



Verification Report

CAR1027 – Rentech Nitrogen, LLC – Nitric Acid Plant 2
Reporting Period: October 8, 2020 – October 5, 2021

Prepared for:
East Dubuque Nitrogen Fertilizers, LLC

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1.0 Introduction

Ruby Canyon Environmental, Inc. (RCE) was contracted by ClimeCo LLC (ClimeCo) to verify the Rentech Nitrogen, LLC – Nitric Acid Plant 2 project (Project) owned and operated by East Dubuque Nitrogen Fertilizers, LLC (EDNF) for the reporting period October 8, 2020 through October 5, 2021 to the Climate Action Reserve's (Reserve) Nitric Acid Production Project Protocol Version 2.0 (Protocol). The Project generates greenhouse gas (GHG) emission reductions by destroying nitrous oxide (N₂O) via a secondary catalyst.

1.1 *Project Background & Site Description*

EDNF installed and operates a secondary abatement catalyst below the oxidation gauzes at its Nitric Acid Plant 2 at its facility in East Dubuque, Illinois. The secondary catalyst decomposes N₂O and subsequently reduces the quantity of N₂O that would have otherwise been released to the atmosphere. Nitric Acid Plant 2 was relocated to its current location and restarted in 1998. RCE verified that the plant was out of operation and restarted well before December 2, 2007, and thus it meets all aspects of the project definition in the Protocol. The facility also includes an ammonia plant, a urea plant, and Nitric Acid Plant 1.

EDNF is the project owner and is responsible for ongoing operation and maintenance of the monitoring system and data acquisition and handling system. ClimeCo is the technical consultant to EDNF and is responsible for overall program management, development of monitoring reports, and oversight of the verification process.

This is the verification of the eighth reporting period for the Project. The reporting period includes one full campaign, Campaign 8, which began on October 8, 2020 and ended on October 5, 2021. The reporting period is within the Project's first crediting period which began on the Project start date, December 28, 2013, and ends on December 27, 2023.

1.2 *Responsible Parties*

Project Developer

East Dubuque Nitrogen Fertilizers, LLC
16675 U.S. Highway 20 W
East Dubuque, IL 61025

Technical Consultant

ClimeCo LLC
1 East Philadelphia Avenue
Boyertown, PA 19512

1.3 Verification Team

The RCE verification team consisted of the following individuals who were selected based upon verification experience under the Reserve's program and knowledge of U.S. EPA regulations and the nitric acid plant sector.

Lead Verifier: Nina Pinette

Team Member: Garrett Heidrick

Senior Internal Reviewer: Phillip Cunningham

1.4 Objectives

The goal of the verification activities was to ensure that the claimed GHG emission reductions are complete, consistent, accurate, transparent, and permanent and that the Project was in compliance with the Protocol's additionality, monitoring, and reporting requirements. Furthermore, the verification activities ensure that the data provided to RCE is well documented and free of any material errors or omissions.

1.5 Scope

The scope of the verification consisted of the following independent and objective activities:

- Review the Project Monitoring Plan,
- Review Project boundaries,
- Review Project eligibility,
- Conduct a virtual site visit to the Project,
- Review Project data acquisition and quality control procedures,
- Review Project's historical campaign data and calculation of permitted operating conditions and HNO_3max ,
- Review the Project's baseline emissions data,
- Review the Project's emission reduction calculations,
- Review Project documents and data against the Verification Criteria listed in Table 1,
- Issue requests for corrective actions, non-material findings, additional documentation, and clarifications, as necessary, and
- Issue a Verification Report, List of Findings, and Verification Statement to EDNF and the Reserve.

