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October 1, 2021

Mr. Robert Sadlier
Deputy Director, Water Quality MC-145
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Attention: Mike Lindner MC-148

RE: Coletto Creek Power Plant – Federal ELG Notice of Planned Participation to Achieve Permanent Cessation; TPDES Permit (WQ000215900) Renewal Application Supplement

Dear Mr. Sadlier,

Pursuant to 40 C.F.R. § 423.19(f), Coletto Creek Power, LLC (Coletto Creek) submits this Notice of Planned Participation to the Texas Commission on Environmental Quality (TCEQ) demonstrating that the Unit 1 at the Coletto Creek Power Plant qualifies as an electric generating unit that will achieve permanent cessation of coal combustion by December 31, 2028. Accordingly, Bottom Ash Transport Waters (BATW) may continue to discharge on and after October 13, 2023 pursuant to 40 C.F.R. § 423.16(g)(1). Coletto Creek is also hereby supplementing its TPDES updated renewal application submitted in November 2020 with major amendments as required by 40 C.F.R. § 423.18.

Coletto Creek has provided below and enclosed the information required by 40 C.F.R. § 423.19(f)(2):

- *Expected date that the electric generating unit is projected to achieve cessation of coal combustion*
 - Unit 1 at the Coletto Creek Power Plant: July 17, 2027
- *Whether the date represents a retirement or a fuel conversion*
 - Retirement for Unit 1 at the Coletto Creek Power Plant
- *Whether the retirement or fuel conversion has been approved by a regulatory body, and what the relevant regulatory body is*
 - Retirement has not yet been approved. The relevant regulatory body is ERCOT.
- *A copy of (1) the most recent integrated resource plan for which the applicable state agency approved the retirement or repowering of the unit subject to the ELGss, (2) certification of electric generation unit cessation under 40 CFR 257.103(b), or (3) other documentation supporting that the electric generating unit will permanently cease the combustion of coal by December 31, 2028*
 - See enclosed demonstration submitted to USEPA pursuant to 40 C.F.R. § 257.103(f)(2) on November 30, 2020.

- See enclosed company announcement indicating a 2027 retirement date for the Coletto Creek Power Plant
- *A timeline to achieve the permanent cessation of coal combustion*
 - See timeline on pages 6-2, 6-3, and 6-4 of the enclosed demonstration submitted to USEPA pursuant to 40 C.F.R. 257.103(f)(2) on November 30, 2020.

Unit 1 at the Coletto Creek Power Plant will cease coal combustion pursuant to 40 C.F.R. § 423.19(f), and therefore, discharge of pollutants in BATW can continue until closure, but no later than December 31, 2028. Coletto Creek is requesting that TCEQ revise its TPDES permit accordingly. Moreover, TCEQ should include the language below in accordance with 40 C.F.R. § 423.18 which states that "All permits subject to this part shall include the following permit conditions." In addition to the language set forth at 40 C.F.R. § 423.18, Coletto Creek further offers the additional language underlined below that would include a System Support Resource designation as a qualifying event.

- a) An electric generating unit shall qualify as a low utilization electric generating unit or permanently ceasing the combustion of coal by December 31, 2028, if such qualification would have been demonstrated absent the following qualifying event:
 - 1) An emergency order issued by the Department of Energy under Section 202(c) of the Federal Power Act,
 - 2) A reliability must run agreement issued by a Public Utility Commission, or
 - 3) Any other reliability-related order or agreement issued by a competent electric regulator (e.g., an independent system operator) which results in that electric generating unit operating in a way not contemplated when the certification was made, including a Reliability Must Run designation of the Electric Reliability Council of Texas; or
 - 4) The operation of the electric generating unit was necessary for load balancing in an area subject to a declaration under 42 U.S.C. 5121 et seq., that there exists:
 - i. An "Emergency," or
 - ii. A "Major Disaster," and
 - iii. That load balancing was due to the event that caused the "Emergency" or "Major Disaster" in paragraph (a)(4) of this section to be declared,
- b) Any facility providing the required documentation pursuant to §423.19(g) may avail itself of the protections of this permit condition.

If you have any questions regarding this submittal, please contact Gary Spicer at 214-793-6150 or gary.spicer@luminant.com.

Sincerely,



Renee Collins
Sr. Director Environmental

Enclosures

CCR SURFACE IMPOUNDMENT DEMONSTRATION

W/O ATTACHMENTS



Cynthia Vodopivec
Coletto Creek Power, LLC
Luminant
6555 Sierra Dr.
Irving, TX 75039

November 30, 2020

Sent via email

Mr. Andrew R. Wheeler, EPA Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Mail Code 5304-P
Washington, DC 20460

Re: Coletto Creek Power Plant Alternative Closure Demonstration

Dear Administrator Wheeler:

Coletto Creek Power, LLC (CCP) hereby submits this request to the U.S. Environmental Protection Agency (EPA) for approval of a site-specific alternative deadline to initiate closure pursuant to 40 C.F.R. § 257.103(f)(2) for the Primary Ash Pond located at the Coletto Creek Power Plant near Fannin, Texas. CCP is requesting an extension pursuant to 40 C.F.R. § 257.103(f)(2) so that the Primary Ash Pond may continue to receive CCR and non-CCR wastestreams after April 11, 2021, and complete closure no later than October 17, 2028.

CCP has elected to withdraw the alternate closure demonstration that was previously submitted to EPA on September 29, 2020 pursuant to 40 C.F.R. § 257.103(f)(1) and replace it with the enclosed demonstration prepared by Burns & McDonnell pursuant to 40 C.F.R. § 257.103(f)(2). This demonstration addresses all of the criteria in 40 C.F.R. § 257.103(f)(2)(i)-(iv) and contains the documentation required by 40 C.F.R. § 257.103(f)(2)(v). As allowed by the agency, in lieu of hard copies of these documents, electronic files were submitted to Kirsten Hillyer, Frank Behan, and Richard Huggins via email. If you have any questions regarding this submittal, please contact Renee Collins at 214-875-8338 or renee.collins@luminant.com. The demonstration is also available on CCP's publicly available website: <https://www.luminant.com/ccr/>

Sincerely,

A handwritten signature in black ink, appearing to read 'Cynthia E. Vodopivec', is written over a light blue horizontal line.

