Jon Niermann, *Chairman*Bobby Janecka, *Commissioner*Catarina R. Gonzales, *Commissioner*Kelly Keel, *Executive Director* 



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 20, 2024

Laurie Gharis Texas Commission on Environmental Quality Office of the Chief Clerk, MC-105 P.O. Box 13087 Austin, Texas 78711-3087

Re: San Miguel Electric Cooperative, Inc.

TPDES No. WQ0002043000 TCEQ Docket No. 2024-0027-IWD SOAH Docket No. 582-24-14120

Dear Ms. Gharis:

I have enclosed the following copies of documents to be included in the Administrative Record for the above-referenced case as required by 30 Tex. Admin Code § 80.118 and by Order No. 3 Abating the Proceeding until November 1, 2024, and Ruling on Pending Motions, signed August 20, 2024. The documents included are as follows:

- Draft Permit No. WQ0002043000
- The ED's Technical Backup (includes the Statement of Basis/Technical Summary, the ED's Preliminary Decision, and Compliance History Report)

Please transmit these documents to the State Office of Administrative Hearings (SOAH) using the procedures used to transmit the Administrative Record for purposes of SOAH taking jurisdiction.

Sincerely,

Michael Parr II, Staff Attorney Environmental Law Division

Bradford Eckhart, Staff Attorney Environmental Law Division

Brudford & Eckhart



# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

P.O. Box 13087 Austin, Texas 78711-3087

#### PERMIT TO DISCHARGE WASTES

under provisions of Section 402 of the Clean Water Act and Chapter 26 of the Texas Water Code

San Miguel Electric Cooperative, Inc.

whose mailing address is

P.O. Box 280 Jourdanton, Texas 78026 TPDES PERMIT NO. WQ0002043000 [For TCEQ office use only -EPA I.D. No. TX0083445]

This major amendment replaces TPDES Permit No. WQ0002043000, issued on June 16, 2020.

is authorized to treat and discharge wastes from San Miguel Lignite Mine, a surface lignite coal mining operation (SIC 1221)

located at 6200 Farm-to-Market Road 3387, south of the City of Christine, in Atascosa County, Texas 78012

via Outfalls 001-006 to an unnamed tributary, thence to Caballos Creek, thence to Souse Creek, thence to La Parita Creek; via Outfall 007 to an unnamed tributary, thence to La Parita Creek; via Outfall 009 to an unnamed tributary, thence to Christine Creek, thence to Metate Creek, thence to La Parita Creek; via Outfall 010 to an unnamed tributary, thence to Christine Creek, thence to Metate Creek, thence to La Parita Creek; via Outfalls 011-019 to unnamed tributaries, thence to La Parita Creek; via Outfalls 008, 020-023 to an unnamed tributary, thence to Metate Creek, thence to La Parita Creek; via Outfalls 024-028 to an unnamed tributary, thence to Souse Creek, thence to La Parita Creek; via Outfalls 029-030 to an unnamed tributary, thence to Metate Creek, thence to La Parita Creek; via Outfall 031 to an unnamed tributary, thence to Metate Creek, thence to La Parita Creek; via Outfalls 032-033 to unnamed tributaries; and via Outfalls 034-035 to an unnamed ditch, thence to an unnamed tributary; and via Outfall 057 to an unnamed tributary, thence to LaParita Creek; thence all to the Atascosa River in Segment No. 2107 of the Nueces River Basin; via Outfall 050 to Hog Creek, thence to La Jarita Creek; via Outfall 051 to an unnamed tributary, thence to La Jarita Creek; via Outfall 052 to an unnamed ditch, thence to La Jarita Creek; via Outfall 053 to an unnamed tributary; via Outfall 054 to pipe culvert, thence to a ditch, thence to an unnamed tributary; via Outfall 055 to Bruce Branch; via Outfall 056 to Far Live Oak Creek; thence all to San Miguel Creek in Segment No. 2108 of the Nueces River Basin; and via 058 to Ditch CD Z-2A, thence to Bill Walker Creek, thence to Leoncita Creek; via Outfall 059 to Bill Walker Creek, thence to Leoncita Creek; via Outfall 060 to Ditch CD Z-1A, thence to Bill Walker Creek, thence to Leoncita Creek; thence all to the Frio River Above Choke Canyon Reservoir in Segment No. 2117 of the Nueces River Basin.

only according to effluent limitations, monitoring requirements, and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of

the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

ISSUED DATE:			

For the Commission

This permit shall expire at midnight, five years from the date of permit issuance.

authorized to discharge mine pit water, mine depressurization water, and stormwater runoff from ponds in the active mining area During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is subject to the following effluent limitations:

Volume: Intermittent and flow-variable.

	Disc	Discharge Limitations		Minimum Self-Monitoring	g Requirements
Effluent Characteristics	Daily Average	Daily Maximum	Single Grab	Report Daily Average and Daily Maximum	Daily Maximum
	mg/L	m mg/L	m mg/L	Measurement Frequency Sample Type	Sample Type
Flow	Report, MGD	Report, MGD	N/A	$1/\text{week}^2$	Estimate
Total Suspended Solids	35	70	70	$1/\text{week}^2$	Grab
Total Iron	3.0	0.9	0.9	$1/\text{week}^2$	Grab
Total Manganese	1.0	2.0	2.0	$1/\text{week}^2$	Grab

- The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/week² by grab sample. તં
- There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil. က်
- Effluent monitoring samples must be taken at the following locations:
- At Outfall 001M, after the discharge from Pond 3 and prior to mixing with any stream or waters in the state.
- At Outfall 002M, after the discharge from Pond 13E and prior to mixing with any stream or waters in the state.
  - At Outfall 003M, after the discharge from Pond A and prior to mixing with any stream or waters in the state.
- At Outfall 004M, after the discharge from Pond B and prior to mixing with any stream or waters in the state.
- At Outfall 005M, after the discharge from Pond D and prior to mixing with any stream or waters in the state.
- At Outfall 006M, after the discharge from Pond E and prior to mixing with any stream or waters in the state.
- At Outfall 007M, after the discharge from Pond 23B and prior to mixing with any stream or waters in the state.
- At Outfall 008M, after the discharge from Pond 36C and prior to mixing with any stream or waters in the state.
  - At Outfall 009M, after the discharge from Pond 17B and prior to mixing with any stream or waters in the state.
    - At Outfall 010M, after the discharge from Pond 18B and prior to mixing with any stream or waters in the state. At Outfall 011M, after the discharge from Pond 6 and prior to mixing with any stream or waters in the state.
- At Outfall 013M, after the discharge from Pond 9B-gravity and prior to mixing with any stream or waters in the state.

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San Miguel Electric Cooperative, Inc.

<sup>2</sup> Within 24-hours of when discharge from a retention pond begins and once per week when discharge occurs. Discharges due to precipitation events shall meet the limitations at Other Requirement No. 7.b. © See Other Requirement Nos. 2, 4, and 5.

- At Outfall 014M, after the discharge from Pond 10 and prior to mixing with any stream or waters in the state.
  - At Outfall 015M, after the discharge from Pond 11 and prior to mixing with any stream or waters in the state.
    - At Outfall 016M, after the discharge from Pond H and prior to mixing with any stream or waters in the state.
      - At Outfall 017M, after the discharge from Pond I and prior to mixing with any stream or waters in the state.
      - At Outfall 018M, after the discharge from Pond J and prior to mixing with any stream or waters in the state.
- At Outfall 019M, after the discharge from Pond 9B-pumped and prior to mixing with any stream or waters in the state.
  - At Outfall 020M, after the discharge from Pond 19B and prior to mixing with any stream or waters in the state.
    - At Outfall 022M, after the discharge from Pond 21B and prior to mixing with any stream or waters in the state.
      - At Outfall 023M, after the discharge from Pond 22B and prior to mixing with any stream or waters in the state.
        - At Outfall 024M, after the discharge from Pond 2 and prior to mixing with any stream or waters in the state.
          - At Outfall 025M, after the discharge from Pond 5 and prior to mixing with any stream or waters in the state. At Outfall 026M, after the discharge from Pond F and prior to mixing with any stream or waters in the state.
- At Outfall 027M, after the discharge from Pond G and prior to mixing with any stream or waters in the state.
- At Outfall 029M, after the discharge from Pond 29C and prior to mixing with any stream or waters in the state.
- At Outfall 030M, after the discharge from Pond 38C and prior to mixing with any stream or waters in the state.
- At Outfall 031M, after the discharge from Pond 37C and prior to mixing with any stream or waters in the state.
  - At Outfall 032M, after the discharge from Pond 30C and prior to mixing with any stream or waters in the state.
- At Outfall 035M, after the discharge from Pond 32C and prior to mixing with any stream or waters in the state. At Outfall 033R, after the discharge from Pond 35C and prior to mixing with any stream or waters in the state.
- At Outfall 050M, after the discharge from Pond 15E and prior to mixing with any stream or waters in the state.
- At Outfall 052M, after the discharge from Pond G-1 and prior to mixing with any stream or waters in the state.
  - At Outfall 054M, after the discharge from Pond H-1 and prior to mixing with any stream or waters in the state.

authorized to discharge mine pit water, mine depressurization water, and stormwater runoff from ponds in the active mining area 1 During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is subject to the following effluent limitations:

Volume: Intermittent and flow-variable.

	Disc	charge Limitations		Minimum Self-Monitoring	g Requirements
Effluent Characteristics	Daily Average	Daily Maximum	Single Grab	Report Daily Average and Daily Maximum	Daily Maximum
	mg/L	$\mathrm{mg/L}$		Measurement Frequency	Sample Type
Flow	Report, MGD	Report, MGD		$1/\mathrm{week^2}$	Estimate
Total Suspended Solids	35	70	70	$1/\mathrm{week^2}$	Grab
Total Iron	3.0	0.9	0.9	$1/\text{week}^2$	Grab
Total Manganese	1.0	2.0	2.0	$1/\mathrm{week^2}$	Grab
Total Selenium <sup>3</sup>	Report	Report	N/A	$1/\mathrm{week^2}$	Grab
Total Selenium <sup>4</sup>	0.0168	0.0356	0.0356	1/week	Grab

The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/week<sup>2</sup> by grab sample.

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- There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil. က်
- Effluent monitoring samples must be taken at the following locations: 4
- At Outfall 012M, after the discharge from Pond 7 and prior to mixing with any stream or waters in the state.
- At Outfall 028M, after the discharge from Pond K and prior to mixing with any stream or waters in the state.
- At Outfall 051M, after the discharge from Pond F-1 and prior to mixing with any stream or waters in the state.
- At Outfall 053M, after the discharge from Pond G-2 and prior to mixing with any stream or waters in the state.

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<sup>&</sup>lt;sup>1</sup> See Other Requirement Nos. 2, 4, and 5.

So be Outer Nequal and 5.

Solution 24-hours of when discharge from a retention pond begins and once per week when discharge occurs. Discharges due to precipitation events of the limitation of shall meet the limitations at Other Requirement No. 7.b.

<sup>&</sup>lt;sup>3</sup> Beginning on the date of permit issuance and lasting for three years.

<sup>4</sup> Beginning three years from the permit issuance date and lasting until the date of permit expiration.

authorized to discharge mine pit water, mine depressurization water, and stormwater runoff from ponds in the active mining area 1 During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is subject to the following effluent limitations:

Volume: Intermittent and flow-variable.

	Disc	charge Limitations		Minimum Self-Monitoring	g Requirements
Effluent Characteristics	Daily Average	e Daily Maximum	Single Grab	Report Daily Average and Daily Maximum	Daily Maximum
	mg/L	mg/L	m mg/L	Measurement Frequency	Sample Type
Flow	Report, MGD	Report, MGD	N/A	$_{ m 1/week^2}$	Estimate
Total Suspended Solids	35	70	70	$1/\mathrm{week^2}$	Grab
Total Aluminum <sup>3</sup>	Report	Report	N/A	$1/\mathrm{week^2}$	Grab
Total Aluminum <sup>4</sup>	0.834	1.765	1.765	1/week	Grab
Total Iron	3.0	0.9	6.0	$1/\mathrm{week^2}$	Grab
Total Manganese	1.0	2.0	2.0	$1/\mathrm{week^2}$	Grab

The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/week<sup>2</sup> by grab sample.

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- There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil. က်
- Effluent monitoring samples must be taken at the following locations: At Outfall 021M, after the discharge from Pond 20B and prior to mixing with any stream or waters in the state. 4

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Secondary Negumentations 2, 4, and 5.

Secondary Seconda shall meet the limitations at Other Requirement No. 7.b. <sup>1</sup> See Other Requirement Nos. 2, 4, and 5.

<sup>3</sup> Beginning on the date of permit issuance and lasting for three years.

<sup>4</sup> Beginning three years from the permit issuance date and lasting until the date of permit expiration.

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Volume: Intermittent and flow-variable.

	Disc	Oischarge Limitations		Minimum Self-Monitoring	g Requirements
Effluent Characteristics	Daily Average	Daily Maximum	Single Grab	Report Daily Average and Daily Maximum	Daily Maximum
	m mg/L	m mg/L	mg/L	Measurement Frequency	Sample Type
Flow	Report, MGD	Report, MGD	N/A	$1/\mathrm{week^2}$	Estimate
Total Suspended Solids	35	20	70	$1/\text{week}^2$	Grab
Total Aluminum³, 4	Report	Report	N/A	$1/\mathrm{week^2}$	Grab
Total Iron	3.0	6.0	6.0	$1/\mathrm{week^2}$	Grab
Total Manganese	1.0	2.0	2.0	$1/\text{week}^2$	Grab

- The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/week² by grab sample. તં
- There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil. က်
- Effluent monitoring samples must be taken at the following locations: At Outfall 034M, after the discharge from Pond 31C and prior to mixing with any stream or waters in the state. 4

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Secondary Negumentations 2, 4, and 5. Se Within 24-hours of when discharge from a retention pond begins and once per week when discharge occurs. Discharges due to precipitation events shall meet the limitations at Other Requirement No. 7.b. <sup>1</sup> See Other Requirement Nos. 2, 4, and 5.

<sup>3</sup> Monitoring and reporting requirements are effective beginning on the date of permit issuance and expiring on the expiration date of permit.

<sup>4</sup> See Other Requirement Nos. 20 and 21.

authorized to discharge mine pit water and stormwater runoff from ponds in the post-mining area<sup>1</sup> subject to the following effluent During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is imitations

Volume: Intermittent and flow-variable.

	Disc	Discharge Limitations		Minimum Self-Monitoring Requirements	g Requirements
Effluent Characteristics	Daily Average	Daily Maximum	Single Grab	Single Grab Report Daily Average and Daily Maximur	Daily Maximum
	mg/L	mg/L	m mg/L	Measurement Frequency Sample Type	Sample Type
Flow	Report, MGD	Report, MGD	N/A	$1/\text{week}^2$	Estimate
Settleable Solids (ml/L)	N/A	$0.5\mathrm{ml/L}$	$0.5\mathrm{ml/L}$	$1/\text{week}^2$	Grab

The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/week² by grab sample.

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- There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil. က်
- Effluent monitoring samples must be taken at the following locations:
- At Outfall 001R, after the discharge from Pond 3 and prior to mixing with any stream or waters in the state.
- At Outfall 002R, after the discharge from Pond 13E and prior to mixing with any stream or waters in the state.
  - At Outfall 003R, after the discharge from Pond A and prior to mixing with any stream or waters in the state.
- At Outfall 004R, after the discharge from Pond B and prior to mixing with any stream or waters in the state.
- At Outfall 005R, after the discharge from Pond D and prior to mixing with any stream or waters in the state.
  - At Outfall 006R, after the discharge from Pond E and prior to mixing with any stream or waters in the state.
- At Outfall 007R, after the discharge from Pond 23B and prior to mixing with any stream or waters in the state.
- At Outfall 008R, after the discharge from Pond 36C and prior to mixing with any stream or waters in the state.
  - At Outfall 009R, after the discharge from Pond 17B and prior to mixing with any stream or waters in the state.
    - At Outfall 010R, after the discharge from Pond 18B and prior to mixing with any stream or waters in the state.
      - At Outfall 011R, after the discharge from Pond 6 and prior to mixing with any stream or waters in the state.
- At Outfall 013R, after the discharge from Pond 9B-gravity and prior to mixing with any stream or waters in the state.

At Outfall 014R, after the discharge from Pond 10 and prior to mixing with any stream or waters in the state.

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<sup>&</sup>lt;sup>2</sup> Within 24-hours of when discharge from a retention pond begins and once per week when discharge occurs. Discharges due to precipitation events shall meet the limitations at Other Requirement No. 7.c. © See Other Requirement Nos. 2, 4 and 5.

