



REGION 6

DALLAS, TX 75270

January 27, 2025

Ms. Demetria Kimbrough
Associate Director
Office of Air Quality
Arkansas Energy & Environment - Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

Dear Ms. Kimbrough:

The Quality Assurance Project Plan (QAPP) for the Arkansas Department of Energy & Environment (E&E) - Department of Environmental Quality (DEQ) Quality Assurance Project Plan (QAPP) Air - Emissions Reporting Requirements for the National Emissions Inventory, Q-Trak No. 25-123. I am pleased to inform you that the QAPP has been reviewed and approved by Salem Nevine, Technical Reviewer of the Infrastructure and Ozone Section, Region 6, EPA. The QAPP has an expiration date of February 27, 2026.

Please send all QAPP's sixty days prior to the expiration of the recipient's approved QAPP. The recipient shall submit to the Project Officer a revised QAPP or certification that the QAPP is current and include a signed copy of the new approval page(s) for the QAPP.

Enclosed is a copy of the QAPP signature page(s) for your record. Should you have any questions, please call me at (214) 665-8453.

Sincerely,

Terrie Wright
Project Officer
Air Grants Section

cc: Grant File



ARKANSAS ENERGY & ENVIRONMENT

10/22/24

Ms. Terrie L. Wright
Environmental Protection Specialist (6AR-PM)
U.S. Environmental Protection Agency, Region 6
1201 Elm St., Suite 500
Dallas, TX 75270

Dear Terrie L. Wright:

The Arkansas Department of Energy and Environment, Division of Environmental Quality (AR DEQ) is requesting an approval extension for the previously approved Arkansas National Emissions Inventory Quality Assurance Project Plan. This plan was initially written and submitted in October 2023 and it was approved in February 2024 (Q-Trak No. 24-151).

If possible, please extend the approval for two years since no major changes are anticipated during the requested timeframe. If changes are made, the QAPP will be updated to reflect those changes and submitted to Region VI. Upon review of this request, please provide AR DEQ with documentation of your approval or denial.

Signature sheet and updated organizational chart are enclosed.

Sincerely,

A blue ink signature of Stacie Wassell, consisting of a stylized 'S' followed by a horizontal line and a small flourish.

Stacie Wassell
AR DEQ QA Manager

A blue ink signature of Steve Tune, featuring a stylized 'S' and 'T' connected by a horizontal line.

Steve Tune
AR DEQ Project Officer

A2. APPROVAL SHEET

Plan Prepared by: _____

Steve Tune, Project Officer, Emissions Inventory Coordinator

Phone: (501) 682-0537, steven.tune@arkansas.gov

DEQ APPROVING OFFICIALS:

Signature: _____

David Clark - Technical Section Supervisor
DEQ Office of Air Quality

Date: _____

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Phone: (501) 682-0070

Signature: _____

Erika Droke - Policy Manager
DEQ Office of Air Quality

Date: _____

E-mail: erika.droke@arkansas.gov

Phone: (501) 682-0542

Signature: _____

Heath Cobb - Deputy Associate Director
DEQ Office of Air Quality

Date: _____

E-mail: heath.cobb@arkansas.gov

Phone: (501) 682-0711

Signature: _____

Demetria Kimbrough - Associate Director
DEQ Office of Air Quality

Date: _____

E-mail: demetria.kimbrough@arkansas.gov

Phone: (501) 682-0927

Signature: _____

Rhonda Joyce Moore - Quality Assurance Coordinator
DEQ Office of Air Quality

Date: _____

E-mail: rhonda.moore@arkansas.gov

Phone: (501) 682-0795

Signature: _____

Stacie Wassell - Quality Assurance Manager
DEQ Office of Water Quality

Date: _____

E-mail: stacie.wassell@arkansas.gov

Phone: (501) 682-0886

EPA APPROVING OFFICIALS:

