



March 3, 2008

**NEBRASKA DEPARTMENT OF ENVIRONMENTAL
QUALITY**

AIR PROGRAM REVIEW

2007

FINAL REPORT

Conducted by:

**U.S Environmental Protection Agency
Region 7**

Air and Waste Division

Air, Planning and Development Branch

Air, Permitting and Compliance Branch

And

Environmental Services Division

Environmental Assessment and Monitoring Branch



TABLE OF CONTENTS

CHAPTER	DESCRIPTION	PAGE
	APPENDIX LIST	<u>3</u>
	ACRONYMS LIST	<u>5</u>
	PART I - NDEQ	<u>7</u>
<u>I</u>	EXECUTIVE SUMMARY	<u>9</u>
<u>II</u>	INTRODUCTION	<u>21</u>
<u>III</u>	PLANNING AND DEVELOPMENT	<u>24</u>
<u>IV</u>	PERMITTING	<u>37</u>
<u>V</u>	COMPLIANCE AND ENFORCEMENT	<u>40</u>
<u>VI</u>	MONITORING	<u>58</u>
	PART II – Lincoln Lancaster County Health Department	<u>68</u>
<u>VII</u>	LLCHD EMISSION INVENTORY	<u>69</u>
<u>VIII</u>	LLCHD PERMIT REVIEW	<u>74</u>
<u>IX</u>	LLCHD COMPLIANCE AND ENFORCEMENT	<u>80</u>
	PART III – Omaha Air Quality Control	<u>87</u>
<u>X</u>	OAQC EMISSION INVENTORY	<u>88</u>
<u>XI</u>	OAQC PERMIT REVIEW	<u>93</u>
<u>XII</u>	OAQC COMPLIANCE AND ENFORCEMENT	<u>99</u>
<u>XIII</u>	OAQC ASBESTOS	<u>105</u>

APPENDICES

The appendices are available upon request.

*Please contact Chris Wolfersberger
Nebraska Coordinator at
wolfersberger.chris@epa.gov or (913)551-7864*

APPENDIX LIST

PART I

Appendix A - Chapter II - Introduction

A-1: NDEQ Program Review Kickoff Letter

Appendix B – Chapter III – Planning and Development

B-1: Planning and Development Questionnaire

B-2: March 2007 Air Quality Division Organizational Chart

B-3: NDEQ December 2007 Organizational Chart

B-4: *Regulatory Manual: A guide for developing rules and regulations, August 2005*

B-5: Local Workplan Agreements

B-6: Outreach Plan

B-7: Individual Development Plans

B-8: Training Resources Catalog

B-9: Emission Inventory data collection and QA summary

B-10: NEI Elements submitted by NDEQ

B-11: EIQ

B-12: EI Local Agency Audits done by NDEQ

Appendix C – Chapter IV – Permitting

C-1: NSR Program Self-Evaluation Questionnaire

C-2: Title V Program Self-Evaluation Questionnaire

Appendix D – Chapter V – Enforcement and Compliance

D- 1: Compliance and Enforcement Self Evaluation Questionnaire

D- 2: File Check list

D- 3: Otis SRF Results

D- 4: ACS Commitments FY-07

D- 5: NE Field Office Chart

Appendix E – Chapter VI – Monitoring

E-1: Air Monitoring System Audits Questionnaires

E-2: Copies of actual air monitoring results

E-3: List of state wide monitoring sites

PART II – Lincoln Lancaster County Health Department

Appendix F – Chapter VII - LLCHD Emission Inventory

G-1: Emission Inventory Questionnaires (EIQ)

G-2: EIQ spreadsheet

G-3: CERR Data elements Table

Appendix G – Chapter VIII – LLCHD Permits

I-1: List of source files reviewed

I-2: Specific details/comments for each review

- I-3: Permit renewal timeline matrix
- I-4: List of NSR project permits issued during 2004 – 2006
- I-5: Title V Self Evaluation Questionnaire
- I-6: NSR Self Evaluation Questionnaire

Appendix H – Chapter IX – LLCHD Enforcement and Compliance

- K-1: LLCHD's Self Evaluation Questionnaire

PART III – Omaha Air Quality Control

Appendix I – Chapter X - OAQC Emission Inventory

- H-1: OAQC EIQ
- H-2: CERR Elements Table
- H-3: OAQC QA document Waiting for OAQC to send e-version
- H-4: NDEQ QAPP

Appendix J – Chapter XI – OAQC Permits

- J-1: List of source files reviewed
- J-2: Specific details/comments for each review
- J-3: Permit renewal timeline matrix
- J-4: List of NSR project permits issued during 2004 – 2006
- J-5: Title V Self Evaluation Questionnaire
- J-6: NSR Self Evaluation Questionnaire

Appendix K – Chapter XII – OAQC Enforcement and Compliance

- L-1: OAQC's Self Evaluation Questionnaire

Appendix L – Chapter XIII – Asbestos

- F-1: Asbestos Self-Evaluation Questionnaire

ACRONYMS LIST

ACS – Annual Commitment System
AERMOD – AMS/EPA Regulatory Model
AFS - Aerometric Facility Data Systems
AG – Attorney General
APCO – Air Permitting and Compliance Branch
APDB – Air Planning and Development Branch
APTI – Air Pollution Training Institute
AQD – Air Quality Division
AQS – Air Quality System
ARTD – Air, RCRA and Toxics Division
CAA – Clean Air Act
CAM – Compliance Assurance Monitoring
CAP - Compliance Advisory Panel
CERR - Consolidated Emissions Reporting Rule
CMS – Compliance Monitoring Strategy
CO - Carbon Monoxide
CWA – Clean Water Act
DCHD – Douglass County Health Department
EI – Emission Inventory
EIQ – Emission Inventory Questionnaires
EQC – Environmental Quality Council
FCE – Full Compliance Evaluation
FFY – Federal Fiscal Year
FTE – Full Time Equivalent
FY – Fiscal Year
HAP – Hazardous Air Pollutant
HPV – High Priority Violation
IDNR – Iowa Department of Natural Resources
IIS – Integrated Information System
ISC3 – Industrial Source Complex
LLCHD – Lincoln Lancaster County Health Department
MACT – Maximum Achievable Control Technology
NAAQS – National Ambient Air Quality Standards
NDEQ – Nebraska Department of Environmental Quality
NEI – National Emissions Inventory
NIF – NEI Input Format
NIST - National Institute of Standards and Technology
NPAP - National Performance Audit Program
NSHL - Nebraska State Health Laboratory
NSR – New Source Review
NWS – National Weather Service
O₃ - Ozone
OAQC – Omaha Air Quality Control
P&A – Precision and Accuracy

PM₁₀ - Particulate Matter – 10 micron
PM_{2.5} - Particulate Matter – 2.5 microns
PPA – Performance Partnership Agreement
PPG – Performance Partnership Grant
PRO – Policy Research Office
PSD – Prevention of Significant Deterioration
QAPP – Quality Assurance Project Plan
SBAP - Small Business and Public Assistance
SCC – Source Classification Code
SEA – State Enforcement Agreement
SIP – State Implementation Plan
SLAMS - State and Local Air Monitoring Station
SM-80 – Synthetic Minor (80% of major source level)
SO₂ - Sulfur Dioxide
SOB – Statement of Basis
SOP – Standard Operating Procedures
SRF – State Review Framework
SWDA – Solid Waste Disposal Act
TEOM - Tapered Element Oscillating Microbalance
TRS – Total Reduced Sulfur
TSA – Technical Systems Audit
UI – Universal Interface
VOC – Volatile Organic Compound

PART I

NEBRASKA DEPARTMENT OF ENVIRONMENTAL QUALITY

INTRODUCTION

Per the 1999 *Program Review Protocol* established by U.S Environmental Protection Agency (EPA), Region 7, a program review of the Nebraska Department of Environmental Quality's (NDEQ) Air Quality Division (AQD) was conducted during Fiscal Year 2007. EPA Region 7 also conducted a review of the permitting, enforcement & compliance, emission inventory and asbestos programs at two local agencies which have been delegated these programs.

This report is divided into three parts. Part I includes the summaries and reports pertinent to the program review of the NDEQ's air programs. Part II includes the reports from the program review conducted at the Lincoln Lancaster Health Department (LLCHD), and Part III includes the reports from the review conducted at the Omaha Air Quality Control Division (OAQC).

CHAPTER I - EXECUTIVE SUMMARY

INTRODUCTION

The following summarizes results from the U.S. EPA's program review of the Nebraska Department of Environmental Quality's Air Quality Division. EPA Region 7 staff completed an onsite evaluation of the AQD's programs on March 13-15, 2007. The program areas evaluated during this time include: planning, emission inventory, and compliance and enforcement. An onsite evaluation of the modeling program was conducted on February 27 and 28, 2007 due to time conflicts. Finally, in the interest of time and other factors explained in this summary, it should be noted that the permitting portion of the review at NDEQ was a "self-evaluation."

In addition to performing a review at NDEQ, EPA Region 7 staff evaluated the Omaha Air Quality Control Division's (OAQC) and the Lincoln Lancaster Health Department's (LLCHD) permitting, compliance and enforcement, emissions inventory programs. Also, a review of OAQC's asbestos program was also completed. These onsite evaluations took place from February 12-16, 2007. Reports summarizing the result from the local program reviews are located in the following Part II of this report.

This chapter addresses the summaries for the NDEQ's program review report only. For the ease of the reader, the summary will reference the location (page) of the report.

PLANNING

Regulatory Development

The NDEQ AQD Program Planning & Development Unit staff are responsible for maintaining Nebraska's air quality regulations and ensuring that rules are updated accordingly and in a timely manner. Nebraska's air quality regulations are housed in Title 129 of Nebraska's Administrative Code. State regulations are adopted through the Environmental Quality Council (EQC). The EQC was established through the Nebraska Environmental Protection Act as the body that adopts rules and regulations which set air, water and land quality standards. The EQC conducts quarterly meetings during which public hearings are held on proposed regulations and stakeholders can provide written comments or oral testimony on the proposed rules.

The AQD currently operates under an informal and formal rule review process. The informal process can range from a staff review and comment period to initiating a stakeholder process to discuss the proposed revisions. The type of informal process that is undertaken depends greatly on the complexity of the revision (i.e., whether the revision consists of an administrative or substantive change and whether the proposed revision is expected to be controversial.) The formal review consists of, at least, a three-month process during which the proposed rules are reviewed by the Department's Legal Division and Director, the Governor's Policy Research Office (PRO), the public, the

EQC, and the Attorney General's office, after which they are approved by the Governor. However, this formal review process can often take longer than three months.

Findings:

EPA commends the AQD for developing tools to continually improve the rule revision and rule making process. It should also be noted that communications between EPA and AQD have greatly improved since the previous program review.

EPA recommends the NDEQ consider submitting rules for information at an EQC meeting for public hearing, and submitting the rule for adoption at the subsequent EQC hearing. This is especially important for National rules such as the Clean Air Mercury Rule and the New Source Review reform rules. In addition, NDEQ should ensure the most current local rule revisions are included to the SIP as Lincoln/Lancaster and Omaha have Title V delegated programs.

The full report pertaining to this section is located on page 21 of this document.

Responses

1. **Comment:** The formal review process for rule development is **at least** a three-month process, often times it can be more than a three-month process.
EPA Response: The following revision was made in response to this comment: "The formal review consists of, at least, a three-month process during which the proposed rules are reviewed by..."

