

DIVISION OF ENVIRONMENT  
QUALITY MANAGEMENT PLAN

PART III:

SOURCE EMISSION TESTING  
QUALITY ASSURANCE PROGRAM PLAN

Kansas Department of Health and Environment  
Division of Environment  
Bureau of Air and Radiation  
Air and Asbestos Compliance Section  
Forbes Field, Building 283  
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## TABLE OF CONTENTS

| <u>Section</u><br><u>Date</u> | <u>Revision</u><br><u>No.</u>  |
|-------------------------------|--|
| 1                             | OVERVIEW   |
| 1.1                           | Purpose and Scope ..... 0 11/20/00   |
| 1.2                           | Developmental History of Plan ..... 0 11/20/00   |
| 1.3                           | Historical Overview of Program ..... 0 11/20/00  |
| 1.4                           | Operational Overview ..... 0 11/20/00  |
| 2                             | ORGANIZATIONAL DESCRIPTION   |
| 2.1                           | Organizational Charts ..... 0 11/20/00   |
| 2.2                           | Individual Responsibilities of KDHE ..... 0 11/20/00   |
| 2.3                           | Distribution ..... 0 11/20/00  |
| 3                             | DATA PERFORMANCE CRITERIA  |
| 3.1                           | Precision, Accuracy, Completeness, Comparability,<br>and Representativeness ..... 0 11/20/00 |
| 4                             | NETWORK DESCRIPTION  |
| 4.1                           | Sampling Frequency, Sampling Network Design, and<br>Monitoring Selection ..... 0 11/20/00    |
| 5                             | DESCRIPTION OF SAMPLING EQUIPMENT  |
| 5.1                           | Description of Sampling Equipment ..... 0 11/20/00   |
| 6                             | DESCRIPTION OF FIELD PROCEDURES  |
| 6.1                           | Description of Field Procedures ..... 0 11/20/00   |
| 7                             | LABORATORY PARAMETERS AND PROTOCOLS  |
| 7.1                           | Laboratory Parameters and Protocols ..... 0 11/20/00   |
| 8                             | DATA VALIDATION AND MANAGEMENT   |
| 8.1                           | Data Validation and Management ..... 0 11/20/00  |
| 9                             | EQUIPMENT CALIBRATION AND AUDITING   |
| 9.1                           | Equipment Calibration and Auditing ..... 0 11/20/00  |
| 10                            | PURCHASED EQUIPMENT  |
| 10.1                          | Purchased Equipment ..... 0 11/20/00   |

| <u>Section</u> |                                      | <u>Revision</u> |          |
|----------------|--------------------------------------|-----------------|----------|
| <u>Date</u>    |                                      | <u>No.</u>      |          |
| 11             | EVALUATION PROCEDURES                |                 |          |
|                | 11.1 Evaluation Procedures .....     | 0               | 11/20/00 |
| 12             | SPECIAL TREATMENT OF DATA            |                 |          |
|                | 12.1 Special Treatment of Data ..... | 0               | 11/20/00 |
| 13             | CORRECTIVE ACTIONS                   |                 |          |
|                | 13.1 Corrective Actions .....        | 0               | 11/20/00 |
| 14             | QUALITY OF ACQUIRED DATA             |                 |          |
|                | 14.1 Quality of Acquired Data .....  | 0               | 11/20/00 |
| 15             | REPORTS                              |                 |          |
|                | 15.1 Reports .....                   | 0               | 11/20/00 |
| 16             | TRAINING                             |                 |          |
|                | 16.1 Training .....                  | 0               | 11/20/00 |

## Section 1

### OVERVIEW

#### 1.1 Purpose and Scope

This document is the Quality Assurance (QA) Program Plan (QAPP) for Source Emission Testing, administered by the Engineering Support Unit (ESU) of the Air and Asbestos Compliance Section of the Bureau Air and Radiation (BAR), Division of Environment, Kansas Department of Health and Environment (KDHE). The purpose of the QAPP is to define and document the QA and quality control (QC) activities of the program and ensure the validity of all data produced in the course of operations.