- At Outfall 015R, after the discharge from Pond 11 and prior to mixing with any stream or waters in the state.
- At Outfall 016R, after the discharge from Pond H and prior to mixing with any stream or waters in the state.
  - At Outfall 017R, after the discharge from Pond I and prior to mixing with any stream or waters in the state.
- At Outfall 018R, after the discharge from Pond J and prior to mixing with any stream or waters in the state.
- At Outfall 019R, after the discharge from Pond 9B-pumped and prior to mixing with any stream or waters in the state.
  - At Outfall 020R, after the discharge from Pond 19B and prior to mixing with any stream or waters in the state.
- At Outfall 022R, after the discharge from Pond 21B and prior to mixing with any stream or waters in the state. At Outfall 023R, after the discharge from Pond 22B and prior to mixing with any stream or waters in the state.
  - At Outfall 024R, after the discharge from Pond 2 and prior to mixing with any stream or waters in the state.
  - - At Outfall 025R, after the discharge from Pond 5 and prior to mixing with any stream or waters in the state.
- At Outfall 027R, after the discharge from Pond G and prior to mixing with any stream or waters in the state. At Outfall 026R, after the discharge from Pond F and prior to mixing with any stream or waters in the state.
- At Outfall 029R, after the discharge from Pond 29C and prior to mixing with any stream or waters in the state.
- At Outfall 030R, after the discharge from Pond 38C and prior to mixing with any stream or waters in the state.
- At Outfall 031R, after the discharge from Pond 37C and prior to mixing with any stream or waters in the state.
- At Outfall 032R, after the discharge from Pond 30C and prior to mixing with any stream or waters in the state.
  - At Outfall 033R, after the discharge from Pond 35C and prior to mixing with any stream or waters in the state. At Outfall 035R, after the discharge from Pond 32C and prior to mixing with any stream or waters in the state.
- At Outfall 050R, after the discharge from Pond 15E and prior to mixing with any stream or waters in the state.
  - At Outfall 052R, after the discharge from Pond G-1 and prior to mixing with any stream or waters in the state
    - At Outfall 054R, after the discharge from Pond H-1 and prior to mixing with any stream or waters in the state.

authorized to discharge mine pit water and stormwater runoff from ponds in the post-mining area1 subject to the following effluent During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is limitations:

Volume: Intermittent and flow-variable.

	Disc			Minimum Self-Monitoring	g Requirements
Effluent Characteristics	Daily Average mg/L	Daily Maximum $ m mg/L$	Single Grab Img/L	Report Daily Average and Daily Maximum Measurement Frequency Sample Type	Daily Maximum Sample Type
Flow	Report, MGD	Report, MGD	N/A	1/week²	Estimate
Settleable Solids (ml/L)	N/A	$0.5\mathrm{ml/L}$	$0.5\mathrm{ml/L}$	1/week²	Grab
Total Selenium³	Report	Report	N/A	$1/\text{week}^2$	Grab
Total Selenium <sup>4</sup>	0.0168	0.0356	0.0356	1/week	Grab

- The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/week<sup>2</sup> by grab sample. તાં
- There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil. က်
- Effluent monitoring samples must be taken at the following locations: 4
- At Outfall 012R, after the discharge from Pond 7 and prior to mixing with any stream or waters in the state.
- At Outfall 028R, after the discharge from Pond K and prior to mixing with any stream or waters in the state.
- At Outfall 051R, after the discharge from Pond F-1 and prior to mixing with any stream or waters in the state.
- At Outfall 053R, after the discharge from Pond G-2 and prior to mixing with any stream or waters in the state.

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<sup>&</sup>lt;sup>1</sup> See Other Requirement Nos. 2, 4 and 5.

Secondary Neglandian 1908: 2, 4 and 5.

2 Within 24-hours of when discharge from a retention pond begins and once per week when discharge occurs. Discharges due to precipitation events

2 Secondary of the limitations of Other Programment No. 7 shall meet the limitations at Other Requirement No. 7.c.

<sup>&</sup>lt;sup>3</sup> Beginning on the date of permit issuance and lasting for three years.

<sup>4</sup> Beginning three years from the permit issuance date and lasting until the date of permit expiration.

authorized to discharge mine pit water and stormwater runoff from ponds in the post-mining area1 subject to the following effluent During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is limitations:

Volume: Intermittent and flow-variable.

	Disc	Discharge Limitations		Minimum Self-Monitoring Requirements	g Requirements
Effluent Characteristics	Daily Average mg/L	Daily Maximum mg/L	Single Grab mg/L	Report Daily Average and Daily Maximum Measurement Frequency Sample Type	d Daily Maximum
Flow	Report, MGD	Report, MGD	N/A	$1/\text{week}^2$	Estimate
Settleable Solids (ml/L)	N/A	0.5 ml/L	$0.5\mathrm{ml/L}$	1/week²	Grab
Total Aluminum <sup>3</sup>	Report	Report	N/A	1/week²	Grab
Total Aluminum <sup>4</sup>	0.834	1.765	1.765	1/week	Grab

- The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/week² by grab sample. તાં
- There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil. က်
- Effluent monitoring samples must be taken at the following locations: At Outfall 021R, after the discharge from Pond 20B and prior to mixing with any stream or waters in the state. 4

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Secondary Neglandian 1908: 2, 4 and 5.

2 Within 24-hours of when discharge from a retention pond begins and once per week when discharge occurs. Discharges due to precipitation events. shall meet the limitations at Other Requirement No. 7.c. <sup>1</sup> See Other Requirement Nos. 2, 4 and 5.

<sup>&</sup>lt;sup>3</sup> Beginning on the date of permit issuance and lasting for three years.

<sup>4</sup> Beginning three years from the permit issuance date and lasting until the date of permit expiration.

authorized to discharge mine pit water and stormwater runoff from ponds in the post-mining area1 subject to the following effluent During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is limitations:

Volume: Intermittent and flow-variable.

	Disc	Discharge Limitations		Minimum Self-Monitoring Requirements	g Requirements
Effluent Characteristics	Daily Average	Daily Maximum	ap	Report Daily Average and Daily Maximun	Daily Maximum
	mg/L	${ m mg/L}$	$\mathrm{mg/L}$	Measurement Frequency	Sample Type
Flow	Report, MGD	Report, MGD		1/week² Estimate	Estimate
Settleable Solids (ml/L)	N/A	$0.5\mathrm{ml/L}$	$0.5\mathrm{ml/L}$	$1/\text{week}^2$	Grab
Total Aluminum <sup>3</sup> , <sup>4</sup>	Report	Report	N/A	$1/\mathrm{week^2}$	Grab

The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/week² by grab sample.

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- There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil. က်
- Effluent monitoring samples must be taken at the following locations: At Outfall 034R, after the discharge from Pond 31C and prior to mixing with any stream or waters in the state. 4

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See Other Requirement Nos. 2, 4 and 5.

So be Outer Nequillement Nos. 2, 4 and 5.

2 Within 24-hours of when discharge from a retention pond begins and once per week when discharge occurs. Discharges due to precipitation events.

2 Within 24-hours of when discharge from a retention pond begins and once per week when discharge occurs. Discharges due to precipitation events. shall meet the limitations at Other Requirement No. 7.c.

<sup>3</sup> Monitoring and reporting requirements are effective beginning on the date of permit issuance and expiring on the expiration date of permit.

<sup>&</sup>lt;sup>4</sup> See Other Requirement Nos. 20 and 21.

## **DEFINITIONS AND STANDARD PERMIT CONDITIONS**

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC §§305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in Texas Water Code §26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

#### 1. Flow Measurements

- a. Annual average flow the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder, and limited to major domestic wastewater discharge facilities with a one million gallons per day or greater permitted flow.
- b. Daily average flow the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.
- c. Daily maximum flow the highest total flow for any 24-hour period in a calendar month.
- d. Instantaneous flow the measured flow during the minimum time required to interpret the flow measuring device.
- e. 2-hour peak flow (domestic wastewater treatment plants) the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.
- f. Maximum 2-hour peak flow (domestic wastewater treatment plants) the highest 2-hour peak flow for any 24-hour period in a calendar month.

#### 2. Concentration Measurements

- a. Daily average concentration the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
  - i. For domestic wastewater treatment plants When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.
  - ii. For all other wastewater treatment plants When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
- c. Daily maximum concentration the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.
- d. Daily discharge the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the "daily discharge" is calculated as the total

mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the sampling day.

The "daily discharge" determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the "daily discharge" determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

- e. Bacteria concentration (Fecal coliform, *E. coli*, or Enterococci) the number of colonies of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the nth root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substitute value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.
- f. Daily average loading (lbs/day) the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD × Concentration, mg/L × 8.34).
- g. Daily maximum loading (lbs/day) the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.

# 3. Sample Type

- a. Composite sample For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC §319.9(a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC §319.9(c).
- b. Grab sample an individual sample collected in less than 15 minutes.
- 4. Treatment Facility (facility) wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.
- 5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes.
- 6. Bypass the intentional diversion of a waste stream from any portion of a treatment facility.

## MONITORING AND REPORTING REQUIREMENTS

#### 1. Self-Reporting

Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§319.4 - 319.12. Unless otherwise specified, effluent monitoring data shall be submitted each month, to the Enforcement Division (MC 224), by the 20th day of the following month for each discharge that is described by this permit whether or not a discharge is made for that month. Monitoring results must be submitted online using the NetDMR reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. Monitoring results must be signed and certified as required by Monitoring and Reporting Requirements No. 10.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act; TWC Chapters 26, 27, and 28; and THSC Chapter 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

## 2. Test Procedures

- a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§319.11 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.
- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.

#### 3. Records of Results

- a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.
- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR §264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.
- c. Records of monitoring activities shall include the following:
  - i. date, time, and place of sample or measurement;
  - ii. identity of individual who collected the sample or made the measurement;
  - iii. date and time of analysis;
  - iv. identity of the individual and laboratory who performed the analysis;
  - v. the technique or method of analysis; and
  - vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

## 4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

#### 5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site or shall be readily available for review by a TCEQ representative for a period of three years.

# 6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the regional office and the Enforcement Division (MC

# 7. Noncompliance Notification

- a. In accordance with 30 TAC §305.125(9) any noncompliance that may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally or by facsimile transmission (FAX) to the regional office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the regional office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. For Publicly Owned Treatment Works (POTWs), effective September 1, 2020, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
- b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:

i. unauthorized discharges as defined in Permit Condition 2(g).

ii. any unanticipated bypass that exceeds any effluent limitation in the permit.

- iii. violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.
- In addition to the above, any effluent violation that deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the regional office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.
- d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.
- 8. In accordance with the procedures described in 30 TAC §§35.301 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.
- 9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the regional office, orally or by facsimile transmission within 24 hours, and both the regional office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i. one hundred micrograms per liter (100  $\mu$ g/L); ii. two hundred micrograms per liter (200  $\mu$ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol: and one milligram per liter (1 mg/L) for antimony;

iii. five (5) times the maximum concentration value reported for that pollutant in the permit application; or

iv. the level established by the TCEQ.

- b. That any activity has occurred or will occur that would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - i. five hundred micrograms per liter (500  $\mu$ g/L);

- ii. one milligram per liter (1 mg/L) for antimony; iii. ten (10) times the maximum concentration value reported for that pollutant in the permit application: or
- iv. the level established by the TCEO.

## 10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC §305.128 (relating to Signatories to Reports).

- 11. All POTWs must provide adequate notice to the Executive Director of the following:
  - a. any new introduction of pollutants into the POTW from an indirect discharger that would be subject to CWA §301 or §306 if it were directly discharging those pollutants;
  - b. any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit;
  - c. for the purpose of this paragraph, adequate notice shall include information on:
    - i. the quality and quantity of effluent introduced into the POTW: and
    - ii. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

#### PERMIT CONDITIONS

#### 1. General

- a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
- b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:

  - i. violation of any terms or conditions of this permit;ii. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
  - iii. a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending, or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

## 2. Compliance

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.
- b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment,

- revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.
- e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.
- f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§305.62 and 305.66 and TWC §7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.
- h. In accordance with 30 TAC §305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility that does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.
- i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code §§7.051 7.075 (relating to Administrative Penalties), 7.101 7.111 (relating to Civil Penalties), and 7.141 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA §402, or any requirement imposed in a pretreatment program approved under the CWA §§402(a)(3) or 402(b)(8).

# 3. Inspections and Entry

- a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC Chapter 361.
- b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit, or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC §7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

## 4. Permit Amendment or Renewal

- a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
  - i. the alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC §305.534 (relating to New Sources and New Dischargers); or
  - ii. the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9; or
  - iii. the alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
- c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.
- d. Prior to accepting or generating wastes that are not described in the permit application or that would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.
- e. In accordance with the TWC §26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.
- f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA §307(a) for a toxic pollutant that is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA §307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

#### 5. Permit Transfer

- a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
- b. A permit may be transferred only according to the provisions of 30 TAC §305.64 (relating to Transfer of Permits) and 30 TAC §50.133 (relating to Executive Director Action on Application or WQMP update).

# 6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

# 7. Relationship to Water Rights

Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to Texas Water Code Chapter 11.

## 8. Property Rights

A permit does not convey any property rights of any sort, or any exclusive privilege.

# 9. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

# 10. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

# 11. Notice of Bankruptcy.

- a. Each permittee shall notify the executive director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
  - i. the permittee;
  - ii. an entity (as that term is defined in 11 USC, §101(15)) controlling the permittee or listing the permit or permittee as property of the estate; or
  - iii. an affiliate (as that term is defined in 11 USC, §101(2)) of the permittee.

#### b. This notification must indicate:

- i. the name of the permittee;ii. the permit number(s);
- iii. the bankruptcy court in which the petition for bankruptcy was filed; and
- iv. the date of filing of the petition.

## **OPERATIONAL REQUIREMENTS**

- The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.
- 2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC Chapter 312 concerning sewage sludge use and disposal sewage sludge use sludge use sewage sludge use sewage sludge use sewage sludge use sewage sludge use TAC §§319.21 - 319.29 concerning the discharge of certain hazardous metals.

- 3. Domestic wastewater treatment facilities shall comply with the following provisions:
  - a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.
  - b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment or other treatment unit regulated by this permit.
- 4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, or retention of inadequately treated wastewater.
- 5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.
- 6. The permittee shall remit an annual water quality fee to the Commission as required by 30 TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC §7.302(b)(6).

#### 7. Documentation

For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC §1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

- 8. Facilities that generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.
  - a. Whenever flow measurements for any domestic sewage treatment facility reach 75% of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion or upgrading of the domestic wastewater treatment or collection facilities. Whenever the flow reaches 90% of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment or collection facilities. In the case of a domestic wastewater treatment facility that reaches 75% of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 219) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

- b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission, and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.
- c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.
- 9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.
- 10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.
- 11. Facilities that generate industrial solid waste as defined in 30 TAC §335.1 shall comply with these provisions:
  - a. Any solid waste, as defined in 30 TAC §335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.
  - b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.
  - c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC §335.8(b)(1), to the Corrective Action Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.
  - d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Remediation Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC §335.5.
  - e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.
  - f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC Chapter 335 and must include the following, as it pertains to wastewater treatment and discharge:
    - i. volume of waste and date(s) generated from treatment process;
    - ii. volume of waste disposed of on-site or shipped off-site;
    - iii. date(s) of disposal;

- iv. identity of hauler or transporter;v. location of disposal site; andvi. method of final disposal.

The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.

12. For industrial facilities to which the requirements of 30 TAC Chapter 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC Code Chapter 361.

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# **OTHER REQUIREMENTS**

1. Violations of daily maximum limitations for the following pollutants shall be reported orally or by facsimile to TCEQ Region 13 within 24 hours from the time the permittee becomes aware of the violation, followed by a written report within five working days to TCEQ Region 13 and Compliance Monitoring Team (MC 224):

Pollutant	MAL¹ (mg/L)
Iron (Total)	0.007
Manganese (Total)	0.0005
Settleable Solids	o.4 ml/L

Test methods used must be sensitive enough to demonstrate compliance with the permit effluent limitations. If an effluent limit for a pollutant is less than the MAL, then the test method for that pollutant must be sensitive enough to demonstrate compliance at the MAL. Permit compliance/noncompliance determinations will be based on the effluent limitations contained in this permit, with consideration given to the MAL for the pollutants specified above.

When an analysis of an effluent sample for a pollutant listed above indicates no detectable levels above the MAL and the test method detection level is as sensitive as the specified MAL, a value of zero shall be used for that measurement when making calculations for the self-reporting form. This applies to determinations of daily maximum concentration, calculations of loading and daily averages, and other reportable results.

When a reported value is zero based on this MAL provision, the permittee shall submit the following statement with the self-reporting form either as a separate attachment to the form or as a statement in the comments section of the form:

"The reported value(s) of zero for _	[list pollutant(s)]	on the self-reporting form for
[monitoring period date range]	_ is based on the following	conditions: (1) the analytical
method used had a method detecti	on level as sensitive as the	MAL specified in the permit, and
(2) the analytical results contained	no detectable levels abov	e the specified MAL."

When an analysis of an effluent sample for a pollutant indicates no detectable levels and the test method detection level is not as sensitive as the MAL specified in the permit, or an MAL is not specified in the permit for that pollutant, the level of detection achieved shall be used for that measurement when making calculations for the self-reporting form. A zero may not be used.

## 2. Definitions:

- a. The term "acid or ferruginous mine drainage" means mine drainage which, before any treatment, either has a pH of less than 6.0 or a total iron concentration equal to or greater than 10 mg/L.
- b. The term "active mining area" means the area, on and beneath land, used or disturbed in activity related to the extraction, removal, or recovery of coal from its natural deposits. This term excludes coal preparation plants, coal preparation plant-associated areas, and postmining areas.
- c. The term "mine drainage" means any drainage, and any water pumped or siphoned, from an active mining area or a post-mining area.

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<sup>&</sup>lt;sup>1</sup> Minimum analytical level.