1.6 Verification Criteria

Table 1. Verification Criteria

Criteria	Details
Standard of Verification	• Nitric Acid Production Project Protocol Version 2.0 (September 28, 2011) (Protocol) • Errata and Clarifications to Nitric Acid Production Protocol Version 2.0 (January 3, 2017) • Reserve Offset Program Manual (March 12, 2021)
Verification Process	• The Reserve Verification Program Manual (February 3, 2021) • ISO 14064-3:2006 "Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions"
Level of Assurance	Reasonable assurance

Materiality	99% materiality threshold (<1% error) because total annual ERs are >100,000 tCO ₂ e.
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2.0 Verification Activities Summary

RCE developed a verification plan to be followed throughout the verification. The verification plan consisted of the following activities:

- RCE completed the Project NOVA/COI form to identify any potential conflicts of interest with the Project or Project developer. The NOVA/COI form was submitted to the Reserve's online registry, and the COI assessment revealed no conflicts of interest and was approved by the Reserve on November 10, 2021.
- RCE held a verification kickoff meeting with ClimeCo and EDNF on December 1, 2021. During the kickoff meeting RCE reviewed the verification objectives and process, the verification schedule, and requested the verification background documents.
- RCE performed a strategic review and risk assessment of the received data and support documents to understand the scope and areas of potential risk in the GHG emissions reductions. In response to the COVID-19 pandemic, the Reserve allowed RCE to conduct the site visit virtually. RCE assessed the risk of conducting a virtual site visit instead of an onsite visit as part of its risk assessment.
- RCE developed a risk-based sampling plan based upon the strategic review and risk assessment. The verification plan and sampling plan were used throughout the verification and were revised as needed based upon additional risk assessments.
- RCE conducted a virtual site visit to the Project on December 15, 2021, using the real-time video web meeting and screen sharing platform Microsoft Teams. Due to connectivity issues at the plant, EDNF provided photos of the project equipment based on questions and requests from the lead verifier. During the site visit RCE viewed the continuous emission monitoring system (CEMS) equipment; observed the onsite GHG management systems and data gathering, monitoring and handling practices; and interviewed key personnel. The use of this method was effective in achieving the verification objectives.
- RCE conducted a detailed desktop review of submitted material including evidence of regulatory compliance, documentation of ongoing QA/QC procedures, source data, and emission reduction calculations.
- RCE submitted requests for corrective actions, additional documentation, and clarifications, as necessary to ClimeCo and EDNF throughout the verification.
- RCE's Senior Internal Reviewer conducted a review of the verification sampling, Verification Report, and Verification Statement.
- RCE issued a final Verification Report, Verification Statement, and List of Findings.
- RCE held an exit meeting with ClimeCo and EDNF.

3.0 Verification Findings

3.1 Assessment of the GHG Reduction Project Operations

The Project destroys N₂O from a nitric acid plant (NAP) via a secondary abatement catalyst below the oxidation gauzes located within the ammonia oxidation reactor (AOR). EDNF measured the N₂O emissions per unit of nitric acid production during the baseline campaign using only a primary catalyst in the ammonia oxidation process. EDNF repeated the monitoring procedure in the project campaign after they

installed the secondary abatement catalyst in December 2013. RCE confirmed that a non-selective catalytic reduction (NSCR) unit was not operating at the plant at any time since December 2, 2007.

A CEMS directly measures the N₂O concentration in the stack gas. The data acquisition and handling system (DAHS) along with the programmable logic controller (PLC) and the server perform CEMS data monitoring, recordkeeping, and reporting. The system monitors gas flow rate, N₂O concentration, process temperature, pressure, and ammonia-to-air ratio on a continuous basis and records the data every minute, meeting Protocol requirements.

During the verification of the first reporting period, RCE confirmed that the plant completed installation and initial certification of the CEMS according to manufacturer's specifications and the requirements of the Protocol. RCE verified the installation of the secondary abatement catalyst and campaign dates through review of plant gauze records. RCE confirmed that this reporting period included one full campaign. Finally, RCE determined that EDNF adhered to the methodology defined in the Monitoring Plan Version 1.3 throughout the verification and monitored all applicable parameters in accordance with Table 6.2 of the Protocol.

3.2 GHG Project Boundary (sources, sinks and/or reservoirs)

According to the Protocol, N₂O is the only GHG included from the Baseline and Project activities for secondary abatement projects.

Table 2 lists the sources of GHG emissions reviewed during the verification of the Project.