#### 1.2 Developmental History of Plan

Source emission testing is required by various subparts of 40 CFR Part 60, Part 61, and Part 63. Continuous emission monitors (CEMs) are required to conduct initial and/or annual relative accuracy test audits (RATAs) by various subparts of 40 CFR Part 60, Part 63, and Part 75.

#### 1.3 Historical Overview of Program

KDHE has been observing source emission testing since the early 1970's. At that time, EPA had primacy and KDHE verified that the tests were being conducted in accordance with the appropriate EPA test methods. In 1995, KDHE adopted all standards contained in 40 CFR Part 60, Part 61, and Part 63 and continued to observed performance tests. New standards are adopted annually. KDHE continues to ensure that performance tests are conducted according to appropriate EPA test methods. KDHE has not adopted 40 CFR Part 75, but does verify that RATAs are conducted in accordance with the appropriate EPA test methods.

#### 1.4 Operational Overview

The ESU observes private companies performing source emission testing in order to verify that the testing is done according to EPA test methods. Data collected in the tests are reported to KDHE. The test report is reviewed to determine if EPA test methods were followed, if calculations were done correctly, and if the facility met the emission limits specified in the applicable regulation. The ESU also observes private companies performing RATAs in order to verify that the RATA is done according to EPA test methods.

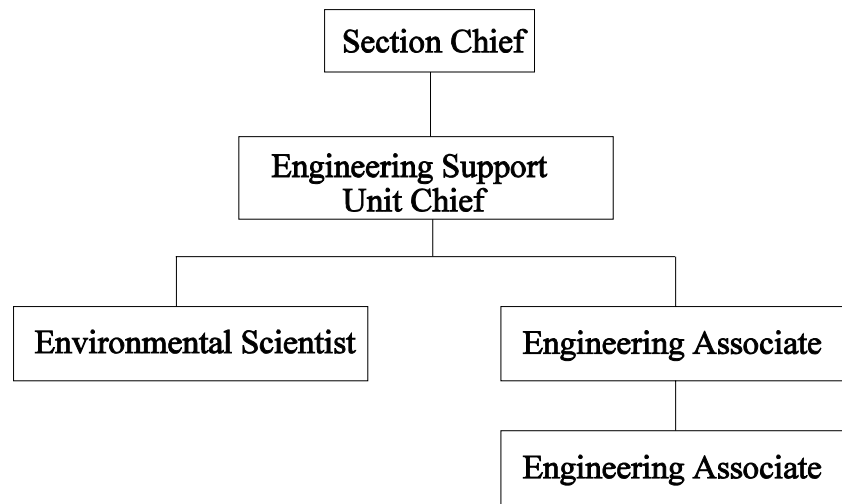
## Section 2

### ORGANIZATIONAL DESCRIPTION

#### 2.1 Organizational Charts

The chart below represents the organizational structure of that portion of KDHE involved in source emission testing.

### Air and Asbestos Compliance Section



#### 2.2 Individual Responsibilities of the Kansas Department of Health and Environment (KDHE)

The QA responsibilities of the **Division of Environment Director** and the **Division QA Officer** are described in the Division of Environment Quality Management Plan (QMP) Part I, Section 3.2.

The **Bureau Director** of the Bureau of Air and Radiation has overall responsibility for managing the Bureau of Air and Radiation (BAR) according to Division of Environment policy. The direct responsibility for assuring data quality rests with line management. Ultimately, the Bureau Director is responsible for establishing QA policy and for resolving QA issues identified through

the QA program. Major QA related responsibilities of the Bureau Director include:

- approving the budget and planning processes
- assuring that the BAR develops and maintains a current and germane quality system
- assuring that the BAR develops and maintains current QAPPs and ensures adherence to the documents by staff, and where appropriate, other extramural cooperators
- establishing policies to ensure that QA requirements are incorporated into all environmental monitoring operations
- maintaining an active line of communication with the QA and technical managers

The Bureau Director delegates the responsibility of QA development and implementation in accordance with Division of Environment policy to the Section Chiefs.