- d. The term "settleable solids" is that matter measured by the volumetric method specified in 40 CFR § 434.64, which is as follows:
  - Fill an Imhoff cone to the one-liter mark with a thoroughly mixed sample. Allow to settle undisturbed for 45 minutes. Gently stir along the inside surface of the cone with a stirring rod. Allow to settle undisturbed for 15 minutes longer. Record the volume of settled materials in the cone as milliliters per liter (mL/L). Where a separation of settleable and floating materials occurs, do not include the floating material in the reading. Notwithstanding any provision of 40 CFR Part 136, the method detection limit for measuring settleable solids under 40 CFR Part 434 shall be 0.4 mL/L.
- e. The term "10-year, 24-hour precipitation event" means the maximum 24-hour precipitation event with a probable recurrence interval of once in ten years as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed therefrom.
- f. The term "2-year, 24-hour precipitation event" means the maximum 24-hour precipitation event with a probable recurrence interval of once in two years as defined by the National Weather Service and Technical Paper No. 40, "Rainfall Frequency Atlas of the U.S.," May 1961, or equivalent regional or rainfall probability information developed therefrom.
- g. The term "post-mining area" means a reclamation area or the underground workings of an underground coal mine after the extraction, removal, or recovery of coal from its natural deposits has ceased and prior to bond release.
- h. The term "reclamation area" means the surface area of a coal mine which has been returned to required contour and on which revegetation (specifically, seeding or planting) work has commenced.
- i. The term "bond release" means the time at which the appropriate regulatory authority returns a reclamation or performance bond based upon its determination that reclamation work (including, in the case of underground mines, mine sealing and abandonment procedures) has been satisfactorily completed.
- 3. All retention ponds must be constructed prior to disturbing the natural soils in preparation of any mining activity. Upon initiation of any mining-related activity in the watershed of any particular pond, the permittee shall notify the TCEQ Industrial Team, Wastewater Permitting Section (MC-148) and the Region 13 Office. A record of the design dimensions, construction information, the pond drainage area, and a map, sketch or drawing showing the location of each pond must be maintained at the site and must be readily available for inspection by authorized representatives of the permitting authority.
- 4. Discharges from the retention ponds must be monitored in accordance with this permit from the time the natural soils are disturbed for mining purposes until reclamation of the disturbed soils is complete and until the performance bond issued by the appropriate authority has been released. At least 10 days prior to any such action, the permittee shall notify the TCEQ Industrial Team, Wastewater Permitting Section (MC-148) and the Region 13 Office in writing of the permittee's intent to close any retention pond or to discontinue monitoring. Discharges of stormwater runoff that occurs during the construction of retention ponds are covered under TPDES Construction General Permit TXR150000.
- 5. Location Information: The following tables show the operational phases and the sedimentation ponds associated with active mining and post-mining final outfalls. The discharges flow from the ponds and into tributaries of Segment Nos. 2107, 2108, and 2117 in the Nueces River Basin:

Table 1 – Mining Impoundment Information

Table 1 – M	lining Impound	ment Inform	ation			
Outfall Number	Final Dis- charge Pond	Latitude	Longitude	Current Active Mining	Current Post-mining	Future
oo1M/R	Pond 3	28° 41' 06"	-98° 29' 29"		√ ·	
001M/R	Pond 13E	28° 40' 37"	-98° 29' 18"	<b>√</b>	,	
002M/R	Pond A	28° 40' 58"	-98° 28' 54"	· ✓		
003 M/R	Pond B	28° 41' 00"	-98° 28' 53"	· ✓		
004 M/R	Pond D	28° 41' 14"	-98° 28' 32"	· ✓		
005 M/R	Pond E	28° 41' 11"	-98° 28' 24"	√ ·		
007 M/R	Pond 23B	28° 42' 43"	-98° 22' 32"	<b>√</b>		
007 M/R 008 M/R	Pond 36C	28° 45' 08"	-98° 20' 57"	<u> </u>		
009 M/R	Pond 17B	28° 45' 14"	-98° 23' 56"	·	✓	
010 M/R	Pond 18B	28° 45' 05"	-98° 23' 17"		<b>√</b>	
011 M/R	Pond 6	28° 42' 34"	-98° 26' 33"		<b>√</b>	
012 M/R	Pond 7	28° 42' 44"	-98° 25' 53"	<b>√</b>	·	
013 M/R	Pond 9B	28° 43' 07"	-98° 24' 02"	<b>√</b>		
014 M/R	Pond 10	28° 42' 42"	-98° 24' 39"	<b>√</b>		
014 M/R	Pond 11	28° 42' 52"	-98° 24' 34"	<b>√</b>		
016 M/R	Pond H	28° 42' 38"	-98° 26' 35"	<b>√</b>		
017 M/R	Pond I	28° 42' 42"	-98° 26' 00"	<b>√</b>		
018 M/R	Pond J	28° 42' 48"	-98° 25' 46"	√ ·		
019 M/R	Pond 9B	28° 43' 12"	-98° 24' 35"	<b>√</b>		
020 M/R	Pond 19B	28° 45' 16"	-98° 22' 24"	<b>√</b>		
020 M/R	Pond 20B	28° 44' 47"	-98° 21' 46"	√ ·		
021 M/R	Pond 21B	28° 43' 47"	-98° 21' 19"	<b>√</b>		
023 M/R	Pond 22B	28° 43' 26"	-98° 21' 36"	<b>→</b>		
024 M/R	Pond 2	28° 41' 15"	-98° 27' 50"	·	<b>√</b>	
025 M/R	Pond 5	28° 41' 47"	-98° 27' 24"	<b>√</b>	·	
026 M/R	Pond F	28° 41' 16"	-98° 27' 54"	<b>√</b>		
027 M/R	Pond G	28° 41' 46"	-98° 27' 29"	<b>√</b>		
028 M/R	Pond K	28° 41' 59"	-98° 28' 55"	<b>√</b>		
029 M/R	Pond 29C	28° 46' 27"	-98° 21' 34"	<b>√</b>		
030 M/R	Pond 38C	28° 45' 55"	-98° 22' 02"	✓		
031 M/R	Pond 37C	28° 45' 28"	-98° 21' 32"	✓		
032 M/R	Pond 30C	28° 47′ 48″	-98° 20' 33"			✓
033 M/R	Pond 35C	28° 45' 19"	-98° 19' 22"	✓		
034 M/R	Pond 31C	28° 47′ 18″	-98° 19' 49"			✓
035 M/R	Pond 32C	28° 46′ 59"	-98° 19' 29"			✓
050 M/R	Pond 15E	28° 37' 59"	-98° 30' 47"	✓		
051 M/R	Pond F-1	28° 36' 51"	-98° 30' 21"			✓
052 M/R	Pond G-1	28° 37′ 10″	-98° 30' 50"	✓		
053 M/R	Pond G-2	28° 36′ 12″	-98° 31' 44"	✓		
054 M/R	Pond H-1	28° 35′ 14″	-98° 32' 00"			✓
055 M/R	Pond X-1	28° 34' 48"	-98° 33' 00"			✓
056 M/R	Pond X-2	28° 35′ 24″	-98° 33' 36"			✓
057 M/R	Pond O	28° 43′ 12"	-98° 23' 48"			✓
058 M/R	Pond Y-1	28° 33′ 36″	-98° 36' 36"			✓
059 M/R	Pond Z-1	28° 31' 48"	-98° 36' 00"			✓
060 M/R	Pond Z-2	28° 32' 24"	-98° 36' 36"			✓

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After construction the permittee shall submit updated latitude and longitude for exact pond location to the TCEQ Industrial Permits Team (MC-148) and TCEQ Region 13 Office.

- a. The permittee shall maintain a current map and supporting documentation, as necessary, on the site that shows and lists all constructed ponds with the operational phase (active mining or post-mining), design dimensions, construction information, pond drainage area, pond location, discharge routes, and outfall locations. The map shall be available to TCEQ personnel upon request.
- b. In preparation of mining activities in a specific watershed area, the permittee shall construct the retention pond(s) necessary to retain water from the mining activity prior to disturbing the natural soils in the contributing watershed area.
- c. The permittee may change the location of ponds and reconfigure ponds if necessary to establish ponds in a series or to allow effluent to be commingled in a pipe or man-made conveyance, as long as the final discharge point or outfall is authorized herein. No final outfalls other than those listed in Table 1 above are authorized by this permit.
- d. Discharges from the outfalls shall be monitored in accordance with permit requirements from the time the natural soils are disturbed due to mining activity until reclamation of the disturbed soils is completed and the Phase Two performance bond issued by the appropriate authority has been released.
- e. Written notification is required as follows:
  - i. within 45 days of any revision of the pond map including changing to or from the active mining or post-mining operational phase, and to or from active or inactive status (see item 3.F. below);
  - ii. upon initiation of any mining-related activity in the watershed of any pond; and
  - iii. at least 10 days prior to closing a retention pond or discontinuing monitoring of discharges.

All written notifications are required to be submitted to the TCEQ Industrial Permits Team (MC 148) and TCEQ Region 13 Office.

- f. Reporting requirements pursuant to 30 TAC Sections 319.1-319.12 and any additional effluent reporting requirements contained in the permit as designated in the "Future" column in Table 1 above are suspended from the effective date of the permit until facility area startup or discharge, whichever occurs first, from the facility described by this permit. The permittee shall provide written notice to the TCEQ Region 13 Office and the Applications Review and Processing Team (MC-148) of the Water Quality Division at least forty-five (45) days prior to outfall startup or anticipated discharge, whichever occurs first, on Notification of Completion Form 20007.
- 6. The permittee must apply for and receive authorization to add additional outfalls and associated ponds which are not identified in this permit prior to their construction and use. The permittee may file an application for a permit renewal with changes to identify additional outfalls and associated ponds prior to the expiration of this permit if:
  - a. the approximate location of each outfall is delineated by latitude and longitude in the application for renewal with changes; and public notice of the application by newspaper publication is provided in accordance with commission rules;

- b. the permitted boundary is not expanded;
- c. any adjacent property located within ½ mile of an additional outfall or associated pond, or downstream property located adjacent to the discharge route associated with an additional outfall and within one mile downstream of the outfall, is not newly adjacent or downstream solely because of the addition of an outfall or associated pond identified in the application for renewal with changes;
- d. no new waste-stream is added to the discharge; and
- e. no new receiving waters extend beyond the permitted boundary.

Each subsequent permit action shall be treated as a renewal with changes if the permittee complies with the requirements in subsections a - e of this special provision.

- 7. Additional Monitoring and Reporting Requirements for Retention Ponds Regulated by 40 CFR Part 434.
  - a. Sampling Requirements
    - i. Effluent discharge from retention ponds in a series shall be sampled at a point from the last pond in the series; and
    - ii. Effluent discharges from multiple retention ponds commingled in a pipe or a man-made conveyance structure before discharging into waters in the state shall be sampled at a point prior to mixing with other waters.
  - b. Effluent Limitations for Acid or Ferruginous Active Mining Areas
    - i. Effluent discharges from an active mining area caused by precipitation within any 24-hour period **less than or equal to the 2-year, 24-hour precipitation event**, shall not exceed the following limitations:

Pollutant Effluent Limitations

Total Iron 7.0 mg/l maximum not to be exceeded Settleable Solids 0.5 ml/l maximum not to be exceeded pH (standard units) (6.0 minimum - 9.0 maximum at all times)

ii. Effluent discharges from an active mining area caused by precipitation within any 24-hour period greater than the 2-year, 24-hour precipitation event, but less than or equal to the 10-year, 24-hour precipitation event, shall not exceed the following limitations:

Pollutant Effluent Limitations

Settleable Solids 0.5 ml/l maximum not to be exceeded pH (standard units) (6.0 minimum - 9.0 maximum at all times)

iii. Effluent discharges from an active mining area caused by precipitation within any 24-hour period **greater than the 10-year, 24-hour precipitation event**, shall not exceed the following limitations:

Pollutant <u>Effluent Limitations</u>

pH (standard units) (6.0 minimum - 9.0 maximum at all times)

c. Effluent Limitations for Post-Mining Areas

Effluent discharges from Post-Mining Areas within any 24-hour period **greater than the 10-year, 24-hour precipitation event**, shall not exceed the following limitations:

Pollutant <u>Effluent Limitations</u>

pH (standard units) (6.0 minimum - 9.0 maximum at all times)

- d. The permittee bears the burden of proof in establishing the volume of a precipitation event.
- 8. All wastewater ponds shall be operated in such a manner as to maintain a minimum freeboard of two feet.
- 9. Mine pit water, mine depressurization water, and stormwater may be used for dust suppression within the mine boundaries. No wastewater may be applied to any road surface containing standing water. Also, water shall not be allowed to drain from roadways into water in the state. An operating log shall be maintained and be available at the plant site for inspection by authorized representatives of the TCEQ for at least three (3) years and shall include the dates, amounts, and area where wastewater was applied for dust suppression.
- 10. There is no mixing zone established for the discharges from Outfalls 001M/R-035M/R and 050M/R-060M/R to intermittent streams. Acute toxic criteria apply at the point of discharge.
- 11. All discharges from all retention ponds must comply with the limitations for hazardous metals as regulated under the TCEQ, Permanent Rule, Title 30 Texas Administrative Code (TAC) Chapter 319, Subchapter B, 319.21 319.29, "Hazardous Metals."
- 12. The permittee shall implement measures or provide additional storage to store/dispose of a minimum of 10.85 acre-feet of wastewater routed to Pond C for evaporation. This shall be demonstrated by the following:
  - a. Construction of an additional irrigation holding pond(s) in compliance with Other Requirement No. 17; or
  - b. Provision of adequate alternate source of storage/disposal of sufficient capacity; or
  - c. The development of a contingency plan which identifies that the permittee is capable of managing an additional 10.12 acre-feet of effluent. The plan shall be put into effect when the irrigation holding pond exceeds storage capacity prior to an unauthorized discharge and may include, but is not limited to, the following:
    - (1) Contracting a third party to haul the additional effluent offsite.
    - (2) Connecting to a Publicly Owned Treatment Works (POTW).
    - (3) Modifying the facility processes or wastewater/stormwater management; or
    - (4) Implementing evaporation-enhancing measures.
  - d. Any combination of 12.a, 12.b., and 12.c.

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The permittee has demonstrated the capability to sufficiently satisfy the above requirements with Other Requirement No. 14 as part of the facility wastewater/stormwater management.

13. Treated domestic wastewater, truck wash water, and some stormwater are routed to an evaporation pond (Pond C), which is not authorized to discharge. Samples shall be taken of the treated domestic wastewater in order to demonstrate adequate treatment. A readily accessible sample point shall be located after final treatment of the domestic wastewater and prior to discharge into the evaporation pond.

Parameter Type	Effluent Limitation	Monitoring Frequency	Sample
Flow (*1)	Report	5/week	Estimate
Biochemical Oxygen	100 mg/L	1/month	Grab
Demand (5-day) (*2)			
pH (standard units) (*2)	6.0 su (min), 9.0 su (max)	1/ month	Grab

- (\*1) The flow must be measured daily from the domestic treatment plant. The flow from the truck wash and stormwater runoff must be measured when discharge occurs.
- (\*2) The BOD and pH must be measured for the domestic wastewater only.

Results of analysis from the monitoring required above shall be tabulated on a monthly basis. Tabulated data shall be submitted to the Industrial Permits Team (MC 148) and the Enforcement Division (MC 224) during the month of September of each year. Additionally, this data shall be retained on site for five (5) years and made available for inspection by authorized representatives of the TCEQ and submitted with each permit application.

- 14. To ensure that adequate storage capacity will be available in the evaporation pond (Pond C), the permittee shall pump water from the pond for use in dust suppression within the boundaries of the facility. The permittee may pump, when water is available, approximately 80,000 gallons per day, seven days per week, to water-trucks located at the pond site. An operating log will be maintained and be available at the plant site for inspection by authorized representatives of the TCEQ for at least three (3) years and shall include the following information:
  - a. the truck number of the water-truck used;
  - b. the date the water was hauled; and
  - c. the gallons hauled per day per truck.
- 15. There shall be no discharge of wastewaters from the evaporation pond (Pond C) to water in the state of Texas. This permit does not authorize the disposal of treated wastewater by irrigation.
- 16. The permittee shall operate the domestic wastewater treatment system so as not to cause any nuisance conditions.

## 17. POND REQUIREMENTS

A wastewater pond must comply with the following requirements. A wastewater pond (or lagoon) is an earthen structure used to evaporate, hold, store, or treat water that contains a *waste* or *pollutant* 

or that would cause *pollution* upon *discharge* as those terms are defined in Texas Water Code §26.001, but does not include a pond that contains only stormwater.

- A. A wastewater pond **subject to 40 CFR Part 257**, **Subpart D** (related to coal combustion residuals) must comply with those requirements in lieu of the requirements in B through G of POND REQUIREMENTS.
- B. An **existing** wastewater pond (Pond C only) must be maintained to meet or exceed the original approved design and liner requirements; or, in the absence of original approved requirements, must be maintained to prevent unauthorized discharges of wastewater into or adjacent to water in the state. The permittee shall maintain copies of all liner construction and testing documents at the facility or in a reasonably accessible location and make the information available to the executive director upon request.
- C. A **new** wastewater pond (Does not apply to mine sedimentation ponds constructed in accordance with Texas Railroad Commission requirements) constructed after the issuance date of this permit must be lined in compliance with one of the following requirements if it will contain <u>process wastewater</u> as defined in 40 CFR §122.2. The executive director will review ponds that will contain only <u>non-process wastewater</u> on a case-by-case basis to determine whether the pond must be lined. If a pond will contain only non-process wastewater, the owner shall notify the Industrial Permits Team (MC-148) to obtain a written determination at least 90 days before the pond is placed into service and copy the TCEQ Compliance Monitoring Team (MC-224). The permittee must submit all information about the proposed pond contents that is reasonably necessary for the executive director to make a determination. If the executive director determines that a pond does not need to be lined, then the pond is exempt from C(1) through C(3) and D through G of POND REQUIREMENTS.

