STATE OF NEW MEXICO BEFORE THE SECRETARY OF ENVIRONMENT

NEW MEXICO ENVIRONMENT DEPARTMENT

Complainant,

v. No. AQCA 2023____(CO)

AMEREDEV II, LLC,

Respondent.

ADMINISTRATIVE COMPLIANCE ORDER

Pursuant to Section 74-2-12 of the New Mexico Air Quality Control Act ("Act"), NMSA Sections 74-2-1 through -17 (as amended through 2021), the Environmental Protection Division ("Division") of the New Mexico Environment Department ("Department" or "NMED") issues this Administrative Compliance Order ("Order") to Ameredev II, LLC ("Ameredev") to require compliance and assess a civil penalty for violations of the Act, violations of the Air Quality Regulations at Title 20, Part 2 ("Regulations") of the New Mexico Administrative Code ("NMAC"), and violations of air quality permits at the following central tank battery ("CTB") facilities: Amen Corner CTB, Azalea CTB, Firethorn CTB, Nandina CTB, and Red Bud CTB (collectively, the "Facilities").

As set forth in the detailed allegations below, during 2019 and 2020 Ameredev violated multiple air quality permit regulations and conditions of their permits. A summary of these violations is set forth in Table 1 below and described in further detail in Sections I through VIII of this Order.

Table 1: Summary of Ameredev Violations

Violation	Permit Conditions	Violation Description	Facilities in Violation
Number 1	Violated General Construction Permit-6 ("GCP-6") General Condition B101.A or General Construction Permit-Oil &Gas	Failure to construct or modify and operate as represented in Application or Registrations, modifying five facilities without approval	Amen Corner CTB Azalea CTB Firethorn CTB Nandina CTB Red Bud CTB
2	("GCP-O&G"), Specific Condition A100 GCP-6 General	Failure to obtain a regular,	Amen Corner CTB
2	Condition C101.D(1) or GCP-O&G General Condition C101.C(1)	individual construction permit from the Department before modifying five Facilities	Azalea CTB Firethorn CTB Nandina CTB Red Bud CTB
3	GCP-O&G Specific Condition A209.A	Failure to operate and control tank emissions with the Vapor Recovery Unit ("VRU") as represented in the GCP-O&G #8189 Registration	Nandina CTB
4	GCP-O&G Specific Condition A209.A	Failure to complete and/or record monthly inspections of the VRUs used to control tank emissions	Azalea CTB
5	GCP-6 Specific Condition A107.A	Failure to complete and/or record monthly inspections of the VRUs used to control tank emissions	Amen Corner CTB
6	GCP-6 Specific Condition A106.D or GCP-O&G Specific Condition A106.C	Failure to limit pound per hour emission rates from each Facility's flare, unit FL-1, to the limits required by each permit	Amen Corner CTB Azalea CTB Firethorn CTB Nandina CTB Red Bud CTB
7	GCP-6 Specific Condition A108.A or GCP-O&G, Specific Condition A207.B	Failure to comply with operational requirements for each Facility flare, Unit FL1	Amen Corner CTB Azalea CTB Firethorn CTB Nandina CTB Red Bud CTB
8	GCP-6 General	Failure to submit	Amen Corner CTB

Table 1: Summary of Ameredev Violations

Violation	Permit Conditions	Violation Description	Facilities in Violation
Number	Violated		
	Condition B110.B(1) or	notifications of the	Azalea CTB
		anticipated date of initial	Firethorn CTB
	GCP-O&G General	startup no less than 30	Nandina CTB
	Condition B110.B(1)	days prior to the date	Red Bud CTB

This Order addresses the seriousness of these violations and the necessary corrective actions required to address them.

FACTUAL BACKGROUND

- 1. Ameredev owns and operates the Amen Corner CTB, Azalea CTB, Firethorn CTB, Nandina CTB, and Red Bud CTB which are located approximately four (4) to eight (8) miles west and southwest of Bennett and Jal in Lea County, New Mexico.
- 2. Ameredev's operations may occur on New Mexico State Trust Land under the jurisdiction and authority of the New Mexico State Land Office.
- 3. At the time the violations described in this Order occurred, Ameredev was authorized to operate the Amen Corner CTB under air quality permit GCP-6, Registration #7835, issued May 31, 2018. [NMED Exhibit 1]
- 4. At the time the violations described in this Order occurred, Ameredev was authorized to operate the Azalea CTB, GCP-O&G, Registration #7601M1, issued October 3, 2019. [NMED Exhibit 2]
- 5. At the time the violations described in this Order occurred, Ameredev was authorized to operate the Firethorn CTB, GCP-O&G, Registration #7836M1, issued October 2, 2019. [NMED Exhibit 3]
 - 6. At the time the violations described in this Order occurred, Ameredev was

 $authorized\ to\ operate\ the\ Nandina\ CTB,\ GCP-O\&G,\ Registration\ \#8189,\ issued\ February\ 28,2019.$

[NMED Exhibit 4]

- 7. At the time the violations described in this Order occurred, Ameredev was authorized to operate the Red Bud CTB, GCP-O&G, Registration #7839M1 issued October 3, 2019. [NMED Exhibit 5]
- 8. Each of the five (5) Facilities is an oil and gas CTB that operates in the oil and gas production industry.
- 9. Each of the Facilities receives mixed streams of natural gas, water, and crude oil from surrounding oil and gas wells.
- 10. The Facilities separate the mixed streams into natural gas and crude oil for sale and produced water for disposal. The separated crude oil and produced water are temporarily stored at each of the Facilities in storage tanks.
- 11. According to General Construction Permit registration records at the time the violations occurred, natural gas emissions from storage tanks and separating tanks were to be either re-routed back to a facility inlet or routed to a facility flare, unit FL-1. [NMED Exhibit 6].
- 12. The natural gas separated at each facility inlet was to be sent downstream to a third-party gas processor via a sales gas pipeline. [NMED Exhibit 6].
- 13. The mixed natural gas and crude oil streams would pass through heater treaters and vapor recovery towers ("VRT") separating the gas and oil, and the separated gas was to be captured via Vapor Recovery Units ("VRU") and routed downstream via the sales gas pipeline. [NMED Exhibit 6].
- 14. Ameredev started operating each of the Facilities and immediately began to exceed permitted pollution limits on the following dates: Amen Corner CTB November 28, 2019; Azalea

CTB December 27, 2018; Firethorn CTB March 14, 2019; Nandina CTB July 29, 2019; and Red Bud CTB March 7, 2019. [NMED Exhibit 7; NMED Exhibit 8].