Table 2. Project GHG Sources, Sinks and Reservoirs

Activity	GHG Sources, Sinks & Reservoirs
Baseline	• N₂O vented to the atmosphere.
Project	• N₂O vented to the atmosphere

3.3 Project Eligibility Criteria

The Protocol specifies four eligibility rules that GHG Project developers must meet to register reductions with the Reserve. Below is a summary of the Protocol's eligibility rules and the Project's compliance to each requirement.

- **Eligibility Rule I: Location**

The Project is located at a nitric acid plant in East Dubuque, Illinois, U.S. The Project therefore meets the location eligibility requirement.

- **Eligibility Rule II: Project Start Date**

RCE reviewed work orders for removing and modifying the converter for the Project which were completed on December 20, 2013 and December 24, 2013. RCE also reviewed the raw CEMS data which shows that December 28, 2013 at 5:00am was the start of the first campaign after the installation of the catalyst. RCE confirmed December 28, 2013 as the project start date. The Project's crediting period is December 28, 2013 to December 27, 2023.

- **Eligibility Rule III: Additionality**

Legal Requirement Test

RCE confirmed that there are currently no laws requiring the abatement of N₂O at the plant. In addition, EDNF's Environmental and Security Manager checks periodicals, websites, newsletters, and other materials provided by trade associations and legal advocacy groups such as the Chemical

Industry Council of Illinois and the Fertilizer Institute. RCE reviewed EDNF's renewal Title V Permit, but the permit does not address N₂O. EDNF's nitric acid plant 2 has not triggered the PSD Tailoring Rule for GHGs; the plant does not exceed the emission threshold and is therefore not subject to this rule.

RCE also verified that the project developer accurately completed the Attestation of Voluntary Implementation form and uploaded it to the Reserve software.

Performance Standard Test

RCE verified that the Project satisfies the Performance Standard by installing a new secondary N₂O abatement catalyst. RCE reviewed plant records indicating the installation of the catalyst in December 2013.

- **Eligibility Rule V: Regulatory Compliance**

The Project was in material compliance with all applicable laws throughout the reporting period. RCE reviewed the U.S. EPA's Enforcement and Compliance History Online (ECHO) database and any entries associated with the EDNF facility. There was one Clean Water Act violation noted for the quarter 07/01-09/30/20 which was prior to this reporting period. EDNF provided additional information about this violation, which RCE determined to be unrelated to the Project.

RCE searched the Illinois Environmental Protection Agency (IEPA) Document Explorer and found no evidence of violations related to the Project for this reporting period.

RCE submitted a Freedom of Information Act (FOIA) request to the Illinois Environmental Protection Agency, and there was no evidence of any violations during the reporting period in any of the documents provided in response to the request.

Finally, RCE verified that the Attestation of Regulatory Compliance was correctly completed and uploaded to the Reserve software.

3.4 Ownership of GHG Reductions

EDNF owns the nitric acid plant and thus owns full right to any emission reductions associated with the plant. ClimeCo serves only as a technical consultant to EDNF. RCE reviewed the "Designation of Authority" in which Rentech Nitrogen, LLC (now EDNF) designated authority to ClimeCo as the Account Holder Agent on the Reserve website. RCE also verified that the Attestation of Title was correctly completed and uploaded to the Reserve software after the end of the reporting period.

3.5 Assessment of Information System Controls

RCE's review of the GHG management systems took place during the virtual site visit through observations of onsite procedures and interviews with Project key personnel. The review included confirming that the Project monitoring was done by direct measurements from a CEMS for gas flow rates and N₂O concentration. The Project uses a Kurz insertion mass flow meter and transmitter (model 155B/KBAR-2000B) to measure gas flows in the stack. These flow measurements are used in both baseline and project emission calculations. The Project uses an EcoChem Analytics infrared gas analyzer (model MC3) to measure N₂O concentration. RCE confirmed the locations of the sample probes within the stack through review of plant diagrams.

The Project uses the CEMS DAHS coupled with a PLC that consolidates the data. The data is stored locally and on a server with regular backup. RCE verified that the data management systems met the requirements of Section 6.2.2 of the Protocol.

