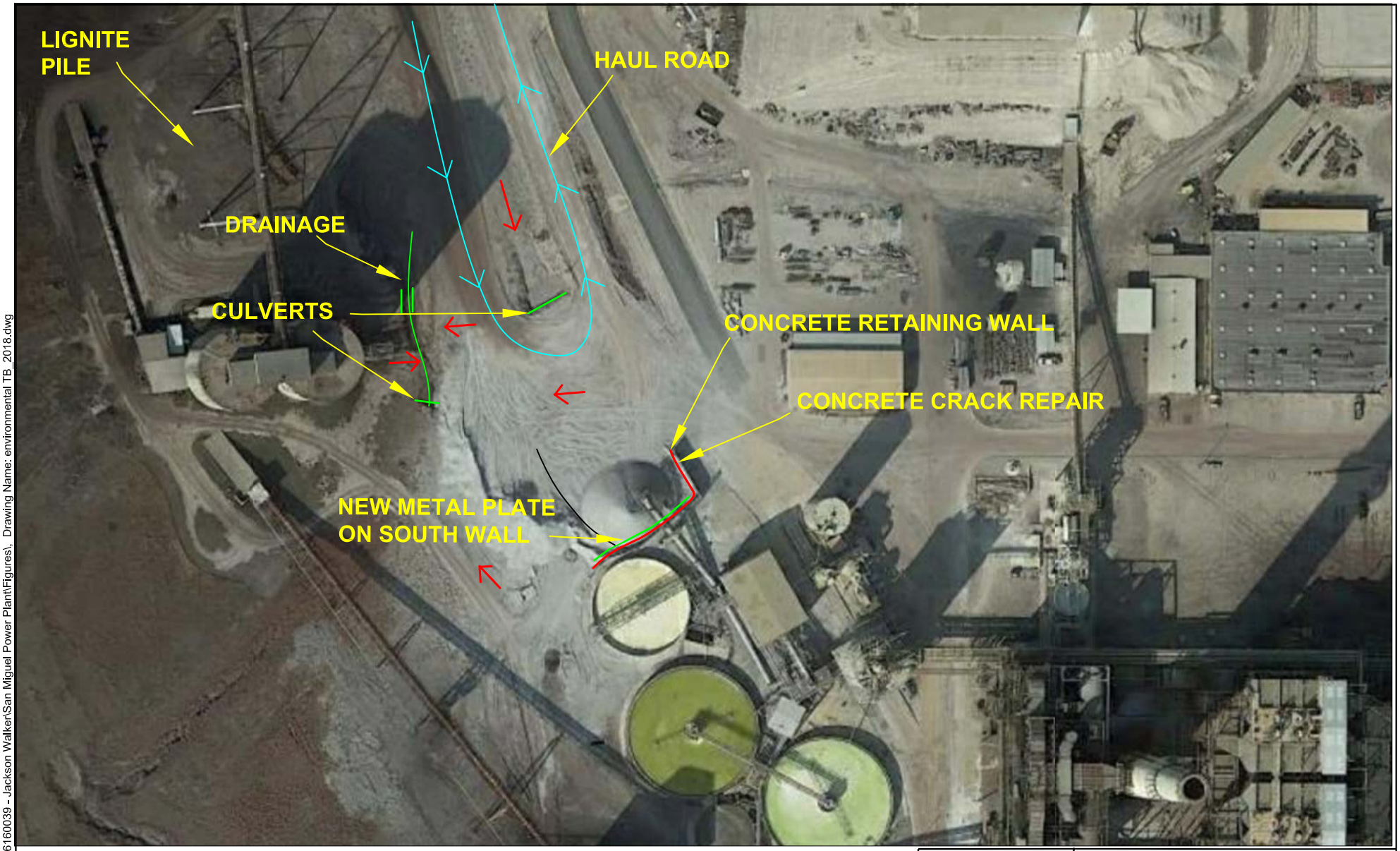
0 300
Approximate Scale in Feet

wood.
Environment & Infrastructure Solutions, Inc.
TX Engineering Firm F-0012

ASH PONDS SITE MAP
San Miguel Electric Cooperative Inc.
Atascosas County, Texas

Project No. 670610039
Date. 01/03/2019 By. SLB

Figure 3



↑ SITE DRAINAGE

SOURCE: GOOGLE EARTH PRO, 2/14/2019

N

0 120

Approximate Scale in Feet

wood.
Environment & Infrastructure Solutions, Inc.
TX Engineering Firm F-0012

ASH PILE SITE MAP
San Miguel Electric Cooperative Inc.
Atascosas County, Texas

Project No. 670610039
Date. 01/03/2019 By. SLB

Figure 4

Plot Date: 01/09/19 - 10:18am, Plotted by: susan.l.brown
Drawing Path: P:\1 670616 Projects\670616160039 - Jackson Walker\San Miguel Power Plant\Figures\, Drawing Name: environmental TB_2018.dwg

APPENDIX A

November 21, 2019 Inspection Summary

Annual Inspection Summary
San Miguel Annual Inspection Summary
San Miguel Electric Cooperative Inc.
(November 21, 2019)