A wastewater pond that <u>only contains domestic wastewater</u> must comply with the design requirements in 30 TAC Chapter 217 and 30 TAC §309.13(d) in lieu of items C(1) through C(3) of this subparagraph.

- (1) <u>Soil liner</u>: The soil liner must contain clay-rich soil material (at least 30% of the liner material passing through a #200 mesh sieve, liquid limit greater than or equal to 30, and plasticity index greater than or equal to 15) that completely covers the sides and bottom of the pond. The liner must be at least 3.0 feet thick. The liner material must be compacted in lifts of no more than 8 inches to 95% standard proctor density at the optimum moisture content in accordance with ASTM D698 to achieve a permeability less than or equal to 1 × 10<sup>-7</sup> (≤ 0.0000001) cm/sec. For in-situ soil material that meets the permeability requirement, the material must be scarified at least 8 inches deep and then re-compacted to finished grade.
- (2) <u>Synthetic membrane</u>: The liner must be a synthetic membrane liner at least 40 mils in thickness that completely covers the sides and the bottom of the pond. The liner material used must be compatible with the wastewater and be resistant to degradation (e.g., from ultraviolet light, chemical reactions, wave action, erosion, etc.). The liner material must be installed and maintained in accordance with the manufacturer's guidelines. A wastewater pond with a synthetic membrane liner must include an underdrain with a leak detection and collection system.
- (3) <u>Alternate liner</u>: The permittee shall submit plans signed and sealed by a Texas-licensed professional engineer for any other equivalently protective pond lining method to the Industrial Permits Team (MC-148) and copy the Compliance Monitoring Team (MC-224).

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D. For a pond (Pond C only) that must be lined according to subparagraph C (including ponds with in-situ soil liners), the permittee shall provide certification, signed and sealed by a Texaslicensed professional engineer, stating that the completed pond lining and any required underdrain with leak detection and collection system for the pond meet the requirements in subparagraph C(1) – C(3) before using the pond. The certification shall include the following minimum details about the pond lining system: (1) pond liner type (in-situ soil, amended in-situ soil, imported soil, synthetic membrane, or alternative), (2) materials used, (3) thickness of materials, and (4) either permeability test results or a leak detection and collection system description, as applicable.

The certification must be provided to the TCEQ Water Quality Assessment Team (MC-150), Industrial Permits Team (MC-148), Compliance Monitoring Team (MC-224) and regional office. A copy of the liner certification and construction details (i.e., as-built drawings, construction QA/QC documentation, and post construction testing) must be kept on-site or in a reasonably accessible location (in either hardcopy or digital format) until the pond is closed.

- E. Protection and maintenance requirements for a pond (Pond C only) subject to subparagraph B or C (including ponds with in-situ soil liners).
  - (1) The permittee shall maintain a liner to prevent the unauthorized discharge of wastewater into or adjacent to water in the state.
  - (2) A liner must be protected from damage caused by animals. Fences or other protective devices or measures may be used to satisfy this requirement.
  - (3) The permittee shall maintain the structural integrity of the liner and shall keep the liner and embankment free of woody vegetation, animal burrows, and excessive erosion.
  - (4) The permittee shall inspect each pond liner and each leak detection system at least once per month. Evidence of damage or unauthorized discharge must be evaluated by a Texaslicensed professional engineer or Texas-licensed professional geoscientist within 30 days. The permittee is not required to drain an operating pond or to inspect below the waterline during these routine inspections.
    - a. A Texas-licensed professional engineer or Texas-licensed professional geoscientist must evaluate damage to a pond liner, including evidence of an unauthorized discharge without visible damage.
    - b. Pond liner damage must be repaired at the recommendation of a Texas-licensed professional engineer or Texas-licensed professional geoscientist. If the damage is significant or could result in an unauthorized discharge, then the repair must be documented and certified by a Texas-licensed professional engineer. Within 60 days after a repair is completed, the liner certification must be provided to the TCEQ Water Quality Assessment Team (MC-150), Compliance Monitoring Section (MC-224), and regional office. A copy of the liner certification must be maintained at the facility or in a reasonably accessible location and made available to the executive director upon request.
    - c. A release determination and subsequent corrective action will be based on 40 CFR Part 257 or the Texas Risk Reduction Program (30 TAC Chapter 350), as applicable. If evidence indicates that an unauthorized discharge occurred, including evidence that the actual permeability exceeds the design permeability, the matter may also be referred to the TCEQ Enforcement Division to ensure the protection of the public and the environment.

- F. For a pond (Pond C only) subject to subparagraph B or C (including ponds with in-situ soil liners), the permittee shall have a Texas-licensed professional engineer perform an evaluation of each pond that requires a liner at least once every five years. The evaluation must include: (1) a physical inspection of the pond liner to check for structural integrity, damage, and evidence of leaking; (2) a review of the liner documentation for the pond; and (3) a review of all documentation related to liner repair and maintenance performed since the last evaluation. For the purposes of this evaluation, evidence of leaking also includes evidence that the actual permeability exceeds the design permeability. The permittee is not required to drain an operating pond or to inspect below the waterline during the evaluation. A copy of the engineer's evaluation report must be maintained at the facility or in a reasonably accessible location and made available to the executive director upon request.
- G. For a pond (Pond C only) subject to subparagraph B or C (including ponds with in-situ soil liners), the permittee shall maintain at least 2.0 feet of freeboard in the pond except when:
  - (1) the freeboard requirement temporarily cannot be maintained due to a large storm event that requires the additional retention capacity to be used for a limited period of time;
  - (2) the freeboard requirement temporarily cannot be maintained due to upset plant conditions that require the additional retention capacity to be used for treatment for a limited period of time; or
  - (3) the pond was not required to have at least 2.0 feet of freeboard according to the requirements at the time of construction.

The permittee submitted liner recertification and documentation on April 13, 2017. The liner recertification includes two additional certifications, both dated March 20, 1984. These certifications address Pond C. One certifies that the pond was designed in accordance with the Railroad Commission's (RRC) Coal Mining Regulations as of February 1978 and the other certifies the pond was constructed in accordance with the plans and specifications approved by the RRC on October 19, 1979. Additional information was reviewed such as site geology, depth to groundwater, and that the facility does not overlay a major aquifer. Therefore, the existing liner recertification has been reviewed and meets the conditions of an alternate liner.

- 18. The sludge from the treatment process shall be digested, dewatered and disposed of in accordance with all the applicable rules of the TCEQ. The permittee shall ensure that the disposal of sludge does not cause any contamination of the ground or surface waters in the state. The permittee shall keep records of all sludge removed from the wastewater treatment plant site. Such records will include the following information:
  - a. volume of sludge disposed;
  - b. date of disposal;
  - c. identity of hauler;
  - d. location of disposal site; and
  - e. method of final disposal.

The above records shall be maintained on a monthly basis and be available at the plant site for inspection by authorized representatives of the TCEQ for at least three (3) years.

19. Attachment 1 shall be completed with the analytical results from two (2) separate sample events at least a week apart for Outfalls 001M-004M, 007M-011M, 013M, 017M, 019M-020M, 023M-024M, 026M, 029M-030M, 035M, 050M, 052M, 054M-060M, 001R-035R, and 050R-060R and sent to the TCEQ, Wastewater Permitting Section (MC-148), within 60 days following the first two available discharges via Outfalls 001M-004M, 007M-011M, 013M, 017M, 019M-020M, 023M-

o24M, o26M, o29M-o30M, o35M, o50M, o52M, o54M-o60M, oo1R-o35R, and o5oR-o60R. Based on a technical review of the submitted analytical results, an amendment may be initiated by TCEQ staff to include additional effluent limitations and/or monitoring requirements. The permittee shall report the flow at these Outfalls in MGD in the attachment. The permittee shall indicate on each table whether the samples are composite (C) or grab (G) by checking the appropriate box.

- 20. Discharge is prohibited during dry conditions. Dry conditions are defined as any period with no rain or rainfall less than 0.1 inches in a 24-hour period.
- 21. Monitoring requirements for aluminum are self-expiring. The permittee is required to demonstrate that aluminum is not used in the facility's processes or added to the facility's wastestream and determine the ratio of the dissolved aluminum concentration to the total recoverable aluminum concentration for the facility and submit with the renewal of the permit.

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# **Attachment 1**

**Table 1 – Conventionals and Non-conventionals** 

Outfall No.:	$\Box$ C $\Box$ G	Effluent Concentration (mg/L)				
Pollutant		Samp.	Samp.	Samp.	Samp.	Average
Flow (MGD)						
BOD (5-day)						
CBOD (5-day)						
Chemical Oxygen D	emand					
Total Organic Carbo	on					
Dissolved Oxygen						
Ammonia Nitrogen						
Total Suspended So	olids					
Nitrate Nitrogen						
Total Organic Nitro	gen					
Total Phosphorus						
Oil and Grease						
Total Residual Chlo	rine					
Total Dissolved Sol	ids					
Sulfate						
Chloride						
Fluoride						
Total Alkalinity (mg	g/L as					
CaCO <sub>3</sub> )						
Temperature (°F)						
pH (Standard Units min/max)	<b>5</b> ;					

Table 2 - Metals

D. Ilastana		Effluent Concentration (μg/L) <sup>2</sup>				
Pollutant	Samp.	Samp.	Samp.	Samp.	Average	(μg/L)
Aluminum, Total						2.5
Antimony, Total						5
Arsenic, Total						0.5
Barium, Total						3
Beryllium, Total						0.5
Cadmium, Total						1
Chromium, Total						3
Chromium, Hexavalent						3
Chromium, Trivalent						N/A
Copper, Total						2
Cyanide, Free						10
Lead, Total						0.5
Mercury, Total						0.005
Nickel, Total						2
Selenium, Total						5
Silver, Total						0.5
Thallium, Total						0.5
Zinc, Total						5.0

Indicate units if different than  $\mu g/L$ . Minimum Analytical Level

Table 3 - Toxic Pollutants with Water Quality Criteria

able 3 − Toxic Pollutants wit Outfall No.: ☐C ☐G	Samp. 1	Samp. 2	Samp. 3	Samp. 4	Avg.	MAL <sup>2</sup>
Pollutant	(μg/L) <sup>1</sup>	(µg/L)				
Acrolein						0.7
Acrylonitrile						50
Anthracene						10
Benzene						10
Benzidine						50
Benzo(a)anthracene						5
Benzo(a)pyrene						5
Bis(2-chloroethyl)ether						10
Bis(2-ethylhexyl) phthalate						10
Bromodichloromethane						10
Bromoform						10
Carbon Tetrachloride						2
Chlorobenzene						10
Chlorodibromomethane						10
Chloroform						10
Chrysene						5
Cresols						10
1,2-Dibromoethane						10
<i>m</i> -Dichlorobenzene						10
o-Dichlorobenzene						10
<i>p</i> -Dichlorobenzene						10
3,3'-Dichlorobenzidine						5
1,2-Dichloroethane						10
1,1-Dichloroethylene						10
Dichloromethane						20
1,2-Dichloropropane						10
1,3-Dichloropropylene						10
2,4-Dimethylphenol						10
Di- <i>n</i> -Butyl Phthalate						10
Epichlorohydrin						1,000
Ethylbenzene						10
Ethylene Glycol						_
Fluoride						500
Hexachlorobenzene						5
Hexachlorobutadiene						10
Hexachlorocyclopentadiene						10
Hexachloroethane						20
4,4'-Isopropylidenediphenol [bisphenol A]						_
Methyl Ethyl Ketone						50

Outfall No.: \Bigcup C \Bigcup G	Samp. 1	Samp. 2	Samp. 3	Samp. 4	Avg.	$\mathbf{MAL}^2$
Pollutant	(μg/L) <sup>1</sup>	(μg/L) <sup>1</sup>	(μg/L) <sup>1</sup>	(μg/L) <sup>1</sup>	$(\mu g/L)^{1}$	(μg/L)
Methyl <i>tert</i> -butyl ether [MTBE]						_
Nitrobenzene						10
<i>N</i> -Nitrosodiethylamine						20
<i>N</i> -Nitroso-di- <i>n</i> -Butylamine						20
Nonylphenol						333
Pentachlorobenzene						20
Pentachlorophenol						5
Phenanthrene						10
Polychlorinated Biphenyls (PCBs) 4						0.2
Pyridine						20
1,2,4,5-Tetrachlorobenzene						20
1,1,2,2-Tetrachloroethane						10
Tetrachloroethylene						10
Toluene						10
1,1,1-Trichloroethane						10
1,1,2-Trichloroethane						10
Trichloroethylene						10
2,4,5-Trichlorophenol						50
TTHM (Total Trihalomethanes)						10
Vinyl Chloride						10

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Total of detects for PCB-1242, PCB-1254, PCB-1221, PCB-1232, PCB-1248, PCB-1260, PCB-1016. If all values are non-detects, enter the highest non-detect preceded by a "<" symbol.

### STATEMENT OF BASIS/TECHNICAL SUMMARY AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

### **DESCRIPTION OF APPLICATION**

Applicant: San Miguel Electric Cooperative, Inc.; Texas Pollutant Discharge Elimination

System (TPDES) Permit No. WQ0002043000 (EPA I.D. No. TX0083445)

Regulated activity: Industrial wastewater permit

Type of application: Major amendment with renewal

Request: Major amendment with renewal to the expansion of lignite mining activities

including: the addition of new mining area X, Y, and Z; the addition of five proposed treatment ponds (X-1, X-2, Y-1, Z-1, and Z-2); the addition of five proposed outfall locations (055, 056, 058, 059, and 060); a revision of mining area 11H; the addition of proposed treatment pond O; and the addition of proposed Outfall 057; each of which will discharge mine pit water, mine depressurization water, and stormwater at an intermittent and flow-variable

rate.

Authority: Federal Clean Water Act (CWA) §402; Texas Water Code (TWC) §26.027;

30 Texas Administrative Code (TAC) Chapter 305, Subchapters C-F, and Chapters 307 and 319; commission policies; and Environmental Protection

Agency (EPA) guidelines

### EXECUTIVE DIRECTOR RECOMMENDATION

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The draft permit will expire at midnight, five years from the date of permit issuance according to the requirements of 30 TAC §305.127(1)(C)(i).

### REASON FOR PROJECT PROPOSED

The applicant applied to the Texas Commission on Environmental Quality (TCEQ) for an amendment of its existing permit. The proposed amendment would authorize the expansion of lignite mining activities including: the addition of new mining area X, Y, and Z; the addition of five proposed treatment ponds (X-1, X-2, Y-1, Z-1, and Z-2); the addition of five proposed outfall locations (055, 056, 058, 059, and 060); a revision of mining area 11H; the addition of proposed treatment pond O; and the addition of proposed Outfall 057; each of which will discharge mine pit water, mine depressurization water, and stormwater on an intermittent and flow-variable rate..

### PROJECT DESCRIPTION AND LOCATION

The applicant currently operates San Miguel Lignite Mine, a surface lignite coal mining operation.

Mine pit water, mine depressurization water, and stormwater from ponds in the active mining areas (denoted by an M) are routed to sedimentation ponds prior to discharge. Mine pit water and stormwater from ponds in the post-mining areas (denoted by an R) are routed to sedimentation ponds prior to discharge. The discharges from Outfalls 001M-035M, 050M-060M, 001R-035R, and 050R-060R are flow-variable and stormwater-driven. Stormwater that comes into contact with haul roads may be routed to haul road ponds or discharged through haul road drop structures to outfalls authorized under the TPDES Multi-Sector General Stormwater Permit No. TXR05X702.

Treated domestic wastewater, truck wash water, and some stormwater are routed to an evaporation pond (Pond C), which is not authorized to discharge. The domestic wastewater is treated in an

activated sludge package plant. The truck wash water and stormwater receive no treatment prior to being commingled with treated domestic waste and disposed via an on-site evaporation pond. The evaporation pond has a minimum surface area of 3.24 acres and a minimum storage volume of 30.6 acre-feet. Pond Evaporation calculations are presented in Appendix A and Other Requirement No. 12 has been carried forward in the draft permit and updated.

Water from the mining ponds (mine pit water, mine depressurization water, and stormwater) is authorized for reuse for on-site dust suppression. The facility also maintains Authorization for Industrial Reclaimed Water Use No. 2E-0000151, which allows for reuse of depressurization water, groundwater seepage, domestic (sanitary) wastewater, and stormwater at an approximate maximum volume of 4.0 million gallons per day (MGD).

The facility is located at 6200 Farm-to-Market Road 3387, south of the City of Christine, in Atascosa County, Texas 78012.