Cynthia Vodopivec
VP - Environmental Health & Safety

Enclosure

cc: Kirsten Hillyer
Frank Behan
Richard Huggins

Coletto Creek CCR Surface Impoundment Demonstration for a Site-Specific Alternative to Initiation of Closure Deadline



Coletto Creek Power, LLC

**Coletto Creek Power Plant
Project No. 122702**

**Revision 0
11/30/2020**

Coletto Creek CCR Surface Impoundment Demonstration for a Site-Specific Alternative to Initiation of Closure Deadline

prepared for

**Coletto Creek Power, LLC
Coletto Creek Power Plant
Fannin, Texas**

Project No. 122702

**Revision 0
11/30/2020**

prepared by

**Burns & McDonnell Engineering Company, Inc.
Kansas City, Missouri**

INDEX AND CERTIFICATION

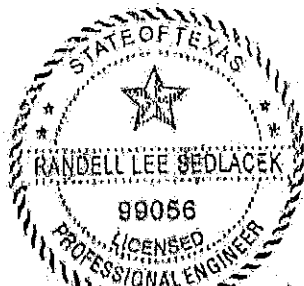
**Coletto Creek Power, LLC
Coletto Creek CCR Surface Impoundment
Demonstration for a Site-Specific Alternative to Initiation of Closure Deadline
Project No. 122702**

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Certification

I hereby certify, as a Professional Engineer in the state of Texas, that the information in this document as noted in the above Report Index was assembled under my direct personal charge. This report is not intended or represented to be suitable for reuse by the Coletto Creek Power, LLC or others without specific verification or adaptation by the Engineer.



Randell Lee Sedlacek
11/30/20

Randell Lee Sedlacek
Randell Lee Sedlacek, P.E. (Texas License No.
99506)

Date: 11/30/20

Burns & McDonnell Engineering Company, Inc.
Texas Registered Engineering Firm F-845

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LIST OF ABBREVIATIONS

<u>Abbreviation</u>	<u>Term/Phrase/Name</u>
CCP	Coleto Creek Power, LLC
CCR	Coal Combustion Residual
CFR	Code of Federal Regulations
Coleto Creek	Coleto Creek Power Plant
EPA	Environmental Protection Agency
GWPS	Groundwater Protection Standards
POTW	Publicly Owned Treatment Works
PSD	Prevention of Significant Deterioration
RCRA	Resource Conservation and Recovery Act
TPDES	Texas Pollutant Discharge Elimination System

1.0 EXECUTIVE SUMMARY

Coletto Creek Power, LLC (CCP) submits this request to the U.S. Environmental Protection Agency (EPA) for approval of a site-specific alternative deadline to initiate closure pursuant to 40 C.F.R. § 257.103(f)(2) —“Permanent Cessation of a Coal-Fired Boiler(s) by a Date Certain”— for the Primary Ash Pond located at the Coletto Creek Power Plant (Coletto) in Texas. The Primary Ash Pond is a 190-acre CCR surface impoundment used to manage CCR and non-CCR wastestreams at Coletto. As discussed herein, the boiler at the station will cease coal-fired operations no later than July 17, 2027, and the impoundment will complete closure no later than October 17, 2028. Therefore, CCP is requesting an extension pursuant to 40 C.F.R. § 257.103(f)(2) so that the Primary Ash Pond may continue to receive CCR and non-CCR waste streams after April 11, 2021, and complete closure no later than October 17, 2028.

2.0 INTRODUCTION

Coletto is a 650-megawatt, single unit coal-fueled electrical generating facility located in Fannin, Texas. The Coletto Creek facility includes a CCR unit (the Primary Ash Pond) that is the subject of this demonstration. Coletto uses the 190-acre Primary Ash Pond to manage sluiced bottom ash, economizer ash, and mill rejects, as well as non-marketable dry fly ash and non-CCR wastewaters. The impoundment was constructed between 1976 and 1977 and has been in service for the life of the plant. The boiler is scheduled to cease coal-fired operations no later than July 17, 2027. Fly ash is currently collected dry and normally hauled offsite for beneficial use; however, periodically, the market will not accept the fly ash due to varying properties or seasonal demand, in which case the ash is sluiced from the storage silo and disposed of in the Primary Ash Pond. The various non-CCR wastewaters received originate from the demineralizer sump (including, reverse osmosis reject and demineralizer regeneration flows) and the boiler sump (including flows from laboratory drains, hopper overflow (ash contact/quench water), boiler blowdown condensate polisher regeneration, water pretreatment filter backwash, oil/water separator discharge, transformer area sump, stormwater from ash piping trench, fabric filter area wash, air heater wash, and boiler wash). A site plan is provided in Appendix A, and the plant water balance diagram is included in Appendix B.

On April 17, 2015, the Environmental Protection Agency (EPA) issued the federal Coal Combustion Residual (CCR) Rule, 40 C.F.R. Part 257, Subpart D, to regulate the disposal of CCR materials generated at coal-fueled units. The rule is being administered under Subtitle D of the Resource Conservation and Recovery Act (RCRA, 42 U.S.C. § 6901 et seq.). On August 28, 2020, the EPA Administrator issued revisions to the CCR Rule that require all unlined surface impoundments to initiate closure by April 11, 2021, unless an alternative deadline is requested and approved. 40 C.F.R. § 257.101(a)(1) (85 Fed. Reg. 53,516 (Aug. 28, 2020)). Specifically, owners and operators of a CCR surface impoundment may continue to receive CCR and non-CCR wastestreams if the facility will cease operation of the coal-fired boiler(s) and complete closure of the impoundments within certain specified timeframes. 40 C.F.R. § 257.103(f)(2). To qualify for an alternative closure deadline under § 257.103(f)(2), a facility must meet the following four criteria:

1. **§ 257.103(f)(2)(i)** – No alternative disposal capacity is available on-site or off-site. An increase in costs or the inconvenience of existing capacity is not sufficient to support qualification.
2. **§ 257.103(f)(2)(ii)** - Potential risks to human health and the environment from the continued operation of the CCR surface impoundment have been adequately mitigated;
3. **§ 257.103(f)(2)(iii)** - The facility is in compliance with the CCR rule, including the requirement to conduct any necessary corrective action; and

4. **§ 257.103(f)(2)(iv)** - The coal-fired boilers must cease operation and closure of the impoundment must be completed within the following timeframes:
 - a. For a CCR surface impoundment that is 40 acres or smaller, the coal-fired boiler(s) must cease operation and the CCR surface impoundment must complete closure no later than October 17, 2023.
 - b. For a CCR surface impoundment that is larger than 40 acres, the coal-fired boiler(s) must cease operation, and the CCR surface impoundment must complete closure no later than October 17, 2028.