- 15. On August 12, 2019, the Air Quality Bureau ("AQB") received a citizen complaint about increased flaring at a facility meeting the location information for Azalea CTB. [NMED Exhibit 9].
- 16. On September 9, 2019, an AQB inspector received another complaint about large amounts of flaring being done by Ameredev. [NMED Exhibit 9].
- 17. On September 9, 2019, the AQB inspector contacted Ameredev, notified Ameredev of the complaint, and informed Ameredev of the requirement to submit excess emissions reports pursuant to 20.2.7 NMAC.
- 18. On November 7, 2019, AQB personnel and Ameredev representatives met in Santa Fe, New Mexico to discuss the ongoing concerns. At the meeting, Ameredev explained the cause of their excessive flaring and presented a long-term plan to stop it.
- 19. On December 20, 2019, the Department's Office of General Counsel received a further complaint about high quantities of very sour gas being flared from different facilities owned by Ameredev.
- 20. On December 30-31, 2019, AQB personnel conducted an on-site investigation of the Facilities and produced an inspection report resulting in three Post-Inspection Notifications.

 [NMED Exhibit 10; NMED Exhibit 27].
- 21. On January 2, 7, and 16, 2020 and February 21, 2020, AQB requested from Ameredev permit records and other information for the five Facilities. [NMED Exhibit 11].
- 22. On January 2, 7, and 17, 2020 and on February 24, 2020, Ameredev responded to AQB's records requests. Ameredev's responses relative to each violation are described in Sections

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I through VIII below.

- 23. On January 20 and 28, 2020, Ameredev submitted "Voluntary Disclosures of Violations" to AQB. [NMED Exhibit 12].
- 24. AQB determined that Ameredev's disclosures failed to meet multiple conditions of the NMED-AQB Civil Penalty Policy ("Policy"), Appendix D, including Condition D.2 *Voluntary Discovery* of violations, Condition D.3 *Prompt Disclosure* of violations, and Condition D.4 *Prompt Correction and Remediation* of violations. [NMED Exhibit 13].
- 25. According to Ameredev's excess emissions reports, it took the following number of days from the reported discovery date before ending the excess emissions events:
 - 129 days at Amen Corner CTB
 - 158 days at Azalea CTB
 - 166 days at Red Bud CTB
 - 198 days at Nandina and Firethorn CTBs [NMED Exhibit 7]
- 26. Based on on-site inspections of the Facilities and review of Ameredev's records submittals, AQB identified violations of multiple air quality regulations and conditions of the Facilities' permits.
- 27. On January 10, March 16, and April 8, 2020, AQB issued to Ameredev post-inspection notifications ("PIN") listing potential air quality violations occurring at the five Facilities. [NMED Exhibit 10].
- 28. On August 17, 2022, AQB issued Notice of Violation ("NOV") No. AMDV-Multi-2001 alleging eight (8) violations described further in Sections I through VIII of this Order. [NMED Exhibit 14].
- 29. On September 2 and 15, 2022, Ameredev responded to the NOV, providing requested information, arguing the regulatory basis or number of claims of some alleged violations,

and requesting penalty reductions based on facility environmental audits or past emissions related projects. [NMED Exhibit 15].

- 30. On May 18, 2023, AQB requested additional records from Ameredev to evaluate current compliance status. [NMED Exhibit 16].
- 31. On May 31, 2023, Ameredev provided records in response to the May 18, 2023, request. AQB's review of Ameredev's records submittal identified current potential compliance issues at some of the Ameredev Facilities.

VIOLATIONS

Violation 1:

Failure of Ameredev to construct or modify and operate five Facilities in accordance with representations in and as specified in the current application or registration forms pursuant to GCP-6, General Condition B101-A – Legal, and to GCP-O&G Specific Condition A100 – Introduction and Applicability

Violation 1 Background

32. GCP-6, General Condition B101.A, *Legal*, states in part:

Unless modified by conditions of this permit, the permittee shall construct or modify and operate the Facility in accordance with all representations of the current application and supplemental submittals that the Department relied upon to determine compliance with applicable regulations and ambient air quality standards.

[NMED Exhibit 20 at 16-17].

- 33. GCP-O&G, Specific Condition A100, *Introduction and Applicability*, states in part: "F. The Facility shall operate as specified in the Registration Form. The emission limits and equipment specified in the Registration Form are federally enforceable and shall become the terms and conditions of this Permit." [NMED Exhibit 21 at 4].
 - 34. During the December 30-31, 2019, on-site investigations, AQB inspectors

observed multiple pieces of equipment at each of the Facilities that were not included in Ameredev's certified and approved General Construction Permit ("GCP") Application or Registration Forms.

35. On January 7, 2020, Ameredev provided to AQB a list of all equipment located at each of the Facilities. The list verified the unregistered equipment identified by AQB and identified additional unregistered equipment at all five Facilities. Table 2 lists the unauthorized equipment located at each facility. [NMED Exhibit 17].

Table 2: Unauthorized Equipment

Facility	Unreported and Unauthorized Equipment
Amen Corner CTB	6 crude oil tanks, 1 gun barrel tank, 1 3-phase separator, 2 2-phase
	separators, 3 combustors, 1 generator engine
Azalea CTB	1 3-phase inlet: separator, 1 2-phase inlet separator, 1 combustor, 1
	generator
Firethorn CTB	3-phase inlet separator, 2-phase inlet separator, combustor, generator
Nandina CTB	6 crude oil tanks, 1 gun barrel tank, 6 3-phase inlet separators, 2 2-phase
	inlet separators, 3 combustors, 1 flare
Red Bud CTB	1 3-phase inlet separator, 2 2-phase inlet separators, 1 combustor, 1 flare

36. Ameredev delayed submitting Registrations for the unauthorized modifications for three (3) to five (5) months after AQB's January 1, 2020 PIN notifying Ameredev of the unauthorized equipment. Table 3 lists the GCP numbers and issue dates authorizing the existing, unpermitted equipment.