Signature: _____

US EPA Air QA Officer

Date: 01/21/2025

E-Mail: wright.terrie@epa.gov

Phone: (214) 665-8453

Signature: _____

US EPA Air Technical Reviewer

Salem,
Nevine

Digitally signed
by Salem, Nevine

Date: 2025.01.21

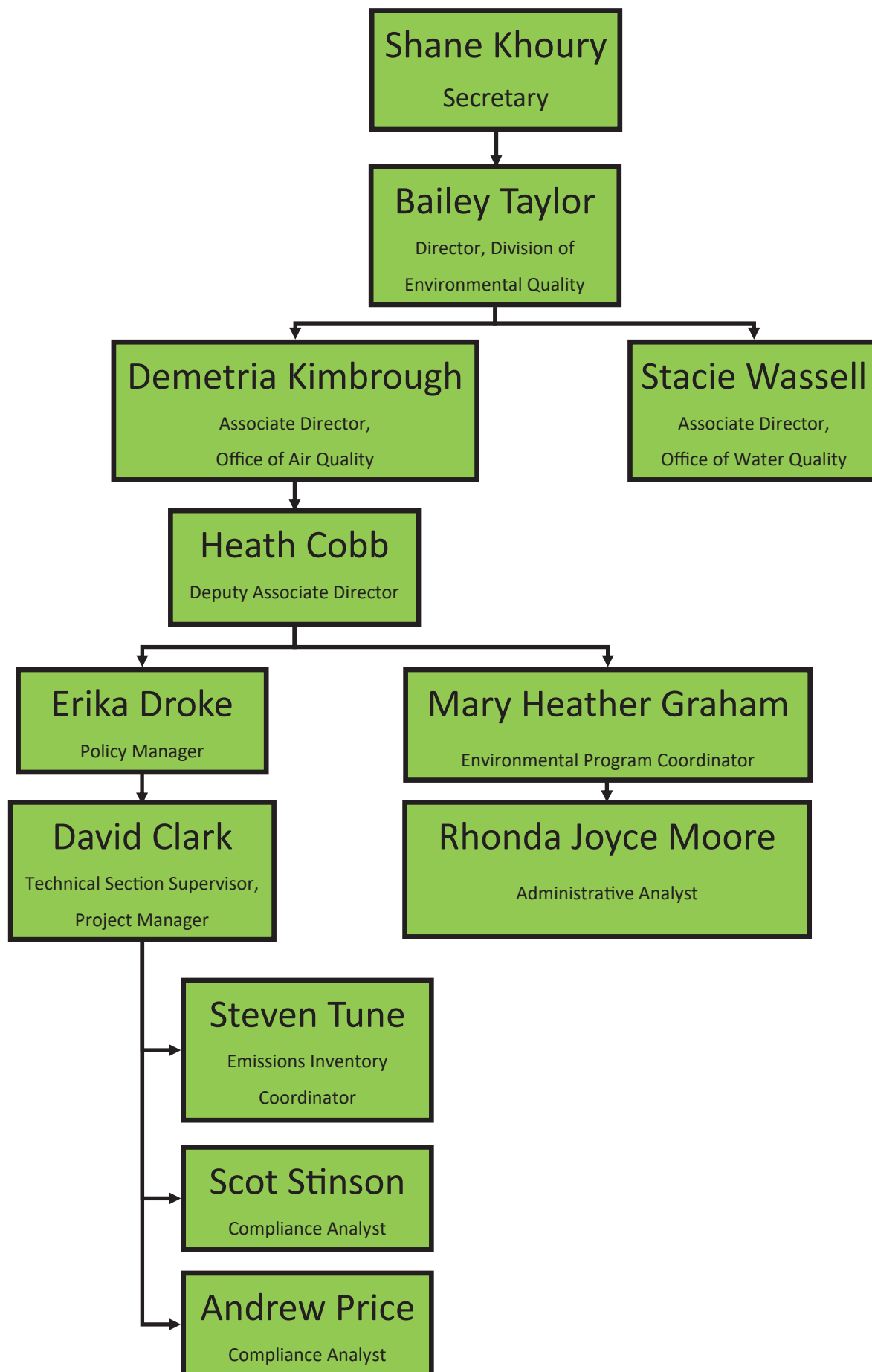
09:23:32 -06'00'

Date: 01/21/2025

E-Mail: Salem.Nevine@epa.gov

Phone: 214-665-7222

ARKANSAS DEPARTMENT OF ENERGY AND ENVIRONMENT



**ARKANSAS DEPARTMENT OF ENERGY &
ENVIRONMENT – DEPARTMENT OF ENVIRONMENTAL
QUALITY**

QUALITY ASSURANCE PROJECT PLAN (QAPP)

**Air Emissions Reporting Requirements for the
2023 National Emissions Inventory**

November 14, 2023

Agencies performing environmental data operations for the United States Environmental Protection Agency (EPA) are required to submit Quality Assurance Project Plans by EPA Order 5360.1, *Policy and Program Requirements to Implement the Mandatory Quality Assurance Program*. This document outlines the plans and protocol for the Arkansas Department of Energy & Environment – Department of Environmental Quality (DEQ) to perform data collection and management activities that support the compilation and submittal of emissions inventory data for the 2023 National Emissions Inventory (NEI). This document follows guidelines outlined in the *EPA Quality Assurance Project Plan Standard*.