Grants overview

The NDEQ and EPA Region 7 continue to operate under a Performance Partnership Agreement (PPA) and Performance Partnership Grant (PPG). The NDEQ also receives CAA Section 103 funds, which are not part of the PPG, that are used to operate and maintain a fine particulate matter or particulate matter of 2.5 micrometers in diameter or less (PM 2.5) monitoring network. Two separate workplans cover activities that are eligible to be funded under the Section 105 and Section 103 funds, although reporting requirements (semi-annual reports) remain the same.

Findings:

The AQD has done a commendable job to balance local, state and federal priorities in the negotiated workplan, especially in recent years where the EPA has experienced either a plateau or a decrease in Section 105 and 103 funds. EPA also applauds the AQD's efforts in submitting timely semi-annual reports as agreed in the PPA and as stipulated in the workplan.

EPA does not have any recommendations to offer on the NDEQ's AQD grant management activities.

The full report pertaining to this section is located on page 23 of this document.

Local Program Oversight

The NDEQ currently has an interagency agreement with three local agencies and provides pass-through funds to each agency to carry out activities under the Section 105 and 103 programs. These local agencies are the Omaha Air Quality Control (OAQC), the Douglass County Health Department (DCHD) and the Lincoln Lancaster Health Department (LLCHD). With the exception of the Title V program, the NDEQ is responsible of providing oversight of the local agencies, negotiating workplans, and ensuring that rule revisions are made as needed. The local agencies are required to submit semi-annual reports to NDEQ 20 days after the end of the reporting period.

Findings:

Review of the local workplans and interviews with NDEQ staff show that EPA, State and local priorities are reflected in the workplan activities and that the NDEQ conducts adequate oversight of each local agency's workplan activities.

EPA does not have any recommendations to offer on NDEQ's management of the local programs.

The full report pertaining to this section is located on page 24 of this document.

Outreach and Training

The AQD has and maintains a comprehensive education, communication and outreach plan. This plan provides a clear strategy for conducting outreach and educating the public on air quality issues. It also provides an emphasis on educating the other Department staff about air quality regulations and issues of public concern. Finally, it promotes good communication across the Division and the Department, especially on cross media issues, to ensure that all staff are knowledgeable of how actions in one program may affect another.

It is also the Department's goal to ensure that they have well trained and qualified staff. The Division has developed a number of resources such as individual development plans, a Training Resources Catalog, and learning groups that will allow them to determine, not only the type of training that will be needed in the future, but also what outside resources are available to meet their training needs.

Findings:

The AQD's efforts to improve internal communication and outreach to stakeholders are evident through the many publications, training sessions and stakeholder meetings. Continual improvement and the use of technology for alternative methods of

training are notable. We commend the training staff for ensuring that the Division has well qualified staff by establishing methods resources (i.e., individual development plans, a Training Resources Catalog, and learning groups) to determine the training needs of the Division.

The full report pertaining to this section is located on page 25 of this document.

Emission Inventory

The AQD's Monitoring and Emissions Unit staff is responsible for carrying out activities related to emissions data collection and emission inventory development for sources within the NDEQ's jurisdiction.

Please note that the US. EPA has delegated the Title V program to two local agencies in the State, LLCHD and the OAQC. These two agencies are responsible for collecting emissions data within their jurisdiction, which include Lincoln Lancaster County and the City of Omaha, respectively. The emission inventory program of these local agencies is described in Chapters IX and VIII, respectively.

This review focused on the NDEQ's data collection and quality assurance process, the Department's oversight activities of the local agencies, data elements reported to the National Emission Inventory (NEI), and outstanding issues from the 2003 Program Review.

Findings:

The NDEQ emission inventory staff are commended on conducting audits specifically on EIQs. This serves as an excellent quality assurance step by ensuring that reported values are comparable to those found in the facility's records. EIQs have also been updated to allow facilities to report ammonia and PM 2.5.

The Department conducts audits of the emission inventory programs at the local agencies. This serves as a good step to ensure that the local agencies are following the minimum quality assurance standards set by the Department and that emission estimation methods are consistent across the State. We recommend that the NDEQ use the grant negotiation process to ensure that any deficiencies found during the local agency audits are corrected within a timely manner. These audits can be found in Appendix B-12.

During the 2003 program review it was found that volatile organic compounds (VOCs) may have been underreported to the 2002 NEI. We recommend that at a minimum, NDEQ ensures all VOC emissions are being accurately reported as those emissions are important in determining contributions to PM 2.5 and ozone formation.

EPA also recommends that all HAP data be collected and submitted to the NEI. The use of the NEI for national rule makings is rapidly increasing. An example is the use of the NEI's HAP data to develop the Risk and Technology Review Rule.

Lastly, EPA recommends that NDEQ report to the NEI all data elements that have been submitted to them by a source. In recent modeling done to support the Best Available Retrofit Technology rule, it was found that inaccurate stack parameters were used for the modeling exercise. Although NDEQ collects this information, it was not submitted to the NEI.

The full report pertaining to this section is located on page 27 of this document.

Responses

1. **Response:** The report characterizes the Title V authority for the local agencies as being delegated by the State of Nebraska. NDEQ understood that the local agencies were directly delegated the Title V program from the US EPA, and that the 105/103 program authorities were through a delegated workplan agreement between the specific state and local agency.
EPA Response: The following revision was made in response to this comment: “Please note that the US. EPA has delegated the Title V program to two local agencies in the State, LLCHD and the OAQC.”
2. **Response:** The NDEQ agrees with EPA’s recommendation to utilize the 105 workplan negotiation process with the local agencies to address any appropriate deficiencies.
EPA Response: Noted.
3. **Response:** The report alleges that NDEQ did not report stack parameters to the NEI or that inaccurate stack information was provided. Nebraska has participated in the regional planning process through CENRAP for several years. Whenever information is provided, such as emissions inventory information, we review it for inaccuracies with the information we have in our databases. The stack data required for submittal to the National Emissions Inventory database is collected and maintained on the NDEQ’s IIS system. Apparent inaccuracies in this data were checked during the modeling efforts for the Best Available Retrofit Technology rule. We compared the stack information on the original hardcopies of a number of submittals to the data entered into the IIS and found no discrepancies. It appears that the data may have changed during the submittal process or subsequent processing afterward. We have no control over what happens to the data once this information leaves the NDEQ IIS system. To our knowledge, no errors which would have indicated a problem at the time data was transferred were reported. If it is possible to provide us with some specific sources where information was in error that would help us investigate further where the problem occurred, so we may work with EPA to appropriately correct it.

EPA Response: During the program review, the emission inventory lead, David Brown, and NDEQ’s information technology lead, Bart Moore, were interviewed

to help determine the main causes for discrepancies between stack parameters found in the BART modeling referenced in our recommendation and in NDEQ's IIS. During these interviews, EPA and NDEQ staff reviewed the data file that was submitted to the NEI and found that, although NDEQ collects this information, the NDEQ failed to report them to the 2002 NEI. It was determined that there may be a limitation in the IIS which could have prevented the transfer of this information into the file submitted to NEI. During the 2002 NEI cycle, if a reporting agency did not submit this data element, EPA filled the data gap with default stack parameters. Because the BART modeling used the 2002 NEI as a starting point, any errors in the data would have been transferred to the BART modeling. EPA would like to reiterate our desire for NDEQ to consider improvements to the IIS system that will allow submittal of all data elements to the NEI. In addition, EPA and NDEQ emission inventory staff plan on having further conversations to determine the cause and potential solutions to this issue.

Small Business Assistance Program

The Nebraska Small Business Assistance Program (SBAP) Review was conducted via e-mail by Hugh Stirts, NDEQ, and Heather Hamilton, EPA Region 7. The SBAP questions were sent to NDEQ on December 21, 2006, which are included in the Planning and Development questionnaire. The questionnaire was completed by NDEQ and returned to EPA on February 9, 2007.

Findings:

No significant findings were noted, although there is one vacant Compliance Advisory Panel (CAP) position that should be filled. The NDEQ has done a notable job of maintaining the CAP as there are some states that have yet to fill CAP positions. Communications between EPA and NDEQ Small Business Liaison have significantly improved due to bi-annual meetings at the EPA offices.

The full report pertaining to this section is located on page 29 of this document.

Modeling

The modeling portion of the program review for the NDEQ, was performed February 27 - 28, 2007. The modeling portion consisted of determining the qualifications of the current modeling staff and examining solutions to problems that have been encountered in reviewing/performing air quality analysis

The problem that all states/regions are encountering is the requirement of on-site meteorology if National Weather Service (NWS) meteorology from a local airport is not representative of the application site. The requirement for on-site meteorology data was not as critical when the Industrial Source Complex (ISC3) Models were the approved/recommended models, but with the introduction of AERMOD, this is crucial data.

NDEQ has obtained and processed five years of meteorological data for use in AERMOD system for the NWS stations that are used for analyses in Nebraska and is available to anyone to use. If a company/consultant elects to obtain and process meteorological data instead of using the data from the NDEQ, it must be sent to NDEQ for review. The intent of NDEQ is to use its data to verify a company's analysis. The regulatory agencies in the adjoining states have also obtained, processed, and make available meteorological data for use in their state.

It should be noted that the NDEQ has lost their lead modeler. EPA Region 7 has identified some of the key competencies of the lead modeler's replacement and has offered assistance to NDEQ until another qualified modeler is obtained.

Findings:

EPA will continue to support the NDEQ modeling program as resources allow until a replacement has been hired for the Lead Modeler. It was observed that air quality modeling reviews are following NDEQ modeling guidelines. NDEQ is commended in gathering meteorological data to support modeling reviews. In the future, it would be a good planning exercise for NDEQ and surrounding states to meet and review meteorological data to ensure consistency.

The full report pertaining to this section is located on page 29 of this document.

Responses

1. **Response:** In its findings, EPA says it would be a good planning exercise for NDEQ and surrounding states to meet and review meteorological data to ensure consistency. There will be some geographical differences which may make it difficult for one state to utilize meteorological data gathered in another state. However, there may be some exceptions and there will be some fundamentals which should be consistent across the region. Since the data is being utilized in support of federal programs, it seems appropriate that the EPA regional office initiate and coordinate to ensure appropriate consistency.

EPA Response: There are meteorological data that can be used by more than one state, e.g., Omaha, NE. The necessary site characteristics for AERMET, the preprocessing meteorological model for the AERMOD dispersion model, are those of the meteorological site. These characteristics should not change unless there is a change in the land use surrounding the site. These characteristics should be representative of the application. Also, the geographical features at the meteorological and application sites should be similar. The geographical coordinates (latitude/longitude) of the application site are required as the time of the sunrise and sunset will be calculated from these parameters. The intent of our recommendation was reach agreement on the site characteristics and land use of the meteorological sites used, in particular roughness, albedo, and bowen ratios.

The selection of these parameters is somewhat subjective, although the use of GIS data has decreased the subjectivity. Also, EPA is expecting to release AERSURFACE in the near future. AERSURFACE is an EPA surface characteristic preprocessor that processes land use data. The intent of our comment was to have Region VII and state modelers meet to discuss/agree on the site characteristics for the National Weather Service (NWS) and/or Federal Aviation Administration (FAA) meteorological stations. The determination of the representativeness of the meteorological site to a particular application site will be on a case-by-case evaluation. Region VII will coordinate with state modelers to hold a workshop to determine how each state has calculated/processed NWS/FAA meteorological data. The desired outcome is to have consistently so that companies, or consultants, will not say that the meteorological data derived from a common NWS/FAA site and used in an adjacent state were acceptable to that state but not acceptable in "your" state even when the locations are very close, e.g., Omaha vs. Council Bluffs locations.