3.6 CEMS Installation and Certification

The Protocol states that the project developers follow the CEMS installation and certification requirements:

- 40 CFR Part 60, Sec. 60.13
- 40 CFR Part 60, Appendix B, Performance Specification 2
- 40 CFR Part 75, Appendix A, Sec. 6

As is the case with most NAPs located in the U.S., parts of the EDNF CEMS were installed prior to the Project. All CEMS components were installed by the manufacturers of the equipment or electrical contractors. RCE verified that the Project met all CEMS installation and certification requirements during the verification of the Project's first reporting period.

RCE verified that the following requirements were met for installation and certification of the CEMS:

7-day Calibration Error Test:

RCE reviewed the results of the 7-day calibration error tests performed for the flow meter (3/1/2011 – 3/8/2011) and the analyzer (3/1/2011 – 3/8/2011). All tests were completed prior to the project start date and the percent calibration errors were within the allowable range.

Linearity Check:

RCE reviewed the results of the linearity check performed for the analyzer (3/17/2011). The check took place prior to the project start date and met the requirement of less than 5.0 percent error.

RATA and bias tests:

RCE reviewed the results of the RATA that was conducted on March 22, 2011 for the flow meter and analyzer. The relative accuracy (RA) for both was within the allowable range and both passed the bias test.

Cycle Time Test:

RCE reviewed the results of the cycle time test on March 11, 2011 which ensures that the monitoring system is capable of completing at least one cycle of sampling, analyzing, and data recording every 15 minutes.

3.7 Ongoing CEMS QA/QC Program

RCE confirmed that the Project met the ongoing CEMS QA/QC requirements throughout the reporting period.

3.7.1 Daily Requirements

RCE reviewed evidence that EDNF performs daily calibration error tests for the N₂O analyzer with a span gas and a zero gas. The analyzer performs an automatic daily calibration error test; the analyzer is quite stable as demonstrated by minimal variation in the calibration results. RCE viewed the raw data and results of each test. RCE also confirmed that calibration adjustments are performed, if necessary, data is validated daily, data is continuously monitored and recorded every minute, and QA checks are performed. There were instances during the reporting period where the results of the automatic calibration error test for the analyzer indicated "warning" or "out of control". Some of these were during periods when the plant was offline, but for the times the plant was online, the analyzer was automatically recalibrated and another test was performed until the result indicated "cal OK". Missing data substitution was applied for periods until the results indicated "cal OK".

3.7.2 Quarterly Requirements

RCE verified that the following quarterly assessments were performed according to Protocol requirements and the variance:

Calibration Error Test:

EDNF conducted daily calibration error tests for the flow meter, exceeding the Protocol requirement to conduct quarterly tests. RCE reviewed evidence that the daily calibration error tests met Part 75 requirements for flow meters. The meter performs an automatic daily calibration error test with a flow zero and a flow span; the flow meter is stable as demonstrated by minimal variation in the daily calibration results. RCE viewed the raw data and results of each test and verified that all results were within the +/-6 percent threshold as required by Part 75. This differs from the Protocol requirement for quarterly calibration error tests to be within a +/-3 percent threshold; however, The Reserve issued a variance determination on May 16, 2022, agreeing that the Project's use of daily calibration error tests is a reasonable procedure.

RCE also confirmed that calibration adjustments are performed if necessary, data is validated, data is continuously monitored and recorded every minute, and QA checks are performed. There were no instances during the reporting period when the flow meter was out of calibration.

Leak Check:

The Protocol states that leak checks are required for differential pressure flow meters only. Because the Project utilizes a thermal mass flow meter, this quarterly assessment is not required.

Flow-to-Load or Heat Rate Evaluations:

The Protocol states that units not producing electrical output or thermal output are exempted from the flow-to-load ratio test requirements. The Project meets this exemption and is therefore not required to perform this quarterly assessment.

Linearity Checks

RCE confirmed that the quarterly linearity checks were performed for the N₂O analyzer in each quarter during the reporting period that did not include a RATA for the analyzer, as required by the Protocol; however, EDNF also conducted linearity checks in quarters in which there were RATAs.