QAPP ELEMENTS

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- A2. Approval Sheet
- A3. Table of Contents
- A4. Problem Definition/Background
- A5. Project/Task Description
- A6. Quality Objectives and Criteria
- A7. Distribution List
- A8. Project/Task Organization
- A9. Project QAM Independence
- A10. Project Organizational Chart
- A11. Special Training/Certification
- A12. Documents and Records

B. MEASUREMENT/DATA ACQUISITION

C. ASSESSMENT AND OVERSIGHT

- C1. Assessments and Response Actions
- C2. Reports to Management

D. DATA VALIDATION AND USABILITY

Appendix A

Section: A

Version No.: 1

Version Date : 11/14/2023

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GROUP A
PROJECT MANAGEMENT

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ORGANIZATION: Arkansas Department of Energy & Environment – Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

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A4 PROBLEM DEFINITION/BACKGROUND

DEQ will compile 2023 emissions inventory data for all Type A and Type B facilities in Arkansas. The data will be submitted to the EPA as required by the Air Emissions Reporting Requirements.

DEQ has the primary responsibility of protecting the health and welfare of Arkansans from the harmful effects of air pollution. The purpose of collecting emission inventory data is to provide a basis for development of emission reduction goals.

The Clean Air Act of 1970 and the associated Amendments of 1990 provides statutory requirements for improving air quality in the United States. In 2002, the Consolidated Emissions Reporting Rule (CERR) was promulgated to consolidate the emissions inventory (EI) requirements of various sections of the CAAA. CERR mandated that states submit annual and triennial emissions inventories for CAPs and their precursors to the EPA, within 17 months of year end, for inclusion in the National Emissions Inventory (NEI). For annual inventories, states were required to report emissions only from large point sources within their jurisdiction with different reporting thresholds of actual emissions for attainment and nonattainment areas. For triennial inventories, states were required to report emissions from all point sources plus area, onroad mobile, nonroad mobile, and biogenic sources within their jurisdiction. Effective for the 2009 NEI, CERR was replaced by the Air Emissions Reporting Requirements (AERR). The main differences between AERR and CERR are a decrease in reporting time from 17 to 12 months, redefinition of reporting thresholds from actual emissions to “potential to emit”, and elimination of the requirement for states to report biogenic emissions. A revision to the AERR in 2015 lowered the threshold for reporting lead (Pb) emissions sources as point sources and created a lead threshold limit based on actual emissions rather than potential emissions. Additional information about the final published AERR rule can be found at <https://www.epa.gov/air-emissions-inventories/air-emissions-reporting-requirements-aerr>.

The 2023 EI is a triennial reporting year as defined by AERR so emissions inventory data will be collected from facilities classified as Type A and Type B major sources by AERR. The emission thresholds for both Type A and Type B sources (as defined by AERR) are listed in Table 1. Facilities’ potential to emit CAPs will be assumed to equal the highest permitted emission limits from any air permits that were active in 2023.

Table 1. Emissions thresholds of criteria air pollutants for Type A (annual reporting) and Type B (triennial reporting) major sources as defined by the Air Emissions Reporting Requirements.

Pollutant	Annual Cycle Type A (tons per year)	Triennial Cycle Type B (tons per year)
SO _x	≥2500	≥100
VOC	≥250	≥100
NO _x	≥ 2500	≥ 100
CO	≥ 2500	≥1000
PM ₁₀	≥ 250	≥ 100
PM _{2.5}	≥ 250	≥ 100
NH ₃	≥ 250	≥ 100
Pb	≥ 0.5 (Actual Emissions)	≥ 0.5 (Actual Emissions)

For the 2023 NEI, states will submit data as a Consolidated Emissions Reporting Schema Extensible Markup Language (CERS XML) file through Exchange Network nodes via the Emission Inventory System (EIS) Gateway. Applicable point source data collected by states for inclusion in the 2023 NEI must be submitted to the EPA by December 31, 2024. Access to the EIS Gateway including instructions for data reporting and submittal can be found at <https://www.epa.gov/air-emissions-inventories/emission-inventory-system-eis-gateway>.