PERMITTING

EPA has the latitude to choose a program for self-evaluation based on the level of comfort and confidence EPA has in a particular program area; therefore, the NDEQ was chosen by EPA to conduct a self-evaluation of their Title V and New Source Review (NSR) permitting programs. In lieu of an on-site evaluation at NDEQ, EPA chose to review the two approved local Title V permitting programs in Lincoln-Lancaster County and Omaha, Nebraska. The permitting agencies for these two local programs are the Lincoln Lancaster County Health Department and the Omaha Air Quality Control, whose jurisdiction falls within the limits of Lincoln Lancaster County and the City of Omaha, respectively. The findings of the local agency program reviews are found in Chapters XI and XII.

NDEQ self-evaluation covered permitting activities since the last program review (2003). The self-evaluation was based on NDEQ's completion of the December 2006 updated version of the "NSR Program Self-Evaluation Questionnaire" and the "Title V Program Self-Evaluation Questionnaire." The self-evaluation questionnaires were sent electronically on December 21, 2006. On-site file reviews were not part of this evaluation.

Findings:

Neither the NDEQ nor the EPA identified major issues with NDEQ's national air permits program; however, some notable activities were identified during the exit conference.

NDEQ uses an internal peer review process prior to issuing NSR and Title V permits, and also shares a draft with the source. This activity has greatly reduced comments that were previously addressed after the comment period. NDEQ has proactively initiated activities such as revising the format of the Title V permit to make it

more user-friendly, providing a statement of basis to assist the reader in understanding how NDEQ arrived at permitting decisions, and NDEQ is developing the compliance assurance monitoring (CAM) section of Title V applications and permits to clarify specific CAM requirements.

The NDEQ has various databases available to assist in conducting increment modeling; however, they do not have a data base system that specifically tracks increment consumption. A comment was provided during the close-out meeting that NDEQ may want to begin tracking increment more closely, particularly because they have an increasing number of ethanol permit applications.

The NDEQ identified an area for improvement as a result of the self-evaluation exercise. They discovered their public notices for modifications did not limit the public comments to only those changes stated in the revised permit. They reported that they were taking action to assure that the public notice will specify which provisions of the existing permit are open for comment.

The NDEQ reported that they do not get much attention from the public notices that they publish in the “legal notice section” of the local newspapers. The EPA encouraged them to continue posting the public notices on their website and to post other permitting documents on line as well. The NDEQ responded that updates to the web site were needed before it will accommodate large volumes of data.

The NDEQ reported, in its self-review, that it issued variances allowing a source to commence construction prior to receiving a permit. The EPA does not recognize, at this time, the issuance of a variance to construct. This issue is being addressed in another forum. Therefore, during the close-out meeting, it was agreed that the program review would not include discussion of the use of variances by NDEQ.

The full report pertaining to this section is located on page 31 of this document.

Responses

1. **Response:** In its findings, EPA notes that NDEQ does not have a database system that specifically tracks increment consumption. The program that NDEQ is implementing that would require tracking of increment is the Prevention of Significant Deterioration program, a federal construction permitting program. While there are databases, such as the RACT/BACT/LAER Clearinghouse available for use and are actually required to be used, EPA has never to our knowledge, provided a database system for tracking increment for management purposes.

EPA Response: Noted.

COMPLIANCE AND ENFORCEMENT

This portion of the report documents the findings and recommendation of EPA's review of the State's air compliance and enforcement program based on the State Review Framework (SRF). This report examines 12 critical elements covering inspection implementation, enforcement activity, commitments in annual agreements and data integrity, consistent with the SRF issued by the Office of Enforcement and Compliance. These 12 critical elements are as follows:

- 1) Inspections/coverage of the regulated universe;
- 2) Documentation of inspection findings;
- 3) Timely and accurate completion of inspection reports;
- 4) Timely reporting of violations;
- 5) Inclusion of injunctive relief and return to compliance;
- 6) Timely initiation of enforcement actions;
- 7) Economic benefit calculations;
- 8) Collection of appropriate economic benefit and gravity portion of a penalty;
- 9) Meeting PPA/PPG/SEA agreements and commitments;
- 10) Timely data requirements;
- 11) Accurate data requirements; and
- 12) Complete data requirements, (compare the actual compliance and enforcement practices of the NDEQ with the CAA Stationary Sources Program polices and guidance).

The purpose of the SRF assessment is to provide a consistency in the level of core enforcement activity and thus in environmental protection across the country. Each of the elements that were reviewed and the findings are covered in their entirety starting on page 34 of this report.

Prior to the on-site portion of the review, a list of source files to be reviewed was prepared and provided to Nebraska via e-mail on March 9, 2007. The number of files to be reviewed was determined based on the protocol in the SRF Implementation Guide, and was based on the number of facilities in the universe, the number of inspections performed and the level of enforcement activity in the program. Each program file was selected randomly within a representation of types or program areas within each program. NDEQ is to be commended on organization of the files.

Region 7's assessment is that NDEQ is running a core compliance and enforcement program. Region 7 will continue to work closely with NDEQ to continuously improve those portions of the program that should be aligned with the SRF.

In addition to the files reviewed at NDEQ, EPA also reviewed files maintained by the City of Omaha and the Lincoln/Lancaster County Health Department. The reports for the local agency programs are found in Parts II and III.

The full report pertaining to this section is located on page 38 of this document.

Responses

1. **Response:** NDEQ is wondering why there were no findings described in this section as the other portions of the report.

EPA Response: Due to the extensive review using the 12 SRF elements, the summary of each criteria starts on page 42.

MONITORING

The NDEQ is responsible for conducting the ambient air monitoring program in the State of Nebraska. The Nebraska air monitoring program consists of a network operated by three separate agencies of which NDEQ has oversight authority. This program includes a State and Local Air Monitoring Station (SLAMS) network of air monitors for carbon monoxide (CO), ozone (O₃), particulate matter – 10 micron (PM₁₀), PM_{2.5}, and sulfur dioxide (SO₂). This network is designed in accordance with EPA siting regulations and is reviewed annually by the NDEQ as per 40 CFR Part 58 and the State's Quality Assurance Project Plan (QAPP). In addition, NDEQ operates a network of Total Reduced Sulfur (TRS) analyzers to assess TRS levels in accordance with the State's ambient air quality standard. The focus of this audit is on the monitoring system employed as part of the SLAMS network, therefore, the State TRS network was not assessed.

All of the monitors and the laboratory analytical procedures being utilized in the DCHD, LLCHD and NDEQ Air Monitoring networks are designated reference or equivalent methods by the Environmental Protection Agency (EPA) with two exceptions. These include the PM_{2.5} continuous mass Tapered Element Oscillating Microbalance (TEOM) and the PM_{2.5} speciation sampler in Omaha. Continuous PM_{2.5} samplers have not been granted federal reference method equivalency. The standard materials used to calibrate and audit the monitoring systems are properly certified and have the required certification to National Institute of Standards and Technology (NIST) reference standards.

The agency's Standard Operating Procedures (SOP's) and QAPP are in overall good order and well written. Lincoln Lancaster County Health Department is currently in the process of updating their PM_{2.5} SOP. Douglas County Health Department needs to revise their SO₂ SOP to reflect changes in the calibration procedures. Statewide continuous gaseous monitoring data completeness has historically been good for all pollutants monitored as have been the precision and accuracy data results for their monitoring. Statewide, particulate sampling data incompleteness still remains an issue. Quarterly data reports to the Air Quality Systems (AQS) database need to be completed 90 days after the calendar quarter in which it was collected. As mentioned in the 2003 TSA report, NDEQ should develop a performance audit plan for DCHD, LLCHD and the Nebraska State Health Laboratory, filter weighing laboratory to ensure these programs

and their equipment are operating as required. This includes independent audits of LLCHD's continuous gaseous monitoring network equipment.

Findings:

As the monitoring portion of this review was more detailed and in-depth, findings for each of the monitoring programs reviewed (NDEQ, LLCHD and DCHD) can be found on page 51 of this report.

CHAPTER II - INTRODUCTION

PURPOSE

Many governmental and non-governmental entities are responsible for ensuring environmental protection throughout the nation. The majority of environmental programs are carried out through the shared responsibility of the Environmental Protection Agency (EPA) and its non-Federal partners.

The EPA has delegated a large share of its authority to state and local agencies across the nation. After delegation, the EPA maintains responsibility for delegated programs and continues to be accountable for progress toward meeting national goals and ensuring that Federal statutes are fulfilled. To ensure that delegated programs are being implemented adequately by its state/local partners, EPA Region 7 monitors delegated program activities through formal and informal evaluations. A formal evaluation currently consists of conducting a comprehensive onsite evaluation or program review of all or part of the delegated programs. Program reviews are conducted every four years per Region 7 guidance and are designed to evaluate the various delegated air programs which include, but are not limited to the planning, permitting, compliance and enforcement, asbestos, and monitoring programs of the state air agency.

EPA also has the responsibility of conducting day-to-day formal and informal oversight activities. The goal of oversight is to strengthen the relationship between EPA and its partners and to ensure that the national environmental goals expressed in the EPA Strategic Plan are accomplished. Effective oversight helps to ensure adequate environmental protection through continued development and enforcement of National Ambient Air Quality Standards (NAAQS). Oversight also helps to enhance the partners' capabilities to administer sound environmental protection programs through increased communication and a combination of support and evaluation activities. Finally, Federal oversight seeks to describe and analyze the status of national and regional environmental quality, through continued collection and distribution of information from governmental agencies and other major sources. The EPA is fully committed to the success of its partners' environmental programs. A clear expectation for program performance is a crucial factor in achieving an effective partnership.

Fostering quality delegated programs is dynamic in nature and will vary across the different delegated entities. The methods used to oversee delegated programs must change over time to respond to new environmental problems and challenges. EPA is committed to revising and improving the methods utilized to oversee delegated program so this process continues to be one of continuous improvement. Currently, EPA Region 7 is working to revise the 1999 program review protocol and its accompanying questionnaires to fulfill this commitment.

PROCESS

EPA maintains responsibility for delegated programs and continues to be accountable for progress toward meeting national goals and ensuring that Federal statutes are fulfilled. In order to fulfill this responsibility, EPA Region 7 created a protocol to establish regional policy for the most cost effective, cost efficient procedures and the appropriate level of effort for conducting program reviews. The 1984 “EPA Policy on Oversight of Delegated Environmental Programs” served as a starting point for structuring the protocol and was used by Region 7 staff to develop a *Program Review Protocol* document, which provides the justification and framework for conducting program reviews in the Region.

The protocol established a minimum frequency for conducting program reviews within the Agency, defines the scope of full and partial reviews within each program, and provides a consistent basis for determining which type of review is appropriate. The protocol includes how to document a rationale for determining whether or not a program review effort is necessary, includes a summary of the regulatory requirements for the major programs within the Air, RCRA and Toxics Division (ARTD), a discussion of oversight policy, and differentiation between the requirements of grant close-out reviews and program reviews.

EPA Region 7 issued two additional documents, *Operating Principles for Conducting Program Reviews*, which outlines the process for providing consistent internal procedures, and the *Program Review Criteria Notebook*. The notebook contains criteria and checklists for each of the program areas. EPA Region 7 is in the process of revising the *Program Review Protocol* guidance. This revised program review guidance was not finalized during NDEQ’s program review, therefore, EPA staff operated under the 1999 *Program Review Protocol*, the *Operating Principles for Conducting Program Reviews*, and the *Program Review Criteria Notebook*.