Equalization Pond

Summary of Prior Deficiency/Observation*	Summary of Deficiencies/Observations
Prior to 2018, the crest of the impoundment had localized areas with moderate rutting. The crest of the impoundment was surveyed, and compacted clay soils were placed along the crest of the berm to an adjusted elevation of 296 feet above mean sea level (amsl).	This is a routine operations maintenance task. The crest of the Equalization Pond was in good condition with no rutting, cracking, or indications of ponding of stormwater observed during the inspection. See Photo Nos. 20, 21, 24, and 25
Moderate wind/wave erosion is occurring at the water line of the pond. This an ongoing issue and in 2018 the crest of the impoundment was adjusted to 296 feet amsl where needed by a SMECI Maintenance Contractor.	This is a routine operations maintenance task. The compacted clay soils placed on the crest of the impoundment shows minor erosion along the water's edge on the interior of the embankment but does not show more than normal erosion. SMECI personnel had added additional uncompacted clay soils along the interior edge of the embankment to stop the minor erosion along the edge in 2019. A few areas showed minor spray from waves caused by high winds that broke along the edge of the crest. The liner was not exposed. See Photo Nos. 20, 21, 22, 24, and 25
Vegetation growth was noted along the interior slope of the Equalization Pond. The vegetation was removed in 2018.	This is a routine operations maintenance task. No vegetative growth was noted along the interior slope of the Equalization Pond during the inspection. See Photo Nos. 20, 21, 22, 24, and 25
Dense vegetation was observed on the south and east sides of the Equalization Pond. Mowing and vegetation removal was performed prior to the 2018 annual inspection by the SMECI Maintenance Contractor.	This is a routine operations maintenance task. The berms and other areas were recently mowed prior to the 2019 Annual Inspection in late November. Woody vegetation is beginning to reoccur along the toe of the impoundment and within the area extending out from the southern side of the impoundment slope. This area is scheduled for vegetation removal in 2020. See Photo Nos. 3, 4, 6, 7, 9, 10, 11, 12, 13, 14, 15, and 16
Ponding and moist/soft spots were observed within the natural drainage feature along the southern and eastern sides of the Equalization Pond. Minor soft spots and seeps were observed but were attributed to rainfall prior to the 2018 Annual Inspection. No evidence of cracks, or slope failures were observed along the slope or toe of the berm.	Ponded water and soft soils were observed within the natural drainage feature located along the south and north of the Equalization Pond. Conditions during the 2019 Annual Inspection were similar but somewhat drier than during the 2018 Annual Inspection. Some areas were wet and vegetation was taller than during the 2018 inspection. In addition to the natural surface water drainage, it is noted that the wet conditions may also be attributed to a concrete water line that transports water from an offsite water well to the raw water impoundment upgradient and to the west of the Equalization Pond. According to SMECI personnel, pH testing of the water in the areas around the Equalization Pond show to be near neutral which is consistent with a natural water source. . No cracks or slope failures were observed along the Equalization Pond impoundment. See Photo Nos. 2, 4, 5, 7, 8, 9, 10, 11, 12, 13, and 14

Annual Inspection Summary
San Miguel Annual Inspection Summary
San Miguel Electric Cooperative Inc.
(November 21, 2019)

Equalization Pond

Summary of Prior Deficiency/Observation*	Summary of Prior Deficiency/Observation*
Sparse vegetation was observed on the inner slopes on the northwest side and along the downstream toe on the northeast side of the equalization pond. The areas of sparse vegetation at the northwestern area of the Equalization Pond were related to machinery operation in the area and have not recovered a vegetative cover.	This is a routine operations maintenance task. The area located on the northwestern corner of the Equalization pond and the area along the toe of the embankment that are barren are scheduled for reseeding. The sparse vegetation and barren areas along the northern, northeastern, and along the eastern sides of the Equalization Pond may be related to a dry climate, poor soils, and erosion along the drainageways that flows along the northern, southern, and eastern sides of the Equalization Pond. See Photo Nos. 17, 18, 19, and 23
Small trees/bushes growing on the downstream embankment. Woody vegetation was removed prior to the 2018 inspection.	This is a routine operations maintenance task. Small trees and bushes were removed in 2018, but regrowth has occurred and will be removed during planned maintenance activities during 2020. See Photo Nos. 4, 6, 7, 9, 10, 11, 12, and 14
Water ponding around the toe of the downstream embankment (potentially from storm activities prior to inspection).	This area has had the woody vegetation removed in 2018 to help alleviate the ponded water and facilitate more effective drainage. Some regrowth of the woody vegetation was observed within this area during the 2019 Annual Inspection. A streambed is located in this area and flows around the base of the Equalization Pond. Based on visual observations, the surface water is related to the leaking concrete water supply pipe and to the adjacent stream flowing to the northeast. Rain water pools in ruts and low areas along the drainageway. Creating a swale to direct natural drainage farther from the toe of the embankment should be considered. SMECI personnel indicated that a concrete water line is located along the southern edge of the Equalization Pond. The water line is used to transport water from an offsite water well to the Raw Water Pond located to the west of the Equalization Pond. This older concrete water line may be leaking water along the southwest and southern sides of the Equalization Pond. See Photo Nos. 4, 5, 7, 8, 9, 10, and 11

Annual Inspection Summary
San Miguel Annual Inspection Summary
San Miguel Electric Cooperative Inc.
(November 21, 2019)

Equalization Pond

Summary of Prior Deficiency/Observation*	Summary of Prior Deficiency/Observation*
Slope softening on northwest levee face.	This area of slope softening was observed near the toe of the embankment in the area adjacent to the cattails located along the drainageway on the northern side of the Equalization Pond. The area appeared to be somewhat smaller in size at the time of the 2019 inspection compared to the 2018 inspection. The drainage into the small culvert on the eastern end of the main area of cattail growth was cleared and allowed to drain more freely since the 2018 inspection. The soils below the raw water reservoir overflow were slightly wet. No slope failure areas were observed. See Photo Nos. 20 and 21
Accuracy of measuring water depth and volume of CCR material within unit. SMECI replaced the staff gage on the pier in 2016. In July 2018, SMECI lowered the water level and flew the pond with a drone to perform a bathymetric survey.	SMECI utilizes operational knowledge and, as needed, drone surveys, to appropriately estimate ash volume at any given time. The current gauge used at the Equalization Pond is scheduled to be replaced when the water level is lowered. The new gauge is onsite and should be installed in the first quarter of 2020. See Photo No. 1
Riprap needs realignment. Riprap was realigned during maintenance activities in 2017 prior to the inspection.	Riprap realignment is part of the regularly scheduled maintenance activities at the time of vegetation removal along the toe of the Equalization pond and is performed as needed. See Photo No. 3, 4, 6, and 7

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Equalization Pond

PHOTO 1

The water level gauging instrument is attached to the right-hand railing on the walkway. The gauge was difficult to read and is scheduled for replacement.

PHOTO 2

The wet area between the Equalization Pond and the Ash Ponds A and B. The water seepage in this area is thought to be due to leakage from the concrete water pipe that brings fresh water from a water well located to the east of the Equalization Pond to the Raw Water Pond.

Equalization Pond

PHOTO 3

A view of the riprap located along the toe of the Equalization Pond. The riprap extends up the slope approximately 10 feet.

PHOTO 4

Looking to the east along the toe of the southern side of the Equalization Pond. This area is the channel for a natural drainageway that flows around the Equalization Pond. Surface grading upstream is recommended so as to redirect the natural flow some distance away from the toe of the Pond.