Table 3. Linearity Check Dates

Equipment	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021
N ₂ O Outlet Analyzer	10/28/2020	2/3/2021	5/5/2021	8/9/2021	11/1/2021

RCE verified that the results of all checks met Protocol and Part 75 requirements. The results were either within the required range (<5% error) for low-level, mid-level, and high-level gas concentrations or the absolute value of the difference between the average of the monitor response values and the average of the reference values was less than or equal to 5 ppm if the percent error was >5%. The analyzer also had a RATA in the fourth quarter of 2020.

Data Validation

RCE confirmed that the results of all QA/QC checks were within the ranges required by the Protocol and/or 40 CFR Part 75 Appendix B requirements, as detailed above.

3.7.3 Annual and Semi-Annual Assessments

RCE reviewed the results of the RATAs conducted on November 20, 2020 for the analyzer and the flow meter. The third party conducting the RATAs, Alliance Source Testing, conforms to the requirements of ASTM D7036-04.

The results are shown in Table 4, below.

Table 4. RATA Results

Equipment	11/20/2020
Flow Meter	0.91%
N ₂ O Outlet Analyzer	8.27 ppm

The results of the RATA for the flow meter showed the relative accuracy to be within the acceptable range (less than 10%) and also less than 7.5%, thus meeting the requirement for conducting an annual RATA. The relative accuracy shown in the RATA during the previous reporting period, on November 7, 2019, was also less than 7.5%.

The results of the RATA for the analyzer indicate a result with units in ppm. For low emitting units (average reference method concentrations ≤ 250 ppm) Part 75 states that “the difference between the mean value of the CEMS measurements and the reference method mean value shall not exceed ± 15.0 ppm, wherever the 10.0 percent relative accuracy specification is not achieved”. RCE confirmed that the RATA shows a reference method N₂O concentration average of 113.19 ppm so the instrument qualifies for use of this method. The mean difference was 8.27 ppm.

The relative accuracy shown in the RATA during the previous reporting period, on November 7, 2019, was also less than 7.5%, thus meeting the requirement for conducting an annual RATA.

The BAFs prior to the November 2020 RATAs and bias tests were verified during the verification of the previous reporting period. Only the flow meter required a BAF prior to November 20, 2020. As a result of the bias tests in November 2020, the analyzer required a BAF for N₂O concentration from the date of the tests to the end of the reporting period. RCE verified that BAFs were applied correctly to the raw data.

Table 5 - Bias Adjustment Factors

Equipment	10/8/2020 – 11/20/2020	11/20/2020 – 10/5/2021
N ₂ O Outlet Analyzer	None	1.079
Flow Meter	1.063	None

3.7.4 Missing Data Substitution

During the Project campaigns, missing data substitution methods were applied for a total of 280 hours for N₂O concentration and 73 hours for flow. The DAHS is programmed to automatically calculate the substitute values based on the guidance in the Protocol and Part 75 Section 75.33. RCE confirmed that the values were appropriately substituted.

3.8 Assessment of GHG Emissions Reductions Calculations

The emission reduction calculations assessment included a review of the historical, baseline, and project assumptions, data inputs, data management, and the accuracy of calculations. During its first verification for the Project, RCE assessed the information generated from the historical campaigns. For this reporting period, RCE assessed the data generated from the project campaign and evaluated the completeness of

the data and how it is transferred from EDNF's DAHS to ClimeCo's GHG calculation database.

The Protocol requires a series of data analyses and calculation steps to quantify the GHG emission reductions. ClimeCo managed the data in a Microsoft Access database file using various queries of the raw data and provided the data to RCE in a MS Excel spreadsheet. RCE reviewed the queries/formulas and data outputs for compliance with the Protocol.

The flow meter and analyzer record at 68°F and 1 atmosphere; RCE confirmed that all data was normalized to 0°C and 101.325 kPa in the calculation database/spreadsheets. ClimeCo also performed unit conversions for some monitoring parameters, and RCE confirmed that the conversions were performed correctly and that the raw data was converted to the units required by the protocol for all parameters.