Section 257.103(f)(2)(v) sets out the documentation that must be provided to EPA to demonstrate that the four criteria set out above have been met. Therefore, this demonstration is organized based on the documentation requirements of §§ 257.103(f)(2)(v)(A) – (D).

3.0 DOCUMENTATION OF NO ALTERNATIVE DISPOSAL CAPACITY

To demonstrate that the criteria in § 257.103(f)(2)(i) has been met, the following provides documentation that no alternative disposal capacity is currently available on-site or off-site for each CCR and non-CCR wastestream that CCP seeks to continue placing into the Primary Ash Pond after April 11, 2021. Consistent with the regulations, neither an increase in costs nor the inconvenience of existing capacity was used to support qualification under this criteria. Instead, as EPA explained in the preamble to the proposed Part A revisions, “it would be illogical to require [] facilities [ceasing power generation] to construct new capacity to manage CCR and non-CCR wastestreams.” 84 Fed. Reg. 65,941, 65,956 (Dec. 2, 2019). EPA again reiterated in the preamble to the final revisions that “[i]n contrast to the provision under § 257.103(f)(1), the owner or operator does not need to develop alternative capacity because of the impending closure of the coal fired boiler. Since the coal-fired boiler will shortly cease power generation, it would be illogical to require these facilities to construct new capacity to manage CCR and non-CCR wastestreams.” 85 Fed. Reg. at 53,547. Thus, new construction or the development of new alternative disposal capacity was not considered a viable option for any wastestream discussed below.

3.1 Site-Layout and Wastewater Processes

As shown on Figure 1 in Appendix A, Coleto Creek is bounded by Sulfur Creek to the north, the Coleto Creek Reservoir to the east, and Perdido Creek to the south. The western boundary is formed by FM 2987 (farm to market road). The Ash Pond receives both the CCR sluice flows and a portion of the non-CCR wastewater flows onsite. The plant process flows are shown in Appendix B. The remaining impoundments onsite (the Secondary Pond, Evaporation Pond and Coal Pile Runoff Pond) are not authorized to receive CCR material and are not large enough to independently treat the total volume of the plant process water flows.

3.2 CCR Wastestreams

CCP evaluated each CCR wastestream placed in the Primary Ash Pond at Coleto. For the reasons discussed below in Table 3-1, each of the following CCR wastestreams must continue to be placed in the Primary Ash Pond due to lack of alternative capacity both on and off-site.

Table 3-1: Coletto CCR Wastestreams

CCR Wastestreams	Estimated Average Flow (MGD)	Alternative Disposal Capacity Currently Available? YES/NO	Details
Bottom Ash, Economizer Ash, and non-CCR mill rejects Sluice	1.26	NO	<p>Alternative capacity is not currently available on or off-site and would have to be developed. Alternative capacity would need to be designed, permitted, and installed. Off-site alternative capacity would include development of on-site temporary tanks to support transport of sluice material offsite for disposal. Refer to the discussion below for a more detailed evaluation on the development of alternative capacity.</p> <p>Some bottom ash/economizer ash/mill reject materials removed from the Primary Ash Pond for off-site beneficial reuse (~21,000 tons in 2019); however, the transport water remains within the pond.</p>
Dry Fly Ash	<p>Normally Dry Handled with Intermittent Sluices from Silo for Disposal (0.57 when sluicing)</p> <p>~550 tons/year to Primary Ash Pond based on 2019 rates</p>	NO	<p>The fly ash is collected dry and conveyed to a storage silo near the Primary Ash Pond. Normally, the ash is sent off-site for beneficial reuse. Periodically, the market will not accept the ash due to varying properties or seasonal demand, in which case the ash is sluiced from the silo to the Primary Ash Pond. No conditioning equipment is currently installed to allow for trucking the material offsite for disposal. The existing sluicing system must be removed from service no later than December 31, 2023, to comply with the ELG Rule. CCP must continue its beneficial use marketing efforts to allow for 100% beneficial reuse or install a pug mill to condition any fly ash that must be disposed after that date.</p> <p>CCP does not have a CCR landfill or another CCR surface impoundment located onsite that is available or ready to accept this material. Consequently, there are currently no on-site alternatives for this wastestream, and alternative capacity would need to be designed, permitted, and installed. Off-site alternative capacity is not currently available as discussed below.</p>

CCP evaluated the following on-site and off-site alternative capacity options for these CCR wastestreams:

- Bottom ash, economizer ash, and non-CCR mill rejects sluice (1.26 MGD):
 - On-site alternative capacity is currently not available and would need to be developed. The remaining impoundments onsite (Coal Pile Runoff Pond, Evaporation Pond, and the Secondary Pond) are not authorized to receive the CCR materials.

- Development of on-site alternative capacity would require the design, permitting, and installation of a new dry ash handling system or a treatment system including CCR ponds, clarifiers, and/or storage tank(s), to provide the necessary retention time to meet the TPDES permit limits. The environmental permitting might require a modification to the site's current individual TPDES permit (if rerouting of this wastestream to another outfall), general TPDES stormwater construction permit (includes evaluation of threatened and endangered species and historic preservation assessments), and an updated Stormwater Pollution Prevention Plan (SWPPP) at a minimum. Based on our experience with environmental permitting, this effort could require two to four years.
- Off-site alternative capacity is currently not available and would need to be developed. Developed off-site alternative capacity would consist of both temporary on-site wet storage (frac tanks), and off-site transportation, via tanker trucks. With an average daily flow of 1.26 MGD of sluice water, approximately 60 frac tanks and 168 daily tanker trucks (~7500 gallons per truck to maintain DOT weight restrictions) would be required, if a Publicly Owned Treatment Works (POTW) could be identified to receive it. The daily tanker truck traffic would result in increased potential for safety and noise impacts and further increases in fugitive dust, greenhouse gas emissions and carbon footprint which may require a Prevention of Significant Deterioration (PSD) permit and modification under the Clean Air Act Permit Program if the calculated increases in emissions are over the PSD limits. Setting up contractual arrangements for a local POTW to accept the wastewater would prove to be difficult since this amount of wastewater would potentially upset their treatment systems causing them to exceed their TPDES discharge limits. The potential for leaks/spills from the tank system or transportation of the wastewater offsite exist as well. Furthermore, the temporary wet storage needed to accommodate off-site disposal would require reconfiguration, design, installation, and associated environmental permitting which would require a minimum of two years to implement. For all of these reasons, CCP has determined that offsite disposal is not feasible for these flows at Coletto.
- Fly ash (0.57 MGD when sluicing; ~550 tons/year based on 2019 rates):
 - On-site alternative capacity is currently not available and would need to be developed. The remaining impoundments onsite (Coal Pile Runoff Pond, Evaporation Pond, and the Secondary Pond) are not authorized to receive the CCR materials.
 - Development of on-site alternative capacity would require the design, permitting, and installation of a new CCR landfill and new conditioning equipment to support hauling and