Table 3: Summary of GCPs Correcting Regulated Equipment

Facility	GCP#	Registration	GCP issued
		Received	
Amen Corner CTB	GCP-O&G #7835M1	May 8, 2020	June 5, 2020
Azalea CTB	GCP-O&G #7601M2	May 15, 2020	June 12, 2020
Firethorn CTB	GCP-O&G #7836M2	April 24, 2020	May 22, 2020
Nandina CTB	GCP-O&G #8189M1	March 25, 2020	April 24, 2020
Red Bud CTB	GCP-O&G #7839M2	April 15, 2020	May 15, 2020

Violation 1 Summary

- 37. Ameredev violated GCP-6 General Condition B101.A and GCP-0&G Specific Condition A100 when it unlawfully constructed and operated at the Facilities, multiple unreported and unauthorized pieces of equipment that were sources of regulated air pollutants.
- 38. Ameredev had, among other unlawful changes to the Facilities, doubled the crude oil storge capacity at the Amen Corner and Nandina CTBs, installed combustors and/or a second flare at each of the five Facilities, and installed generator engines at Amen Corner, Azalea, and Firethorn CTBs.
- 39. NMED observed five (5) occurrences at the Amen Corner CTB, Azalea CTB, Firethorn CTB, Nandina, CTB, and Red Bud CTB of this violation for which Ameredev is subject to penalties pursuant to the NMED-AQB Civil Penalty Policy.

Violation 2:

Failure of Ameredev to obtain a regular, individual construction permit for each Facility from the Department before modifying and operating five Facilities above GCP thresholds pursuant to GCP-6, General Condition C101.D(1) and GCP-O&G, General Condition C101.C(1)

Violation 2 Background

40. GCP-6, General Condition C101 – *Revision Process*, D(1) *Changes that Prevent Meeting General Permit Limits*, states:

"Changes or equipment additions that prevent the Facility from meeting the requirements of GCP-6 shall not occur before the owner or operator applies for and is issued an individual construction permit under 20.2.72.200 NMAC."

[NMED Exhibit 20 at 27].

41. GCP-6, Specific Condition A100 – *Description*, Paragraph E states, in relevant parts:

"The potential emission rate (PER) of the permitted Facility . . . shall not exceed the total potential emission rates in Table 100.A and Table 100.B Any Facility with a PER greater than the amounts in Table 100.A or Table 100.B does not qualify for GCP-6."

[NMED Exhibit 20 at 3].

42. GCP-6, Table 100.A provides GCP-6 PER limits as follows:

Table 100.A: Potential Emission Rate (PER) of the Facility

Pollutant*	Emissions	Emissions
	(pounds per hour)	(tons per year)
Nitrogen Oxides (NOx)	less than 10	less than 25
Carbon Monoxide (CO)	less than 10	less than 25
Volatile Organic Compounds (VOCs) from Storage	**	No PER Limit
Vessels or Truck Loading		
Sulfur Dioxide (SO2)	less than 10	less than 25
Total Suspended Particulates (TSP)	less than 2.5	less than 25
Particulate Matter less than 10 microns (PM10)	less than 2.5	less than 25
Particulate Matter less than 2.5 microns (PM2.5)	less than 2.5	less than 25
Hydrogen Sulfide (H2S)	less than 0.5	less than 5
Lead	less than 10	less than 5

[**Id.**].

43. GCP-O&G, General Condition C101 – Revision Process, C(1) Changes that Prevent Meeting General Permit Limits states:

"Changes or equipment additions that prevent the Facility from meeting the requirements of GCP-Oil and Gas shall not occur before the owner or operator applies for and is issued an individual construction permit under 20.2.72.200 NMAC."

[NMED Exhibit 21 at 47-48].

- 44. GCP-O&G, Specific Condition A106.A *Facility: Allowable Emissions* states, in relevant part: "In order to qualify for this permit, the Facility's annual emissions may not exceed those amounts in Table 106." [NMED Exhibit 21 at 7].
 - 45. GCP-O&G, Table 106 provides the maximum emission rates as follows:

Table 106: Maximum Eligible Emission Rates to Register Under this Permit

Pollutant	Tons per Year (tpy)
Nitrogen Oxides (Nox)	95 tpy
Carbon Monoxide (CO)	95 tpy
Volatile Organic Compounds (VOC)* (non-fugitive)	95 tpy
Sulfur Dioxide	95 tpy
Hydrogen Sulfide	25 tpy
Total Suspended Particulates (TSP)	25 tpy
Particulate Matter less than 10 Microns (PM10)	25 tpy
Particulate Matter less than 2.5 Microns (PM2.5)	25 tpy
Any Individual Hazardous Air Pollutant (HAP)	< 10 tpy
Total HAP	< 25 tpy

[**Id**.]

46. New Mexico's Regulations state:

"For those modifications for which the source will not continue to meet the conditions of the general construction permit after such modification, obtain a construction permit from the department under this part prior to the modification."

20.2.72.220.D(2) NMAC.

- 47. Between October 25, 2019, and April 27, 2020, Ameredev submitted ten (10) final excess emissions reports ("EER") pertaining to the five Facilities through the AQB Compliance Reporting ("AQBCR") system. Each EER reported emission rates of regulated air pollutants from each facility flare exceeding one to five of the ton per year ("tpy") permit thresholds allowed by the GCP-6 and the GCP-O&G. [NMED Exhibit 22].
- 48. In the Final EERs, Ameredev described the cause of each excess emission event as an emergency, lasting from 66 to 6300 hours, because their downstream third-party gas processor was not accepting their produced gas. None of Ameredev's GCP Applications or Registrations requested nor authorized flaring of any produced gas at the Facilities. Produced gas was to be routed offsite through a sales gas pipeline. [NMED Exhibit 6].
 - 49. EERs and other Ameredev records indicate that on the day of or day after starting

operations at each of the Facilities, Ameredev was unlawfully routing all produced gas to each facility flare, unit FL-1, for combustion, which resulted in exceeding the GCP thresholds. Table 4 lists each facility startup date and the earliest excess emissions start date.