Equalization Pond

PHOTO 5

A pooled area along the natural drainage feature near the southwest corner of the Equalization Pond. line. The water is pooled in a tractor tire rut.

PHOTO 6

Looking to the east along the toe of the southern side of the Equalization Pond. Vegetation removal should be conducted in the coming year.

Equalization Pond

PHOTO 7

Looking to the east along the drainageway on the southern side of the Equalization Pond. Woody vegetation is growing again in this area and should be removed. SMECI personnel during daily observations have observed this area to be dry during periods of low rainfall.

PHOTO 8

Water ponded in ruts within the natural drainage feature, along the southern toe of the Equalization Pond near the base of the riprap.

Equalization Pond

PHOTO 9

Looking to the west along an area of ponded water within the stream channel near the toe of the Equalization Pond.

PHOTO 10

The largest area of ponded water is near the southeastern corner of the Equalization Pond. In addition to the natural stream channel, on-site personnel indicated that a concrete water line is buried in this area. It is possible that this water line is leaking and contributing to the surface water observed in this area. It should be determined if raw water line is leaking and if so, the line should be repaired.

Equalization Pond

PHOTO 11

Looking to the southwest across the southeastern corner of the Equalization Pond embankment.

PHOTO 12

Looking to the north-northeast along the eastern side of the Equalization Pond. This area is drier than the southern side of the structure.

Equalization Pond

PHOTO 13

Looking to the north along the eastern side of the Equalization Pond. A perimeter groundwater monitoring well is visible in the distance.

PHOTO 14

A barren area along the eastern side of the Equalization Pond that is along the stream channel. This is an area where woody vegetation was previously removed and the natural grasses have not fully recovered.

Equalization Pond

PHOTO 15

The grass covered slopes and the area around the toe of the embankment on the eastern side of the Equalization Pond.

PHOTO 16

The northern portion of the area located to the east of the Equalization Pond**.**

Equalization Pond

PHOTO 17

The eastern extent of the drainageway located on the northern side of the Equalization Pond. A barren area was located at the northeastern corner of the Equalization Pond embankment.

PHOTO 18

Looking to the east along the drainageway on the northern side of the Equalization Pond.

Equalization Pond

PHOTO 19

No seepage was observed along the area at the northern toe of the Equalization Pond embankment to the east of the culvert along the northern drainageway.

PHOTO 20

A wet area along the northern side of the Equalization Pond is marked by the presence of cattails. The surface in this area could be graded to improve drainage.

Equalization Pond

PHOTO 21

No rutting or woody vegetation is present along the northern portion of the interior or exterior portions of the Equalization Pond berm.

PHOTO 22

The accumulation of ash material within the northern extent of the Equalization Pond.

Equalization Pond

PHOTO 23

The stockpiled ash within the Equalization Pond that was dredged from the pond prior to 2018.

PHOTO 24

The berm of the Equalization Pond looking to the east along the southern portion of the berm. No rutting or woody vegetation was observed in this area.

Equalization Pond

PHOTO 25

Looking to the north along the eastern crest of the Equalization Pond berm. No rutting or woody vegetation was observed in this area.

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Ash Ponds A and B

Summary of Prior Deficiency/Observation*	Summary of Deficiencies/Observations
The crest of the impoundment had areas with moderate rutting from vehicular traffic in localized areas around the pond. Major rutting observed along southeast and northwest of the crest.	This is a routine operations maintenance matter. The crest of the Ash Pond was raised to the prescribed elevation of 316 feet above mean sea level (msl) in 2018. During the addition of the compacted clay soils the rutted areas were removed and reconditioned. No rutting, cracks, or ponded stormwater was observed along the crest of the Ash Pond A and B the embankments during the 2019. See Photo Nos. 3, 4, 7, 8, 9, 10, 18, 19, and 21
Moderate wind/wave erosion occurring at the water line of the pond.	This is a routine operations maintenance matter. Minor erosion was observed, but it did not expose the liner. SMECI added a line of clay soils to the interior slope of the crest to combat wave erosion along the edge of the embankment. The erosion along the interior of the Ash Pond berms was uniform. See Photo Nos. 8, 9, 10, 18, 19, 20, and 21
Bushes and trees growing around the interior of the ponds.	This is a routine operations maintenance matter. The vegetation has been removed and a minor amount of vegetation regrowth was observed at the time of the 2019 Annual Inspection. Mowing and woody vegetation clearing is performed on a routine and as-needed basis by the SMECI Maintenance Contractor. See Photo Nos. 2, 3, 5, 6, 7, 8, 9, 10, 13, 16, 17, 18, 19, and 20
Small trees/bushes growing on the downstream embankment.	This is a routine operations maintenance matter. Woody vegetation has been removed and none was observed at time of the 2019 Annual Inspection. Mowing and woody vegetation clearing is performed on a routine and as-needed basis by SMECI's Maintenance Contractor. See Photo Nos. 4, 10, 18, 19, 21, 22, 29, 30, 34, 35, 36, 37, 38, and 39
Dense vegetation/ tall grasses were observed along the southern exterior slope.	This is a routine operations maintenance matter. This area was recently mowed prior to the 2019 Annual Inspection. Mowing and vegetation clearing is performed on a routine and as-needed basis by SMECI's Maintenance Contractor. See Photo Nos. 10, 18, 21, 34, and 35
Lack of vegetation on west side.	This is a routine operations maintenance matter. A toe drain and slope realignment was conducted on the west side of the Ash Ponds in later 2017. The area was seeded with grasses following the construction. The area had only sparse vegetation at the time of the 2019 Annual Inspection with some erosion along the slope. The slope is scheduled for reseeding in the Spring. See Photo Nos 22, 24, 25, 29, 30, and 31