### **Discharge Routes and Designated Uses**

The effluent is discharged via Outfalls 001-006 to an unnamed tributary, thence to Caballos Creek, thence to Souse Creek, thence to La Parita Creek; via Outfall 007 to an unnamed tributary, thence to La Parita Creek; via Outfall 009 to an unnamed tributary, thence to Christine Creek, thence to Metate Creek, thence to La Parita Creek; via Outfall 010 to an unnamed tributary, thence to Christine Creek, thence to Metate Creek, thence to La Parita Creek; via Outfalls 011-019 to unnamed tributaries, thence to La Parita Creek; via Outfalls 008, 020-023 to an unnamed tributary, thence to Metate Creek, thence to La Parita Creek; via Outfalls 024-028 to an unnamed tributary, thence to Souse Creek, thence to La Parita Creek; via Outfalls 029-030 to an unnamed tributary, thence to Metate Creek, thence to La Parita Creek; via Outfall 031 to an unnamed tributary, thence to Metate Creek, thence to La Parita Creek; via Outfalls 032-033 to unnamed tributaries; and via Outfalls 034-035 to an unnamed ditch, thence to an unnamed tributary; and via Outfall 057 to an unnamed tributary, thence to LaParita Creek; thence all to the Atascosa River in Segment No. 2107 of the Nueces River Basin; via Outfall 050 to Hog Creek, thence to La Jarita Creek; via Outfall 051 to an unnamed tributary, thence to La Jarita Creek; via Outfall 052 to an unnamed ditch, thence to La Jarita Creek; via Outfall 053 to an unnamed tributary; via Outfall 054 to pipe culvert, thence to a ditch, thence to an unnamed tributary; via Outfall 055 to Bruce Branch; via Outfall 056 to Far Live Oak Creek; thence all to San Miguel Creek in Segment No. 2108 of the Nueces River Basin; and via 058 to Ditch CD Z-2A, thence to Bill Walker Creek, thence to Leoncita Creek; via Outfall 059 to Bill Walker Creek, thence to Leoncita Creek; via Outfall 060 to Ditch CD Z-1A, thence to Bill Walker Creek, thence to Leoncita Creek; thence all to the Frio River Above Choke Canyon Reservoir in Segment No. 2117 of the Nueces River Basin. The unclassified receiving water uses are minimal aquatic life use for all ditches, Bruce Branch, Far Live Oak Creek, and Bill Walker Creek, and high aquatic life use for Leoncita Creek. The designated uses for Segment No. 2107 and No. 2108 are primary contact recreation, public water supply, and high aquatic life use. The designated uses for Segment No. 2117 are primary contact recreation, public water supply, aquifer protection, and high aquatic life use. The effluent limits in the draft permit will maintain and protect the existing instream uses. All determinations are preliminary and subject to additional review and revisions.

### **Antidegradation Review**

In accordance with 30 Texas Administrative Code §307.5 and the TCEQ implementation procedures (June 2010) for the Texas Surface Water Quality Standards, an antidegradation review of the newly proposed receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. A Tier 2 review on the newly proposed outfalls and their discharge routes has preliminarily determined that no significant degradation of

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water quality is expected in Leoncita Creek, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination of the newly proposed outfalls and discharge routes can be reexamined and may be modified if new information is received.

### **Endangered Species Review**

The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas authorization of the Texas Pollutant Discharge Elimination System (TPDES; September 14, 1998; October 21, 1998 update). To make this determination for TPDES permits, TCEQ and EPA only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

### **Impaired Water Bodies**

Segment Nos. 2107, 2108, and 2117 are currently listed on the state's inventory of impaired and threatened waters, the 2020 CWA §303(d) list.

Segment No. 2107 is listed for bacteria in water (recreation use) from the downstream end of the segment at the confluence with the Frio River upstream to the confluence with Galvan Creek (AUs 2107\_01 and 2107\_02), for depressed dissolved oxygen in water from the confluence with Borrego Creek to the confluence with Galvan Creek (AU 2107\_02), and for impaired fish and microbenthic communities in water from the confluence with Borrego Creek upstream to the confluence with Palo Alto Creek (AUs 2107\_02 and 2107\_03). Due to the low concentrations of oxygen demanding constituents in this type of effluent, these discharges are not expected to contribute to the dissolved oxygen impairment in Segment No. 2107.

Segment No. 2108 is listed for bacteria in water (recreation use) from the downstream end of the segment to the confluence of Live Oak Creek (AU 2108\_01).

Segment No. 2117 is listed for bacteria in water (recreation use) from the downstream end of segment to the confluence with Ruiz Creek (AUs 2117\_01 and 2117\_02) and for total dissolved solids in water for the entire segment (AUs 2117\_01 through 2117\_06).

Due to the intermittent and primarily stormwater-driven nature of the discharge, the effluent from this facility is not expected to contribute to the bacteria impairment in Segment Nos. 2107, 2108, and 2117. In addition, domestic wastewater produced at the facility is not authorized for discharge and there are other known source of bacteria in the effluent therefore, discharge from this facility is not expected to add to the impairment for bacteria in Segment Nos. 2107, 2108, or 2117.

### **Completed Total Maximum Daily Loads (TMDLs)**

There are no completed TMDLs for Segment Nos. 2107, 2108, or 2117.

### **Dissolved Oxygen**

Due to the low concentrations of oxygen demanding constituents expected in this type of effluent, no significant depletion of dissolved oxygen is expected in the receiving waters as a result of these discharges.

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### **SUMMARY OF EFFLUENT DATA**

The following is a quantitative description of the discharge described in the monthly effluent report data for the period June 2017 through May 2022. The "Avg of Daily Avg" values presented in the following table are the average of all daily average values for the reporting period for each pollutant. The "Max of Daily Max" values presented in the following table are the individual maximum values for the reporting period for each pollutant. Flows are expressed in million gallons per day (MGD). All pH values are expressed in standard units (SU).

### Flow

FIOW			
Outfall	Frequency	Avg of Daily Avg, MGD	Max of Daily Max, MGD
002M-003M	Intermittent	No discharge	No discharge
004M	Intermittent	1.8	1.8
005M	Intermittent	1.457	1.8
006M	Intermittent	1.4	1.4
007M	Intermittent	1.8	1.8
008M	Intermittent	No discharge	No discharge
012M	Intermittent	2.884	3.7
013M-015M	Intermittent	No discharge	No discharge
016M	Intermittent	1.344	1.4
017M	Intermittent	No discharge	No discharge
018M	Intermittent	0.532	0.6
019M	Intermittent	No discharge	No discharge
020M	Intermittent	2.22	2.22
021M	Intermittent	2.02	2.02
022M	Intermittent	1.8	1.8
023M	Intermittent	No discharge	No discharge
025M	Intermittent	1.42	1.42
026M	Intermittent	No discharge	No discharge
027M	Intermittent	0.555	0.6
028M	Intermittent	0.64	1.4
029M-030M	Intermittent	No discharge	No discharge
031M	Intermittent	1.8	1.8
032M	Intermittent	8.4	8.4
033M	Intermittent	1.8	1.8
034M	Intermittent	1.8	1.8
050M	Intermittent	2.51	3.6
051M-052M	Intermittent	No discharge	No discharge
053M	Intermittent	1.4	1.4
054M	Intermittent	No discharge	No discharge
001R	Intermittent	1.8	1.8
009R-010R	Intermittent	No discharge	No discharge
011R	Intermittent	3.7	3.7
024R	Intermittent	3.29	3.29

Outfall Pollutant	Avg of Daily Avg	Max of Daily Max	
Outlan		mg/L	mg/L
002M-003M		No discharge	No discharge

	racteristics	A (D 1) A	3.6 CD 11 3.6
Outfall	Pollutant	Avg of Daily Avg	Max of Daily Max
004M	Total Suspended Solids (TSS)	mg/L 0.0	mg/L 0.0
004W	Total Iron		
		2.37	2.37
	Total Manganese	0.0	0.0
	pH, SU	7.5 SU, minimum	7.5 SU
005M	TSS	0.0	0.0
	Total Iron	0.268	0.467
	Total Manganese	0.0	0.0
	pH, SU	6.74 SU, minimum	7.66 SU
CD #	ma a		
006M	TSS	0.0	0.0
	Total Iron	0.134	0.254
	Total Manganese	0.0	0.0
	pH, SU	6.20 SU, minimum	7.29 SU
007M	TSS	6.101	26
00/W	Total Iron	0.120	0.807
	Total Manganese	0.179	0.815
		7.12 SU, minimum	8.81 SU
	pH, SU	/.12 50, minimum	0.01 50
oo8M		No discharge	No discharge
012M	TSS	10.51	9.4
0121/1	Total Iron	0.859	34 2.14
	1	0.368	
	Total Manganese	6.27 SU, minimum	0.912
	pH, SU	0.27 SU, IIIIIIIIIIIIII	8.05 SU
013M-015M		No discharge	No discharge
016M	TSS	0.0	0.0
	Total Iron	0.429	1.4
	Total Manganese	0.017	0.034
	pH, SU	6.12 SU, minimum	8.15 SU
017M		No discharge	No discharge
- ,		0.5	
018M	TSS	1.44	7.2
	Total Iron	0.433	2.27
	Total Manganese	0.005	0.027
	pH, SU	6.2 SU, minimum	8.3 SU
		-	
019M		No discharge	No discharge

Outfall	Pollutant	Avg of Daily Avg	Max of Daily Max
Outfall	Pollutant	mg/L	mg/L
020M	TSS	9.8	22
	Total Iron	0.303	0.325
	Total Manganese	0.027	0.027
	pH, SU	7.62 SU, minimum	7.78 SU
021M	TSS	11.215	26.4
	Total Iron	0.36	0.813
	Total Manganese	0.02	0.046
	pH, SU	7.69 SU, minimum	8.9 SU
022M	TSS	10.81	26.6
02211	Total Iron		1.42
	Total Manganese	0.357 0.285	1.42
		6.58 SU, minimum	8.89 SU
	pH, SU	0.50 50, 1111111111111	0.09.50
023M		No discharge	No discharge
025M	TSS	5.047	10.5
	Total Iron	0.110	0.245
	Total Manganese	0.056	0.195
	pH, SU	6.52 SU, minimum	7.79 SU
026M		No discharge	No discharge
0201/1		Two disentings	Tio discharge
027M	TSS	11.683	26.3
- /	Total Iron	0.386	1.1
	Total Manganese	0.049	0.156
	pH, SU	6.15 SU, minimum	8.35 SU
03.5	Trace		
028M	TSS	5.98	13.2
	Total Iron	0.168	0.438
	Total Manganese	0.113	0.264
	pH, SU	6.29 SU, minimum	7.61 SU
029M-030M		No discharge	No discharge
031M	TSS	0.0	0.0
02111	Total Iron	0.255	1.32
		0.255	
031M	Total Manganese pH, SU	7.51 SU, minimum	0.0 8.57 SU
- 0		,	0/

Effluent Cha		Avg of Daily Avg	Max of Daily Max
Outfall	Pollutant	mg/L	mg/L
032M	TSS	0.0	0.0
o .	Total Iron	1.236	4.1
	Total Manganese	0.0	0.0
	pH, SU	7.12 SU, minimum	7.59 SU
			, 0,
033M	TSS	11.146	30
	Total Iron	0.412	5.07
	Total Manganese	0.1	0.511
	pH, SU	6.24 SU, minimum	8.93 SU
	F,		,,,
034M	TSS	0.0	0.0
0.	Total Iron	2.078	5.62
	Total Manganese	0.0	0.0
	pH, SU	6.82 SU, minimum	7.63 SU
			, ,
050M	TSS	4.955	9.01
J	Total Iron	0.146	0.514
	Total Manganese	0.034	0.04
	pH, SU	7.48 SU, minimum	8.52 SU
			<u>_</u>
051M-052M		No discharge	No discharge
053M	TSS	2.5	2.5
	Total Iron	0.114	0.144
	Total Manganese	0.022	0.022
	pH, SU	8.33 SU, minimum	8.36 SU
			-
051M-052M		No discharge	No discharge
001R	Settleable Solids, ml/L	N/A	o.5 ml/L
	pH, SU	7.16 SU, minimum	7.31 SU
009R-010R		No discharge	No discharge
011R	Settleable Solids, ml/L	N/A	o.5ml/L
	pH, SU	7.42 SU, minimum	7.42 SU
			·
024R	Settleable Solids, ml/L	N/A	0.5 ml/L
-	pH, SU	6.44 SU, minimum	7.2 SU

There are no effluent limit violations.

### **DRAFT PERMIT CONDITIONS**

The draft permit authorizes the discharge of mine pit water, mine depressurization water, and stormwater from ponds in the active mining areas via Outfalls 001M-035M and 050M-060M on an intermittent and flow-variable basis and the discharge of mine pit water and stormwater from ponds in the post-mining areas via Outfalls 001R-035R and 050R-060R on an intermittent and flow-variable basis.

Effluent limitations are established in the draft permit as follows:

Outfall	Pollutant	Daily Average mg/L	Daily Maximum mg/L
001M-011M,	Flow, MGD	Report, MGD	Report, MGD
013M-020M, 022M-027M,	TSS	35	70
029M-033M,	Total Iron	3.0	6.0
035M, 050M,	Total Manganese	1.0	2.0
052M, and 054M-060M	pH, SU	6.0 SU, minimum	9.0 SU
012M, 028M,	Flow, MGD	Report, MGD	Report, MGD
051M, and	TSS	35	70
053M	Total Iron	3.0	6.0
	Total Manganese	1.0	2.0
	Total Selenium	Report	Report
	Total Selenium	0.0168	0.0356
	pH, SU	6.0 SU, minimum	9.0 SU
021M	Flow, MGD	Report, MGD	Report, MGD
	TSS	35	70
	Total Aluminum	Report	Report
	Total Aluminum	0.834	1.765
	Total Iron	3.0	6.0
	Total Manganese	1.0	2.0
	pH, SU	6.0 SU, minimum	9.0 SU
034M	Flow, MGD	Report, MGD	Report, MGD
	TSS	35	70
	Total Aluminum	Report	Report
	Total Iron	3.0	6.0
	Total Manganese	1.0	2.0
	pH, SU	6.0 SU, minimum	9.0 SU

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Outfall	Pollutant	Daily Average mg/L	Daily Maximum mg/L
001R-011R, 013R-020R,	Flow, MGD	Report, MGD	Report, MGD
022R-027R, 029R-033R, 035R, 050R,	Settleable Solids, ml/L	N/A	0.5 ml/L
052R, and 054R-060R	pH, SU	6.0 SU, minimum	9.0 SU
012R, 028R,	Flow, MGD	Report, MGD	Report, MGD
051R, and	Settleable Solids, ml/L	N/A	o.5 ml/L
053R	Total Selenium	Report	Report
	Total Selenium	0.0168	0.0356
	pH, SU	6.0 SU, minimum	9.0 SU
021R	Flow, MGD	Report, MGD	Report, MGD
	Settleable Solids, ml/L	N/A	o.5 ml/L
	Total Aluminum	Report	Report
	Total Aluminum	0.834	1.765
	pH, SU	6.0 SU, minimum	9.0 SU
034R	Flow, MGD	Report, MGD	Report, MGD
	Settleable Solids, ml/L	N/A	0.5 ml/L
	Total Aluminum	Report	Report
	pH, SU	6.0 SU, minimum	9.0 SU

### **OUTFALL LOCATIONS**

Outfall	Latitude	Longitude
001	28.69 N	98.49 W
002	28.68 N	98.49 W
003	28.68 N	98.48 W
004	28.68 N	98.48 W
005	28.69 N	98.48 W
006	28.69 N	98.47 W
007	28.71 N	98.38 W
008	28.75 N	98.35 W
009	28.75 N	98.4 W
010	28.75 N	98.39 W
011	28.71 N	98.44 W
012	28.71 N	98.43 W
013	28.72 N	98.4 W
014	28.71 N	98.41 W

015	28.71 N	98.41 W
016	28.71 N	98.44 W
017	28.71 N	98.6 W
018	28.71 N	98.43 W
019	28.72 N	98.41 W
020	28.75 N	98.37 W
021	28.75 N	98.36 W
022	28.73 N	98.36 W
023	28.72 N	98.36 W
024	28.69 N	98.46 W
025	28.69 N	98.46 W
026	28.69 N	98.47 W
027	28.7 N	98.46 W
028	28.7 N	98.48 W
029	28.78 N	98.36 W
030	28.77 N	98.37 W
031	28.76 N	98.36 W
032	28.8 N	98.34 W
033	28.76 N	98.32 W
034	28.79 N	98.33 W
035	28.78 N	98.32 W
050	28.63 N	98.51 W
051	28.61 N	98.51 W
052	28.62 N	98.51 W
053	28.6 N	98.53 W
054	28.59 N	98.53 W
055	28.58 N	98.55 W
056	28.59 N	98.56 W
057	28.72 N	98.43 W
058	28.56 N	98.61 W
059	28.53 N	98.60 W
060	28.54 N	98.61 W

### **Technology-Based Effluent Limitations**

Regulations in Title 40 of the Code of Federal Regulations (40 CFR) require that technology-based limitations be placed in wastewater discharge permits based on effluent limitations guidelines, where applicable, or on best professional judgment (BPJ) in the absence of guidelines. The discharge of mine pit water and stormwater via Outfalls 001M/R-035M/R and 050M/R-060M/R is subject to federal effluent limitation guidelines at 40 CFR Part 434 Subpart C – Acid or Ferruginous Mine Drainage.

Existing permit Outfalls 001M-035M, 050M-054M are the point of discharge from a single pond in the active mining area. Outfalls 001R-035R, 050R-054R are the point of discharge from a single pond in the post-mining area. Outfalls 055M/R-060M/R are added to the draft permit per the amendment request. The pond locations are detailed in Other Requirement No. 5.