Table 4: Dates of Facility Startup and Earliest Excess Emission Event Per Ameredev

Facility	Facility Startup	Earliest reported excess emission start
		dates
Amen Corner CTB	11-28-2019	11-28-2019
Azalea CTB	12-26-2018	12-27-2018
Firethorn CTB	3-14-2019	3-14-2019
Nandina CTB	7-29-2019	7-29-2019
Red Bud CTB	3-7-2019	3-7-2019

50. Pursuant to 20.2.7.113 NMAC, *Affirmative Defense for an Emergency*, Ameredev submitted Affirmative Defense Demonstrations ("ADD") for six of the excess emissions events. [NMED Exhibit 28]. In relevant part, NMAC 20.2.7.113.B states:

An emergency constitutes an affirmative defense to an action brought for noncompliance with the technology-based emission limitation if the owner or operator of the source demonstrates through properly signed, contemporaneous operating logs, or other relevant evidence that: ... (2) the source was at the time being properly operated; (3) during the period of the emergency the owner or operator took all reasonable steps to minimize levels of emissions that exceeded the technology-based emission limitation . . .

- 51. Pursuant to 20.2.7.115 NMAC, AQB evaluated and denied five (5) of Ameredev's ADD claims. AQB determined that the excess emissions were not caused by emergencies since Ameredev continued to flare for several months after becoming aware of the excess emissions and failed to take all reasonable steps to minimize excess emissions. [NMED Exhibit 18].
 - 52. On September 2, 2022, in response to the NOV, Ameredev stated:

"[w]here actual emissions exceed what was reasonably expected, a permittee must only 're-evaluate permit applicability' – not immediately apply for an individual construction permit. Put differently, actual emissions need not be directly relevant to the CTBs' potential

to emit for permitting purposes."

[NMED Exhibit 15].

53. However, both permit conditions and 20.2.72 NMAC state that the requirement is to apply for an individual construction permit before making modifications to a facility, not after.

Violation 2 Summary

- 54. Ameredev violated 20.2.72.220.D(2) NMAC, GCP-6 General Condition C101.D(1) at Amen Corner CTB and GCP-0&G General Condition C101.C(1) at Azalea CTB, Firethorn CTB, Nandina CTB, and Red Bud CTB when it unlawfully operated the Facilities over GCP thresholds before obtaining pre-approval through a regular construction permit.
- 55. NMED observed five (5) occurrences at the Amen Corner CTB, Azalea CTB, Firethorn CTB, Nandina, CTB, and Red Bud CTB, of this violation for which Ameredev is subject to penalties pursuant to the NMED-AQB Civil Penalty Policy.

Violation 3:

Failure of Ameredev to operate and control tank emissions with the Vapor Recovery Unit (VRU) as represented in the GCP-O&G #8189 for the Nandina CTB pursuant to GCP-O&G, Specific Condition A209.A Vapor Recovery Unit or Department Approved Equivalent

Violation 3 Background

56. GCP-O&G, Specific Condition A209A, Vapor Recovery Unit or Department-approved Equivalent, states in relevant part:

"The permittee shall at all times operate the VRU as a closed vent system that captures and routes all VOC and HAP emissions ...back to the process stream or to a sales pipeline and does not vent to the atmosphere."

[NMED Exhibit 21 at 28].

57. Ameredev's GCP-O&G Registration #8189 emissions calculation form for the Nandina CTB (Air Emissions Calculation Tool, dated Jan 21, 2019) states: "Emissions will be

captured by the VRU at 95% efficiency with 100% control." [NMED Exhibit 4 at PDF 32].

- 58. In the response to "Tanks VOC Control Method, Represent VRU/ULPC Downtime Emissions at the Tank," Ameredev indicated "NA" (i.e. "not applicable"). [NMED Exhibit 4 at PDF 32].
- 59. During the onsite inspection of the Nandina CTB on December 31, 2019, AQB personnel observed that the VRUs required to control emissions at the Nandina CTB were not operating. [NMED Exhibit 10 at 2; NMED Exhibit 27].
- 60. Ameredev personnel stated that all gas from the tanks was being sent to an unregistered flare located at Nandina CTB. In addition, according to the VRU maintenance records from Ameredev, between September 19, 2019, and December 16, 2019, the VRUs were shut down for maintenance at least one day per month. [NMED Exhibit 23].
- 61. The GCP-O&G emissions calculations for the Nandina CTB represented tank emissions 100% controlled with capture by the VRU. Ameredev did not report a flare nor request emission limits for a flare in the Nandina GCP Registration. [NMED Exhibit 4 at PDF 7-8].
- 62. The Nandina CTB was modified when Ameredev routed tank emissions to an unregistered flare for combustion instead of through a closed vent system that captures and routes 100% of tank emissions back to the process stream or to a sales pipeline.

Violation 3 Summary

63. New Mexico's Regulations state:

"For those modifications for which the source will not continue to meet the conditions of the general construction permit after such modification, obtain a construction permit from the department under this part prior to the modification."

20.2.72.220.D(2) NMAC.

64. Ameredev violated GCP-O&G, Specific Condition A209.A at the Nandina CTB,

when it failed to control tank emissions with VRUs and a closed vent system, as represented in the GCP Registration, and instead routed tank emissions to an unauthorized flare for combustion.

65. NMED observed one (1) occurrence of this violation for which Ameredev is subject to penalties pursuant to the NMED-AQB Civil Penalty Policy.

Violation 4:

Failure of Ameredev to complete and/or record inspections of the Azalea CTB vapor recovery units (or "VRUs") and associated piping from the controlled units pursuant to GCP-O&G, Specific Condition A209.A Vapor Recovery Unit or Department-approved Equivalent

Violation 4 Background

66. GCP-O&G, A209.A, Vapor Recovery Unit or Department-approved Equivalent states, in pertinent part:

"Monitoring: At least once per month, the permittee shall inspect the VRU and associated piping from the controlled units, and blowback vessels, for defects that could result in air emissions. . . Recordkeeping: The permittee shall record the results of the VRU inspections. . . . Reporting: The permittee shall report in accordance with Section B110."

[NMED Exhibit 21 at 28].

- 67. On January 2, 2020, AQB personnel requested that Ameredev provide VRU inspection records for the Azalea CTB during operations from December 30, 2017 to December 30, 2019. [NMED Exhibit 11].
- 68. On January 7, 2020, Ameredev responded via email with a table of responses. For the Azalea CTB, the response to this request states, "No responsive records." [NMED Exhibit 19, row 22].