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Ash Ponds A and B

Summary of Prior Deficiency/Observation*	Summary of Deficiencies/Observations
Drainage channel along east side needs to be vegetated	This is a routine operations maintenance matter. The drainage channel was cleaned prior to the 2018 Annual Inspection. The drainage channel has eroded into bedrock and vegetation has not been reestablished within the narrow channel at the time of the 2019 Annual Inspection. See Photo No. 4
Erosion gullies were found on the embankment in isolated areas around the perimeter of the disposal area. Minor slope failure observed on south side.	This is a routine operations maintenance matter. These minor erosional rills and minor slumps were scheduled to be addressed as part of the ongoing construction and ash removal associated with the Ash Ponds. The erosion along the southern side of the Ash Ponds can be corrected with a minor slope adjustment in the isolated area of downslope erosion. See Photo Nos. 34, 36, and 38
An erosion gully was found on the embankment at the northwest corner of Pond A.	This was an area of active ash removal at the time of the 2019 Annual Inspection. The erosional gully and side slopes will be addressed during the ash material removal from Ash Pond A and during the liner installation. See Photo Nos. 1, 11, and 12
Water ponding around the toe of the downstream embankment (potentially from storm activities prior to inspection).	No ponded water was observed at the toe of the berm at the time of the 2019 Annual Inspection. See Photo Nos. 27 and 28
Water appeared to be seeping from the toe of the downstream embankment of Ash Pond A along the western edge.	This area was assessed as part of the berm repairs and it was determined the seepage was related to surface water drainage into a buried lens of gravel that had washed down from the crest. Upon removal of the gravel, the area quickly dried up. The pond is not seeping. Following the repairs, no seepage was observed at the time of the 2018 inspection. During the 2019 Annual Inspection the area that had been wet in the past was dry and firm. See Photo Nos. 22, 27, 28, 29, and 30
Crest has minor desiccation cracks on south side.	This is a routine operations maintenance matter. No desiccation cracks were observed at the time of the 2019 Annual Inspection. See Photo Nos. 3, 8, 9, 10, 18, 19, and 21

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Ash Ponds A and B

Summary of Prior Deficiency/Observation*	Summary of Deficiencies/Observations
Accuracy of measuring water depth and volume of ash within unit. Pond A boundary/limits needs to be reestablished.	The existing gage works well to obtain water levels but should be surveyed after it was relocated to Ash Pond B to confirm correct elevations of the water level in Ash Pond B. For bathymetric surveys, SMECI utilizes operational knowledge, periodically lowers the water level for drone surveys, and/or performs depth to ash measurements from a jon boat. At the time of this inspection, Ash Pond A was dewatered, and ash material removal was being conducted. It was estimated that approximately 27% of the ash material remained in Ash Pond A at the time of the 2019 Annual inspection. It is estimated that Ash Pond B is 42% filled with ash material. The Ash Pond A boundary will be reestablished as part of the ash removal process and liner installation. See Photo Nos. 1, 2, 3, 5, 6, 7, 11, 12, 14, 15, and 17
Scour/erosion around weir structures/pipes.	This is a routine operations maintenance matter. Material has been added to this area and along the central berm. This area was been blocked off at the time of the 2019 Annual Inspection to prevent migration of water from Ash Pond B to Ash Pond A. See Photo Nos. 5, 6, and 7
Maintain the pump station area.	This is a routine operations maintenance matter. Ash material was removed from this area during 2019 to improve drainage to the sump. A sump was established southwest of the pump station to control runoff. Runoff from the roadway leading to the berm on the northwest side of the Ash Ponds is now limited by the installation of a drainageway to the surface water runoff culvert on the northwestern side of the Ash Ponds. At the time of the 2019 Annual Inspection stormwater runoff has eroded an area along the northern edge of the toe drain installation. This stormwater runoff should be rerouted to eliminate the potential for erosion. See Photo Nos. 22, 23, 24, 25, 26, 27, 28, 30, 31, 32, and 40

Ash Ponds A and B

PHOTO 1

Looking to the southwest at the track hoe that is excavating ash material from the western extent of the dewatered Ash Pond A.

PHOTO 2

Looking to the west along the northern edge of Ash pond A. This area is dewatered and is awaiting ash material removal.

Ash Ponds A and B

PHOTO 3

Looking to the south along the eastern end of Ash Ponds A and B. The weir that connects the two ash ponds is in the distance.

PHOTO 4

Looking to the south along the eastern slope of the Ash Ponds A and B. No woody vegetation was observed in this area.

Ash Ponds A and B

PHOTO 5

The weir that formerly connected Ash Pond A to Ash Pond B is now blocked to allow dewatering of Ash Pond A.

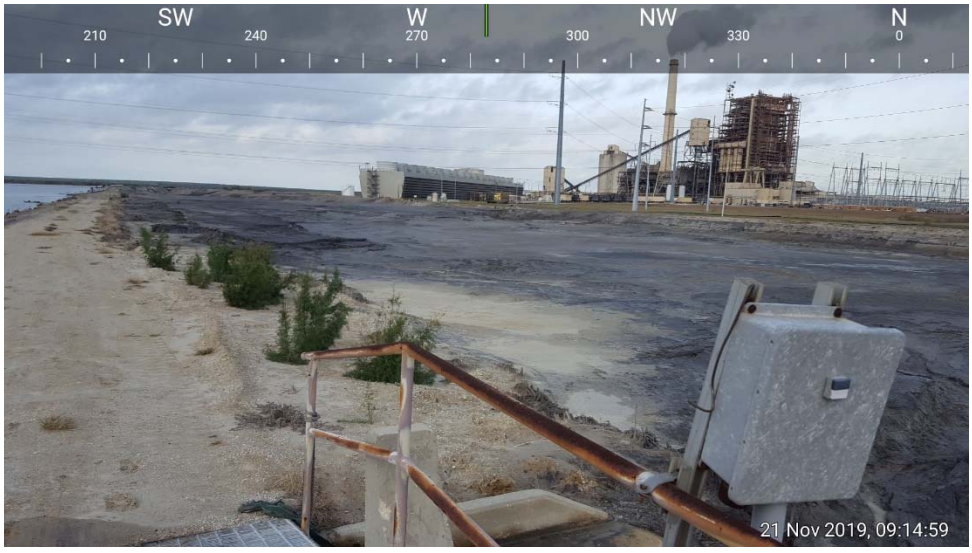

PHOTO 6

Looking to the west along the central dike that divides Ash Pond A from Ash Pond B. A minor amount of woody vegetation was beginning to grow at this end of the central dike.

Ash Ponds A and B

PHOTO 7

The relocated water level gauge in Ash Pond B. The water level gauge had not been surveyed at the time of the inspection.

PHOTO 8

Looking to the south along the crest of the eastern end of Ash Pond B. No rutting or cracks were observed along the crest of the embankment. Minor amounts of vegetation were observed along the interior of the embankment.