disposal at the landfill. Based on our experience with environmental permitting, this effort could require a minimum of three to four years.

- Fly ash transport water cannot be disposed offsite per 40 C.F.R. § 423.16(f). The sluicing system is the only installed method onsite to allow for disposal of dry fly ash, and the Primary Ash Pond is the only CCR surface impoundment onsite to receive this wastestream.
- Off-site alternative capacity for dry fly ash is currently not available and would need to be developed. It should be noted that CCP is currently marketing 99% of the fly ash for beneficial reuse off-site. CCP is focused on expanding beneficial use marketing efforts to eliminate the sluicing of fly ash at Coleto prior to December 31, 2023. As a result, fly ash disposal is projected to be minimal, both in 2020 and over the next several years.
- Developed off-site alternative disposal capacity for fly ash would consist of off-site transportation to a contracted landfill and the installation of conditioning equipment on-site to prepare the material for offsite disposal. The fly ash would likely need to be conditioned (@ 10% moisture) in an on-site pug mill due to fugitive dusting concerns. Low-sulfur Powder River Basin Class C fly ash develops cementitious characteristics when conditioned with water rather quickly. Because of this, off-site transportation must be limited to less than a one-hour haul time, or within 40 miles of the station, to prevent the fly ash from setting up and hardening and causing adverse disposal / unloading issues at the offsite landfill. There is one landfill within approximately 40 miles of the station (see Figure 2 in Appendix A), so CCP is continuing to have discussions with these offsite landfills to determine if they have the capacity and the infrastructure to receive any future fly ash for disposal. This will also include efforts to characterize the waste. CCP will update EPA in forthcoming progress reports if offsite disposal capacity becomes available.

As stated previously, because CCP has elected to pursue the option to permanently cease coal-fired operations of the boiler no later than July 17, 2027, developing alternative disposal capacity is “illogical,” to use EPA’s words, and also counterproductive to the work to cease coal-fired operations of the boiler and close the impoundment. As long as CCP continues to wet handle the bottom ash, economizer ash, and mill reject materials, there are no other onsite CCR impoundments available to receive and treat these flows and it is not feasible to dispose of the wet-handled material offsite. As EPA explained in the preamble of the 2015 rule, it is not possible for sites that sluice CCR material to an impoundment to eliminate the impoundment and dispose of the material offsite. *See* 80 Fed. Reg. 21,301, 21,423 (Apr. 17, 2015) (“[W]hile it is possible to transport dry ash off-site to [an] alternate disposal facility that is simply not feasible for

wet-generated CCR. Nor can facilities immediately convert to dry handling systems.”). As a result, the conditions at Coletto satisfy the demonstration requirement in § 257.103(f)(2)(i).

Consequently, in order to continue to operate and generate electricity, Coletto must continue to use the 190-acre Primary Ash Pond to manage the CCR wastestreams discussed above. Accordingly, the non-marketable fly ash must be placed in the only available onsite disposal location (i.e., the Primary Ash Pond) when not hauled offsite for beneficial use due to seasonal market impacts.

3.3 Non-CCR Wastestreams

CCP evaluated each non-CCR wastestream placed in the Primary Ash Pond at Coletto. For the reasons discussed below in Table 3-2, each of the following non-CCR wastestreams must continue to be placed in the Primary Ash Pond due to lack of alternative capacity both on and off-site.

Table 3-2: Coletto Non-CCR Wastestreams

Non-CCR Wastestreams	Estimated Average Flow (MGD)	Alternative Disposal Capacity Currently Available? YES/NO	Details
Demineralizer Sump Discharge (including Demineralizer Regeneration Flows and RO Reject)	0.07	NO	On-site alternative capacity would need to be designed, permitted, and installed. Off-site alternative capacity would include development of on-site temporary tanks and transporting of this sludge material offsite for disposal. See discussion below for more details.
Boiler Sump Discharges (normal operation)	1.56	NO	While onsite infrastructure exists to route this flow to the Evaporation Pond, the capacity of the Evaporation Pond would be exceeded by the addition of these flow rates. The average annual precipitation and evaporation rates for the site are 41 and 69 inches, respectively. The coal pile runoff is already routed to the Evaporation Pond, and consequently this pond is only capable of receiving approximately 5% of this boiler sump discharge without having the permit modified to allow for discharge from this pond. Such a modification would require sampling, wastestream characterization, and likely anti-degradation studies to generate a new outfall to Coletto Creek Reservoir. Off-site alternative capacity would include development of on-site temporary tanks and transporting of this sludge material offsite for disposal. See discussion below for more details.

Non-CCR Wastestreams	Estimated Average Flow (MGD)	Alternative Disposal Capacity Currently Available? YES/NO	Details
Boiler Sump Discharges (during outage wash events)	~1.2 million gallons per outage	YES	These wastestreams will be rerouted to the existing Evaporation Pond prior to the April 11, 2021 deadline.

CCP evaluated on-site and off-site alternative capacity options for the non-CCR wastestreams. Development of on-site alternative capacity would require the design, permitting, and installation of a new treatment system including non-CCR ponds, clarifiers, and/or storage tank(s) to provide the necessary retention time for TSS removal to meet the TPDES permit limits. For the demineralizer sump discharge, this would include installing a minimum of 1,000 feet of additional piping, and potentially replacing the demineralizer sump pumps and upsizing of the power feeds to reroute to the existing Secondary Pond and/or Evaporation Pond. A neutralization tank may also be required depending on the results of the characterization. The environmental permitting might include a modification to the current individual TPDES permit (if rerouting of this wastestream to another outfall), general TPDES stormwater construction permit (includes evaluation of threatened and endangered species and historic preservation assessments), a construction & operating permit, and a SWPPP at a minimum which is expected to require two to four years to implement.