Violation 4 Summary

69. Ameredev violated GCP-O&G, Specific Condition A209.A, when it failed to complete and/or record any monthly inspections of the VRUs used to control air emissions from

the Azalea CTB vapor recovery towers (VRTs) that recover emissions from Facility storage tanks.

70. NMED observed one (1) occurrence of this violation at Nandina CTB, for which Ameredev is subject to penalties pursuant to the NMED-AQB Civil Penalty Policy.

Violation 5:

Failure of Ameredev to perform monthly VRU inspections as of January 7, 2020, used to control air emissions from the Amen Corner CTB VRTs pursuant to GCP-6, Specific Condition A107.A Vapor Recovery Unit (VRU) or Ultra Low-Pressure Separators (ULPS) and Compressor Operation

Violation 5 Background

71. GCP-6, Specific Condition A107–A - Vapor Recovery Unit (VRU) or Ultra Low-Pressure Separators (ULPS) and Compressor states in relevant part:

"Monitoring: The permittee shall conduct the following monitoring monthly: 1) inspect for proper routing to the VRU . . . 2) inspect each Storage Vessel, VRU ... and associated piping for defects that could result in emissions... , and 3) monitor for proper operation per manufacturer's specifications . . . Recordkeeping: The permittee shall record the results of the VRU inspections..."

[NMED Exhibit 20 at 11].

- 72. On January 2, 2020, AQB personnel requested VRU inspection records from Ameredev personnel for the Amen Corner CTB for operations from December 30, 2017 to December 30, 2019. [NMED Exhibit 11].
- 73. On January 7, 2020, Ameredev stated in their response to the request that there were no records of VRU inspections at Amen Corner CTB as of December 30, 2019. [NMED Exhibit 26].

Violation 5 Summary

74. Ameredev violated GCP-O&G, Specific Condition A209.A, when it failed to complete and/or record monthly inspections, as of December 30, 2019, of the VRUs used to control

air emissions from the Amen Corner CTB vapor recovery towers (VRTs) that recover emissions from that facility's storage tanks.

75. NMED observed one (1) occurrence of this violation at Amen Corner CTB for which Ameredev is subject to penalties pursuant to the NMED-AQB Civil Penalty Policy.

Violation 6:

Failure of Ameredev to limit each of the Facilities pph and tpy emission rates to the facility-specific emission limits listed in each certified and approved Application and Registration form pursuant to GCP-6, Specific Condition A100.D, Part A Facility Specific Requirements and GCP-O&G, Specific Condition A106.C Allowable Hourly and Annual Emissions

Violation 6 Background

76. GCP-6, Specific Condition A100.D – *Description* states:

"The allowable VOC emissions from each Storage Vessel, including fugitive, startup, shutdown, and maintenance emissions, shall not exceed the total requested allowable emissions in the current Application Form (registration form)."

[NMED Exhibit 20 at 1].

77. GCP-O&G, Specific Condition A106.C. – Facility: Allowable Emissions – Allowable Hourly and Annual Emission Limits states in relevant part:

"Requirement: For each regulated emission unit in the Registration Form, the emissions specified in the Registration Form shall be the allowable emission limits in this Permit."

[NMED Exhibit 21 at 7].

- 78. At the time the violations occurred, there were no requested or authorized emission limits for produced gas flaring at any of the Facilities; emission limits for combustion of produced gas were zero.
- 79. Between October 25, 2019, and April 27, 2020, AQB received ten (10) final EERs from Ameredev pertaining to the Facilities, through the AQBCR system. Each EER reported emission rates for Facility flare, unit FL-1, exceeding its zero pound per hour ("pph") and tons per

year ("tpy") emission limits required by their GCPs from produced gas flaring. Ameredev reported each excess emission event as an emergency that lasted from 66 to 6300 hours. Overall, Ameredev emitted through its operations at the Facilities 7,648,210 total pounds of excess emissions of the regulated air pollutants nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compounds (VOCs), sulfur dioxide (SO₂), and hydrogen sulfide (H₂S). [NMED Exhibits 8]. AQB denied all Affirmative Defense Demonstration ("ADD") claims submitted by Ameredev for these excess emissions. [NMED Exhibit 18].

- 80. On September 2, 2022 in response to the NOV, Ameredev provided (confidential) records documenting that Ameredev started drilling and routing produced oil and gas to all of the Facilities, before the contractual In-Service Date, or deadline for Ameredev's third-party gas processor to start accepting and processing Ameredev's produced gas, containing up to 20,000 parts per million by volume ("ppmv") of H₂S.
- 81. To start drilling and production, Ameredev combusted 100% of its produced sour gas through facility flares and continued to drill knowing they would need to illegally flare the produced gas. [NMED Exhibit 15].

Violation 6 Summary

- 82. Ameredev violated its pph and tpy permitted emissions limits pursuant to GCP-6, Specific Condition 100.D and GCP-O&G, Specific Condition A106 when it unlawfully routed all produced sour gas to Facility flares for combustion.
- 83. NMED alleges the total quantity of excess emissions, 7,648,210 total pounds of nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compounds (VOCs), sulfur dioxide (SO₂), and hydrogen sulfide (H₂S) combined from these violations for which Ameredev is subject to penalties pursuant to the NMED-AQB Civil Penalty Policy.

Violation 7:

Failure of Ameredev to comply with operational requirements and representations made in permit Application and Registrations for each Facility flare, unit FL-1, pursuant to GCP-6, Specific Condition A108.A - Flare Operation; and GCP-O&G, Specific Condition A207.B – Pilot Flame, Visible Emissions, and Operational Requirements and General Condition B101.A – Legal

Violation 7 Background

84. GCP-6, Part A – Facility Specific Requirements, Specific Condition A108.A –

Flare Operation states in relevant part:

Requirement: . . . 4) The flare shall be equipped with a system to ensure that it is operated with a flame present at all times . . . Monitoring: The permittee shall continuously monitor the presence of the flare pilot flame using a thermocouple equipped with a continuous recorder and alarm to detect the presence of a flame.