Historical Campaigns

The project was implemented at an existing NAP. Because of some changes at the plant from the historical campaigns to the baseline and project campaigns, the allowable operating condition (AOC) parameters are not representative. During the verification of the first reporting period, EDNF requested, and was granted, a variance to rely on Section 5.1.2(c) of the Protocol rather than Section 5.1.2(b). Furthermore, the variance determination allows the Project to "use plant operational documentation, in lieu of the more traditional 'operating manual'... pursuant to the following conditions:

- The project developer applies a 2.5% factor to the upper and lower ranges for the oxidation temperature and pressure derived from plant operational documentation (e.g. reducing the maximum and increasing the minimum by 2.5%), as well as applies a 2.5% factor to the maximum ammonia-to-air ratio derived from plant operational documentation (e.g. reducing the maximum).
- The verifier is reasonably assured that the project developer employed conservative measures when deriving the project's AOCs for oxidation temperature, pressure, and maximum ammonia-to-air ratio input from the available plant operational documentation (in lieu of the operating manual referenced in source option 5.1.2(c)).
- The verifier confirms that the 2.5% compensatory factor was correctly applied to all parameters."

During the verification of the first reporting period, RCE reviewed the sources for all AOCs and confirmed that the 2.5% compensatory factor was applied to all parameters. The sources were appropriate, consisted of the best available documentation, and were conservative.

There was sufficient data for the project to use five historical campaigns to calculate $\text{HNO}_{3,\text{MAX}}$. RCE confirmed that $\text{HNO}_{3,\text{MAX}}$ was calculated and measured according to the methods outlined in the Protocol.

- $\text{HNO}_{3,\text{MAX}} = 140.74 \text{ tHNO}_3/\text{day}$
- Oxidation temperature: min. = 665.10°C, max. = 822.24°C
- Oxidation pressure: min. = 2.12 bar, max. = 3.29 bar
- Ammonia-to-Air Ratio: max. = 11.70%

RCE confirmed that the values for each AOC were used in the calculations for this Project campaign.

Baseline Emissions

During RCE's verification of the Project's first reporting period, ClimeCo provided data from the baseline campaign which occurred prior to the installation of the secondary catalyst. The baseline campaign occurred from May 16, 2013 to November 30, 2013. The plant was shut down for the installation of the secondary catalyst and the first project campaign began on December 28, 2013. RCE verified that the

baseline did not exceed CPV_{cap} (42,639 tHNO₃). ClimeCo calculated CPV_{cap} using the same five campaigns that were used to calculate the AOCs.

During the verification of the first reporting period, RCE verified that the raw data from the Baseline campaign was correctly adjusted in accordance with the Protocol requirements—including the exclusion of data points when the plant was not operating, elimination of data outside of the AOCs, and the elimination of outliers—and appropriately used to determine the Baseline Emission Factor. RCE verified the assumptions and variables used in Equations 5.4 and 5.5 in the Protocol.

During the verification of the first reporting period, RCE verified that the Baseline campaign operated inside the established AOCs greater than 50 percent of the campaign, meeting the requirement in the Protocol. RCE also confirmed that the operating conditions during the baseline sampling period are representative of AOCs by verifying that the mean values for oxidation temperature, oxidation pressure, and ammonia-to-air ratio are within the corresponding ranges defined for the AOC.

During the verification of a previous reporting period, by another VVB, ClimeCo revised some of the baseline parameter values slightly based on findings by that VVB. The changes were non-material.

Project Emissions

ClimeCo provided Project data for the entire reporting period which included one full campaign, Campaign 8.

The Project requested a variance, dated January 28, 2022, to comply with Section 6.2.2 of the Protocol which requires project developers to check for temporal consistency in production data and emission estimates. The variance request discloses an issue that occurred during the reporting period which affected the consistency of recorded stack flow data:

The issue involved the EDNF NAP-2 flow computer, which is a component of the plant's CEMS. Over the course of the period 07.01.2021 through 08.17.2021, the I/O board of the flow computer began to fail, which limited the flow computer's ability to continuously translate the mass flow measurement and signal received from the flow meter situated in the plant stack to a volumetric flow rate for use in emission reduction calculations. The issue resulted in overly consistent stack flow rate measurements being reported by the flow computer during the malfunction period. Therefore, for certain consecutive hours during the malfunction period, the reported hourly average stack flow rates are identical values.