In addition to being submitted to the EPA for inclusion in the NEI, emissions inventory data is used by DEQ for developing an air quality control and maintenance strategy for the state of Arkansas. Specific uses of this data include:

- Preparation of the DEQ Office of Air Quality “State of the Air” Report
- Development of State Implementation Plans
- Establishment of baselines for future planning activities
- State oversight of point sources
- Response to public requests for information
- Emission factor development
- Documenting regulatory impact assessments
- Air quality assessments
- Human exposure modeling

A5 PROJECT/TASK DESCRIPTION

A5.1 Work to be performed

Point Sources: DEQ utilizes a web-based emissions inventory reporting and database management system to collect emission information from reporting facilities. The system, which is called SLEIS (State & Local Emissions Inventory System), was funded by an Exchange Network grant and has been deployed at DEQ as well as multiple other state and local environmental agencies located throughout the United States. SLEIS (which has been in use at DEQ since 2012) is designed to be fully compliant with the Cross-Media Electronic Reporting Regulation (CROMERR) and EPA has approved the system's CROMERR application. As a result of EPA's CROMERR approval, the Responsible Official for each reporting facility may use SLEIS to electronically submit their 2023 EI reports and attached certifying statements to DEQ.

The 2023 EI is a triennial EI year so states will collect emission data from facilities that have the classification of Type A or Type B major sources as defined by AERR criteria. The DEQ database of air permits will be used to determine which Arkansas facilities meet the reporting threshold for criteria air pollutants and their precursors. For Type classification purposes, each permitted facility's potential to emit individual CAPs and their precursors will be assumed to be equal to the permitted emissions limits listed in that facility's DEQ issued air permit. If a facility's permit was changed during 2023, the highest emissions limit listed in any permit active during 2023 will be used as the potential to emit. As required by AERR, only CAP and Ammonia emissions will be used to determine the eligibility of facilities to report EI data. Facilities with lead emissions will be classified according to actual lead emissions. Facilities that are required to report emissions data based on the thresholds outlined in 40 CFR Part 51, Subpart A, Appendix A, Table 1 submit data for all pollutants specified in the AERR that were included in the permit or permits active during the reporting period.

For 2023 EI reporting purposes, facilities will be able to register for SLEIS using a secure method. SLEIS security requirements will include a combination of a password and challenge questions. Once a facility has registered, they will have the option to add authorized users (including environmental consultants) to their SLEIS account. Authorized users will be permitted to use SLEIS for review and/or reporting of facility EI data. Upon completion of data entry, editing, and review of the report, the Responsible Official for each reporting facility will be able to electronically submit their completed EI to DEQ using SLEIS.

For facilities that have previously submitted emission information, SLEIS will prepopulate 2023 EI reports with some data from the most recently submitted EI including facility addresses, emission units, emission processes, release points, and reported pollutants. SLEIS features a user-friendly, web-based system that allows

facilities to navigate through menus in order to view and edit EI data in a format similar to the EPA's Emissions Inventory System (EIS). After a facility has completed their EI, they will use SLEIS to submit their data to DEQ for agency review. Once DEQ finds the EI acceptable, SLEIS will be used to accept the report and move the data into the SLEIS database. After all reporting facilities have completed their EIs, DEQ staff will use SLEIS to convert the 2023 point source EI data to CERS XML format and will submit information to EIS using the Exchange Network node.

There will be several levels of QA built into SLEIS. The first level of QA will be automatic parameter checks in the data entry screens that will prevent facility users from saving data of the wrong data type or data that is outside acceptable ranges. These parameter checks can be edited by DEQ Emission Inventory staff so that they are identical to those set by EPA for the CERS XML format requirements. The second level of QA will be a validation utility that prevents facility users from submitting an incomplete EI. Once an EI is successfully validated, it will be sent to DEQ Emission Inventory Analysts for the third level of QA. DEQ Emission Inventory Analysts will compare 2023 emissions to previously reported EIs to determine if any reported emissions appear unreasonably low or high. If DEQ Emission Inventory Analysts finds questionable data in a particular facility's EI, they will contact that facility to determine if the data is incorrect or needs to be edited. For the final level of QA, the DEQ Emissions Inventory Coordinator will compare state and county-level emissions by pollutant across multiple years. After the DEQ Emissions Inventory Coordinator determines that the point source data has passed all levels of QA, SLEIS will be used to submit the data to EPA.

On-Road Mobile Sources: For the 2023 NEI, DEQ plans to accept the EPA's mobile source emissions data.

Nonpoint Sources: For the 2023 NEI, DEQ plans to accept the EPA's nonpoint source emissions data.

Nonroad Mobile Sources: For the 2023 NEI, DEQ plans to accept the EPA's nonroad emissions data.

Event Emissions: For the 2023 NEI, DEQ plans to accept the EPA's event emissions data.

Biogenic Emissions: For the 2023 NEI, DEQ plans to accept EPA's biogenic emissions data.