PROCEDURE

As stated in the Program Review Protocol, Region 7 will review each state once every four years. The last program review of the NDEQ AQD took place FFY 2003. Coordination for the 2007 NDEQ program review began during the CAA Section 105 FFY 2007 workplan negotiations. At that time, the NDEQ requested that all air program on-site evaluations be conducted during the same time period to conserve personnel resources. With the exception of the modeling and monitoring programs, EPA was able to meet this request. The week of March 13-15, 2007 was chosen for the on-site evaluations of most of the programs.

On December 20, 2006, a letter was sent to the NDEQ confirming EPA Region 7’s intention to conduct a program review at the NDEQ and the dates that were tentatively agreed upon between EPA and NDEQ staff for the onsite evaluation of its air programs. This letter is located in Appendix A-1. Subsequently, on December 21, 2006, questionnaires were sent electronically to NDEQ’s program review contact for

distribution to the pertinent program staff. Questionnaires were returned to EPA staff by the time stipulated in the introductory letter and file requests were made within the timeframe that NDEQ requested. The programs evaluated during the program review include the planning and development, emission inventory, modeling, enforcement and compliance, small business, monitoring and permitting programs. The NDEQ's permitting program was chosen for a self-evaluation due to the confidence and knowledge that EPA region 7 staff has of the program. Each program's questionnaires are included in the corresponding appendices.

EPA Region 7 also conducted a program review of several air programs delegated to the LLCHD, the OAQC and the DCHD. The permitting, monitoring, enforcement and compliance, modeling and emission inventory programs at the LLCHD were evaluated. The permitting, asbestos, enforcement and compliance and emission inventory programs at the OAQC were evaluated. Finally, the monitoring program at the DCHD was evaluated. The onsite evaluation of the LLCHD and the OAQC took place during the week of February 12-16, 2007. The findings of these reviews will be discussed in detail in Part II of this report.

The on-site evaluation at the NDEQ began with an entrance conference attended by the EPA review team and members of the NDEQ staff. During this meeting, the logistics for the review were discussed, staff to be interviewed were identified and the NDEQ was given the opportunity to ask questions or express any concerns they had pertaining to the review.

EPA staff was onsite for three days. At the conclusion of the review, EPA staff provided a verbal summary of the findings of the evaluations to the NDEQ Air Division Administrator, Program managers and staff. A brief discussion was held concerning noted strengths of the program and areas of concern.

CHAPTER III – PLANNING AND DEVELOPMENT

INTRODUCTION

The areas of review in this chapter include:

1. Regulatory Development
2. Grants
3. Local Program Oversight
4. Outreach & Training
5. Emission Inventory
6. Small Business Assistance Program
7. Modeling

NDEQ's responses for the topics covered in this chapter are found in Appendix B-1.

ORGANIZATIONAL STRUCTURE

The NDEQ contains is made up of Divisions that operate under the Office of the Director. These divisions are: Administration, Legal Services, Air Quality, Environmental Assistance, Water Quality and Waste Management. The AQD consists of three sections (Permitting, Compliance and Field Offices) and of 3 units (Program Planning & Development, Construction Permits, and Inspection & Compliance). During the on-site evaluation, the Division was assigned a total of 40 positions. These positions were categorized as follows: four administrative assistants, three section supervisors, three unit supervisors, five environmental engineers, one team leader, one environmental assistance coordinator and 23 program specialists (Appendix B-2). At the time of the on-site evaluation, the Division had a total of five vacancies: two in the Construction Permitting Team, two in the Planning & Development Unit and one in the Compliance Section. Since the on-site evaluation, some of the vacant positions have been filled, but at the same time other positions became vacant. Per the December 2007 NDEQ Organizational Chart (Appendix B-3), the Operating Construction Permit team gained a vacancy, and, although the Construction Permit team gained one team member, this group remains with three vacancies. The AQD has expressed that, because they operate with such few staff, each vacancy is critical and that filling those is one of the Division's priorities.

REGULATORY DEVELOPMENT

The NDEQ's AQD Program Planning & Development Unit staff are responsible for maintaining Nebraska's air quality regulations and ensuring that rules are updated accordingly and in a timely manner. Nebraska's air quality regulations are housed in Title 129 of Nebraska's Administrative Code. State regulations are adopted through the Environmental Quality Council (EQC). The EQC was established through the Nebraska Environmental Protection Act as the body that adopts rules and regulations which set air, water and land quality standards. The Council currently consists of 17 members who are appointed by the Governor to four-year terms. Council members represent the food

manufacturing, agricultural processing, automobile or petroleum, chemical, heavy, power generating, and the livestock industries. Council members also represent the interests of county and municipal governments, and conservation, crop production, labor and minority groups as well as having representatives in the engineering, biology and medical fields with knowledge about the health aspects of air, water and land pollution. The Council conducts quarterly meetings during which public hearings are held on proposed regulations and stakeholders can provide written comments or oral testimony on the proposed rules.

The AQD currently operates under an informal and formal rule review process. The informal process can range from a staff review and comment period to initiating a stakeholder process to discuss the proposed revisions. The type of informal process that is undertaken depends greatly on the complexity of the revision i.e. whether the revision consists of an administrative or substantive change and whether the proposed revision is expected to be controversial. Administrative revisions can include correction of terminology, renumbering of provisions, accepting delegation for maximum achievable control technology (MACT) standards, etc. If an administrative change is being proposed, the context of a rule is not expected to be significantly altered, thus a stakeholder process is not usually pursued. Substantive changes, on the other hand, can alter the context of a rule and would likely include a stakeholder process. Substantive changes can be driven by state or federal legislation, federal rulemaking, state and federal court decisions as well as internal policy and procedural changes. The timeframe needed to complete the informal rule review process also varies with the complexity of the revision. For administrative changes, the informal rule review process can be initiated around three months prior to the beginning of the formal process, whereas for substantive and controversial revisions, it could be started 1-2 years prior to the expected formal review process.

Once the informal review process is completed and a draft rule is prepared the formal review process begins. The formal rule review process is described in the NDEQ's *Regulatory Manual: A guide for developing rules and regulations, August 2005* (Appendix B-4). This manual ensures conformity and consistency in the rule making process and includes the following templates and checklists:

1. Rulemaking Checklist Form
2. Formatting Style example
3. PRO Rules and Regulations Policy Review Checklist Form
4. Explanatory Statement to EQC
5. Fiscal Impact Statement
6. Concise Explanatory Statement
7. PRO Final Agency Checklist
8. Memorandum to the Governor

Summary of Findings

Commendations

1. We commend the NDEQ's AQD for their efforts to ensure that their SIP is in accordance with Federal and State Regulations. The NDEQ has done a good job of submitting administrative and technically complete SIP submittals per 40 CFR 51, Subpart F. The AQD has also worked with EPA to improve communication and information exchange prior to public hearings by including EPA in the stakeholder process for some Federal Rules such as the Clean Air Mercury Rule and by giving EPA the opportunity to provide early comments on draft proposed rules. Sharing early drafts has allowed EPA and the NDEQ ensure that provisions, which may cause approvability issues, be corrected prior to public notice period.
2. The AQD has developed some new tools that will allow them to achieve continual improvements in their rule revision/rule making process. These include a historical database of rulemakings, a Rules Document Tracking checklist and AQD rule package files. Official rulemaking files are stored in the Legal Division. These tools will not only promote consistency, but will also provide transparency in its rule making process.

Recommendations

1. Nebraska's current public hearing process involves proposing rules for adoption at each EQC meeting, which is not without its challenges. Although the AQD makes a great effort to conduct stakeholder meetings to resolve any potential issues that may arise with substantive and controversial rulemakings, there are times where testimony might be offered at the public hearing which opposes a particular provision within the rule package. This type of testimony can, at times, delay the adoption of all revisions submitted in that package. Because the EQC only meets quarterly, this can cause huge delays in adopting proposed rules. This is especially true of National environmental rules such as the Clean Air Mercury Rule and the New Source Review reform rules that are time-sensitive and require state approval to avoid federal intervention (a Federal Implementation Plan). We understand that NDEQ is considering submitting rules for information at one public hearing prior to their adoption at the subsequent EQC public hearing. This strategy will not only allow the EQC to become more familiar with the proposal, but it will also allow all stakeholders to provide their comments and/or testimony in favor or opposing the rule revisions at the initial public hearing. EPA would support this change.

Response: While changes in the state rulemaking process cannot be made by the Air Quality Division, the Air Quality Division supports changes which would make the rulemaking process more effective. Within the past year, we have offered input to the Department administration regarding potential changes to the rulemaking process.

EPA Response: Noted.

2. The local rules have not been updated in the SIP for a number of years. We recommend that the AQD submit a request to revise Nebraska's SIP to include the most current local revisions. These updates are especially important with regard to Lincoln/Lancaster and Omaha as both programs have Title V delegated programs.

Response: We are very close to submitting updates through 2006 to the Lincoln-Lancaster County Health Department's portion of the SIP. Unfortunately, this project has been set aside several times to work on more pressing matters, but we plan to complete and submit this SIP update soon. During the next year, we plan to pursue updating the SIP to also reflect current rules for the Omaha local agency.

EPA Response: Noted.

GRANTS OVERVIEW

The Nebraska Department of Environmental Quality and EPA Region 7 continue to operate under a Performance Partnership Agreement (PPA) and Performance Partnership Grant (PPG). This PPA covers programs under the Clean Air Act (CAA) Section 105, Solid Waste Disposal Act (SWDA) Section 3011(a), and Clean Water Act (CWA) Sections 106 and 319(h) and is valid for two years, which also corresponds to the PPG project period. Activities conducted by the NDEQ's AQD are partially funded with CAA Section 105 monies which require a match from the grantee, and Title V operating permit fees. The NDEQ also receives CAA Section 103 funds that are used to operate and maintain a fine particulate matter (PM_{2.5}) monitoring network.

EPA Region 7's air programs and NDEQ's AQD currently operate with two workplans to cover activities that are eligible to be funded under the Section 105 and 103 funds. The current project period for the Section 105 grant workplan is from October 1, 2005 through September 30, 2007, and from January 1, 2006 through December 31, 2007 for Section 103. These project periods correspond to the federal fiscal year (FFY) and calendar year (CY), respectively. Although Title V activities are not eligible to be funded under the Section 105 monies, the Section 105 workplan includes both 105-funded and Title V-funded activities. Workplan negotiations usually begin when EPA sends a kickoff letter to NDEQ 5-6 months prior to the beginning of the project period. This kickoff letter, requests that NDEQ submit a workplan that corresponds to the expected funding level, if available, or to the funding level of the previous year, if funding levels are unknown. EPA also requests that activities outlined in the Office of Air and Radiation's National Program Guidance be included in the workplan, as appropriate and applicable to the state. The negotiated workplan will cover a 2-year project period, with modifications made, as needed, prior to the beginning of the second year of the project period. EPA's goal is to have a negotiated workplan prior to the receipt of an application to ensure that awards are made in a timely manner, as funding is available and the AQD plays a pivotal role in ensuring that this is achieved.

Summary of Findings:

The AQD has done a commendable job to balance local, state and federal priorities in the negotiated workplan, especially in recent years where the EPA has experienced either a plateau or a decrease in Section 105 and 103 funds. NDEQ has explored streamlining work and worksharing opportunities with other agencies, as appropriate. NDEQ has sought additional funds when available, for special projects such as replacing old monitors with EPA-approved continuous monitors. These special projects allow NDEQ to better distribute its resources and spend time on the different workplan commitments. EPA commends the AQD for its efforts in preparing a balanced and comprehensive workplan and for working with us to have a final negotiated workplan in a timely manner. EPA also applauds the AQD's efforts in submitting timely semi-annual reports as agreed in the PPA and as stipulated in the workplan.