Development of off-site alternative capacity would consist of both temporary on-site wet storage (frac tanks) and off-site transportation via tanker trucks, assuming a local POTW could be identified to receive these streams. The required daily frac tanks and tanker trucks (~7,500 gallons per truck to maintain DOT weight restrictions) for each wastestream is provided in Table 3-3. The daily tanker truck traffic would result in increased potential for safety and noise impacts and further increases in fugitive dust, greenhouse gas emissions and carbon footprint which may require a PSD permit and modification under the Clean Air Act Permit Program if the calculated increases in emissions are over the PSD limits. Setting up arrangements for a local POTW to accept this wastewater could prove to be difficult if this amount of wastewater would upset their treatment systems, causing them to exceed their TPDES discharge limits. CCP is continuing to have discussions with local POTW's to determine if they have the capacity and the infrastructure to handle these daily volumes of wastewater. This will likely also include efforts to characterize the waste, and installation of a chemical treatment/neutralization process prior to hauling the demineralizer sump discharge offsite for disposal. CCP will update EPA in forthcoming progress reports if

offsite disposal capacity becomes available. The potential for leaks/spills from the tank system or transportation of the wastewater offsite does also exist. Furthermore, the temporary wet storage needed to accommodate off-site disposal would require reconfiguration, design, installation, and associated environmental permitting which would require a minimum of two years to implement. For all of these reasons, CCP has determined that offsite disposal is not feasible for these flows at Coletto at this time.

Table 3-3: Non-CCR Wastestream Offsite Disposal

Non-CCR Wastestreams	Estimated Flow (MGD)	No. of Frac Tanks required (21,000 gallons each)	No. of Trucks required per day (7,500 gallons each)
Demineralizer Sump Discharge	0.07	4	10
Boiler Sump Discharges (normal operation)	1.56	75	208
Total		79	218

As stated previously, since CCP has elected to pursue the option to permanently cease the use of the coal fired boilers by a certain date, developing alternative disposal capacity is “illogical,” to use EPA’s words, and also counterproductive to the work to cease coal-fired operations of the boilers and close the impoundment. There is currently no available infrastructure at the plant to support reroute of these flows. For the reasons discussed above, each of the non-CCR wastestreams (except the outage wash flows) must continue to be placed in the Primary Ash Pond due to lack of alternative capacity both on and off-site. Consequently, in order to continue to operate and generate electricity, Coletto must continue to use the 190-acre Primary Ash Pond to manage the non-CCR wastestreams discussed above.

4.0 RISK MITIGATION PLAN

To demonstrate that the criteria in § 257.103(f)(2)(ii) has been met, CCP has prepared and attached a Risk Mitigation Plan for the Coleto Primary Ash Pond (see Attachment 1). Per § 257.103(f)(2)(v)(B), this Risk Mitigation Plan is only required for the specific CCR Unit(s) that are the subject of this demonstration.

5.0 DOCUMENTATION AND CERTIFICATION OF COMPLIANCE

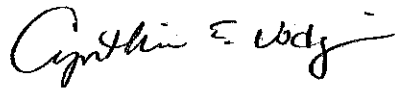
In the Part A rule preamble, EPA reiterates that compliance with the CCR rule is a prerequisite to qualifying for an alternative closure extension, as it “provides some guarantee that the risks at the facility are properly managed and adequately mitigated.” 85 Fed. Reg. at 53,543. EPA further stated that it “must be able to affirmatively conclude that facility meets this criterion prior to any continued operation.” 85 Fed. Reg. at 53,543. Accordingly, EPA “will review a facility’s current compliance with the requirements governing groundwater monitoring systems.” 85 Fed. Reg. at 53,543. In addition, EPA will also “require and examine a facility’s corrective action documentation, structural stability documents and other pertinent compliance information.” 85 Fed. Reg. at 53,543. Therefore, EPA is requiring a certification of compliance and specific compliance documentation be submitted as part of the demonstration. 40 C.F.R. § 257.103(f)(2)(v)(C).

The Coletto Creek facility includes a CCR unit (the Primary Ash Pond) that is the subject of this demonstration. To demonstrate that the criteria in § 257.103(f)(2)(iii) has been met, CCP is submitting the following information as required by § 257.103(f)(2)(v)(C):

5.1 Owner’s Certification of Compliance - § 257.103(f)(2)(v)(C)(1)

I hereby certify that, based on my inquiry of those persons who are immediately responsible for compliance with environmental regulations for Coletto Creek, the facility is in compliance with all of the requirements contained in 40 C.F.R. Part 257, Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments. Coletto Creek’s CCR compliance website is up-to-date and contains all the necessary documentation and notification postings.

On behalf of CCP:



Cynthia Vodopivec
VP - Environmental Health & Safety
November 30, 2020

5.2 Visual representation of hydrogeologic information - § 257.103(f)(2)(v)(C)(2)

Consistent with the requirements of § 257.103(f)(2)(v)(C)(2)(i) – (iii), CCP has attached the following items to this demonstration:

- Map(s) of groundwater monitoring well locations in relation to the CCR unit (Attachment 2)
- Well construction diagrams and drilling logs for all groundwater monitoring wells (Attachment 3)

- Maps that characterize the direction of groundwater flow accounting for seasonal variations (Attachment 4)

5.3 Groundwater monitoring results - § 257.103(f)(2)(v)(C)(3)

Tables summarizing constituent concentrations at each groundwater monitoring well through the first 2020 semi-annual monitoring period are included as Attachment 5.

5.4 Description of site hydrogeology including stratigraphic cross-sections - § 257.103(f)(2)(v)(C)(4)

A description of the site hydrogeology and stratigraphic cross-sections of the site are included as Attachment 6.

5.5 Corrective measures assessment - § 257.103(f)(2)(v)(C)(5)

Background sampling began at the Primary Ash Pond in March of 2017 and continued through July for eight rounds of background sampling. The first semiannual detection monitoring samples were collected in November 2017. The first assessment monitoring samples were collected in June 2018. The results, through the first 2020 semi-annual monitoring period, indicate the Primary Ash Pond is currently in assessment monitoring, with no exceedances of the Appendix IV parameters recorded. Accordingly, an assessment of corrective measures is not currently required. Coletto will continue to conduct groundwater monitoring in accordance with all state and federal requirements.