Ash Ponds A and B

PHOTO 9

Looking to the west along the crest of the embankment on the southern side of Ash Pond B. No vegetation was observed along the interior slope of the embankment.

PHOTO 10

Looking to the west along the crest of the embankment on the southern side of Ash Pond B. Grass covers the exterior slope of the embankment.

Ash Ponds A and B

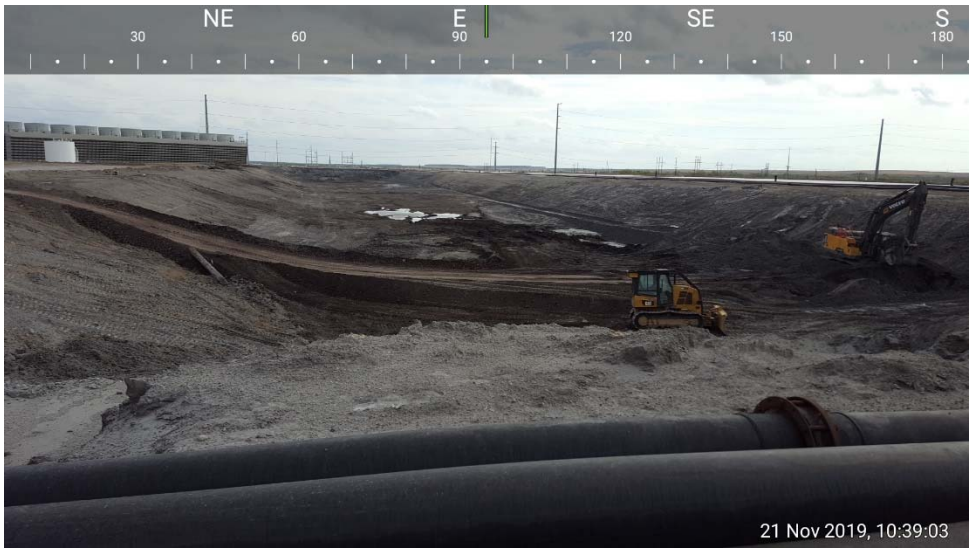

PHOTO 11
Looking to the east from the western crest of the embankment along Ash Pond A. An ash haul road is visible in the foreground of the photograph.

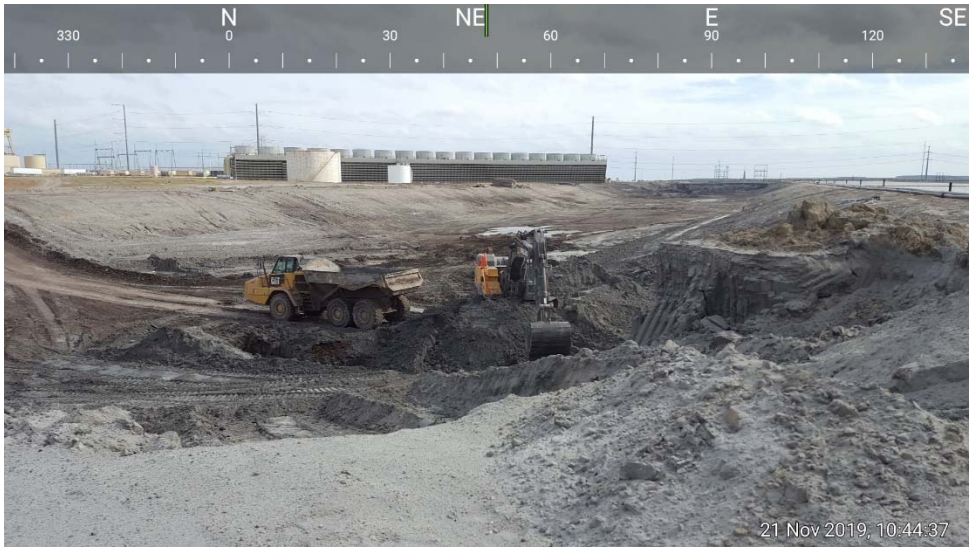

PHOTO 12

Loading dump trucks with the ash material from Ash Pond A. The ash is transported to the Ash Pile for blending and eventual transported to previously mined areas for disposal.

Ash Ponds A and B

PHOTO 13

Looking to the east along the central embankment between Ash Pond A and Ash Pond B.

PHOTO 14

Water and ash material being pumped into Ash Pond B near the eastern portion of the impoundment.

Ash Ponds A and B

PHOTO 15

Looking to the northeast at the headwall of the excavated material within Ash Pond A. The excavated area extends to the east of the cooling towers and encompasses approximately two-thirds of Ash Pond A.

PHOTO 16

Looking to the west along the southern side of the central embankment that separates the excavated portion of Ash Pond A from the active Ash Pond B.

Ash Ponds A and B

PHOTO 17

Another photograph of the excavated portion of Ash Pond A, the central dike, and the active Ash Pond B. The photograph is looking to the east.

PHOTO 18

Looking to the west along the crest of the impoundment along the southern side of Ash pond B. The crest of the embankment was in good condition with no observed cracking or rutting. No vegetation was observed along the interior slope of the embankment.

Ash Ponds A and B

PHOTO 19

Looking to the east along the interior slope of Ash Pond B.

PHOTO 20

Looking to the north along the western end of Ash Pond B. The lignite silos and ash dewatering bins are visible in the background.

Ash Ponds A and B

PHOTO 21

Looking to the east along the southern side of the Ash Pond B embankment. A few isolated areas near the crest were sparsely vegetated.

PHOTO 22

The northern portion of the western embankment that contains the toe drain that was installed in 2018. The area is sparsely vegetated and has been reseeded.

Ash Ponds A and B

PHOTO 23

The drainageway along the roadway to the northwest of the Ash ponds.

PHOTO 24

A barren slope near the electrical building located to the north of the toe drain. This area had washed-in soils removed in 2019.