[NMED Exhibit 20 at 12]

85. GCP-O&G, Specific Condition A207.B - Pilot Flame, Visible Emissions, and

Operational Requirements, states in pertinent part:

Requirement: Compliance with the allowable emission limits for flare(s) in the Registration Form shall be demonstrated by the following: . . . 2) The flare shall combust only gas streams represented in the Registration Form . . . 4) For flares with a continuous pilot flame or an auto-igniter, the flare shall be equipped with a system to ensure that the flare is operated with a flame present at all times that gas is sent the flare . . . 8) The flare shall be operated with no visible emissions except for periods not to exceed a total of sixty (60) seconds during any fifteen (15) consecutive minutes . . . Monitoring: 1) For flares with a continuous pilot or an auto igniter, the permittee shall continuously monitor the presence of a flare pilot flame using a thermocouple equipped with a continuous recorder and alarm to detect the presence of a flame 3) When any visible emissions are observed, the permittee shall perform a Method 22 observation while the flare pilot flame is present to certify compliance with the visible emission requirements."

[NMED Exhibit 21 at 24-25].

86. GCP-6, General Condition B101.A – *Legal* states in relevant part:

Unless modified by conditions of this permit, the permittee shall construct or modify and operate the Facility in accordance with all representations of the current application and supplemental submittals that the Department relied upon to determine compliance with applicable regulations and ambient air quality standards.

[NMED Exhibit 20 at 16].

87. Ameredev's audit disclosure letter received by the AQB on January 28, 2020, stated in part:

The alarm systems are not set up to continuously record alarms, which is a monitoring and recordkeeping requirement. Also, with respect to each of the tank batteries, the flares did not only combust gas streams represented in the registration forms. As previously disclosed, the flares have been used to combust associated gas shut-in by Salt Creek Midstream. With respect to Nandina tank battery, Ameredev is aware of instances during which the flare operated with visible emissions, but Ameredev did not conduct Method 22 inspections.

[NMED Exhibit 12 at PDF 9].

Violation 7 Summary

- 88. Ameredev violated GCP-6, Specific Condition A108.A at the Amen Corner CTB by failing to equip the flare pilot monitoring equipment with an alarm system and violated GCP-6, General Condition B101.A by failing to combust only gas streams that were represented in the Application / Registration Form.
- 89. Ameredev violated GCP-O&G, Specific Condition A207.B(2) at the Azalea, Firethorn, Nandina and Red Bud CTBs when it combusted gas streams in the flare that were not represented in the Application / Registration Forms for each facility.
- 90. Ameredev violated GCP-O&G, Specific Condition A207.B(4) at the Azalea, Firethorn, Nandina and Red Bud CTBs when it failed to equip the flare pilot monitoring equipment with an alarm system.
- 91. Ameredev violated GCP-O&G, Specific Condition A207.B(8) at the Nandina CTB by operating a flare with visible emissions without keeping records of any Method 22 observations.

92. NMED observed eleven (11) occurrences of this violation: two (2) for Amen Corner CTB, two (2) for Azalea, two for Firethorn, two for Red Bud, and three (3) for Nandina for which Ameredev is subject to penalties pursuant to the NMED-AQB Civil Penalty Policy.

Violation 8:

Failure of Ameredev to submit notifications of the anticipated date of initial startup not less than 30 days prior to the date pursuant to GCP-6 and GCP-0&G, General Condition B110.B(1) General Reporting Requirements

Violation 8 Background

93. GCP-6 and GCP-O&G General Condition B110.B - General Reporting Requirements states:

The permittee shall notify the Air Quality Bureau's Compliance and Enforcement Section using the current Submittal Form posted to NMED's Air Quality web site under Compliance and Enforcement/Submittal Forms in writing of, or provide the Department with (20.2.72.212.A and B): (1) the anticipated date of initial startup of each new or modified source not less than thirty (30) days prior to the date. Notification may occur prior to issuance of the permit, but actual startup shall not occur earlier than the permit issuance date.

[NMED Exhibit 20 at 22-23; NMED Exhibit 21 at 38].

94. Based on a review of records provided by Ameredev on January 17, 2020, AQB determined that Ameredev did not notify the Department of the initial startup of any of the Facilities. Notifications submitted by Ameredev on March 6, 2020, reported the following start-up dates: Amen Corner CTB –November 28, 2019; Azalea CTB – December 26, 2018; Firethorn CTB – March 14, 2019; Nandina CTB – July 29, 2019; and Red Bud CTB – March 7, 2019. [NMED Exhibit 24].

Violation 8 Summary

95. Ameredev violated GCP-6 and GCP-0&G, General Condition B110.B(1) when it

failed to notify the Department of the anticipated startup dates of five Facilities, information for which the Department relies on to meet its enforcement obligations.

96. NMED observed five (5) occurrences at the Amen Corner CTB, Azalea CTB, Firethorn CTB, Nandina CTB, and Red Bud CTB, of this violation for which Ameredev is subject to penalties pursuant to the NMED-AQB Civil Penalty Policy.

EFFECTIVE DATE

97. The Effective Date of this Order shall be the date upon which this Order is signed by the NMED Secretary or designee.

COMPLIANCE ORDERS

- 98. NMSA 1978, § 74-2-12(A) authorizes the New Mexico Secretary of Environment ("Secretary") to issue a compliance order requiring compliance with a regulation or permit.
- 99. Pursuant to the NMED Delegation Order dated March 24, 2023, the Environmental Protection Division Director may approve the commencement of a civil enforcement action with concurrence by the Secretary.
 - 100. The Secretary has concurred with this enforcement action.
- 101. Ameredev is ordered to take the following corrective actions for the violations specified in Sections I through VIII above.

Order 1:

Cease and Desist Excess Emissions at All Ameredev Facilities Located in New Mexico

- 102. Ameredev shall cease and desist from excess emissions that do not qualify for an affirmative defense pursuant to 20.2.7.111 NMAC; 20.2.7.112. NMAC; and 20.2.7.113 NMAC.
- 103. Beginning no later than 30 days from the Effective Date, Ameredev shall calculate and submit by the 15th of each month, reports of actual pph and tpy emission rates from each

emissions unit at each Ameredev facility operating in New Mexico. Calculations shall be submitted in sortable and editable Excel spreadsheets and in PDF. Reports shall be submitted for two years from the Effective Date.

- 104. For flares, tpy emission rates shall be reported as daily rolling 365-day totals. For all other equipment, tpy emission rates shall be reported as monthly rolling 12-month totals.
 - 105. Ameredev shall initiate prompt corrective action for any exceedances and report according to 20.2.7 NMAC.