The **Section Chief of the Air and Asbestos Compliance Section** has overall responsibility for managing the Air and Asbestos Compliance Section of the Bureau of Air and Radiation (BAR) according to BAR policy. The direct responsibility for assuring data quality rests with line management. Ultimately, the Section Chief is responsible for establishing QA policy and for resolving QA issues identified through the QA program. Major QA related responsibilities of the Section Chief include:

- participating in the budget and planning processes
- assuring that the Section develops and maintains a current and germane quality system
- assuring that the Section develops and maintains current QAPPs and ensures adherence to the document by staff, and where appropriate, other extramural cooperators
- carrying out policies to ensure that QA requirements are incorporated into all environmental monitoring operations
- maintaining an active line of communication with the QA and technical managers
  
- communication with EPA Project Officers and EPA QA personnel on issues related to routine sampling and QA activities
- understanding EPA monitoring and QA regulations and guidance, and ensuring subordinates understand and follow these regulations and guidance
- understanding KDHE QA policy and ensuring subordinates understand and follow the policy
- understanding and ensuring adherence to the QAPPs
- reviewing acquisition packages (contracts, grants, cooperative agreements, inter-agency agreements) to determine the necessary QA requirements
- reviewing and approving QAPPs
- developing budgets and providing program costs necessary for EPA allocation activities
- ensuring that all personnel involved in environmental data collection have access to any training or QA information needed to be knowledgeable in QA requirements, protocols, and technology
- recommending required management-level corrective actions

The Section Chief delegates the responsibility of QA development and implementation in

accordance with BAR policy to those in the Air and Asbestos Compliance Section.

**The Engineering Support Unit Chief** of the Air and Asbestos Compliance Section supervises and participates in observing of source emission testing including CEM RATAs and stack testing. The unit chief develops and updates the QAPP for source emission testing.

**The Engineering Associates** participate in observing source emission testing including CEM RATAs and stack testing. The Engineering Associates also review test reports.

**The Environmental Scientist** participates in observing of source emission testing including CEM RATAs and stack testing. The Environmental Scientist also reviews test reports.

### 2.3 Distribution

This document, the Source Emission Testing QAPP and any revisions will be distributed to:

KDHE Bureau of Air and Radiation (BAR) QA Representative  
KDHE BAR Air and Asbestos Compliance Section (ACAS) Section Chief  
KDHE BAR ACAS Engineering Support Unit Chief  
KDHE BAR ACAS Engineering Associates in the Engineering Support Unit  
KDHE BAR ACAS Environmental Scientist in the Engineering Support Unit



## **Section 3**

### **DATA PERFORMANCE CRITERIA**

#### 3.1 Precision, Accuracy, Completeness, Comparability, and Representativeness

This section provides a description of data performance criteria expressed in terms of data precision, accuracy, completeness, comparability and representativeness for each parameter of interest.

The data precision, accuracy, completeness, comparability and representativeness for each parameter of interest will meet the requirements set down in 40 CFR Part 60, Part 61, Part 63, and Part 75.

## **Section 4**

### **NETWORK DESCRIPTION**

#### 4.1 Sampling Frequency, Sampling Network Design, and Monitoring Selection

The purpose of this section is to provide a description of, and rationale for, intended sampling frequency, sampling network design and monitoring site selection criteria.

The sampling frequency, sampling network design and monitoring site selection criteria will be as stipulated in 40 CFR Part 60, Part 61, Part 63, and Part 75.

## **Section 5**

### **DESCRIPTION OF SAMPLING EQUIPMENT**

#### 5.1 Description of Sampling Equipment

The sampling equipment and associated decontamination procedures will be as stipulated in 40 CFR Part 60, Part 61, Part 63, and Part 75.