### Outfalls 001M-035M and 050M-060M

Effluent limitations in the existing and draft permits for total suspended solids and pH are established based on 40 CFR §434.32 (effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available - BPT). Effluent limitations for total manganese included in the existing permit and continued in the draft permit are required by 40 CFR §434.32 (BPT) and §434.33 (effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable - BAT); although, the more protective 30 TAC §319.22 limitations have been applied. Effluent limitations for total iron in the existing permit are required by 40 CFR §434.32 (BPT) and §434.33 (BAT); although, the more stringent 40 CFR §434.35 (new source performance standards – NSPS, effective October 9, 1985) have been applied. Although, construction commenced at the facility site in 1979 and NSPS are not required, the existing total iron NSPS are included in prior Agency discharge permits issued since May 12, 1993 and possibly earlier. All the existing effluent limitations have been continued in the draft permit in accordance with anti-backsliding guidelines under 40 CFR Part §122.44(l).

### Outfalls 001R-035R and 050R-060R

Existing and draft permit effluent limitations for settleable solids and pH are based on 40 CFR §434.52 (BPT) and settleable solids are also consistent with §434.53 (BAT).

### Water Quality-Based Effluent Limitations

Calculations of water quality-based effluent limitations for the protection of aquatic life and human health are presented in Appendix B. Aquatic life criteria established in Table 1 and human health criteria established in Table 2 of 30 TAC Chapter 307 are incorporated into the calculations, as are recommendations in the Water Quality Assessment Team's memorandum dated July 6, 2022. TCEQ practice for determining significant potential is to compare the reported analytical data from the facility against percentages of the calculated daily average water quality-based effluent limitation. Permit limitations are required when analytical data reported in the application exceeds 85 percent of the calculated daily average water quality-based effluent limitation. Monitoring and reporting is required when analytical data reported in the application exceeds 70 percent of the calculated daily average water quality-based effluent limitation.

Effluent data was not submitted with the application for any discharge outfalls. Data reported by separate letter on November 5, 2021, May 8, 2021, July 21, 2023, and August 7, 2023 was screened against the calculated water quality-based effluent limitations. Permit limitations requirements due to exceeding 85 percent of the calculated daily average water quality-based effluent limitation for aluminum was placed in Outfall 021 M/R and for selenium for Outfalls 012 M/R, 028M/R, 051M/R, and 053M/R based on the data submitted. Other Requirement No. 19 was updated to reflect the effluent data submitted. The facility does not discharge during critical conditions and Other Requirement No. 20 was placed in the draft permit as well as Other Requirement No. 21 to require the facility to demonstrate the dissolved portion of aluminum is less than fifty percent.

The limits in the existing permit were compared to the calculated water quality-based effluent limits to determine whether the existing limits are still protective. None of the recalculated limits are more stringent than the existing values. The existing limits are still protective.

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### Total Dissolved Solids (TDS), Chloride, and Sulfate Screening

Due to the intermittent flow-variable nature of the discharge and industrial EPA minor facilities are subject to screening on a case-by-case basis, no screening was performed.

### pH Screening

The existing permit includes pH limits of 6.0-9.0 SU at all Outfalls. All outfalls discharge to either intermittent ditches, tributaries, or creeks that are unclassified water bodies. Consistent with the procedures for pH screening that were submitted to EPA with a letter dated May 28, 2014, and approved by EPA in a letter dated June 2, 2014, requiring a discharge to an unclassified water body to meet pH limits of 6.0-9.0 standard units reasonably ensures instream compliance with *Texas Surface Water Quality Standards* pH criteria. These limits have been carried forward in the draft permit.

### SUMMARY OF CHANGES FROM APPLICATION

No changes were made from the application.

### SUMMARY OF CHANGES FROM EXISTING PERMIT

The permittee requested the following changes in their amendment request that the Executive Director has recommended granting.

- 1. The addition of new mining area X, Y, and Z.
- 2. The addition of five proposed treatment ponds (X-1, X-2, Y-1, Z-1, and Z-2).
- 3. The addition of five proposed outfall locations (055, 056, 058, 059, and 060).
- 4. A revision of mining area 11H.
- 5. The addition of proposed treatment pond O.
- 6. The addition of proposed Outfall 057.

The following additional changes have been made to the draft permit.

- 1. Pages 3-13 were updated (May 2021 version).
- 2. Selenium limits were placed on Outfalls 012, 028, 051, and 053 and aluminum limits were added to Outfall 021 based on effluent samples submitted on July 21, 2023 and August 7, 2023.
- 3. Other Requirements Nos. 5, 10, 12, and 19 in the draft permit were modified from the existing permit based on the amendment, evaporation calculations, and discharge analytics submitted.

### **BASIS FOR DRAFT PERMIT**

The following items were considered in developing the draft permit:

- 1. Application received on April 4, 2022, and additional information received on November 5, 2021, May 8, 2021, and May 24, 2022.
- 2. Existing permits: TPDES Permit No. WQ0002043000 issued on June 16, 2020.
- 3. TCEQ Rules.
- 4. *Texas Surface Water Quality Standards* 30 TAC §§307.1-307.10, effective March 1, 2018, as approved by EPA Region 6.

- 5. *Texas Surface Water Quality Standards* 30 TAC §§307.1-307.10, effective March 6, 2014, as approved by EPA Region 6, for portions of the 2018 standards not approved by EPA Region 6.
- 6. *Texas Surface Water Quality Standards* 30 TAC §§307.1-307.10, effective July 22, 2010, as approved by EPA Region 6, for portions of the 2014 standards not approved by EPA Region 6.
- 7. *Texas Surface Water Quality Standards* 30 TAC §§307.1-307.10, effective August 17, 2000, and Appendix E, effective February 27, 2002, for portions of the 2010 standards not approved by EPA Region 6.
- 8. *Procedures to Implement the Texas Surface Water Quality Standards* (IPs), Texas Commission on Environmental Quality, June 2010, as approved by EPA Region 6.
- 9. Procedures to Implement the Texas Surface Water Quality Standards, Texas Commission on Environmental Quality, January 2003, for portions of the 2010 IPs not approved by EPA Region 6.
- 10. Memos from the Standards Implementation Team and Water Quality Assessment Team of the Water Quality Assessment Section of the TCEQ.
- 11. Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits, TCEQ Document No. 98-001.000-OWR-WQ, May 1998.
- 12. EPA Effluent Guidelines: 40 CFR Part 434 (BAT, BCT, and BPT). A new source determination was performed and the discharge from this facility is not a new source as defined at 40 CFR §122.2.
- 13. Consistency with the Coastal Management Plan: N/A
- 14. Letter dated May 28, 2014, from L'Oreal W. Stepney, P.E., Deputy Director, Office of Water, TCEQ, to Bill Honker, Director, Water Quality Protection Division, EPA (TCEQ proposed development strategy for pH evaluation procedures).
- 15. Letter dated June 2, 2014, from William K. Honker, P.E., Director, Water Quality Protection Division, EPA, to L'Oreal W. Stepney, P.E., Deputy Director, Office of Water, TCEQ (Approval of TCEQ proposed development strategy for pH evaluation procedures).

### PROCEDURES FOR FINAL DECISION

When an application is declared administratively complete, the Chief Clerk sends a letter to the applicant advising the applicant to publish the Notice of Receipt of Application and Intent to Obtain Permit in the newspaper. In addition, the Chief Clerk instructs the applicant to place a copy of the application in a public place for reviewing and copying in the county where the facility is or will be located. This application will be in a public place throughout the comment period. The Chief Clerk also mails this notice to any interested persons and, if required, to landowners identified in the permit application. This notice informs the public about the application and provides that an interested person may file comments on the application or request a contested case hearing or a public meeting.

Once a draft permit is completed, it is sent to the Chief Clerk, along with the Executive Director's preliminary decision contained in the technical summary or fact sheet. At that time, the Notice of Application and Preliminary Decision will be mailed to the same people and published in the same newspaper as the prior notice. This notice sets a deadline for making public comments. The applicant must place a copy of the Executive Director's preliminary decision and draft permit in the public place with the application.

Any interested person may request a public meeting on the application until the deadline for filing public comments. A public meeting is intended for the taking of public comment and is not a contested case hearing.

After the public comment deadline, the Executive Director prepares a response to all significant public comments on the application or the draft permit raised during the public comment period. The Chief Clerk then mails the Executive Director's response to comments and final decision to people who have

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filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that if a person is not satisfied with the Executive Director's response and decision, they can request a contested case hearing or file a request to reconsider the Executive Director's decision within 30 days after the notice is mailed.

The Executive Director will issue the permit unless a written hearing request or request for reconsideration is filed within 30 days after the Executive Director's response to comments and final decision is mailed. If a hearing request or request for reconsideration is filed, the Executive Director will not issue the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

If the Executive Director calls a public meeting or the commission grants a contested case hearing as described above, the commission will give notice of the date, time, and place of the meeting or hearing. If a hearing request or request for reconsideration is made, the commission will consider all public comments in making its decision and shall either adopt the Executive Director's response to public comments or prepare its own response.

For additional information about this application, contact Thomas E. Starr at (512) 239-4570.

Thomas E. Starr
Thomas E. Starr

August 4, 2022 and updated August 17, 2023

Date

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### Appendix A Evaporation Pond Evaluation

30 Texas Administrative Code (TAC), Chapter 309, Subchapter C outlines procedures used to determine appropriate design for irrigation systems at domestic wastewater treatment plants. Appropriate evaporation pond sizing is determined based upon these procedures using best professional judgement (BPJ). These procedures consist of two evaluations: critical condition evaluation and average condition evaluation.

### **Critical Condition Evaluation**

The critical condition evaluation is designed to evaluate the storage capacity of the pond(s) under a "worst-case scenario." The worst-case scenario is defined as the 25-year lowest net evaporation\* assuming daily flow to the pond at the permitted rate. The pond's storage capacity is considered adequate when the Total Storage Necessary is less than or equal to the Pond Storage Volume (the pond could contain all wastewater discharged when evaporation is lowest).

The following is a summary of calculations performed in determining the Total Storage Necessary:

Effluent Flow	0.0178	MGD
Pond Surface Acres	3.24	acres
Pond Storage Volume	30.60	acre-feet

				Evap	Storage
		Flow to Ponds	Evap Rate	from Ponds	Requirements
<u>Month</u>	# of Days	(acre-feet)	(feet)	(acre-feet)	(acre-feet)
January	31	1.69	0.01	0.02	1.67
February	28	1.53	0.01	0.03	1.50
March	31	1.69	0.01	0.04	1.65
April	30	1.63	0.02	0.06	1.57
May	31	1.69	0.02	0.05	1.64
June	30	1.63	0.03	0.09	1.55
July	31	1.69	0.03	0.09	1.60
August	31	1.69	0.03	0.11	1.58
September	30	1.63	0.01	0.04	1.59
October	31	1.69	0.01	0.05	1.64
November	30	1.63	0.01	0.03	1.61
December	31	1.69	0.01	0.02	1.67
			Total S	Storage Necessary	19.26

Flow to Pond = (Effluent Flow (MGD)) \* (# of Days)\* (3.0684)
Evaporation from Pond = (Pond Surface Acres) \* (Evaporation Rate)
Evaporation Rate = 25-year lowest net evaporation distributed by month
Storage Requirement = (Flow to Pond) - (Evaporation from Pond)
Total Storage Necessary = SUM (Storage Requirement)

<sup>\*</sup>Texas Water Development Board Lake Evaporation and Precipitation data for Quadrangle 909 for the period of record 1954 through 2021.

### **Average Condition Evaluation**

The pond(s) must have enough surface area to evaporate all the flow to the pond(s) under average rainfall conditions. The pond is considered adequately sized when the Total Storage Necessary is less than or equal to zero. If this value is greater than zero, the pond's surface must be increased or the effluent flow reduced to ensure that no accumulation occurs during average conditions

The following is a summary of calculations performed in determining the Total Storage Necessary:

Effluent Flow	0.017754	MGD
Pond Surface Acres	3.24	acres
Pond Storage Volume	30.6	acre-feet

		Flow to Ponds	Evap Rate	Evap from Ponds	Storage Requirements
<u>Month</u>	# of Days	(acre-feet)	<u>(feet)</u>	(acre-feet)	(acre-feet)
January	31	1.69	0.09	0.31	1.38
February	28	1.53	0.12	0.40	1.12
March	31	1.69	0.17	0.56	1.13
April	30	1.63	0.27	0.88	0.76
May	31	1.69	0.22	0.72	0.97
June	30	1.63	0.39	1.27	0.37
July	31	1.69	0.40	1.29	0.39
August	31	1.69	0.50	1.63	0.06
September	30	1.63	0.18	0.59	1.05
October	31	1.69	0.20	0.66	1.03
November	30	1.63	0.13	0.42	1.21
December	31	1.69	0.10	0.31	1.38
			Total	Storage Necessary	10.85

Flow to Pond = (Effluent Flow (MGD)) \* (# of Days) \* (3.0684) Evaporation from Pond = (Pond Surface Acres) \* (Evaporation Rate) Evaporation Rate = 25-year average monthly net evaporation\* Storage Requirement = (Flow to Pond) - (Evaporation from Pond) Total Storage Necessary = SUM (Storage Requirement)

### **Conclusions**

Pond C meets the storage requirements for critical conditions but requires additional storage for the average condition. Other Requirement No. 12 has been updated.

<sup>\*</sup>Texas Water Development Board Lake Evaporation and Precipitation data for Quadrangle 909 for the period of record 1954 through 2021.

### Appendix B Calculated Water Quality-Based Effluent Limits

TEXTOX MENU #	1 - INTERMITTENT STREAM				
The water quality-based effluent limita	ations developed below are calculated using:				
Table 1, 2014 Texas Surface Water Qua	ality Standards (30 TAC 307) for Freshwater				
"Procedures to Implement the Texas Surface Water Quality Standards," TCEQ, June					
PERMIT INFORMATION					
Permittee Name:	San Miguel Electric Cooperative, Inc.				
TPDES Permit No:	WQ0002043000				
Outfall No:	001-035 and 057				
Prepared By:	Thomas Starr				
Date:	August 8, 2022				
DISCHARGE INFORMATION					
Intermittent Receiving Waterbody:	unnamed tributaries, Christine Creek, and Metate Creek				
Segment No:	2107				
TSS (mg/L):	13				
pH (Standard Units):	7.5				
Hardness (mg/L as CaCO <sub>3</sub> ):	130				
Chloride (mg/L):	242				
Effluent Flow for Aquatic Life (MGD):	2.22				
Critical Low Flow [7Q2] (cfs):	0				
% Effluent for Acute Aquatic Life:	100				

			Partition	Dissolved		Water	
	Intercept	Slope	Coefficient	Fraction		Effect	
Stream/River Metal	(b)	(m)	(Kp)	(Cd/Ct)	Source	Ratio	Source
Aluminum	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Arsenic	5.68	-0.73	73590.43	0.511		1.00	Assumed
Cadmium	6.60	-1.13	219403.73	0.260		1.00	Assumed
Chromium (total)	6.52	-0.93	304812.44	0.202		1.00	Assumed
Chromium (trivalent)	6.52	-0.93	304812.44	0.202		1.00	Assumed
Chromium (hexavalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Copper	6.02	-0.74	156921.31	0.329		1.00	Assumed
Lead	6.45	-0.80	362114.00	0.175		1.00	Assumed
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Nickel	5.69	-0.57	113514.75	0.404		1.00	Assumed
Selenium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Silver	6.38	-1.03	170859.19	0.310		1.00	Assumed
Zinc	6.10	-0.70	209044.94	0.269		1.00	Assumed

	FW Acute				Daily
	Criterion	WLAa	LTAa	Daily Avg.	Max.
Parameter	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)
Aldrin	3.0	3.00	1.72	2.52	5.34
Aluminum	991	991	568	834	1765
Arsenic	340	665	381	560	1185
Cadmium	11.07523	42.7	24.4	35.9	76.0
Carbaryl	2.0	2.00	1.15	1.68	3.56
Chlordane	2.4	2.40	1.38	2.02	4.27
Chlorpyrifos	0.083	0.0830	0.0476	0.0699	0.147
Chromium (trivalent)	706.3407	3505	2009	2952	6246
Chromium (hexavalent)	15.7	15.7	9.00	13.2	27.9
Copper	18.18449	55.3	31.7	46.5	98.5
Cyanide (free)	45.8	45.8	26.2	38.5	81.6
4,4'-DDT	1.1	1.10	0.630	0.926	1.96
Demeton	N/A	N/A	N/A	N/A	N/A
Diazinon	0.17	0.170	0.0974	0.143	0.302
Dicofol [Kelthane]	59.3	59.3	34.0	49.9	105
Dieldrin	0.24	0.240	0.138	0.202	0.427
Diuron	210	210	120	176	374
Endosulfan I (alpha )	0.22	0.220	0.126	0.185	0.392
Endosulfan II (beta )	0.22	0.220	0.126	0.185	0.392
Endosulfan sulfate	0.22	0.220	0.126	0.185	0.392
Endrin	0.086	0.0860	0.0493	0.0724	0.153
Guthion [Azinphos Methyl]	N/A	N/A	N/A	N/A	N/A
Heptachlor	0.52	0.520	0.298	0.438	0.926
Hexachlorocyclohexane (gamma ) [Lind	1.126	1.13	0.645	0.948	2.00
Lead	85.83083	490	281	412	872
Malathion	N/A	N/A	N/A	N/A	N/A
Mercury	2.4	2.40	1.38	2.02	4.27
Methoxychlor	N/A	N/A	N/A	N/A	N/A
Mirex	N/A	N/A	N/A	N/A	N/A
Nickel	584.6025	1447	829	1219	2579
Nonylphenol	28	28.0	16.0	23.5	49.8
Parathion (ethyl)	0.065	0.0650	0.0372	0.0547	0.115
Pentachlorophenol	14.41833	14.4	8.26	12.1	25.6
Phenanthrene	30	30.0	17.2	25.2	53.4
Polychlorinated Biphenyls [PCBs]	2.0	2.00	1.15	1.68	3.56
Selenium	20	20.0	11.5	16.8	35.6
Silver	0.8	28.7	16.4	24.1	51.3
Toxaphene	0.78	0.780	0.447	0.657	1.38
Tributyltin [TBT]	0.13	0.130	0.0745	0.109	0.232
2,4,5 Trichlorophenol	136	136	77.9	114	242
Zinc	146.3522	544	312	458	969