EPA does not have any recommendations to offer on the NDEQ's AQD grant management activities.

LOCAL PROGRAM OVERSIGHT

The NDEQ currently has an interagency agreement with three local agencies and provides pass through funds to each agency to carry out activities under the Section 105 and 103 programs. These local agencies are the OAQC, the DCHD and the Lincoln Lancaster Health Department (LLCHD). The DCHD and LLCHD are awarded Section 103 and 105 funds, whereas OAQC is awarded only Section 105 funds. General roles and responsibilities for each partner are outlined in each interagency agreement and specific commitments for each grant are detailed within the workplan agreements, where EPA/NDEQ Section 103 and 105 priorities are reflected (Appendix B-5).

The NDEQ's oversight of the air quality programs at the local agencies is similar to EPA's oversight of NDEQ's programs, with exception of the Title V programs delegated to the LLCHD and OAQC. The NDEQ and the local agencies operate with a Section 105 workplan that covers a two year project period and a Section 103 workplan that covers a one year project period. The project period for the current Section 105 grant workplan is from October 1, 2005 through September 30, 2007 and for the Section 103 workplan reviewed from January 1, 2006 through December 31, 2006, which correspond to a FFY and calendar year, respectively. During workplan negotiations, NDEQ requests that the local agency submit a workplan based on the state and federal priorities applicable to the local agency and based on the amount of funding that is expected. The local agency then submits a workplan with the activities that they believe they will be able to complete with the level of funding proposed and an agreement is reached. Semi-annual reports of all workplan activities are due to NDEQ 20 days after the end of the reporting period. In addition, environmental data, such as monitoring data, are to be reported quarterly, 20 days after the end of the quarter. NDEQ currently conducts periodic reviews of the programmatic and fiscal elements of the local agency grants; however NDEQ does not operate under a specific schedule for local program reviews.

Summary of Findings

After reviewing the most recent local agency Section 105 and 103 workplans and interviewing AQD staff, EPA concluded that the workplans reflect EPA, State and local priorities and that the NDEQ conducts adequate oversight of each local agency's workplan activities.

OUTREACH AND TRAINING

The AQD has and maintains a comprehensive education, communication and outreach plan (Appendix B-6). The purpose of this plan is to provide a clear strategy for conducting outreach and educating the public on air quality issues. It also provides an emphasis on educating the Division's and other Department staff about air quality regulations and issues of public concern. Finally, it promotes good communication across the Division and the Department, especially on cross media issues, to ensure that all staff are knowledgeable of how actions in one program may affect another.

In order to achieve their education and outreach goals, the plan outlines the training sessions and meetings the Division plans to host, as resources allow. It also lists the different publications that have been and are planned to be created and distributed to stakeholders. Finally, it considers the air issues that the AQD staff and industry within the State of Nebraska will need to be prepared for in the future. Some examples of some excellent educational resources that the Division plans on implementing are the following:

1. Air Toxics and Maximum Achievable Control Technology (MACT) training.
2. Recordings of the EPA's Air Pollution Training Institute (APTI) training.
3. Maintenance of MACT notebooks
4. *Air Waves Newsletter* (semi-annually)

In order to achieve effective stakeholder outreach, the AQD must have well trained and qualified staff. The Division has put in place a number of resources that will allow them to determine what type of training will be needed and through what method it will be offered. Individual Training Plans outline required and beneficial training for each employee within the division, the Training Resources Catalog details what training resources are available throughout the Nation and through the web, and learning groups have been established which encourages staff to meet on a regular basis to share their observations, insights and knowledge gained through a particular training session (Appendices B-7 and B-8, respectively). These resources will not only help the training coordination staff better assess the training needs within the Division, but it will also allow them to determine what training sessions need to be offered onsite and what sessions are offered by another organization or through the web that can be taken advantage of by AQD staff.

Although the outreach plan has served as a good communication tool within the AQD, outreach staff feels that communication between Divisions could still be improved. NDEQ has acknowledged this communication issue and the Department has been looking at ways that internal communication could be improved on, by starting an early internal process.

Summary of Findings

Commendations

1. The AQD's efforts to improve internal communication and outreach to stakeholders are evident through the many publications, training sessions and stakeholder meetings that are planned throughout the year. We commend and congratulate the Division for the endeavors they have undertaken to ensure that their employees, stakeholders and the public are up to date on the current trends and air quality issues in the State of Nebraska.
2. We commend the outreach staff for seeking continual improvement in the Division's program by finding alternative methods, such as webcasts, to communicate with stakeholders and by improving already available resources to ensure that they are user-friendly.
3. We commend the training staff for ensuring that the Division has well qualified staff by establishing methods resources (i.e., individual development plans, a Training Resources Catalog, and learning groups) to determine the training needs of the Division.

Recommendations/Request

1. We commend AQD identifying issues and concerns with internal communication, and we would like to work with the AQD to continually improve communications between EPA and AQD.

Response: The Air Quality Division agrees that communication, both internally and with EPA, has improved over the last few years. It is certainly the intention of the Air Quality Division to sustain these improvements and continue to improve communication in the future. We welcome any specific suggestions EPA has in that regard.

EPA Response: Noted.

EMISSION INVENTORY

The AQD's Monitoring and Emissions Unit staff is responsible for carrying out activities related to emissions data collection and emission inventory development for sources within the NDEQ's jurisdiction. Nebraska has delegated the Title V program to two local agencies in the State. These are the Lincoln Lancaster Health Department (LLCHD) and the Omaha Air Quality Control (OAQC). These two agencies are responsible for collecting emissions data within their jurisdiction, which include Lincoln Lancaster County and the City of Omaha, respectively. The emission inventory program of these local agencies is described in a separate report.

This review focuses on the NDEQ's data collection and quality assurance process, the Department's oversight activities of the local agencies, data elements reported to the NEI, and outstanding issues from the 2003 Program Review. The NDEQ's data collection and quality assurance process is summarized in Appendix B-9.

EQ Review and NEI data submittal

The Department has done a good job of ensuring that they have access to the data elements required by the Consolidated Emissions Reporting Rule (CERR) by revising their EQs as appropriate. The NDEQ either collects the data elements required by the CERR through their EQs or have the ability to calculate some of the data elements. Even though the Department has access to these elements, not all data elements are submitted to the NEI. Appendix B-10 summarizes the data elements required and those submitted to the NEI by NDEQ.

Finally, a file review of a randomly chosen list of sources was conducted. The review consisted in comparing data published in the 2002 NEI and the data found in the sources' emission inventory questionnaires (EQ) (Appendix B-11). The goal was to ensure that the data reported by the source was accurately reported to the NEI.

Summary of Findings

File Review

1. ***Discrepancies between EQs and NEI submittal*** - Some discrepancies were found between the EQs and data found in the 2002 NEI. The differences are mainly due to the significant digits used for rounding when reporting the total emissions in the EQs and the significant digits used by the IIS. Discrepancies may also be due to errors found during audits which would result in a revised EQ after the data was submitted to the NEI.

Response: EPA describes discrepancies between the questionnaires and the NEI, however, it is difficult to ascertain whether these discrepancies are significant and require correction. The discrepancies are speculated to be due to rounding conventions or to corrections from on-site audits, however examples were not provided, so it is difficult to determine whether any corrective action is needed. Any

significant changes resulting from on-site audits should have been corrected in the IIS and ultimately in the NEI.

EPA Response: EPA's comment is not characterized correctly in NDEQ's response. EPA's comment was as follows: "*Some discrepancies were found between the EIQs and data found in the 2002 NEI. The differences are mainly due to the significant digits used for rounding when reporting the total emissions in the EIQs and the significant digits used by the IIS. Discrepancies may also be due to errors found during audits which would result in a revised EIQ after the data was submitted to the NEI.*" The intent of this finding was to note the discrepancies between data found in the IIS and in that reported to the NEI, and potential reasons for the discrepancies. EPA did not request further action from this finding, but EPA will work with NDEQ to determine if further action is necessary.

2. **Missing coordinates in the EIQ and NEI-** NDEQ started collecting coordinate information in 2002 when the EIQs were revised to include all the data elements required by the CERR. Because 2002 was the first year that the Department started to collect coordinates, the 2002 NEI submittal did not have a comprehensive list of coordinates for facilities in the State of Nebraska. In an effort to collect accurate coordinates, the Department has tried to update the facility coordinates with data gathered using GPS units during inspections for facilities being inspected and for those that are not scheduled for inspection, but that are in the vicinity of the target source.

Commendations

1. The NDEQ is participating in pilot project to develop a schema that will allow electronic reporting of emissions from the Air Force Operations to states. NDEQ staff are playing a pivotal role in the development of this schema. This demonstrates NDEQ's commitment to improving emission inventory data and data collection systems.
2. The NDEQ emission inventory staff conducts audits specifically on EIQs. This serves as an excellent quality assurance step by ensuring that reported values are comparable to those found in the facility's records.
3. EIQs have been updated to allow facilities to report ammonia and PM 2.5.
4. **Commendation/Recommendation:** The Department conducts audits of the emission inventory programs at the local agencies. This serves as a good step to ensure that the local agencies are following the minimum quality assurance standards set by the Department and that emission estimation methods are consistent across the State. We recommend that the NDEQ use the grant negotiation process to ensure that any deficiencies found during the local agency audits are corrected within a timely manner (Appendix B-12).

Recommendations

1. During the 2003 program review it was found that volatile organic compounds (VOC) may have been underreported to the 2002 NEI. It was found that for fee purposes, HAPs that also qualify as VOCs are removed from the total VOC. Form 4.0 of the 2002 EIQ instructed data submitters to report only HAPs that were not VOCs. Form 4.0 of the 2006 EIQ still contains this statement. We recommend that at a minimum, NDEQ ensure that all VOC emissions are being accurately reported to the NEI. (VOC emissions are important in determining contributions to PM 2.5 and ozone formation.)

Response: EPA expresses concern over the design of the NDEQ database system used to store emission inventory information and submit data to EPA. The NDEQ's current Integrated Information System (IIS) database is designed to ensure that emissions are not double counted and that accurate air emission fees being charged to facilities. As a result, HAPs that are also VOCs have been excluded from the total plant VOC amounts. The only way to make the correction at this point in time would be to manually look up and subtract out all HAPs reported. This would require a tremendous amount of additional time and resources. Our current staffing and budget restraints do not allow this solution. We will discuss this issue with our Information Technology staff and see if we can make changes to our future submittals to the National Emissions Inventory. However, no commitments are made to make the change. The emissions are being reported to the NEI. It is just that HAPs that are also VOCs are only reported as HAP emissions, instead of being double counted in the system as both HAPs and VOCs. The information is still there, should anyone wish to pull it out of the system.

EPA Response: EPA understands NDEQ's position and the limitations of its IIS, however, it is NDEQ's responsibility to ensure that data reported to the NEI are accurate and of the desired quality. VOC emissions are important in determining contributions to PM 2.5 and ozone formation. Under-reporting of VOCs could affect decision making should the state of Nebraska ever exceed the Ozone and PM_{2.5} NAAQS and have areas designated as non-attainment. EPA and NDEQ emission inventory staff have discussed this issue and plan on having further conversations to determine potential solutions. Some solutions include (1) the modification of EIQs to include a total VOC reporting requirement and (2) the creation of a lookup table in the IIS that would extract and add total VOC emissions to allow reporting of total VOCs to the NEI. Also, IT staff will be consulted to determine the most feasible solution.