A5.2 Products to be produced

The end result of this project will be CERS XML files submitted to EPA's EIS database. The point source file will include all required data elements for Type A and Type B major sources in Arkansas for the 2023 NEI, which covers emissions from January 1, 2023 to December 31, 2023.

A5.3 Schedule of work

- 9/01/23 to 12/31/23: Determination of eligible facilities and prepopulation of SLEIS with facility data
- 1/1/24: Eligible facilities notified that SLEIS is open for editing 2023 EIs
- 1/1/24 to 6/1/24: Review EIs submitted through SLEIS
- 6/1/24 to 12/31/24: Submission of point source CERS XML files to EPA

A6 QUALITY OBJECTIVES AND CRITERIA

The quality objective of the 2023 NEI is to submit CERS XML files to the EIS that include emissions data accurately describing the 2023 emissions of permitted pollutants as outlined in the AERR for all Type A and Type B major sources in the state of Arkansas. To achieve this goal, data will be checked at multiple stages using the QA procedures set in section A6.

A7 DISTRIBUTION LIST

Arkansas Department of Energy & Environment – Department of Environmental Quality
Heath Cobb
Demetria Kimbrough
David Clark
Steve Tune
Andrew Price
Scot Stinson
Tanisha Harper
Jonathan Westmoreland
EPA Region 6
Terrie Wright
Brenton Gildner

A8 PROJECT/TASK ORGANIZATION

Incumbent, DEQ Associate Director
Final Air Division approval of project
Incumbent, DEQ Deputy Associate Director
Project team senior management
Incumbent, DEQ Technical Section Supervisor, Air Quality Planning
Direct project oversight
Incumbent, Emissions Inventory Coordinator, Emissions Inventories
Emissions Inventory project manager
QAPP approval and project manager
QA/QC of emissions data
Incumbent, Emission Inventory Analyst, Emissions Inventories
Emissions Inventory data management
Incumbent, Emission Inventory Analyst, Emissions Inventories
Emissions Inventory data management
Incumbent, Quality Assurance Manager
QA/QC activities
Incumbent, Quality Assurance Coordinator
QA/QC activities
Incumbent, Budget Coordinator, Administration
Fiscal support

A9 PROJECT QAM INDEPENDENCE

The Quality Assurance Manager for AR DEQ is in a position that is separate and independent of all personnel working with Emission Inventory Quality Assurance tasks.

A10 PROJECT ORGANIZATIONAL CHART

See Appendix A for DEQ organizational chart that identifies Branches, Divisions, Sections, etc. and includes incumbent names and their positions in the Air Division.

A11 SPECIAL TRAINING/CERTIFICATION

Agency staff associated with this project have participated in workshops and completed various educational opportunities in emissions inventory preparation work. The Emissions Inventory Coordinator coordinates training activities and maintains a training log.

A12 DOCUMENTS AND RECORDS

SLEIS will archive 2023 EI data including a copy of record for each reporting facility's submitted EI. SLEIS will also electronically store a record of changes made by DEQ staff. All data and forms used to calculate nonpoint, mobile, and event data will be archived electronically on DEQ's network.

This QAPP will be made available to the public including stakeholders and the Emissions Inventory Coordinator will be able to provide a copy (electronic or paper) of the QAPP on request (see page 4 for contact information). Electronic copies of Emissions Inventory QAPPs are maintained indefinitely.

Section: B

Version No.: 1

Version Date : 11/14/2023

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GROUP B

DATA GENERATION AND ACQUISITION

Group B is not applicable to this QAPP since the 2023 EI is not an experimental project with analytical sampling and methods. All information about data collection and QA can be found in section A6.

GROUP C

ASSESSMENT AND OVERSIGHT

C1 ASSESSMENTS AND RESPONSE ACTIONS

As described in section A6, the Emissions Inventory Coordinator and Emission Inventory Analysts will review all EIs for accuracy using both SLEIS QA checks and reports that compare the 2023 EIs to EIs from previous years. The 2023 NEI will not be submitted to the EIS Production Environment until it passes all QA checks in the EIS Test Environment.

C2 REPORTS TO MANAGEMENT

If EI staff discover QA problems while working on the project, they will inform the Emissions Inventory Coordinator, who will attempt to resolve the issue. Following successful submittal of the 2023 NEI, a notice will be submitted to the DEQ Associate Director and all agency staff involved in the project.

GROUP D

DATA VALIDATION AND USABILITY

All information relevant to Group D can be found in Section A6 and Section C1.

APPENDIX

Appendix A DEQ Office of Air Quality Organizational Chart (from Section A10)