	70% of	85% of
Aquatic Life	Daily Avg.	Daily Avg.
Parameter	(μg/L)	(μg/L)
Aldrin	1.76	2.14
Aluminum	584	709
Arsenic	392	476
Cadmium	25.1	30.5
Carbaryl	1.17	1.43
Chlordane	1.41	1.71
Chlorpyrifos	0.0489	0.0594
Parameter	(μg/L)	(μg/L)
Chromium (trivalent)	2066	2509
Chromium (hexavalent)	9.25	11.2
Copper	32.5	39.5
Cyanide (free)	27.0	32.7
4,4'-DDT	0.648	0.787
Demeton	N/A	N/A
Diazinon	0.100	0.121
Dicofol [Kelthane]	34.9	42.4
Dieldrin	0.141	0.171
Diuron	123	150
Endosulfan I (alpha )	0.129	0.157
Endosulfan II (beta )	0.129	0.157
Endosulfan sulfate	0.129	0.157
Endrin	0.0507	0.0615
Guthion [Azinphos Methyl]	N/A	N/A
Heptachlor	0.306	0.372
Hexachlorocyclohexane (gamma) [Lind	0.663	0.806
Lead	288	350
Malathion	N/A	N/A
Mercury	1.41	1.71
Methoxychlor	N/A	N/A
Mirex	N/A	N/A
Nickel	853	1036
Nonylphenol	16.5	20.0
Parathion (ethyl)	0.0383	0.0465
Pentachlorophenol	8.50	10.3
Phenanthrene	17.6	21.4
Polychlorinated Biphenyls [PCBs]	1.17	1.43
Selenium	11.7	14.3
Silver	16.9	20.5
Toxaphene	0.459	0.558
Tributyltin [TBT]	0.0766	0.0930
2,4,5 Trichlorophenol	80.1	97.3
Zinc	320	389

TEXTOX MENU #	#1 - INTERMITTENT STREAM				
The water quality-based effluent limit	ations developed below are calculated using:				
Table 1, 2014 Texas Surface Water Qu	ality Standards (30 TAC 307) for Freshwater				
"Procedures to Implement the Texas S	Surface Water Quality Standards," TCEQ, June				
PERMIT INFORMATION					
Permittee Name:	San Miguel Electric Cooperative, Inc.				
TPDES Permit No:	WQ0002043000				
Outfall No:	050-056				
Prepared By:	Thomas Starr				
Date:	August 8, 2022				
DISCHARGE INFORMATION					
Intermittent Receiving Waterbody:	unnamed tributaries and Hog Creek				
Segment No:	2108				
TSS (mg/L):	11				
pH (Standard Units):	7.4				
Hardness (mg/L as CaCO₃):	201				
Chloride (mg/L):	218				
Effluent Flow for Aquatic Life (MGD):	2.51				
Critical Low Flow [7Q2] (cfs):	0				
% Effluent for Acute Aquatic Life:	100				

			Partition	Dissolved		Water	
	Intercept	Slope	Coefficient	Fraction		Effect	
Stream/River Metal	(b)	(m)	(Kp)	(Cd/Ct)	Source	Ratio	Source
Aluminum	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Arsenic	5.68	-0.73	83134.89	0.522		1.00	Assumed
Cadmium	6.60	-1.13	264988.04	0.255		1.00	Assumed
Chromium (total)	6.52	-0.93	356044.93	0.203		1.00	Assumed
Chromium (trivalent)	6.52	-0.93	356044.93	0.203		1.00	Assumed
Chromium (hexavalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Copper	6.02	-0.74	177569.93	0.339		1.00	Assumed
Lead	6.45	-0.80	413890.88	0.180		1.00	Assumed
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Nickel	5.69	-0.57	124855.07	0.421		1.00	Assumed
Selenium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Silver	6.38	-1.03	202939.01	0.309		1.00	Assumed
Zinc	6.10	-0.70	234976.87	0.279		1.00	Assumed

	FW Acute				Daily
	Criterion	WLAa	LTAa	Daily Avg.	Max.
Parameter	(μg/L)	(μg/L)	(μg/L)	, μg/L)	(μg/L)
Aldrin	3.0	3.00	1.72	2.52	5.34
Aluminum	991	991	568	834	176
Arsenic	340	651	373	548	1159
Cadmium	16.91129	66.2	37.9	55.7	11
Carbaryl	2.0	2.00	1.15	1.68	3.5
Chlordane	2.4	2.40	1.38	2.02	4.2
Chlorpyrifos	0.083	0.0830	0.0476	0.0699	0.14
Chromium (trivalent)	1009.281	4962	2843	4179	884
Chromium (hexavalent)	15.7	15.7	9.00	13.2	27.
Copper	27.41669	81.0	46.4	68.2	14
Cyanide (free)	45.8	45.8	26.2	38.5	81.
4,4'-DDT	1.1	1.10	0.630	0.926	1.9
Demeton	N/A	N/A	N/A	N/A	N/
Diazinon	0.17	0.170	0.0974	0.143	0.30
Dicofol [Kelthane]	59.3	59.3	34.0	49.9	10
Dieldrin	0.24	0.240	0.138	0.202	0.42
Diuron	210	210	120	176	37
Endosulfan I ( <i>alpha</i> )	0.22	0.220	0.126	0.185	0.39
Endosulfan II ( <i>beta</i> )	0.22	0.220	0.126	0.185	0.39
Endosulfan sulfate	0.22	0.220	0.126	0.185	0.39
Endrin	0.086	0.0860	0.0493	0.0724	0.15
Guthion [Azinphos Methyl]	N/A	N/A	N/A	N/A	N/
Heptachlor	0.52	0.520	0.298	0.438	0.92
Hexachlorocyclohexane (gamma ) [Lind	1.126	1.13	0.645	0.948	2.0
Lead	136.8646	760	435	640	135
Malathion	N/A	N/A	N/A	N/A	N/
Mercury	2.4	2.40	1.38	2.02	4.2
Methoxychlor	N/A	N/A	N/A	N/A	N/
Mirex	N/A	N/A	N/A	N/A	N/
Nickel	845.2175	2006	1149	1689	357
Nonylphenol	28	28.0	16.0	23.5	49.
Parathion (ethyl)	0.065	0.0650	0.0372	0.0547	0.11
Pentachlorophenol	13.03972	13.0	7.47	10.9	23.
Phenanthrene	30	30.0	17.2	25.2	53.
Polychlorinated Biphenyls [PCBs]	2.0	2.00	1.15	1.68	3.5
Selenium	2.0	20.0	11.5	16.8	35.
Silver	0.8	28.8	16.5	24.2	51.
Toxaphene	0.78	0.780	0.447	0.657	1.3
Tributyltin [TBT]	0.78	0.780	0.447	0.037	0.23
2,4,5 Trichlorophenol	136	136	77.9	114	24

	70% of	85% of
Aquatic Life	Daily Avg.	Daily Avg.
Parameter	(μg/L)	(μg/L)
Aldrin	1.76	2.14
Aluminum	584	709
Arsenic	383	466
Cadmium	39.0	47.4
Carbaryl	1.17	1.43
Chlordane	1.41	1.71
Chlorpyrifos	0.0489	0.0594
Parameter	(μg/L)	(μg/L)
Chromium (trivalent)	2925	3552
Chromium (hexavalent)	9.25	11.2
Copper	47.7	57.9
Cyanide (free)	27.0	32.7
4,4'-DDT	0.648	0.787
Demeton	N/A	N/A
Diazinon	0.100	0.121
Dicofol [Kelthane]	34.9	42.4
Dieldrin	0.141	0.171
Diuron	123	150
Endosulfan I (alpha )	0.129	0.157
Endosulfan II (beta )	0.129	0.157
Endosulfan sulfate	0.129	0.157
Endrin	0.0507	0.0615
Guthion [Azinphos Methyl]	N/A	N/A
Heptachlor	0.306	0.372
Hexachlorocyclohexane (gamma ) [Lind	0.663	0.806
Lead	448	544
Malathion	N/A	N/A
Mercury	1.41	1.71
Methoxychlor	N/A	N/A
Mirex	N/A	N/A
Nickel	1182	1436
Nonylphenol	16.5	20.0
Parathion (ethyl)	0.0383	0.0465
Pentachlorophenol	7.68	9.33
Phenanthrene	17.6	21.4
Polychlorinated Biphenyls [PCBs]	1.17	1.43
Selenium	11.7	14.3
Silver	16.9	20.6
Toxaphene	0.459	0.558
Tributyltin [TBT]	0.0766	0.0930
2,4,5 Trichlorophenol	80.1	97.3
Zinc	447	543

TEXTOX MENU #1 - INTERMITTENT STREAM									
The water quality-based effluent limitations developed below are calculated using:									
Table 4 2044 Table Confere Water Over	l:	- /20 TAC 20	\7\ f F l-:						
Table 1, 2014 Texas Surface Water Quality Standards (30 TAC 307) for Freshwater									
"Procedures to Implement the Texas Surface Water Quality Standards," TCEQ, June									
DEDLAIT INFORMATION									
PERMIT INFORMATION		-1							
Permittee Name:	San Miguel I		perative, in	С.					
TPDES Permit No:	WQ0002043	3000							
Outfall No:	058-060								
Prepared By: Thomas Starr									
Date:	August 8, 2022								
DISCHARGE INFORMATION									
Intermittent Receiving Waterbody:	Ditches, Bill	Walker Cre	ek, and Leo	ncita Creek					
Segment No:	2117								
TSS (mg/L):	7								
pH (Standard Units):	7.5								
Hardness (mg/L as CaCO₃):	185								
Chloride (mg/L):	259								
Effluent Flow for Aquatic Life (MGD):	2.51								
Critical Low Flow [7Q2] (cfs):	0								
% Effluent for Acute Aquatic Life: 100									

CALCULATE DISSOLVED FRACTION	N (AND ENTER WATER	EFFECT RAT	TIO IF APPLIC	ABLE):			
			Partition	Dissolved		Water	
	Intercept	Slope	Coefficient	Fraction		Effect	
Stream/River Metal	(b)	(m)	(Kp)	(Cd/Ct)	Source	Ratio	Source
Aluminum	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Arsenic	5.68	-0.73	115632.10	0.553		1.00	Assumed
Cadmium	6.60	-1.13	441610.32	0.244		1.00	Assumed
Chromium (total)	6.52	-0.93	542074.31	0.209		1.00	Assumed
Chromium (trivalent)	6.52	-0.93	542074.31	0.209		1.00	Assumed
Chromium (hexavalent)	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Copper	6.02	-0.74	248100.39	0.365		1.00	Assumed
Lead	6.45	-0.80	594184.84	0.194		1.00	Assumed
Mercury	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Nickel	5.69	-0.57	161545.22	0.469		1.00	Assumed
Selenium	N/A	N/A	N/A	1.00	Assumed	1.00	Assumed
Silver	6.38	-1.03	323257.80	0.306		1.00	Assumed
Zinc	6.10	-0.70	322426.98	0.307		1.00	Assumed

	FW Acute				Daily
	Criterion	WLAa	LTAa	Daily Avg.	Max.
Parameter	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)
Aldrin	3.0	3.00	1.72	2.52	5.34
Aluminum	991	991	568	834	176
Arsenic	340	615	353	518	109
Cadmium	15.60267	63.8	36.6	53.7	113
Carbaryl	2.0	2.00	1.15	1.68	3.5
Chlordane	2.4	2.40	1.13	2.02	4.2
	0.083	0.0830	0.0476	0.0699	0.14
Chlorpyrifos	942.9925	4521	2591	3808	805
Chromium (trivalent) Chromium (hexavalent)	15.7	15.7	9.00	13.2	27.
,					
Copper	25.35554	69.4	39.8	58.4	12
Cyanide (free)	45.8	45.8	26.2	38.5	81.
4,4'-DDT	1.1	1.10	0.630	0.926	1.9
Demeton	N/A	N/A	N/A	N/A	N/
Diazinon	0.17	0.170	0.0974	0.143	0.30
Dicofol [Kelthane]	59.3	59.3	34.0	49.9	10
Dieldrin	0.24	0.240	0.138	0.202	0.42
Diuron	210	210	120	176	37
Endosulfan I (alpha )	0.22	0.220	0.126	0.185	0.39
Endosulfan II (beta )	0.22	0.220	0.126	0.185	0.39
Endosulfan sulfate	0.22	0.220	0.126	0.185	0.39
Endrin	0.086	0.0860	0.0493	0.0724	0.15
Guthion [Azinphos Methyl]	N/A	N/A	N/A	N/A	N/
Heptachlor	0.52	0.520	0.298	0.438	0.92
Hexachlorocyclohexane (gamma ) [Lind	1.126	1.13	0.645	0.948	2.0
Lead	125.3088	647	370	544	115
Malathion	N/A	N/A	N/A	N/A	N/
Mercury	2.4	2.40	1.38	2.02	4.2
Methoxychlor	N/A	N/A	N/A	N/A	N/
Mirex	N/A	N/A	N/A	N/A	N/
Nickel	787.9377	1679	962	1414	299
Nonylphenol	28	28.0	16.0	23.5	49.
Parathion (ethyl)	0.065	0.0650	0.0372	0.0547	0.11
Pentachlorophenol	14.41833	14.4	8.26	12.1	25.
Phenanthrene	30	30.0	17.2	25.2	53.
Polychlorinated Biphenyls [PCBs]	2.0	2.00	1.15	1.68	3.5
Selenium	20	20.0	11.5	16.8	35.
Silver	0.8	29.1	16.7	24.4	51.
Toxaphene	0.78	0.780	0.447	0.657	1.3
Tributyltin [TBT]	0.13	0.130	0.0745	0.109	0.23
2,4,5 Trichlorophenol	136	136	77.9	114	24
, ,	197.3467	643	368	541	114

	70% of	85% of
Aquatic Life	Daily Avg.	Daily Avg.
Parameter	(μg/L)	(μg/L)
Aldrin	1.76	2.14
Aluminum	584	709
Arsenic	362	440
Cadmium	37.6	45.7
Carbaryl	1.17	1.43
Chlordane	1.41	1.71
Chlorpyrifos	0.0489	0.0594
Parameter	(μg/L)	(μg/L)
Chromium (trivalent)	2665	3237
Chromium (hexavalent)	9.25	11.2
Copper	40.9	49.6
Cyanide (free)	27.0	32.7
4,4'-DDT	0.648	0.787
Demeton	N/A	N/A
Diazinon	0.100	0.121
Dicofol [Kelthane]	34.9	42.4
Dieldrin	0.141	0.171
Diuron	123	150
Endosulfan I (alpha )	0.129	0.157
Endosulfan II (beta )	0.129	0.157
Endosulfan sulfate	0.129	0.157
Endrin	0.0507	0.0615
Guthion [Azinphos Methyl]	N/A	N/A
Heptachlor	0.306	0.372
Hexachlorocyclohexane (gamma ) [Lind	0.663	0.806
Lead	381	462
Malathion	N/A	N/A
Mercury	1.41	1.71
Methoxychlor	N/A	N/A
Mirex	N/A	N/A
Nickel	989	1202
Nonylphenol	16.5	20.0
Parathion (ethyl)	0.0383	0.0465
Pentachlorophenol	8.50	10.3
Phenanthrene	17.6	21.4
Polychlorinated Biphenyls [PCBs]	1.17	1.43
Selenium	11.7	14.3
Silver	17.1	20.8
Toxaphene	0.459	0.558
Tributyltin [TBT]	0.0766	0.0930
2,4,5 Trichlorophenol	80.1	97.3
Zinc	378	460