Ash Ponds A and B

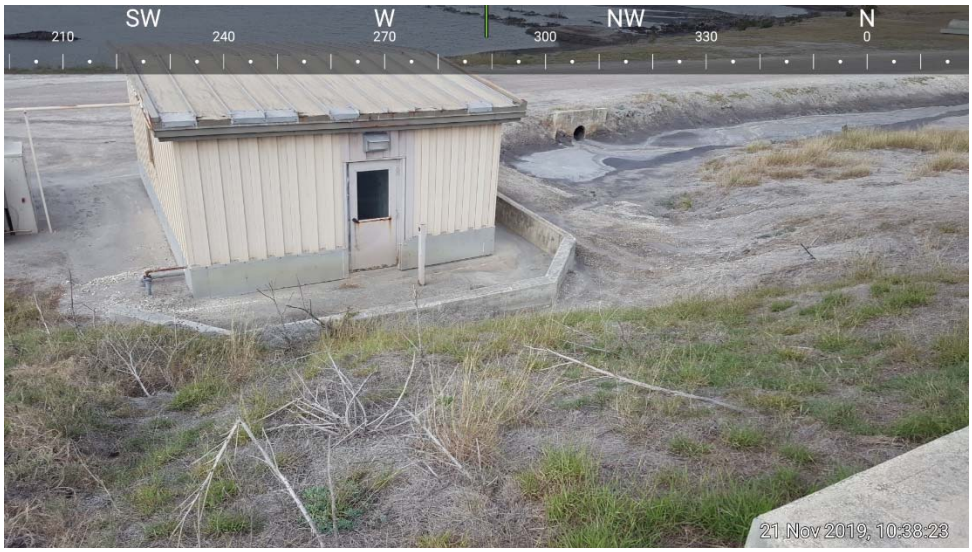

PHOTO 25

Looking to the west at the area in the previous photograph. Soils were removed from around the retaining wall.

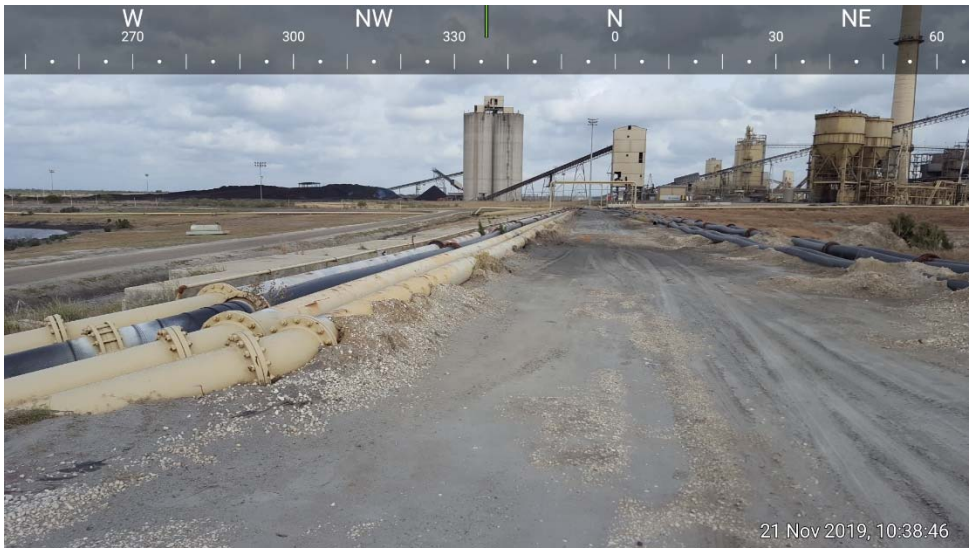

PHOTO 26

Looking to the north along the roadway between the piping located to the northwest of Ash Pond A.

Ash Ponds A and B

PHOTO 27

Erosion has reoccurred along the northern edge of the area where the toe drain was installed, and a portion of the liner is exposed. This area should be repaired.

PHOTO 28

The area downslope of the toe drain on the western side of the Ash Ponds. Some sediment transported to this area was observed.

Ash Ponds A and B

PHOTO 29

Looking to the north along the toe drain installed in 2018. Some erosion has occurred along the slope due to the sparse vegetation. The area has been reseeded. No soft areas or seepage was observed in this area.

PHOTO 30

The southern end of the toe drain installation was sparsely vegetated.

Ash Ponds A and B

PHOTO 31

An area along the western slope of the Ash Pond B embankment that showed erosion due to vehicle traffic. This area should be repaired and reseeded. Vehicular traffic should be limited to the nearby roadway.

PHOTO 32

Containment down slope from the pumps at the western end of the Ash Ponds. The runoff water is collected and pumped to the Ash Ponds.

Ash Ponds A and B

PHOTO 33

There was extensive fence damage to the south of the Ash Ponds due to recent high storm winds. The fence was repaired.

PHOTO 34

Grass cover along the southern slope of the Ash Pond B embankment.

Ash Ponds A and B

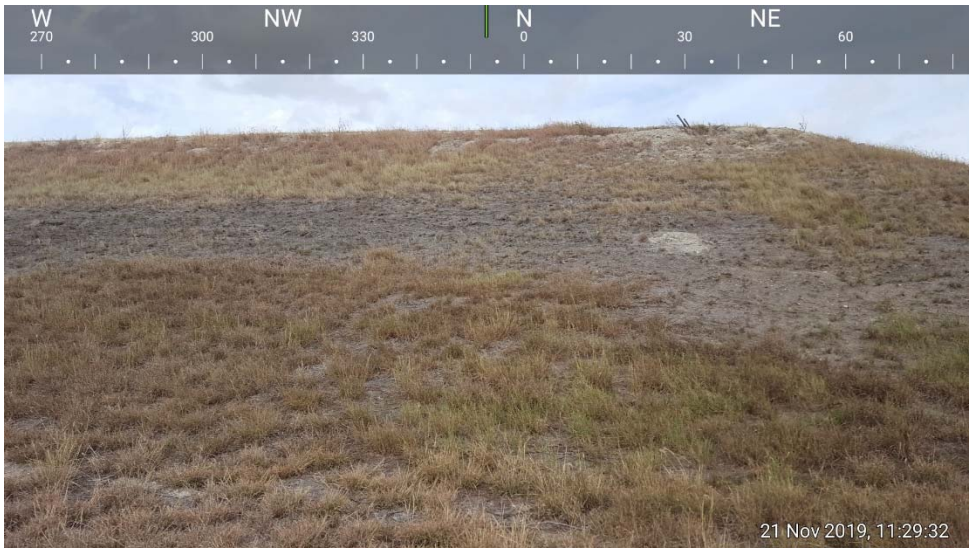

PHOTO 35

An area at the southeastern corner of Ash Pond B that has sparse vegetative cover.