2. We recommend that the NDEQ report to the NEI all data elements that have been submitted to them by a source. In recent modeling done to support the Best Available Retrofit Technology rule, it was found that inaccurate stack parameters were used for the modeling exercise. Although NDEQ collects this information, it

was not submitted to the NEI. We request that NDEQ plan improvements that will allow them to submit all data that is collected to the NEI.

Response: The stack data required for submittal to the National Emissions Inventory database is collected and maintained on the NDEQ's IIS system. Apparent inaccuracies in this data were checked during the modeling efforts for the Best Available Retrofit Technology rule. We compared the stack information on the original hardcopies of a number of submittals to the data entered into the IIS and found no discrepancies. It appears that the data may have changed during the submittal process or subsequent processing afterward. If it is possible to provide us with some specific sources where information was in error that would help us investigate further where the problem occurred, so we may work with EPA to appropriately correct it.

EPA Response: During the program review, the emission inventory lead, David Brown, and NDEQ's information technology lead, Bart Moore, were interviewed to help determine the main causes for discrepancies between stack parameters found in the BART modeling referenced in our recommendation and in NDEQ's IIS. During these interviews, EPA and NDEQ staff reviewed the data file that was submitted to the NEI and found that, although NDEQ collects this information, the NDEQ failed to report them to the 2002 NEI. It was determined that there may be a limitation in the IIS which could have prevented the transfer of this information into the file submitted to NEI. During the 2002 NEI cycle, if a reporting agency did not submit this data element, EPA filled the data gap with default stack parameters. Because the BART modeling used the 2002 NEI as a starting point, any errors in the data would have been transferred to the BART modeling. EPA would like to reiterate our desire for NDEQ to consider improvements to the IIS system that will allow submittal of all data elements to the NEI. In addition, EPA and NDEQ emission inventory staff plan on having further conversations to determine the cause and potential solutions to this issue.

SMALL BUSINESS ASSISTANCE PROGRAM

The Nebraska Small Business Assistance Program (SBAP) Review was conducted via e-mail by Hugh Stirts, NDEQ, and Heather Hamilton, EPA Region 7.

Structure of the Program:

The Federal Register Notice to finalize the State Implementation Plan for the SBAP was finalized in 1994. In the State of Nebraska, this program is called the SBPA program, and includes the Small Business Compliance Advisory Panel (CAP), the Ombudsman, which in the State of Nebraska is referred to as the "Public Advocate," and the technical assistance program.

The SBAP questionnaire, included in Section V of the Planning and Development questionnaire was sent to NDEQ on December 21, 2006. On February 5, 2007, a copy of

the 2003 SBAP Review was mailed to Mr. Stirts as a basis for information that was included in the questionnaire. The questionnaire was returned to EPA on February 9, 2007.

Summary of Findings

No significant findings were noted, although there is one vacant CAP position that should be filled; however, the NDEQ has done a notable job of maintaining the CAP as there are some states that have yet to fill CAP positions. Communications between EPA and NDEQ Small Business Liaison have significantly improved due to bi-annual meetings at the EPA offices.

MODELING

The modeling portion of the program review for the NDEQ, Lincoln, NE, was performed on February 27 and 28. Greta Bluml and William (Will) Adler were the air dispersion modelers consulted by EPA personnel. They are well qualified to review/accomplish air quality reviews and are doing a good job. Unfortunately this was the last week for Will at the NDEQ. A fully qualified modeler/meteorologist will be required to replace him because air dispersion modeling has become more complicated than the Industrial Source Complex models that have been used for decades. AERMOD, CALPUFF, and the photochemical models require a thorough understanding, knowledge/experience of the algorithms in the models and the meteorology that drives them. Region VII will assist the NDEQ until another qualified modeler is obtained.

Most of the review was spent examining solutions to problems that have been encountered in reviewing/performing air quality analyses and discussing potential future problems. The problem that all states/regions are encountering is the requirement of on-site meteorology if National Weather Service (NWS) meteorology from an airport is not representative of the application site. This will continue to be a problem until gridded meteorological data can be used in AERMOD. A minimum of one year on-site data is required if airport data are not representative of the application. This has always been required by Appendix W, 40 CFR Part 51, (The Guideline on Air Quality Modeling or Guideline). The requirement for on-site meteorology data was not as critical when the Industrial Source Complex (ISC3) Models were the approved/recommended models. The models that have replaced the ISC3 models require that the meteorological data "...be both laterally and vertically representative of the transport and dispersion within the analysis domain. Where surface conditions vary significantly over the analysis domain, the emphasis assessing representativeness should be given to adequate characterization of transport and dispersion between the source(s) of concern and areas where maximum design concentrations are anticipated to occur..." Fortunately in Region 7 site specific data are not required as much as in other regions. However, we have found that site specific data are required in/near river valleys. Typically the design concentrations from sources in Region 7 occur within two miles of the source because of downwash conditions and/or short stacks. Usually large facilities, e.g., power generating plants, have time to obtain site-specific data. Small facilities do not. Case-by-case

evaluations to determine when site specific data are required will have to be made until gridded data are usable in near field applications.

NDEQ has obtained and processed five years of meteorological data for use in AERMOD system for the NWS stations that are used for analyses in Nebraska. These data are available to anyone to use. If a company/consultant elects to obtain and process meteorological data instead of using the data from the NDEQ, the “raw” observations, the assumptions used in the processing, all input and output files must be supplied to the NDEQ for review. Regardless of what data are used, the NDEQ intends to use its data to verify a company’s analysis. The regulatory agencies in the adjoining states have also obtained, processed, and make available meteorological data for use in their state. The data from same meteorological stations may be used by the different states. The processed data may vary from state to state. Consultants may want to use data that they obtained from another state. It would be worthwhile to have the states get together and see if there are differences and why. The ideal situation would be for the states to process the same meteorological data.

Summary of Findings

EPA will continue to support the NDEQ modeling program as resources allow until a replacement has been hired for the Lead Modeler. It was observed that air quality modeling reviews are following NDEQ modeling guidelines. NDEQ is commended in gathering meteorological data to support modeling reviews. In the future, it would be a good planning exercise for NDEQ and surrounding states to meet and review meteorological data to ensure consistency.

CHAPTER IV - PERMITTING

INTRODUCTION

EPA has the latitude to choose a program for self-evaluation based on the level of comfort and confidence EPA has in a particular program area; therefore, the NDEQ was chosen by EPA to conduct a self-evaluation of their Title V and New Source Review (NSR) permitting programs. In lieu of an on-site evaluation at NDEQ, EPA to review the two approved local Title V permitting programs in Lincoln-Lancaster County and Omaha, Nebraska. The permitting agencies for these two local programs are the Lincoln Lancaster County Health Department and the Omaha Air Quality Control, whose jurisdiction falls within the limits of Lincoln Lancaster County and the City of Omaha, respectively. The findings of the local agency program reviews are found in Chapters X and XI, respectively.

The objective of the NDEQ self-evaluation was to review permitting activities since the last program review (2003). The review was conducted based on NDEQ's completion of the December 2006 updated version of the "NSR Program Self-Evaluation Questionnaire" and the "Title V Program Self-Evaluation Questionnaire." The self-evaluation questionnaires were sent electronically on December 21, 2006. On-site file reviews were not part of this evaluation.

Summary of Findings

We did not identify any areas where EPA's national air permits program could be improved. We did not find any unique processes that NDEQ is conducting that may benefit other programs.

We did observe some notable activities, and comments were provided to NDEQ at the March 15, 2007 close-out meeting. The EPA commented on the following activities reported by NDEQ:

1. The NDEQ reported that they issued variances allowing a source to commence construction prior to receiving a permit. The EPA does not agree with NDEQ's use of variances in their Prevention of Significant Deterioration (PSD) and synthetic minor permitting program, and the issue is being addressed in another forum. Therefore during the close-out meeting, it was agreed that the program review would not include a discussion of the use of variances by NDEQ.
2. The NDEQ has various database systems available to assist in conducting increment modeling; however, they do not have a data base system that specifically tracks increment consumption. A comment was provided during the close-out meeting that NDEQ may want to begin tracking increment more closely now, particularly because they have an increasing number of ethanol permit applications.

3. The NDEQ stated in its response to the self-evaluation that the last NSR air program review of the local air permitting authorities was for fiscal year 2001. At the close-out meeting, NDEQ agreed to provide copies of reports of any future audits conducted by the Department.
4. For both the NSR and Title V programs, NDEQ reported that they use an internal peer review process prior to issuing the permits to quality check the documents. Also, the draft permit is shared with the source prior to public notice to incorporate any suggestions they have. These processes have proved to reduce the number of comments that must be addressed after the public comment period has expired.
5. The NDEQ stated in its response that they are in the process of revising the format of the Title V permit to make it more user friendly by grouping the requirements for a specific emissions unit into one section. At the close-out meeting, the EPA acknowledged that NDEQ proactively continues to look for areas of improvement for both document and process improvements.
6. The NDEQ is commended for its permit statement of basis (SOB). The SOB allows the reader to understand how the agency arrived at their permitting decisions. The NDEQ reported that they do provide training to their permit writers regarding how to prepare a statement of basis; however, they do not have any formal presentations or written guidance.
7. The EPA acknowledged NDEQ's development of the compliance assurance monitoring (CAM) section of the Title V applications and permits. This section helps clarify the specific CAM requirements. During the close-out meeting, NDEQ reported that they are in the process of further developing forms and procedures to assist the sources in using their CAM application forms.
8. The NDEQ reported that they do not get much attention from the public notices that they publish in the "legal notice section" of the local newspapers. The EPA encouraged them to continue posting the public notices on their website and to post other permitting documents on line as well. The NDEQ responded that updates were need to their website before it will accommodate large volumes of data to be posted.
9. The NDEQ reported that they have three (3) initial Title V permits left to issue. They indicated that at least two of the permits would be issued prior to the end of the fiscal year if things go smoothly. They stated there are challenges that may prevent them from accomplishing the task. Delays depend on the complexity of the issues. NDEQ indicates that pending revisions to underlying NSR permits, compliance/enforcement issues or awaited EPA rule promulgation such as MACT and NSPS may be the cause of potential delays for the issuance of initial permits.
10. The NDEQ identified an area for improvement as a result of the self-evaluation exercise. They discovered their public notices for modifications did not limit the public comments to only those changes stated in the revised permit. They reported

that they were taking action to assure that the public notice will specify which provisions of the existing permit are open for comment.

CHAPTER V – COMPLIANCE AND ENFORCEMENT

INTRODUCTION

The U.S Environmental Protection Agency's (EPA) Office of Enforcement and Compliance Assurance, all ten EPA Regions, the Environmental Council of States Compliance Committee and other state representatives have jointly developed a method to assess state performance in the enforcement and compliance assurances program. This report reflects the review by Region 7 of Nebraska's compliance and enforcement program utilizing the State Review Framework (SRF). This review has been a collaborative effort between the region and state and captures both successes of the state's program as well as any identified areas that need improvement.

The purpose of the SRF assessment is to provide a consistency in the level of core enforcement activity and thus in environmental protection across the country. It provides a consistent tool for regions to use in overseeing state enforcement programs. It provides the basis for a consistent mechanism for EPA Regions to provide flexibility to states which can demonstrate an adequate core enforcement program.