EDNF replaced the malfunctioning flow computer which resolved the issue. The Project proposed to use the recorded flow data points without adjustment because they are accurate and realistic, supported by successful calibration error tests during that time, and the recorded flow rates are higher than the average flow rate observed for the rest of the reporting period, resulting in a more conservative estimate of emission reductions since higher flow values result in higher project emissions.

The Reserve granted the variance on April 1, 2022, pursuant to the following conditions:

- The verifier confirms that the stack flow data measurements recorded between July 1, 2021 and August 17, 2021 were a higher average flow rate.
- The verifier confirms all other relevant monitoring and QA/QC requirements were met.

RCE confirmed that the average stack flow data measurements between July 1 and August 17, 2021 were higher than the average stack flow rate for the rest of the reporting period. RCE also confirmed that all other relevant monitoring and QA/QC requirements were met for that period, including requirements for calibration error tests and RATAs, as described in more detail above in Section 3.7.

RCE verified that the Project campaign operated inside the established AOCs greater than 50 percent of the campaign, meeting the requirement in the Protocol. RCE also confirmed that the operating conditions during the Project campaign are representative of AOCs by verifying that the mean values for oxidation temperature, oxidation pressure, and ammonia-to-air ratio are within the corresponding ranges defined for the AOCs for Campaign 8.

$\text{HNO}_{3,\text{RP}}$ was less than $\text{HNO}_{3,\text{MAX,scaled}}$ during the project campaign. RCE also verified the operating hours for each campaign.

RCE determined that the emission reduction calculations followed the requirements of the Protocol and found no material misstatements in the final Project GHG reductions calculations and results.

4.0 Verification Results

ClimeCo and EDNF provided sufficient evidence and documentation of their emission reductions, data collection procedures, monitoring, and quality control procedures. The verification process focused on verifying the historical emissions, baseline emissions, and full campaign project emission reductions and the source data used by ClimeCo to quantify the emission reductions in accordance with the Protocol.

During the verification process, RCE made requests for additional documentation and clarifications to complete the verification. The details of RCE's findings are documented in the List of Findings provided to the Reserve, EDNF, and ClimeCo.

The Project reported emission reductions of 149,983 metric tons of CO₂ equivalents as per the information provided in the calculation summary spreadsheets. During the final review, RCE identified no material misstatements in the data or emission reduction calculations. Tables 6 and 7 define the emission reductions verified for this reporting period.

5.0 Conclusion

RCE conducted a risk-based analysis of the Rentech Nitrogen, LLC – Nitric Acid Plant 2 project assertion including a strategic review of the Project data and evidence. Based upon the processes and procedures and the evidence collected, RCE concludes that the Project emission reductions resulting from the destruction of N₂O during the reporting period October 8, 2020 through October 5, 2021 can be considered:

- In conformance with the Reserve's Nitric Acid Production Project Protocol Version 2.0 and the ISO 14064-3:2006 standard,
- Without material discrepancy, and
- Verified to a reasonable level of assurance.

The verified emission reductions are listed in Table 6 and Table 7. While RCE confirmed the emission reduction calculations and the total emission reductions to be correct and within the materiality threshold, the values in Table 6 are summary data only with significant figures rounded for summary purposes in this report.

Table 6. Emission Reductions Verified for October 8, 2020 to October 5, 2021 by Campaign

Campaign	Baseline Emissions CO ₂ e (metric tons)	Project Emissions CO ₂ e (metric tons)	Emission Reductions CO ₂ e (metric tons)
Campaign 8	163,186	13,202	149,983

Table 7. Emission Reductions Verified for October 8, 2020 to October 5, 2021 by Vintage

Vintage	Emission Reductions CO ₂ e (metric tons)
2020	36,537
2021	113,446
Total	149,983

Lead Verifier Signature



Nina Pinette

Senior Internal Reviewer Signature



Phillip Cunningham