5.6 Remedy selection progress report - § 257.103(f)(2)(v)(C)(6)

As noted above, an assessment of corrective measures and the resulting selection of remedy are not currently required for the Primary Ash Pond.

5.7 Structural stability assessment - § 257.103(f)(2)(v)(C)(7)

Pursuant to § 257.73(d), the initial structural stability assessment report for the Primary Ash Pond was prepared in October 2016 and revised in January 2018 (to remove the Secondary Pond). The revised report is included as Attachment 7.

5.8 Safety factor assessment - § 257.103(f)(2)(v)(C)(8)

Pursuant to § 257.73(e), the initial safety factor assessment report for the Primary Ash Pond was prepared in October 2016 and revised in January 2018 (to remove the Secondary Pond). The revised report is included as Attachment 7.

6.0 DOCUMENTATION OF CLOSURE COMPLETION TIMEFRAME

To demonstrate that the criteria in § 257.103(f)(2)(iv) has been met, “the owner or operator must submit the closure plan required by § 257.102(b) and a narrative that specifies and justifies the date by which they intend to cease receipt of waste into the unit in order to meet the closure deadlines. The closure plan for the Primary Ash Pond is included as Attachment 8.

In order for a CCR surface impoundment over 40 acres to continue to receive CCR and non-CCR wastestreams after the initial April 11, 2021 deadline, the coal-fired boiler(s) at the facility must cease operation and the CCR surface impoundment must complete closure no later than October 17, 2028. As discussed below, Coletto will begin construction of the Primary Ash Pond closure by April 17, 2025, the boiler will cease coal-fired operations no later than July 17, 2027, and Coletto will cease placing wastestreams into the Primary Ash Pond by September 17, 2027, in order for closure to be completed by this deadline.

Table 6-1 is included below to summarize the major tasks and estimated durations associated with closing the Primary Ash Pond in place. These durations are consistent with the durations experienced with the closure of approximately 500 acres of other CCR impoundments already completed by CCP and its affiliates to date as noted below:

- Baldwin Fly Ash Pond System – 230 acres closed in-place with an approximate 30-month construction schedule
- Hennepin West Ash Ponds System – 35 acres closed in-place with an approximate 24-month construction schedule (includes closure by removal of an adjacent 6-acre settling pond and installing a sheet pile wall)
- Hennepin East Ash Ponds 2 and 4 – 25 acres closed in-place with an approximate 6-month construction schedule
- Coffeen Ash Pond 2 – 60 acres closed in-place with an approximate 24-month construction schedule
- Duck Creek Ash Ponds 1 and 2 – 130 acres closed in-place with an approximate 24-month construction schedule

Each CCR impoundment closure indicated above utilized a coordinated passive or gravity dewatering method, which consisted of the use of trenches excavated to lower the phreatic surface in portions of the impoundment to obtain a stable ash surface to permit the safe construction of the final cover system. The phreatic water in the trenches flows by gravity to sumps constructed within the impoundment. The major

benefit associated with this passive or gravity dewatering method is that the sumps are designed to provide holding time to allow the TSS to settle within the impoundment prior to discharge (an active dewatering method with wells would result in potential discharges of unsettled TSS). After solids settling, the water is discharged through the TPDES outfall in compliance with permitted limits.

Construction progressed sequentially as the dewatering of an area stabilized the ash surface. The CCR was graded to subgrade level, then overlain with the compacted clay layers and/or geomembrane liners. Vegetative soil cover was then placed on top of the infiltration layer. As each section of the impoundment was closed, this sequencing progressed to the completion of the pond closure. A similar process will be utilized to close the Coletto Primary Ash Pond in order to allow the final open section of the impoundment to be large enough for the impoundment to remain in operation until the pond ceases the receipt of waste. This would provide sufficient time for closure to be completed by October 17, 2028.

The first construction effort will involve modifying the pond operations by relocating the influent lines, minimizing the pond water levels, and isolating flow to a smaller portion of the current 190-acre impoundment that can be closed during the last two construction seasons. The smaller active portion of the pond will remain in operation while CCP begins dewatering and closing the impoundment as described above. This reduction in footprint may require the addition of chemical feeds to provide adequate treatment but that has not been the case at our other sequenced closures. This approach simultaneously allows for continued operation of the plant to maintain generating capacity for the ERCOT markets and minimizes the risk to the environment both by minimizing the pond size and the potential for any impacts to groundwater and by opening up a significant portion of the remaining impoundment to allow for dewatering, grading, and closure (in Phase 1).

Table 6-1 provides estimates for the durations required to close a portion of the pond footprint after the date noted to begin construction of closure (Phase 1), as well as the current estimates for the closure of the active area (Phase 2, remaining 40-50 acres). In order to dewater the impoundment, CCP will likely release pond water through the existing Outfall 003.

Table 6-1: Coletto Primary Ash Pond Closure Schedule

Action	Estimated Timeline (Months)
Spec, bid, and Award Engineering Services for CCR Impoundment Closure	3
Finalize CCR unit closure plan	12

Action	Estimated Timeline (Months)
Obtain environmental permits: <ul style="list-style-type: none"> State Waste Pollution Control Construction/Operating Permit TPDES Industrial Wastewater Permit Modification (<i>modification could be required if there are changes to the quantity or quality of discharges or to allow reconfiguration of the various wastestreams to either other TPDES-permitted outfalls or newly constructed TPDES-permitted outfalls</i>) General TPDES Permit for Storm Water Discharges from Construction Site Activities and Storm Water Pollution Prevention Plan (SWPPP) 	24
Spec, bid, and Award Construction Services for CCR Impoundment Closure	3
Begin Construction of Closure	April 17, 2025
Minimize Active Area of Impoundment / Dewater Phase 1 Area	6
Regrade CCR Material in Phase 1 Area	18
Install Cover System – Phase 1 Area*	13
Establish Vegetation – Phase 1 Area**	2
Cease Coal-Fired Operations of Remaining Boiler Onsite (No Later Than)	July 17, 2027
Begin Dewatering Impoundment – Phase 2 Area	2
Cease Placement of Waste (No Later Than, allowing for plant cleanup and dredging of impoundments following coal pile and plant closure)	September 17, 2027
Continue Dewatering Impoundment – Phase 2 Area	1
Regrade CCR Material – Phase 2 Area	6
Install Cover System – Phase 2 Area	5
Establish Vegetation, Perform Site Restoration Activities, Complete Closure, and Initiate Post-Closure Care**	2
Total Estimated Time to Complete Closure	84 months

Action	Estimated Timeline (Months)
Date by Which Closure Must be Complete	October 17, 2028

* Activity expected to overlap with grading operations, finishing 2 months after grading is completed.