## **Section 6**

### **DESCRIPTION OF FIELD PROCEDURES**

#### 6.1 Description of Field Procedures

The field procedures, including sample collection, analysis, preservation, transport and chain-of-custody procedures and accompanying safety protocols are as stipulated in 40 CFR Part 60, Part 61, Part 63, and Part 75.

## **Section 7**

### **LABORATORY PARAMETERS AND PROTOCOLS**

#### 7.1 Laboratory Parameters and Protocols

The laboratory parameters and protocols will be according to 40 CFR Part 60, Part 61, Part 63, and Part 75.

## **Section 8**

### **DATA VALIDATION AND MANAGEMENT**

#### 8.1 Data Validation and Management

This section provides a description of data validation, storage, transfer, reporting and backup requirements and any special documentation requirements.

The data validation, storage, transfer, reporting and backup requirements and any special documentation requirements will be as stipulated in 40 CFR Part 60, Part 61, Part 63, and Part 75.

## **Section 9**

### **EQUIPMENT CALIBRATION AND AUDITING**

#### 9.1 Equipment Calibration and Auditing

This section describes equipment testing, auditing, calibration, and preventive maintenance procedures.

Equipment testing, auditing, calibration, and preventive maintenance procedures will conform to 40 CFR Part 60, Part 61, Part 63, and Part 75.

## **Section 10**

### **PURCHASED EQUIPMENT**

#### 10.1 Purchased Equipment

Equipment purchased and associated purchasing procedures will meet the requirements of 40 CFR Part 60, Part 61, Part 63, Part 75, and department policy.



## **Section 11**

### **EVALUATION PROCEDURES**

#### 11.1 Evaluation Procedures

The evaluation of data precision, accuracy, completeness, representativeness and comparability will be done as stipulated in 40 CFR Part 60, Part 61, Part 63, and Part 75. Internal QC procedures and external performance audits will conform to 40 CFR Part 60, Part 61, Part 63, and Part 75.

## **Section 12**

### **SPECIAL TREATMENT OF DATA**

#### 12.1 Special Treatment of Data

This section describes procedures used to evaluate and enhance utility of environmental monitoring data including, but not necessarily limited to, procedures and assumptions applied in the identification and treatment of (a) outliers and other anomalous data, (b) nonlinear data requiring statistical transformation, and (c) values reported as “less than” or “greater than” established reporting limits.

Any special treatment of data will conform to 40 CFR Part 60, Part 61, Part 63, and Part 75.

## **Section 13**

### **CORRECTIVE ACTIONS**

#### 13.1 Corrective Actions

Corrective actions will be done as stipulated in 40 CFR Part 60, Part 61, Part 63, and Part 75.

## **Section 14**

### **QUALITY OF ACQUIRED DATA**

#### 14.1 Quality of Acquired Data

This section describes procedures for determining the quality of ancillary data acquired from external sources not subject to the provisions of the KDHE Division of Environment Quality Management Plan (e.g., meteorological, hydrological, geological, chemical and/or biological data obtained from other state and federal agencies).

The quality of acquired data will meet the requirements of 40 CFR Part 60, Part 61, Part 63, and Part 75.

## **Section 15**

### **REPORTS**

#### 15.1 Reports

This section contains a description of program/project deliverables (electronic databases, summary statistics, illustrative materials, interim and final reports, etc.) and schedule for completion.

The program deliverables will meet the requirements of 40 CFR Part 60, Part 61, Part 63, and Part 75.

A quality assurance program evaluation of the Engineering Support Unit is conducted covering the calendar year. This report is submitted to the Division of Environment QA Officer by February 15 of each year. The Air and Asbestos Compliance Section Chief directs this evaluation.

## **Section 16**

### **TRAINING**

#### 16.1 Training

Training will be provided to observers of source emission testing by utilizing any EPA courses available and any satellite downlinks available. The observers will also study 40 CFR Part 60, Part 61, Part 63, and Part 75.