Order 2: Submit Construction Permit Applications

- 106. Within 60 days of the Effective Date, Ameredev shall apply for non-GCP construction permits pursuant to 20.2.72, 20.2.74, or 20.2.79 NMAC as applicable to replace GCP-O&G permits for Amen Corner, Azalea, Firethorn, Nandina, and Red Bud CTBs.
- 107. Upon issuance or denial of each construction permit, the Department will cancel each existing GCP-O&G.
- 108. For any canceled permits, Ameredev shall remove or decommission equipment from the facility not permitted by a new construction permit. "Decommission" and "Decommissioning" applies to units left on site (not removed) and is defined as the complete disconnecting of equipment, emission sources or activities from the process by disconnecting all connections necessary for operation (i.e., piping, electrical, controls, ductwork, etc.).
 - 109. Each permit application shall include the following:
 - a. Facility-wide tpy emission limit caps of NOx, CO, SO₂, VOC, PM_{2.5}, and H₂S, including emissions from exempt standby generators (20.2.72.202.B(3) NMAC); fire pump engines (20.2.72.202.A(4) NMAC); emissions units or activities with a potential emission rate of no more than ½ tpy (20.2.72.202.B(5)

- NMAC); and from routine or predictable startup, shutdown, and maintenance activities (20.2.7 NMAC);
- Permit requirements for standby or emergency generators and fire pump engines;
- Production limits corresponding to assumptions used in emissions calculations and limits;
- d. Compliance with 40 CFR § 60, Subpart OOOOa of all existing and future tanks, including the assessment of covers and closed vent systems used to control tank emissions pursuant to 40 CFR § 60.5411a(d)(a)(i) and (ii);
- e. Compliance with 40 CFR § 60.18 of all existing and future flares and submittal of manufacturer specifications for each flare and the applicable evaluation pursuant to 40 CFR § 60.18(c) through (f); and
- f. Daily rolling 365-day total tpy emissions calculations and records for flares.

Order 3: Conduct Third-Party Audit of all other Ameredev New Mexico Facilities

- 110. Ameredev shall hire an independent, third-party contractor to complete an audit of all New Mexico facilities not subject to this enforcement action owned and/or operated by Ameredev.
 - 111. AQB shall approve the contractor selected by Ameredev for this purpose.
- 112. The contractor shall have experience in the oil and gas industry, have not completed any work for Ameredev in the past five (5) years and shall certify that no other work will be performed for Ameredev facilities in the three (3) years following the audit.
- 113. The audit shall start within 60 days of the Effective Date, shall be completed within nine (9) months of the Effective Date, and a final, certified report submitted to AQB within ten

(10) months of the Effective date.

- 114. Ameredev facilities subject to the third-party audit shall minimally include all tank batteries, all gas processing facilities, all compressor stations, all power generating stations, all water treatment facilities, all well sites, and all associated gathering lines and piping.
- 115. The third-party audit shall include the following for each of the Ameredev facilities audited:
 - a. Facility name, location, and any current AQB notices of intent (NOI) or permit numbers.
 - b. A current list of and status of all wells sending produced oil, associated gas, and other hydrocarbons to each facility.
 - c. A list of all stationary equipment, regardless of exemption status, that are sources of regulated air pollutants including unit number, description, make, model, serial number, capacity, construction and manufacture dates, and dates of initial startup.
 - d. For all equipment, the regulatory citations of all applicable emissions standards, notifications, records, and reporting required in 40 CFR § 60 and 40 CFR § 63.
 - e. A list and information of all control equipment, including capture efficiency, control efficiency, make, model, maintenance requirements and other processes to which emissions from regulated sources are routed to or controlled by.
 - f. The calculations of the potential to emit (PTE), as defined at 20.2.74.7.AO NMAC, of each emissions source and of each facility.

Order 4: Propose Mitigation Projects for NMED Approval

116. Within 30 days of the Effective Date, Ameredev shall propose, subject to NMED

approval, projects to mitigate excess emissions that occurred between 2019-2020. Costs of such projects shall not be creditable toward the assessed civil penalties and shall be borne solely by Ameredev. "Mitigation project" shall mean a project or projects to remedy, reduce, or offset past excess emissions resulting from Ameredev's alleged violations of the Act, Regulations, and/or permits in this matter.

CIVIL PENALTIES

- 117. Section 74-2-12(A) of the Act authorizes the Secretary to issue a compliance order assessing a civil penalty for a violation of the Act, the Regulations, or a condition of a permit issued under the Act.
- 118. Section 74-2-12(B) of the Act authorizes the Secretary to assess a civil penalty of up to fifteen thousand dollars (\$15,000.00) per day of non-compliance for each violation under Section 74-2-12(A).
- 119. Pursuant to the NMED Delegation Order dated March 24, 2023, the Environmental Protection Division Director may approve the commencement of a civil enforcement action with concurrence by the Secretary.
 - 120. The Secretary has concurred with this enforcement action.
- 121. For the violations described in Sections I through VIII, the Department has calculated, and hereby assesses, a civil penalty of \$40,336,818.00 consistent with the NMED-AQB Civil Penalty Policy. [NMED Exhibit 13]. Table 5 lists the violations, subject Facilities, and penalty per violation.

Violation	Facilities	Penalty Amount
Failure to construct or modify	Amen Corner	\$75,370.00
and operate as represented in	CTB	
Applications or Registrations,	Azalea CTB	
modifying five facilities	Firethorn CTB	

Violation	Facilities	Penalty Amount
without approval pursuant to GCP-6 General Condition B101.A or GCP-0&G, Specific Condition A100	Nandina CTB Red Bud CTB	v
Failure to obtain a regular, individual construction permit from the Department before modifying five Facilities	Amen Corner CTB Azalea CTB	\$207,069.00
pursuant to GCP-6 General Condition C101.D(1) or GCP- O&G General Condition	Firethorn CTB	
C101.C(1)	Nandina CTB	
Failure to operate and control tank emissions with the Vapor Recovery Unit (VRU) as represented in the GCP-O&G #8189 Registration pursuant to Specific Condition A209.A	Red Bud CTB Nandina CTB	\$153,720.00
Failure to complete and/or record monthly inspections of the VRUs used to control tank emissions pursuant to GCP-O&G, Specific Condition A209.A	Azalea CTB	\$75,600.00
Failure to complete and/or record monthly inspections of the VRUs used to control tank emissions pursuant to GCP-6, Specific Condition A107.A	Amen Corner CTB	\$25,200.00
Failure to limit pound per hour emission rates from each Facility's flare, unit FL-1, to	Amen Corner CTB	\$38,913,811.00
the limits required by each permit pursuant to GCP-6,	Azalea CTB	
Specific Condition A106.D or GCP-0&G,	Firethorn CTB	
Specific Condition A106.C	Nandina CTB Red Bud CTB	
Failure to comply with operational requirements for each Facility flare, Unit FL1,	Amen Corner CTB	\$848,548.00