The purpose of this review is to assess Nebraska, specifically, the NDEQ's ¹ compliance and enforcement activities to ensure that violations that are being identified by NDEQ are being reported to EPA, Region 7, and that timely and appropriate enforcement actions are taken on the violations. The review also includes an overall assessment of the enforcement program.

¹ The NDEQ regulates an air program in all counties of Nebraska, except for the counties in Lincoln/Lancaster, and Douglas County. These NDEQ has delegated program authority to Lincoln/Lancaster Health Department (LLCHD) and the City of Omaha. The SRF does not differentiate data by county. Therefore, performance by the State reflects numbers from NDEQ, LLCHD, and the City of Omaha combined.

NDEQ ORGANIZATIONAL STRUCTURE

The Nebraska Department of Environmental Quality was created pursuant to passage of the Nebraska Environmental Protection Act in 1971. Although the Department has grown and been given additional responsibilities over the years, its ongoing mission has remained the same — the protection of Nebraska's air, land and water resources. Presently, the Agency is authorized a staffing level of 217 full-time employees

The Field Office Section consists of 15 employees who conduct compliance inspections, complaint investigations, environmental sampling, project management, and local compliance assistance for the agency's Air Quality, Waste Management and Water Quality Divisions. Establishing local field offices has enabled the agency to provide the public with greater access to NDEQ staff. They are also able to provide more timely response to citizens and to develop a better understanding of local issues because NDEQ staff live and work in the local community

The objectives of the AQD are to achieve and maintain the ambient air quality standards, to protect the quality of the air in areas of the state that have air cleaner than the standards, and to implement air quality rules and regulations. By fulfilling these objectives, the Department is confident that public health and the environment will be adequately protected.

The major programs in the AQD are: the Permitting Section, which consists of a construction permit program, the operating permit program; the Compliance Section which consists of the monitoring and emission inventory unit, and the inspection and compliance unit. The planning and development program and the asbestos program are also part of the AQD.

Two local agencies -- the Lincoln Lancaster County (LLCHD) and the Omaha Air Quality Control (OAQC) have accepted, through contract with the NDEQ, responsibility for various facets of the program. These responsibilities include air quality monitoring, planning, permitting and enforcement within their areas of jurisdiction. Both the City of Omaha and the LLCHD air compliance and enforcement program were reviewed in February, 2007.

The Compliance Unit of the AQD is responsible for conducting compliance inspections of air pollution sources, responding to citizen complaints, observing and evaluating emission tests, ambient air monitoring, acid rain, and the annual air emissions inventory. The Compliance Unit consists of 15.7 full time equivalent (FTE) employees working in the air program. The Compliance Unit employees have a total of 28 years of inspector experience, 19 years of attorney experience, 32 years of supervisor/manager experience, 10 years of clerical experience, 35 years of data management and 13 years of stack tester and compliance assistance. An organization chart is located in Appendix B-2.

FFY06-07 105 GRANT WORKPLAN

The State and EPA signed a Performance Partnership Agreement in 2005. Basic or "Core" AQD Management Program components consists of:

- Compliance and Enforcement of the Air Quality Regulations
- Permitting in accordance with the State Implementation Plan, federal, and state regulations
- New Source Performance Standards
- Regulatory Development and Program Planning
- Hazardous Air Pollutants
- Ambient Air Monitoring and Stack Testing
- Emission Inventory
- Outreach, Training and oversight of Local Agencies
- Support and active participation in national, regional, state, and local organizations.

The overarching goal of the Clean Air Act (CAA) and Amendments is to authorize States to assume primary responsibility for implementing the air quality regulations. In order for a State to assume the regulatory lead as the implementing agency, it must be authorized by EPA to do so. The State of Nebraska, by Memorandum of Agreement with the U. S. EPA, dated July 3, 2003 has established policies, responsibilities and procedures for the Air Quality program. The Memorandum of Agreement, the current Performance Partnership Agreement (PPA), Performance Partnership Grant (PPG) and any additional agreement(s) should be consistent with the statutory and regulatory requirements.

METHODOLOGY OF THE REVIEW

The EPA enforcement on site review team included Mike Bronoski and Angela Catalano, both representing the Air Permitting and Compliance Branch (APCO) of the ARTD. Earlyne Hill, Data Manager, also in APCO, performed the data retrieval of the Nebraska SRF data prior to the on-site review. That data was frozen on January 8, 2007 and is the basis for review. A self-evaluation questionnaire (Appendix D-1) was developed by EPA to assist with the file review. The questionnaire was sent to Nebraska on December 12, 2006. The questionnaire was completed by NDEQ and submitted prior to the on-site audit. Todd Ellis and Kevin Stoner were the primary representatives for the NDEQ air compliance program.

Prior to the meeting with NDEQ, a list of source files to be reviewed was prepared and provided to Nebraska via e-mail on March 9, 2007. The number of files to be reviewed was determined based on the protocol in the SRF Implementation Guide, and was based on the number of facilities in the universe, the number of inspections performed and the level of enforcement activity in the program. Each program file was selected randomly within a representation of types or program areas within each program. The report contains findings of the review for each program and areas of concern with a full explanation of these concerns along with the recommendations for resolution. The file list included 19 inspection files and 7 enforcement files. Six of these files were MACT sources. Providing the file list in advance provided ample opportunity to Nebraska to pull all necessary information into a central location.

In addition to the files reviewed at NDEQ, EPA also reviewed files maintained by the City of Omaha and the Lincoln/Lancaster County Health Department. Source files were randomly selected with an effort made to include synthetic minors, and major sources subject to significant CAA requirements such as NSPS, NESHAP, and MACT. The Aerometric Facility Data Systems (AFS) data base was used to identify source files for the file review. The following files were reviewed:

Nebraska 07 Program Review Enforcement and Compliance File List

ID Number	Facility Name	
3100100001	FLOWSERVE	
3100100011	DUTTON-LAINSON CO	
3101900013	MONSANTO COMPANY	
3101900015	BALDWIN FILTERS INC	
3104700031	TENNECO AUTOMOTIVE INC	
3106700014	STORE KRAFT MANUFACTURING CO	
3107900016	SWIFT BEEF COMPANY	
3112700002	ARMSTRONG CABINET PRODUCTS	
3115100002	BUNGE MILLING INC	
3114100025	LINDSAY MANUFACTURING COMPANY	
3117900011	GREAT DANE LIMITED PARTNERSHIP	
3117700026	CONCRETE EQUIPMENT CO INC	
3114100035	FLEXCON COMPANY INC	
3101900061	LEPRINO FOODS	
3105300074	AERO-TEC INC	
3118500042	EVEN TEMP INC	
3104700048	PONY EXPRESS GREENHOUSE LLC	
3115300041	METZ BAKING COMPANY	
3117900011	GREAT DANE LIMITED PARTNERSHIP	
3117700032	CARGILL INC	
3111900078	APACHE MANUFACTURING	
3104700046	MANN HAY CO	
3106700014	STORE KRAFT MANUFACTURING CO	
3100100011	DUTTON-LAINSON CO	
3112700002	ARMSTRONG CABINET PRODUCTS	
3109500001	ENDICOTT CLAY PRODUCTS CO	

File Review

A file checklist (Appendix D-2) was used by the EPA team to evaluate each file reviewed. The EPA review covered FY 2006 activities to the date of the on site review. EPA conducted the file review on March 13-15, 2007. Any additional enforcement information made available to EPA following the date of the file review was also included in the review. Any questions regarding file content or enforcement actions were presented to NDEQ either during the EPA visit or submitted via e-mail following the visit.

Information Considered From Other Reviews and Other Sources.

In looking at negotiated commitments, the State Enforcement Agreement (SEA) was also reviewed and results of the FY 2005-2006 grant review were incorporated. There were no other recent (2 year) reviews that contained relevant information to this review. Nebraska is meeting all FY05/06 Section 105 Grant enforcement commitments. The State Enforcement Report for 2006 prepared by NDEQ was also reviewed.

OVERALL SUMMARY

This report documents the findings and recommendation of EPA's review of the State's air compliance and enforcement program based on the SRF. This report examines 12 critical elements covering inspection implementation, enforcement activity, commitments in annual agreements and data integrity, consistent with the SRF issued by the Office of Enforcement and Compliance. These 12 critical elements are:

- 1) Inspections/coverage of the regulated universe;
- 2) Documentation of inspection findings;
- 3) Timely and accurate completion of inspection reports;
- 4) Timely reporting of violations;
- 5) Inclusion of injunctive relief and return to compliance;
- 6) Timely initiation of enforcement actions;
- 7) Economic benefit calculations;
- 8) Collection of appropriate economic benefit and gravity portion of a penalty;
- 9) Meeting PPA/PPG/SEA agreements and commitments;
- 10) Timely data requirements;
- 11) Accurate data requirements; and
- 12) Complete data requirements, (compare the actual compliance and enforcement practices of the NDEQ with the CAA Stationary Sources Program policies and guidance).

The NDEQ is implementing a comprehensive compliance and enforcement program in conformance with the CAA. Discussions have resulted in the State taking action concerning the areas of improvement. The Region will continue to work with the State to continuously improve the State's CAA program. In most instances, the NDEQ exceeded expectation and national averages for inspection coverage, identifying and addressing significant violators in a timely way. The report includes recommendations for improvement in several areas, the most significant of which is data entry into the state system which is then uploaded to EPA's data system. The NDEQ maintains its own data system, the Integrated Information System (IIS). In many instances, EPA found the state data to be more complete and reflective of the state's efforts than the data in the EPA database (AFS). EPA's goal is to address areas in which the data in the state's system did not match the data in EPA's databases.

PROGRAM ELEMENT REVIEW

Review of the program elements was conducted primarily by evaluating the data NDEQ entered into AFS for Federal Fiscal Year 2006. The data was compiled, tabulated and made available for review on the U.S. EPA web site. The table summarizing the results is available at <http://www.epa.gov/idea/otis/stateframework.html> and (See Appendix D-3).

Section 1. Review Area: Inspections

1. Degree to which state program has completed the universe of planned inspections/evaluations (addressing core requirement and federal, state and

regional priorities). Data metrics a, b, c, d, e, f, and g, were discussed with NDEQ.

Metric 1a - Inspections at Major Sources:

The 2005-2006 PPA specified that the frequency for conducting Full Compliance Evaluations (FCEs) at major sources should be every two years. The level of inspection activity undertaken by Nebraska is indicative of a strong compliance/enforcement program and well above the national average in most areas, including inspections at major sources. This finding is supported by the information in both AFS and the Nebraska's data system. The NDEQ Compliance Monitoring Strategy (CMS), which NDEQ agreed to in the 06/07 Implementation Agreement, states that NDEQ will follow the guidelines for minimum inspection frequencies for major sources. The NDEQ CMS further states that a FCE will be conducted at major sources every two years. NDEQ conducted an FCE at 71 of the 96 major sources in FY06. Although 100% of the major sources in the State did not receive an FCE over the last two years, the 94.1% that did receive an FCE is well above the national average of 81%.

Metric 1b - Inspections at synthetic minor (80% of major source level) – (SM80s):

The universe of SM-80s includes those sources with an EPA or State classification code in AFS for synthetic minors with a CMS source Code for SM-80s. The CMS that NDEQ agreed to states that NDEQ will inspect facilities that emit or have the potential to emit at or above 80% of the major source threshold once every five years. The State is not required by the CMS policy to conduct a specific number of FCEs/Inspections at SM-80 and the PPA does not specify a percentage. The metrics data indicates that Nebraska conducted an FCE at 167 of the 285 synthetic minor sources over the past five fiscal years. This is below the national goal (100%) and the national average (84%).