** Activity expected to overlap with cover system installation, finishing 1 month after cover installation is completed.

7.0 CONCLUSION

Based upon the information included in and attached to this demonstration, CCP has demonstrated that the requirements of 40 C.F.R. § 257.103(f)(2) are satisfied for the 190-acre Primary Ash Pond at Coletto. This CCR surface impoundment is needed to continue to manage the CCR and non-CCR wastestreams identified in Section 3.2 and 3.3 above, is larger than 40 acres, the coal-fired boiler at the station will cease coal-fired operation no later than July 17, 2027, and the Primary Ash Pond will be closed by the October 17, 2028 deadline. Therefore, this CCR unit qualifies for the site-specific alternative deadline for the initiation of closure authorized by 40 C.F.R. § 257.103(f)(2).

Therefore, it is requested that EPA approve CCP's demonstration and authorize the Primary Ash Pond at Coletto to continue to receive CCR and non-CCR wastestreams notwithstanding the deadline in § 257.101(a)(1) and to grant the alternative deadline of October 17, 2028, by which to complete closure of the impoundment.

COMPANY PRESS RELEASE

Manthei, Dustin

Subject: Coletto Creek Power Plant Operational Announcement
Location: <https://vistracorp.zoom.us/j/95983750938?pwd=NE9UZm5Da0RzOU05aHZYS1ZCOEZldz09>
Start: Tue 12/1/2020 1:00 PM
End: Tue 12/1/2020 2:00 PM
Show Time As: Tentative
Recurrence: (none)
Organizer: Watson, Brad

Vistra is announcing today that it will not operate Coletto Creek Power Plant beyond 2027, due to regulatory compliance requirements associated with recently finalized U.S. Environmental Protection Agency (EPA) rules, the Coal Combustion Residuals (CCR) rule and the Effluent Limitations Guidelines (ELG) rule. Vistra is the parent company of generation subsidiary, Luminant, that owns and operates the plant.

Unfortunately, compliance with these EPA rules would require investment in new equipment, costing tens of millions of dollars. This investment cannot be justified based on the underlying economics of the plant and the uncertainty of more stringent regulations under a new presidential administration.

The EPA's CCR rule requires Vistra to make a near-term decision on the long-term operation of the plant. The CCR rule comprehensively regulates the management and disposal of coal combustion residuals, commonly known as coal ash. Ash is created when coal is burned by power plants to produce electricity. Absent full compliance, our CCR impoundments at Coletto Creek Power Plant would have to cease receiving CCR by this April (2021) unless they qualify for certain extensions authorized under the final rule. Importantly, we are applying for an extension. As part of the extension, Vistra has until today, Nov. 30, 2020, to declare that it will permanently retire the plant by 2027.

The EPA's ELG rule establishes limits on discharges of certain wastewater discharges and pollutants from coal-fired power plants. The rule imposes stringent and costly requirements for multiple categories of wastewater from our coal plants. The rule includes a provision that exempts power plants from certain elements of the ELG rule if the facility notifies the state permitting authority that the units will retire by December 2028, provided certain effluent limitations are met. The EPA published the final rule in October 2020; notification to the state agency on the retirement exemption is due by October 2021.

In addition to the cost of compliance with regulations, Coletto Creek continues to be challenged by market forces in the highly competitive ERCOT wholesale power market. The plant was designed to be a baseload plant – one that provides a constant supply of electricity and runs continuously. However, Coletto Creek has had relatively low operating levels in the first nine months of 2020, with an overall capacity factor of only 38%. Baseload plants typically average capacity factors that are much higher. Coletto Creek is a single-unit site and lacks the efficiency of operating multiple units. At 650 megawatts, Coletto Creek is by far the smallest of the company's Texas coal plants, with fewer opportunities to achieve the economies of scale at our other locations.

What is very important to emphasize is that the retirement of Coletto Creek Power Plant is still many years away and that today's announcement is no reflection on the dedicated effort by the 62 employees at Coletto Creek who continue to do their professional best to run the plant as safely and efficiently as possible.

Luminant is grateful to the communities near the plant for their support since the plant was built in 1980 and we look forward to that mutually beneficial relationship continuing in the years ahead.

You are invited to join me for a Zoom call tomorrow, Tuesday, Dec. 1, at 1:00 pm at the link or number below to further discuss today's announcement.

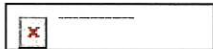


Brad Watson
Director of Community
Affairs

brad.watson@vistracorp.com

o 214.875.8010 | m

Vistra
Dynegy
Luminant
TXU Energy
Homefield



Hi there,

Brad Watson is inviting you to a scheduled Zoom meeting.

[Join Zoom Meeting](#)

Phone US: [+13462487799](tel:+13462487799), [95983750938](tel:+195983750938), [284428](tel:+1284428) or

one-tap: [+12532158782](tel:+12532158782), [95983750938](tel:+195983750938), [284428](tel:+1284428)

Meeting <https://vistracorp.zoom.us/j/95983750938?pwd=NE9UZm5Da0RzOU05aHZYS1ZCOEZldz09>

URL:

Meeting 959 8375 0938

ID:

Password: 284428

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International numbers

https://www.victoriaadvocate.com/counties/goliad/coletto-creek-power-plant-shutting-down-by-2027/article_261596c8-342b-11eb-92e8-0f9c2d927a2b.html