PHOTO 36

The southern portion of the slope realignment along the eastern side of the Ash Ponds. The area is sparsely vegetated but has been reseeded.

Ash Ponds A and B

PHOTO 37

The northern portion of the slope realignment on the eastern side of the Ash Ponds. Isolated areas are sparsely vegetated.

PHOTO 38
Another view of the northern portion of the slope realignment area. Two areas are less vegetated than the adjacent areas.

Ash Ponds A and B

PHOTO 39

The northern most area within the slope realignment that has been difficult to revegetate.

PHOTO 40

The area downslope from the catchment for drainage from the dewatering bins.

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Ash Pile

Summary of Prior Deficiency/Observation*	Summary of Deficiencies/Observations
Corrosion and structural cracks on the concrete wall.	The concrete wall serves to contain ash and scrubber sludge where it is blended together to be hauled to the mine. The crack does not impede the function of the wall but was repaired during the October 22-26, 2018 facility outage. No additional cracks or corrosion were observed on the concrete retaining wall at the Ash Pile during the 2019 Annual Inspection. See Photo Nos. 1, 14, and 15
Concrete retaining wall present only on east side and a steel retaining wall/ baffle wall is used on the south side to contain the Sludge/Ash Pile.	Walls are currently functioning as designed. SMECI repaired the southern steel wall during the October 22-26, 2018 facility outage by installing steel plate on the northern side of the wall. The retaining wall was observed to be operating as designed during the 2019 Annual Inspection. Inspections and repairs will continue to be performed and conducted as applicable. See Photo Nos. 2, 3, 4, 5, and 6
Erosion gullies observed along the drainage channel.	This is a routine maintenance matter. SMECI excavated the ditch as part of their routine maintenance in August 2018. The area was cleaned using the front-end loader and most of the erosion rills were removed prior to the 2018 inspection. The area was observed to be in similar condition during the 2019 Annual Inspection. See Photo Nos. 7, 8, 9 and 10
Sludge pile is exposed resulting in minor erosion.	This is a routine maintenance matter. Ash material is routinely removed from the Ash Pile for disposal. See Photo Nos. 1, 5, 14, 15, and 16
Storm water runoff not draining properly. Storm water runoff ditches are present on west and north sides of the Ash Pile. Run on drainage behind the concrete wall has no contact with the sludge waste.	This is a routine operations maintenance matter. SMECI excavated the ditches/drainageway on the western side of the Ash Pile as part of their routine maintenance in August 2018. There appeared to be little change to the drainageway during the 2019 Annual Inspection. The drainageway to the north of the Ash Pile should be cleaned but is functioning to remove stormwater from the Ash Pile area. See Photo Nos. 7, 8, 9, 10. 11. 12, and 13
Rutting along haul roads.	This is a routine operations maintenance matter. Rutting was not observed at the time of the 2019 Annual Inspection. See Photo Nos. 9, 16, 17, and 18
Stormwater structures need repair.	This is a routine operations maintenance matter. General repairs were made to stormwater structures in August 2018 and are routinely maintained and repaired on an as-needed basis. Stormwater structures were observed to be operating as designed during the 2019 Annual Inspection. See Photo No. 8, 11, 12, and 13

Ash Pile

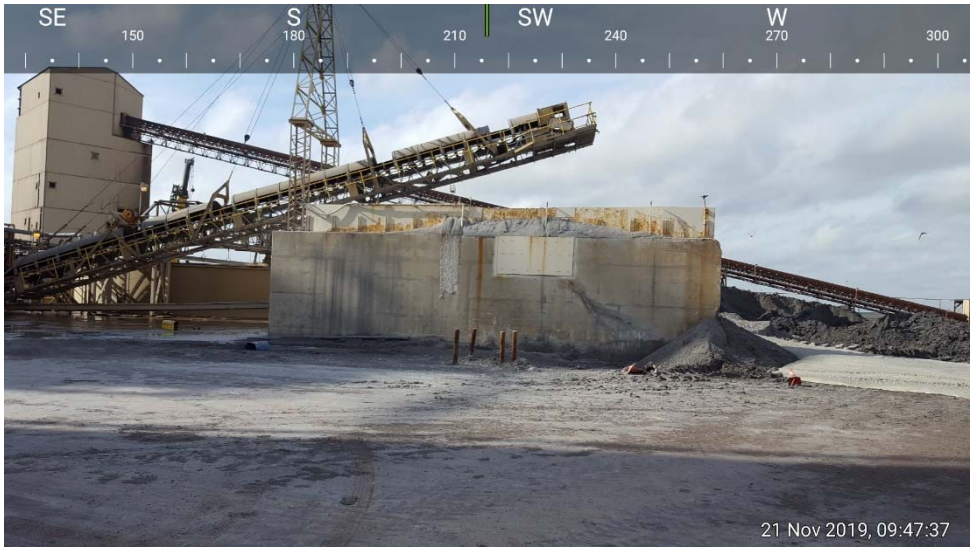

PHOTO 1

Looking to the southwest at the northeastern wall of the Ash Pile containment structure. The repairs completed in 2018 are visible and operating as designed.

PHOTO 2

Looking to the west along the southeastern wall of the Ash Pile containment that was repaired in 2018. The area was wetter than usual due to the increased water content of the ash that is mixed with the ash removed from Ash Pond A.

Ash Pile

PHOTO 3

The southeastern wall of the Ash Pile containment. A new metal cover was welded onto the northwestern side of the wall in 2018 to help contain ash material.