Violation	Facilities	Penalty Amount
pursuant to GCP-6, Specific		
Condition A108.A or GCP-	Azalea CTB	
O&G, Specific Condition		
A207.B	Firethorn CTB	
	Nandina CTB	
	Red Bud CTB	
Failure to submit notifications	Amen Corner	\$37,500.00
of the anticipated date of initial	CTB	
startup no less than 30 days		
prior to the date pursuant to	Azalea CTB	
GCP-6, General Condition		
B110.B(1) or GCP-O&G	Firethorn CTB	
General Condition B110.B(1)		
	Nandina CTB	
	Red Bud CTB	

- 122. Within thirty (30) days of the Effective Date, Ameredev shall pay a civil penalty of \$40,336,818.00.
- Payment shall be made to the *State of New Mexico General Fund, NMED-Air Quality Bureau*, 525 Camino de los Marquez, Suite 1, Santa Fe, New Mexico, 87505 by certified or corporate check, or by wire transfer (ACH deposit). On the date that delivery of funds is initiated, notify the Air Quality Bureau Enforcement Manager by email at ENV-AQB.Settlement.Notification@state.nm.us and notify the Enforcement Specialist at cember.hardison@env.nm.gov

Certified or corporate checks must be sent to the following address:

New Mexico Environment Department Air Quality Bureau c/o Compliance and Enforcement Manager 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico 87505 Wire transfers must be made to Wells Fargo Bank as follows:

Wells Fargo Bank, N.A.

100 W Washington Street, Floor 20

Phoenix, AZ 85003

Routing Transit Number: 121000248

Deposit Account Number: 4123107799

Descriptor: NMED-AQB-C&E

124. If Ameredev fails to make timely and complete payment of the civil penalty

pursuant to Paragraphs 101 and 102, and unless the Department and Ameredev agree to extend the

time for payment of the civil penalty, Ameredev shall pay a stipulated penalty of \$1,500.00 per

day for each day the payment is not timely or complete.

If Ameredev fails to complete the corrective actions pursuant to Paragraph 122,

and unless the Department and Ameredev agree to extend the time for completion of the

requirements, Ameredev shall pay a stipulated penalty of \$1,500.00 per day for each day each

requirement is not timely or complete.

ADMINISTRATIVE COMPLIANCE COSTS

126. The Department will invoice Ameredev in the amount of \$412,960 for

administrative compliance costs incurred to date that are associated with this matter. To the extent

that Ameredev does not resolve this matter within thirty (30) days, including the payment of the

civil penalty of \$40,336,818.00, Ameredev will continue to accrue additional administrative

compliance costs of up to \$2,400 per day.

NOTICE OF OPPORTUNITY TO ANSWER AND REQUEST A HEARING

127. Pursuant to Section 74-2-12(C) of the Act and the Department's adjudicatory

procedures at 20.1.5.200 NMAC, Ameredev may request a hearing by filing a written request for

a public hearing with the hearing clerk no later than 30 days after receipt of this Order. The request

Ameredev ACO Page 29 of 32 for hearing shall include an Answer:

a. Admitting or denying each allegation. Any allegation which is not specifically

denied shall be deemed to be admitted. Ameredev may assert that it has

insufficient knowledge of any alleged finding of fact, and such finding shall be

deemed to be denied:

b. Asserting any affirmative defense upon which Ameredev intends to rely. Any

affirmative defense not asserted in the Answer, except an affirmative defense

asserting lack of subject matter jurisdiction, shall be deemed waived.

c. Signed under oath or affirmation that the information contained therein is true

and correct to the best of the signatory's knowledge; and

d. Attaching a copy of this Order.

This Order shall become final upon Ameredev's receipt of the Order, unless 128.

Ameredev files a Request for Hearing and Answer as set forth above. Ameredev may file a Request

for Hearing and Answer at the following address:

Madai Corral, Paralegal/Hearing Clerk

Office of Public Facilitation

New Mexico Environment Department

1190 St. Francis Drive

Santa Fe, New Mexico 87505

Phone: 505-490-5803

Email: Madai.corral@env.nm.gov

129. The public hearing shall be governed by the Department's adjudicatory procedures

at 20.1.5 NMAC, a copy of which is attached to this Order as NMED Exhibit 25.

SETTLEMENT CONFERENCE

130. Ameredev may confer with the Department regarding settlement at any time, but a

settlement conference or request for a settlement shall not extend or waive the deadline for filing

a Request for Hearing or Answer. Ameredev may appear at a settlement conference either pro se or through legal counsel. The Secretary or an appropriate designee shall execute any settlement as part of a Stipulated Final Order. Any Stipulated Final Order shall resolve all issues raised in this Order, shall bind all parties to this Order, and shall not be appealable. To confer regarding

settlement, contact:

Chris Vigil, Assistant General Counsel New Mexico Environment Department 121 Tijeras Ave. NE, Ste. 1000 Albuquerque, New Mexico 87102

Phone: (505) 469-4696

Email: christopherj.vigil@env.nm.gov

TERMINATION

131. This Order shall terminate upon approval of the Secretary or an appropriate designee of a Stipulated Final Order.

NEW MEXICO ENVIRONMENT DEPARTMENT

BY:	DATE:	
Michelle Miano, Director		
Environmental Protection Division		
New Mexico Environment Department		

CERTIFICATE OF SERVICE

I hereby certify that on this 29th day of June 2023, a copy of the foregoing Administrative Compliance Order was mailed via certified mail-return receipt requested and by email to:

Anthony Seach, General Counsel Ameredev II, LLC 2901 Via Fortuna, Suite 600 Austin, TX 78746 aseach@ameredev.com

/s/ Chris Vigil
Chris Vigil, Assistant General Counsel
New Mexico Environment Department