# Comparison of Technology-Based Effluent Limits and Water Quality-Based Effluent Limits Appendix C

assessed water quality-based effluent limitations (Water Quality-Based), and effluent limitations in the existing permit (Existing Permit). Effluent limitations appearing in bold are the most stringent of the three and are included in the draft permit. The following table is a summary of technology-based effluent limitations calculated/assessed in the draft permit (Technology-Based), calculated/

ermit	Daily Max	mg/L	Report, MGD	70	6.0	2.0	9.0 SU	Report, MGD	70	0.9	2.0	•	9.0 SU	Report, MGD	70	-	0.9	2.0	9.0 SU	Report, MGD	70	Report	0.9	2.0	9.0 SU
Existing Permit	Daily Avg	7/ <i>6</i> ш	Report, MGD	32	3.0	1.0	6.0 SU (minimum)	Report, MGD	35	3.0	1.0	-	6.0 SU (minimum)	Report, MGD	35	-	3.0	1.0	6.0 SU (minimum)	Report, MGD	32	Report	3.0	1.0	6.0 SU (minimum)
Water Quality-Based	Daily Max	mg/L	_	_	-	ı	1	_	_	_	_	0.0356	_	_	_	1.765	_	_	I	-	_	_	_	-	I
Water Qu	Daily Avg	mg/L	-	1	1	ı	1	1	1	1	-	0.0168	1	1	-	0.834	-	1	ı	-	-	1	1	ı	I
Based	Daily Max	mg/L	Report, MGD	70	6.0	2.0	9.0 SU	Report, MGD	70	6.0	2.0	-	9.0 SU	Report, MGD	70	-	6.0	2.0	9.0 SU	Report, MGD	70	-	6.0	2.0	9.0 SU
Technology-Based	Daily Avg	mg/L	Report, MGD	35	3.0	1.0	6.0 SU (minimum)	Report, MGD	35	3.0	1.0	-	6.0 SU (minimum)	Report, MGD	35	_	3.0	1.0	6.0 SU (minimum)	Report, MGD	35	-	3.0	1.0	6.0 SU (minimum)
	Pollutant		Flow	TSS	Total Iron	Total Manganese	pH, SU	Flow	TSS	Total Iron	Total Manganese	Total Selenium	pH, SU	Flow	TSS	Total Aluminum	Total Iron	Total Manganese	pH, SU	Flow	LSS	Total Aluminum	Total Iron	Total Manganese	pH, SU
	Outfall		001M-011M, 013M-	020M, 022M-027M,	029M-033M, 035M,	050M, 052M, and 054M-060M				012M, 028M,	051M, and 053M			021M						034M					

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ermit	Daily Max	mg/L	Report, MGD	0.5		9.0 SU	Report, MGD	0.5		9.0 SU	Report, MGD	0.5	•	9.0 SU	Report, MGD	0.5	Report	9.0 SU
Existing Permit	Daily Avg	mg/L	Report, MGD	N/A		6.0 SU (minimum)	Report, MGD	N/A	•	6.0 SU (minimum)	Report, MGD	N/A	-	6.0 SU (minimum)	Report, MGD	N/A	Report	6.0 SU (minimum)
Water Quality-Based	Daily Max	mg/L	1	-		ı	1	1	0.0356	-	_	1	1.765	-	_	-	-	-
Water Qua	Daily Avg	mg/L	ı	1		ı	1	ı	0.0168	ı	1	ı	0.834	ı	1	1	ı	1
Based	Daily Max	mg/L	Report, MGD	0.5		9.0 SU	Report, MGD	0.5	ı	9.0 SU	Report, MGD	0.5	ı	9.0 SU	Report, MGD	0.5	ı	9.0 SU
Technology-Based	Daily Avg	mg/L	Report, MGD	N/A		6.0 SU (minimum)	Report, MGD	N/A	1	6.0 SU (minimum)	Report, MGD	N/A	1	6.0 SU (minimum)	Report, MGD	N/A	-	6.0 SU (minimum)
	Pollutant		Flow	Settleable Solids		pH, SU	Flow	Settleable Solids	Total Selenium	pH, SU	Flow	Settleable Solids	Total Aluminum	pH, SU	Flow	Settleable Solids	Total Aluminum	pH, SU
	Outfall		001R-011R, 013R-	020R, 022R-027R,	029R-033R, 035R,	050R, 052R, and 054R-060R		012R, 028R,	051R, and 053R		021R				034R			



### Compliance History Report

Compliance History Report for CN600132278, RN100226539, Rating Year 2021 which includes Compliance History (CH) components from September 1, 2016, through August 31, 2021.

CN600132278, San Miguel Electric Customer, Respondent, Classification: SATISFACTORY Rating: 8.59 Cooperative, Inc. or Owner/Operator:

RN100226539, SAN MIGUEL ELECTRIC Regulated Entity: Classification: SATISFACTORY Rating: 8.69

**PLANT** 

19 **Complexity Points:** Repeat Violator:

06 - Electric Power Generation CH Group:

6200 FM 3387 ATASCOSA, TX, ATASCOSA COUNTY Location:

TCEQ Region: **REGION 13 - SAN ANTONIO** 

ID Number(s):

AIR OPERATING PERMITS ACCOUNT NUMBER AG0007G **AIR OPERATING PERMITS PERMIT 85** 

**AIR NEW SOURCE PERMITS PERMIT 4180A** AIR NEW SOURCE PERMITS ACCOUNT NUMBER AG0007G **AIR NEW SOURCE PERMITS REGISTRATION 54118** AIR NEW SOURCE PERMITS AFS NUM 4801300007 **AIR NEW SOURCE PERMITS REGISTRATION 99921 AIR NEW SOURCE PERMITS REGISTRATION 101700** 

**AIR NEW SOURCE PERMITS REGISTRATION 123647 USED OIL REGISTRATION A85466** 

IHW CORRECTIVE ACTION SOLID WASTE REGISTRATION

# (SWR) 31434

TAX RELIEF ID NUMBER 16943

WASTEWATER PERMIT WQ0002043000 **STORMWATER PERMIT TXR05L582 WASTEWATER EPA ID TX0083445 WASTEWATER PERMIT 2E0000151** 

**AIR EMISSIONS INVENTORY** ACCOUNT NUMBER **POLLUTION PREVENTION PLANNING ID NUMBER** 

AG0007G P01686

USED OIL EPA ID TXD088484852

INDUSTRIAL AND HAZARDOUS WASTE SOLID WASTE INDUSTRIAL AND HAZARDOUS WASTE EPA ID TXD088484852 REGISTRATION # (SWR) 31434

TAX RELIEF ID NUMBER 20020

**TAX RELIEF ID NUMBER 16328** TAX RELIEF ID NUMBER 16942 TAX RELIEF ID NUMBER 21931 TAX RELIEF ID NUMBER 21932

**TAX RELIEF ID NUMBER 23508 TAX RELIEF ID NUMBER 23866** TAX RELIEF ID NUMBER 24630 **TAX RELIEF ID NUMBER 23865** TAX RELIEF ID NUMBER 23509 TAX RELIEF ID NUMBER 23867

**TAX RELIEF ID NUMBER 17921 TAX RELIEF ID NUMBER 16333 TAX RELIEF ID NUMBER 16334 TAX RELIEF** ID NUMBER 16335 TAX RELIEF ID NUMBER 18884 **TAX RELIEF** ID NUMBER 16332

**TAX RELIEF ID NUMBER 18885 TAX RELIEF** ID NUMBER 16329 TAX RELIEF ID NUMBER 17920 TAX RELIEF ID NUMBER 20460 TAX RELIEF ID NUMBER 20461 **TAX RELIEF ID NUMBER 17922** 

TAX RELIEF ID NUMBER 22561 TAX RELIEF ID NUMBER 22559

**COAL COMBUSTION RESIDUALS REGISTRATION CCR109** 

Compliance History Period: September 01, 2016 to August 31, 2021 Rating Year: 2021 **Rating Date:** 09/01/2021

**Date Compliance History Report Prepared:** May 31, 2022

Permit - Issuance, renewal, amendment, modification, denial, suspension, or Agency Decision Requiring Compliance History:

revocation of a permit.

September 01, 2016 to August 31, 2021 **Component Period Selected:** 

TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.

Phone: (512) 239-4570 Name: Thomas Starr

### Site and Owner/Operator History:

1) Has the site been in existence and/or operation for the full five year compliance period?

YES

2) Has there been a (known) change in ownership/operator of the site during the compliance period?

NO

### Components (Multimedia) for the Site Are Listed in Sections A - J

### A. Final Orders, court judgments, and consent decrees:

1 Effective Date: 08/22/2018 ADMINORDER 2017-0200-MLM-E (1660 Order-Agreed Order With Denial)

Classification: Moderate

Citation: 30 TAC Chapter 122, SubChapter B 122.143(4)

30 TAC Chapter 122, SubChapter B 122.145(2)(A)

5C THSC Chapter 382 382.085(b)

Rqmt Prov: Special Condition 8c PERMIT

Description: Failed to report all instances of deviations, and FOP No. 085, General Terms and Conditions. Specifically, the deviation report for the January 1, 2016 through March 31, 2016, reporting period did not include deviations for exceeding the 10% opacity limit for the Lignite Truck Hopper, EPN FE-1, in first calendar quarter of 2016.

Classification: Moderate

Citation: 30 TAC Chapter 101, SubChapter F 101.201(e)

30 TAC Chapter 122, SubChapter B 122.143(4)

5C THSC Chapter 382 382.085(b)

Rgmt Prov: Special Condition 16c PERMIT

Description: Failed to submit an initial notification no later than 24 hours after discovery of an excess opacity event. Specifically, the initial notification for Incident No. 243974 was due by December 27, 2015 at 6:42 p.m. but was not submitted.

Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(b)(2)(F)

30 TAC Chapter 116, SubChapter B 116.115(c) 30 TAC Chapter 122, SubChapter B 122.143(4)

5C THSC Chapter 382 382.085(b)

Rgmt Prov Special Condition 1 PERMIT

Description: Failed to comply with the permitted hourly emissions rate. Specifically, from April 23, 2015 to February 17, 2016, the Boiler Stack, EPN 6, exceeded the permitted carbon monoxide ("CO") emissions rate of 1,640 pounds per hour ("lbs/hr") by an average of 716.32 lbs/hr for 255 hours on 60 days, resulting in the unauthorized release of 182,644 pounds of CO.

Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)

30 TAC Chapter 122, SubChapter B 122.143(4)

5C THSC Chapter 382 382.085(b)

Rqmt Prov: 8 C PERMIT

Description: Failed to comply with the permitted opacity limit. Specifically, on February 16, 2016, the Respondent conducted a monthly visible emissions reading and recorded that the Lignite Truck Hopper, Emissions Point No. ("EPN") FE-1, exceeded the permitted opacity limit of 10%, averaged over a six-minute period, by 3.125%.

Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)

30 TAC Chapter 122, SubChapter B 122.143(4)

5C THSC Chapter 382 382.085(b)

Rqmt Prov Special Condition 8 C PERMIT

Description: Failed to comply with the permitted opacity limit

Classification: Moderate

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)

30 TAC Chapter 122, SubChapter B 122.143(4)

5C THSC Chapter 382 382.085(b)

Rqmt Prov Special Condition 16c PERMIT

Description: Failed to prevent unathorized emissions. Specifically, the Respondent experienced a 61% opacity from the Boiler Stack, EPN 6, during an excess opacity event (Incident No. 243974) that began on December 26, 2015, and lasted two hours and 36 minutes. The event occurred when an unscheduled shutdown to repair the "F" Power Center failed. Since the excess opacity event was not properly reported, the Respondent is precluded from asserting an affirmative defense under 30 TEX. ADMIN. CODE § 101.22

2 Effective Date: 07/16/2019 ADMINORDER 2018-1285-AIR-E (1660 Order-Agreed Order With Denial)

Classification: Moderate

Citation: 30 TAC Chapter 122, SubChapter B 122.143(4)

30 TAC Chapter 122, SubChapter B 122.145(2)(A)

5C THSC Chapter 382 382.085(b)

Rqmt Prov: General Conditions OP

Description: Failure to report all permit deviations.

Classification: Moderate

Compliance History Report for CN600132278, RN100226539, Rating Year 2021 which includes Compliance History (CH) components from September 01, 2016, through August 31, 2021.

Citation: 30 TAC Chapter 122, SubChapter B 122.143(4)

30 TAC Chapter 122, SubChapter B 122.145(2)(A)

5C THSC Chapter 382 382.085(b)

Rqmt Prov: General Conditions OP

Description: Failure to report all permit deviations.

Classification: Moderate

Citation: 30 TAC Chapter 101, SubChapter A 101.20(2)

30 TAC Chapter 113, SubChapter C 113.1300 30 TAC Chapter 116, SubChapter B 116.115(c)

40 CFR Chapter 63, SubChapter C, PT 63, SubPT UUUUU 63.9991(a)(1)

5C THSC Chapter 382 382.085(b)

Rqmt Prov: NSR Permit No. 4180A SC No. 2 PERMIT

Description: Failure to prevent an exceedance of the 30-boiler operating day rolling average emissions limit for Mercury.

### **B.** Criminal convictions:

N/A

### C. Chronic excessive emissions events:

N/A

### D. The approval dates of investigations (CCEDS Inv. Track. No.): Item 2 December 14 2016 (1381736)

Item 2	December 14, 2016	(1381736)
Item 3	December 27, 2016	(1391629)
Item 4	January 24, 2017	(1398252)
Item 5	January 31, 2017	(1376250)
Item 6	February 15, 2017	(1405145)
Item 7	February 16, 2017	(1383126)
Item 8	March 21, 2017	(1412229)
Item 9	April 18, 2017	(1418727)
Item 10	April 25, 2017	(1388297)
Item 11	May 11, 2017	(1426391)
Item 12	June 13, 2017	(1415145)
Item 13	June 19, 2017	(1432383)
Item 14	July 12, 2017	(1440936)
Item 15	August 18, 2017	(1444626)
Item 16	September 08, 2017	(1451212)
Item 17	October 11, 2017	(1457085)
Item 18	October 31, 2017	(1421756)
Item 19	November 13, 2017	(1462538)
Item 20	December 14, 2017	(1468933)
Item 21	January 08, 2018	(1475640)
Item 22	February 13, 2018	(1487823)
Item 23	March 15, 2018	(1491510)
Item 24	April 16, 2018	(1494758)
Item 25	April 25, 2018	(1460838)
Item 26	May 10, 2018	(1501710)
Item 27	June 18, 2018	(1508803)
Item 28	July 12, 2018	(1515130)
Item 29	August 17, 2018	(1521181)
Item 30	September 17, 2018	(1528365)
Item 31	October 15, 2018	(1534704)
Item 32	November 14, 2018	(1542538)
Item 33	December 13, 2018	(1546301)
Item 34	January 11, 2019	(1562976)
Item 35	February 15, 2019	(1562974)
Item 36	March 13, 2019	(1562975)
Item 37	April 10, 2019	(1548644)
Item 38	April 15, 2019	(1572922)
Item 39	May 09, 2019	(1585446)

Compliance History Report for CN600132278, RN100226539, Rating Year 2021 which includes Compliance History (CH) components from September 01, 2016, through August 31, 2021.

Item 40	June 13, 2019	(1585447)
Item 41	July 11, 2019	(1594283)
Item 42	August 19, 2019	(1600574)
Item 43	August 30, 2019	(1582346)
Item 44	September 12, 2019	(1607479)
Item 45	October 14, 2019	(1614357)
Item 46	November 14, 2019	(1620148)
Item 47	November 20, 2019	(1598431)
Item 48	December 17, 2019	(1627495)
Item 49	January 16, 2020	(1635128)
Item 50	February 13, 2020	(1641743)
Item 51	February 21, 2020	(1631124)
Item 52	March 09, 2020	(1648257)
Item 53	March 16, 2020	(1624617)
Item 54	April 14, 2020	(1654609)
Item 55	April 21, 2020	(1638519)
Item 56	May 07, 2020	(1638526)
Item 57	May 12, 2020	(1661175)
Item 58	June 09, 2020	(1667704)
Item 59	July 14, 2020	(1674652)
Item 60	August 12, 2020	(1681424)
Item 61	September 16, 2020	(1688001)
Item 62	November 16, 2020	(1715675)
Item 63	December 15, 2020	(1715676)
Item 64	January 14, 2021	(1715677)
Item 65	January 27, 2021	(1645014)
Item 66	February 09, 2021	(1728753)
Item 67	March 09, 2021	(1728754)
Item 68	April 13, 2021	(1728755)
Item 69	April 27, 2021	(1702220)
Item 70	May 10, 2021	(1741672)
Item 71	June 11, 2021	(1741673)
Item 72	June 29, 2021	(1640174)
Item 73	July 14, 2021	(1752773)
Item 74	July 15, 2021	(1737483)
Item 75	August 17, 2021	(1758186)

### E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):

A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

1 Date: 09/30/2020 (1694353)

Self Report? YES Classification: Moderate

Citation: 2D TWC Chapter 26, SubChapter A 26.121(a)

30 TAC Chapter 305, SubChapter F 305.125(1)

Description: Failure to meet the limit for one or more permit parameter

2 Date: 05/20/2021 (1704384)

Self Report? NO Classification: Minor

Citation: 30 TAC Chapter 335, SubChapter C 335.62

Description: Failure of a generator of solid waste to determine if that waste is hazardous. Self Report? NO Classification: Moderate

Citation: 30 TAC Chapter 327 327.5(c)(1)

Description: Failed to provide additional records requested

### F. Environmental audits:

Notice of Intent Date: 02/20/2017 (1396813)

No DOV Associated

### G. Type of environmental management systems (EMSs): $_{\mbox{\scriptsize N/A}}$

Compliance History Report for CN600132278, RN100226539, Rating Year 2021 which includes Compliance History (CH) components from September 01, 2016, through August 31, 2021.

H. Voluntary on-site compliance assessment dates:  $\ensuremath{\mathsf{N}/\mathsf{A}}$ 

I. Participation in a voluntary pollution reduction program:

N/A

J. Early compliance:

N/A

**Sites Outside of Texas:** 

N/A