BREAKING

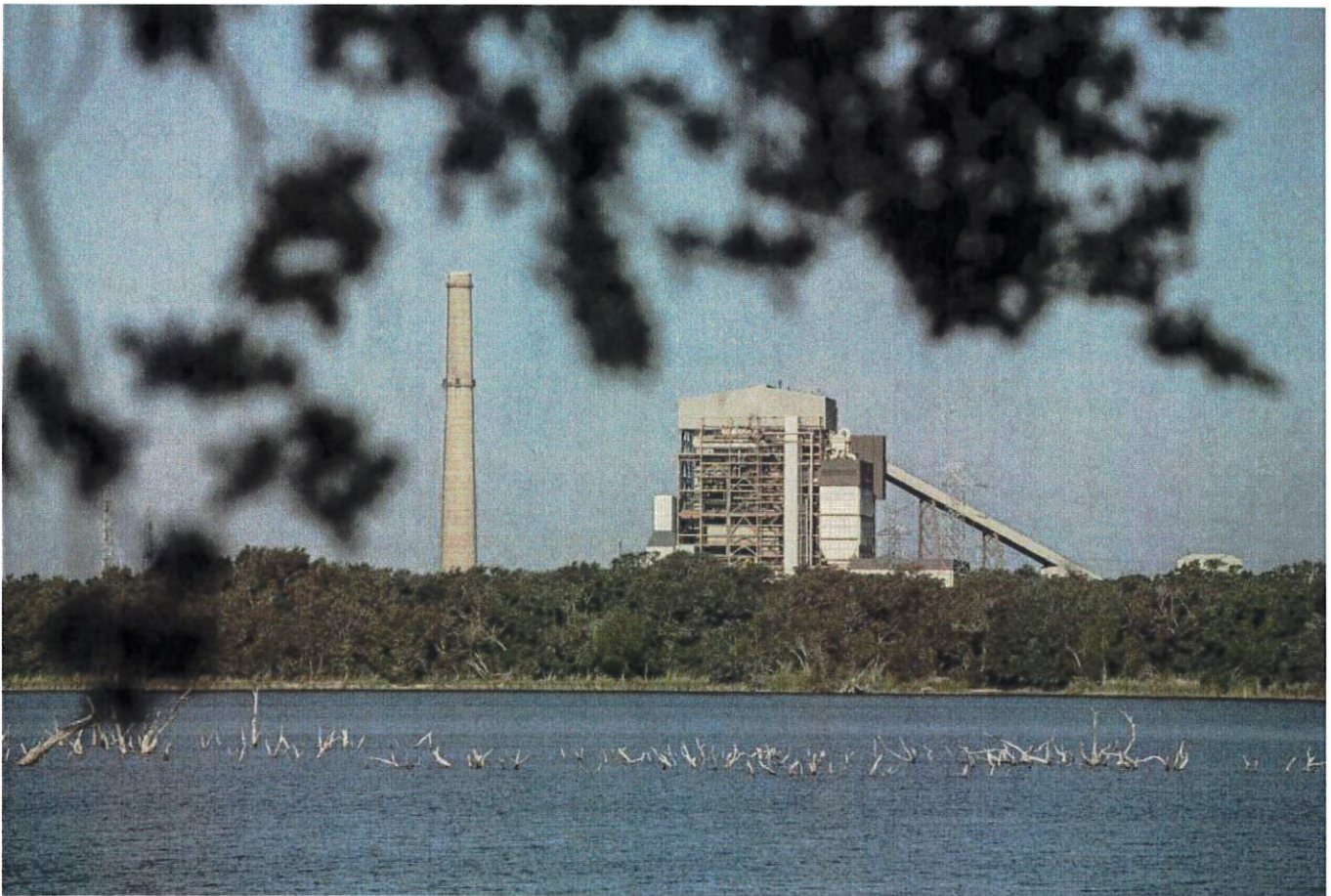
TOP STORY

Economy

Coletto Creek Power Plant shutting down by 2027

By Mark Rosenberg | mrosenberg@vicad.com

Dec 1, 2020



Coletto Creek Power Plant, a coal-fired power plant in Goliad County, is shutting down by 2027, the parent company of its owner-operator announced this week.

Advocate File Photo

The Coletto Creek Power Plant, which generates millions of dollars in tax revenues annually for Goliad County, will shut down by 2027.

The Fannin coal plant, which was built in 1980, is closing due to a combination of federal environmental regulations and competition in the Texas energy market, said Brad Watson, director of community affairs for Vistra, the parent company of the plant's owner-operator.

In a memo sent to Goliad County officials this week, Watson said it would be prohibitively expensive for the plant to comply with two recently finalized rules enacted by the U.S. Environmental Protection Agency. One of these regulates the disposal of coal ash and the other limits the level of toxic metals in wastewater discharged from power plants.

“Ultimately, compliance with these EPA rules would require investment in new equipment, costing tens of millions of dollars,” the memo said. “This investment cannot be justified based on the underlying economics of the plant and the uncertainty of more stringent regulations under a new presidential administration.”

The plant, which employs 62 people, paid an estimated \$3.2 million in local taxes in 2017, [according to previous Advocate reporting](#).

Goliad County Judge Mike Bennett said the plant's impending closure reinforces the need for officials to seek additional sources of tax revenue.

“This does not come as a surprise,” Bennett said Tuesday. “We all knew that the power plant was going to shut down at some point. We’re going to have further discussions with them about trying to bring other industry onto that piece of property.”

In addition to the costs imposed by federal regulations, Watson said market pressures contributed to Vistra's decision to close the plant. The Coletto Creek plant is the smallest of the three coal plants the company's subsidiary, Luminant, operates in Texas, according to the memo.

The plant is designed to be a baseload plant, which means it provides enough power to meet energy demands at any time of day, but it has been operating at just 38% capacity in the first nine months of 2020, which is unusually low, Watson said.

The Coletto Creek Power Plant's closure is part of a broader trend away from coal in the energy industry as a result of environmental regulations and competition from natural gas and renewables. Luminant closed [three](#) Texas [coal plants](#) in 2018, and in September, Vistra [announced plans](#) to shut down all seven of its coal plants in Illinois and Ohio.

Even after the plant stops generating power, it will go through a shutdown process, Bennett said, so it will be some years before all of the jobs at the plant disappear. Still, he said, a large hole in the county's budget is inevitable, and officials will have to find a way to make it up.

"We're going to work as hard as we can," Bennett said. "The last thing we want to do is raise taxes."

Mark Rosenberg reports on rural community life for the Victoria Advocate as a Report for America corps member. He can be reached at mrosenberg@vicad.com or 361-574-1264 or on Twitter at [@markrosenberg32](https://twitter.com/markrosenberg32). To support local journalism at the Advocate through Report for America, go to VictoriaAdvocate.com/report.