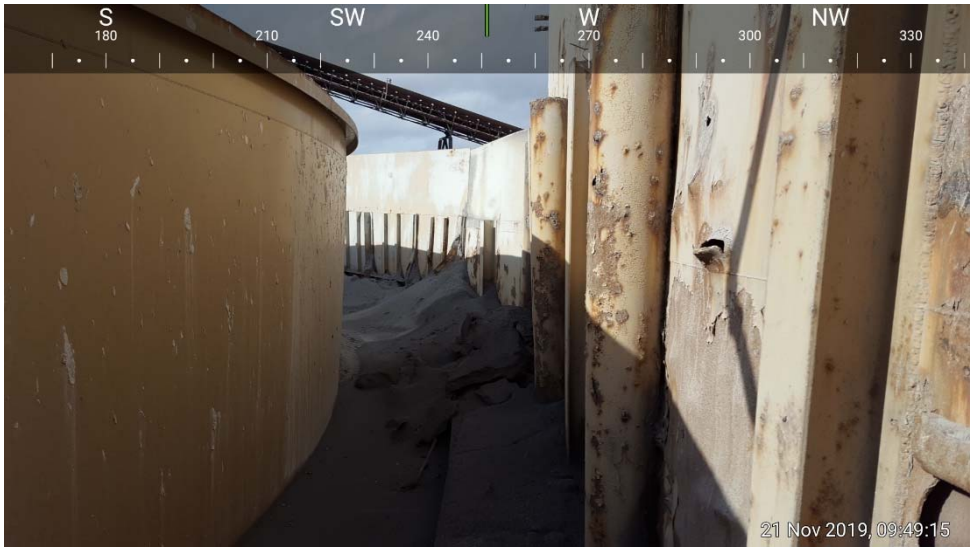

PHOTO 4

Ash was accumulating along the southeastern wall of the Ash Pile containment structure.

Ash Pile

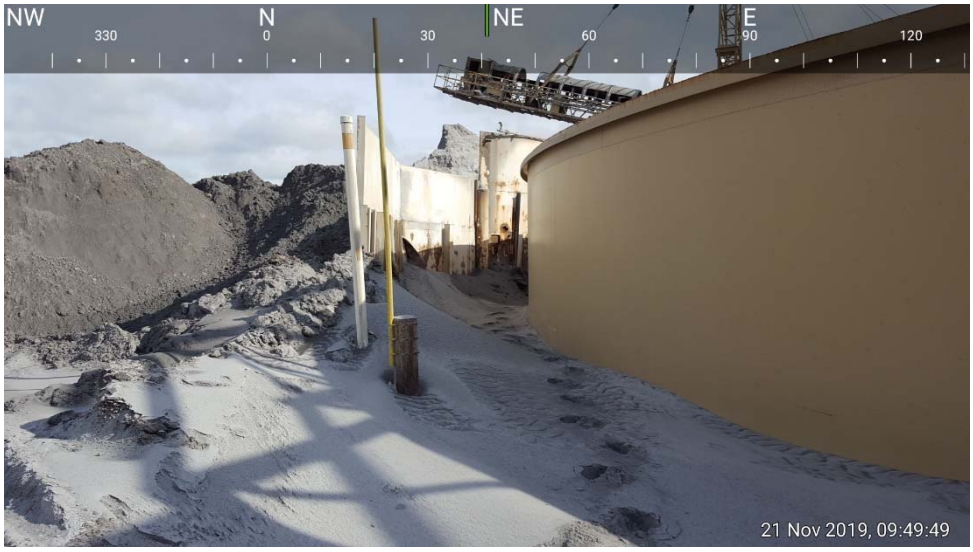

PHOTO 5

The southwestern edge of the Ash Pile containment showing a portion of the ash material transported to the Ash Pile from Ash Pond A that is to be blended with the ash being generated at the plant.

PHOTO 6

Looking to the north from southwest of the Ash Pile. The lignite silos are on the left.

Ash Pile

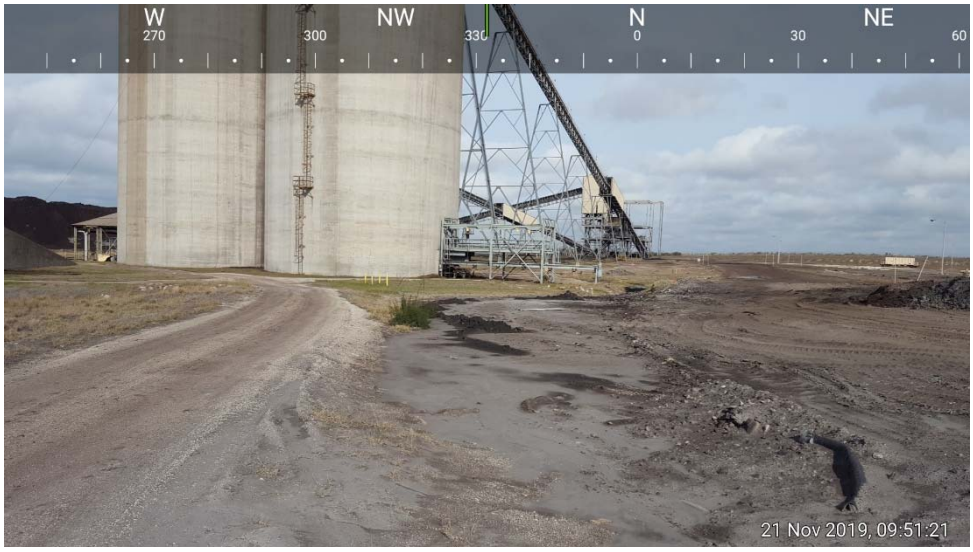

PHOTO 7

Drainage from the area to the southwest of the Ash Pile is directed to the north to a stormwater drain.

PHOTO 8

The stormwater drain located along the western edge of the Ash Pile area.

Ash Pile

PHOTO 9

Drainage along the western edge of the Ash Pile area that flows to the south to the stormwater drain shown in the previous photograph.

PHOTO 10

The drainage from the lignite silo area as it flows to the drainageway along the western edge of the Ash Pile area.

Ash Pile

PHOTO 11

The stormwater drains at the southern end of the drainageway located between the incoming and outgoing haul roads. This drainageway should be cleared of excess sediment material but is functional. The inflow of sediment should be minimized to avoid accumulation in the drainageway.

PHOTO 12

Stormwater culverts located on the eastern side of the drainageway shown in the previous photograph.

Ash Pile

PHOTO 13

Another view of the headwall located at the southern end of the drainageway between the haul roads to the north of the Ash Pile.

PHOTO 14

Looking to the south-southwest at the Ash Pile. The darker material is from the Ash Pond A ash removal project. The lighter material is currently being generated at the plant. The two materials are blended and then transported for disposal in previously mined areas.

Ash Pile

PHOTO 15

A closer view of the two ash materials to be blended for disposal.

PHOTO 16

The loading area located to the north of the Ash Pile containment structure.

Ash Pile

PHOTO 17

The recently cleaned loading area with the lignite silos in the background.

PHOTO 18

Looking to the north-northwest along the entrance haul road to the Ash Pile containment area. The exit haul road is on the left of the photograph on the eastern side of the conveyor structure.