All Region 7 states have a 5 year frequency for the 80% SMs universe. Using the current AFS universe and dividing by 5, the Nebraska yearly frequency is to conduct 33 SM-80 **facilities** FCEs. The breakdown provided by the Region shows a lower number of FCEs for Nebraska. It is recognized that CMS does not require the States to necessarily conduct FCEs at 20% of the universe each year. However, the Region will follow-up with Nebraska to ensure that the State will be making up any shortfall in the subsequent 4 years. (Appendix D-4).

It has been determined by NDEQ that the number of SM-80 in the AFS system for NDEQ is not 212, as shown in the data metric. The correct number of SM-80s for NDEQ is approximately 126 and not 212. Omaha has 40 and Lincoln has 14. This totals 180 SM-80 for the State of Nebraska. Coding changes will be made by NDEQ to correct the discrepancy in SM-80 facilities.

Metric 1f – Review of Self-Certifications completed: The State reviewed 95.1% of Title V certifications received in FY06. This review is well above the 81.2% national average. The data pull lists 102 Title V annual certifications received and 97 annual certifications reviewed. Due to current version of the IIS, results codes are not uploaded

to the AFS. Result codes are reported to EPA and are entered manually by EPA. Result codes for stack tests are also entered manually by EPA.

Metric 1g - Sources with unknown compliance status designations: AFS generates an unknown compliance status for CMS major sources when either an FCE was not done within two fiscal years or an FCE was completed but was not entered into AFS. NDEQ has zero facilities identified with an unknown compliance status.

2. Degree to which inspection reports and compliance reviews document inspection finds, including accurate description of what was observed to sufficiently identify violations.

The inspection reports generally appeared thorough and greatly improved from the 2003 audit. For the files reviewed, field inspection reports were timely in all instances. Of the violations found during the FCEs, the State appeared to resolve all such violations through the enforcement process. Comparing the State's reported high priority violators (HPVs) to the number of FCEs completed in FY06, the State finds violations 4.2% of the time. This metric falls within the national average of greater than ½ of the national goal of 8.7. Each inspection report reviewed contained a checklist that has been prepared for the facility. The checklist addressed permit requirements.

3. Degree to which inspection reports are completed in a timely manner, including timely identification of violations.

Metric 1c. Inspection reports reviewed were typically completed within one week of inspection. Violations were typically identified by the time the inspection report is completed. For all files reviewed by EPA, the FCE reports were completed well within 30 days after the actual inspection, based on comparing inspection dates and data entry of FCEs into the data system.

<u>CAA source Universe Info</u>	<u>Number of Sources in Universe in FY06</u>
Full Compliance Evaluations	71 major + 30 SM-80 = 101 FCEs
Partial Compliance Evaluations	N/A
Total Number of Evaluations	101
Number of inspection files	22 Reviewed

Section II. Review Area: Enforcement Activity

To initiate an enforcement referral to the Legal Division, the program or Section will complete the Enforcement Request Form and the Penalty Computation Worksheet. These forms may be completed by the inspector or the individual with the most knowledge and must be approved by the appropriate Section Supervisor and Division Administrator. Multi-media enforcement requests may require multiple approvals. The types of enforcement action that may be requested are described in Chapter 3 of the Nebraska Enforcement Manual. Once the Enforcement Request is sent to the Legal

Counsel, the matter will be assigned a case number and a staff attorney for review and handling. Depending on the type of enforcement action requested, the attorney may contact the individual initiating the enforcement request for more information regarding the case, discuss alternatives, and possible remedies. The attorney will work closely with all levels of NDEQ staff and the Attorney General's office, if appropriate, to ensure the case development is adequate and correct and that cases are brought to a timely and satisfactory conclusion. During a pending enforcement action, all discussions with the violator should be coordinated through the NDEQ attorney or Attorney General's Office.

The Air Compliance Section may discover violations in a variety of ways, including, but not limited to compliance inspections, reports, complaint investigations, and referral from other law enforcement officials, follow-up inspections, and reviews of submitted documents. Once violations have been detected, they are documented in an inspection report or memorandum as soon as possible. When violations do occur, Nebraska may seek a voluntary return to compliance through informal means or seek formal enforcement. Depending on the type of violations, one or more of the following actions and enforcement mechanisms may be pursued:

Voluntary Compliance

Letters of Warning

Notice of Violation

Permit Denial, Revocation, or Modification

Administrative Order

Consent Orders, Agreement, Stipulations

Injunctive Relief

Referral to EPA

Joint State/EPA Enforcement

SEPs

For civil proceedings, with the prior approval of the Attorney General, the NDEQ may contact a violator in advance of referring the matter to the Attorney General, in an attempt to reach an amicable settlement. The Legal Counsel will usually make this decision on a case-by-case basis after consultation with the Assistant Attorney General, staff attorney, and Director, giving consideration to timeliness issues and the likelihood of settlement.

4. Degree to which signification violations are reported to EPA in a timely and accurate manner.

Metric 4a. HPV discovery rate in the State, based on FCEs completed at major sources in FY 2006, is 4.1%. This places Nebraska just below the national goal of greater than ½ of the national average of 8.7%. Nebraska has a HPV discovery rate (per major source) of 2.7%. This rate of discovery is below the national goal of ½ of the national average of 4%. 22 files were reviewed by EPA, including 2 HPV files and 3 non-HPV files where violations were found. While this metric is below the national goal and national average, Nebraska has an outreach and compliance assistance program that extends to almost

every major and SM-80 facility. Therefore, the rate of noncompliance and HPV discovered are lower.

5. Degree to which state enforcement actions include required injunctive relief (corrective or complying actions) that will return facilities to compliance in a specific time frame.

Findings:

<u>CAA source Universe Information</u>	<u>Number of Enforcement Actions FY06</u>
State formal enforcement actions	16 total, of which 4 addressed HPV
State informal enforcement actions	N/A
Total number of enforcement actions	16 total, of which 4 address HPV
Number of enforcement files for review	7

All files reviewed documented facilities' return to compliance where violations were found. NDEQ rarely uses injunctive relief as controls were not warranted for the violations documented. The compliance staff will note if injunctive relief is recommended on their Legal referral sheet used by the Air compliance staff.

6. Degree to which the state takes timely and appropriate enforcement actions, in accordance with national enforcement response policies relating to specific media.

Metric 6a. The State had 3 facilities that went beyond the HPV time line. All have since been reported as addressed. Two of these remain on the Watchlist. Nebraska is below the national average in identifying HPVs. The discovery rate based on FCEs completed at major sources is 37.5%. This is a lower than the national average of 49.1% resulting in a greater number of HPVs being addressed with a formal action within 270 days of day zero. Region 7 will work with the State to continue its efforts in addressing its HPVs in a timely manner, per the policy. Of the facility files reviewed, which included an HPV, timelines were followed according to the policy. Once a referral to Legal or the attorney general is made, compliance staff has little control over future action.

Findings:

<u>CAA source Universe Information</u>	<u>Number of Enforcement Actions</u>
State formal enforcement actions	6 at major and SM sources. Original Metric lists 1

State informal enforcement actions	17 NOVs reported in AFS
Total number of enforcement actions	6
Number of enforcement files reviewed	7

7. Degree to which Nebraska includes both gravity and economic benefit calculations for all penalties, using BEN model or similar state model (where in use and consistent with national policy).

NDEQ utilizes a penalty policy and the BEN model, where warranted. Penalty amounts for two facilities were not entered into the system. According to the NDEQ 2006 Enforcement Report, NDEQ was involved with a global settlement for Cargill, Incorporated which resulted in a \$61,538 penalty to the state. Sinca Industries, Inc., d/b/a Apache manufacturing also recorded a penalty of \$22,500. NDEQ will enter penalties for Apache and Cargill. Including the penalty for Store Kraft, already in the system, the total penalty amount for FY06 is \$99,238. So far in FY07, total penalty amounts are \$74,500.

8. Degree to which final enforcement actions (settlement or judicial results) take appropriate action to collect economic benefit and gravity portions of a penalty, in accordance with penalty policy consideration.

The NDEQ Enforcement Policy of 2002 takes into consideration the gravity of the violation and the economic benefit to be gained by the violator. Documentation of the penalty calculations were found for all the orders reviewed by EPA. Penalties collected ranged from \$5,000 to \$22,000, and included \$10,000 for SEPs for the files reviewed. The file review indicated that Nebraska maintains documentation of penalty calculations, including a justification, in the case file for each penalty order issued.

Five files were reviewed where an HPV was assessed. Store Kraft and Apache both were assessed a civil penalty. Endicott Clay product was a paperwork violation where a penalty was not deemed appropriate. NDEQ was seeking penalties at Mann Hay when the business closed. Armstrong Cabinet is currently in the AG's office pending enforcement action. The State should be recognized for its efforts to document penalty assessments. Penalty calculations appeared clear from the worksheets found in the files reviewed. No penalty assessment included an economic benefit in the worksheets. NDEQ should seek to assess civil penalties that seek economic benefit.

	<u>National Avg.</u>	<u>Nebraska</u>
Penalties normally included with Formal enforcement action on HPVs	77%	14.3%

Metric 8a and b. While the penalties assessed were in accordance with the state penalty matrix contained in the state's regulations, two of the files EPA reviewed warranted a

penalty, however, none contained an economic benefit component. As such, EPA was not able to definitively state at this time whether the State is including economic benefit in its penalty calculations. The percentage of actions at HPVs with a penalty is 14.3%. This is below the national goal of 77% and the national average of 80%.

Response: NDEQ indicated that it would seem appropriate to mention that NDEQ and the Nebraska Attorney General's Office works together on civil actions. NDEQ does not have administrative penalty authority.

EPA Response: Noted.

Section III. Review Area: Agreements

9. Enforcement commitments in the PPA/PPG categorical grants (written agreements to deliver product/project at a specified time), if they exist, are met and any products or projects are complete.

Language in the State grant work plan commits Nebraska to conduct timely enforcement actions against major and synthetic minor sources, consistent with the State's enforcement policies and priorities. The grant contains specific enforcement commitments for 105 sources. Title V fees are used to cover compliance with enforcement of major sources. Semi annual and annual reports are provided by NDEQ for required reporting requirements. All enforcement commitments for FY06 were met.

The CMS policy requires that Title V sources be inspected every two years and SM80 facilities be inspected every five years. The state completed inspections at Title V (94.7%) and SM80 (58.6%).

10. Degree to which the Minimum Data Requirements are timely. In July 2006, the AFS Business Rules Compendium, Section 1, identifies current minimum data reporting for agencies authorized with delegation of the CAA.

Findings:

<u>CAA Source Universe Information</u>	<u>Number of Sources in Universe</u>
Full Compliance Evaluations	101
Total Number of Evaluations	124
Number of inspection files review	19

Minimum data requirements represent the minimum amount of data that EPA believes is necessary to manage the national air stationary monitoring and enforcement program. FCEs, results of stack tests, results of Title V annual certification reviews and compliance status are some examples of the 26 minimum data requirements.

Metric10a. Integrity of HPV data (timely entry). 25% of HPVs are entered to AFS more than 60 days after the HPV designation (day zero). This percent rates Nebraska at a higher rate of entering data into AFS than the national average of 57.8%. Region 7 will continue to coordinate HPV data entry with Nebraska. Region 7 holds bi-monthly calls with Nebraska enforcement staff. AFS issues are part of the regular discussion in an effort to proactively address future date entry and emphasize the importance of timely entry of minimum data requirements. EPA will in the future, invite the data manage join conference calls with the state to ensure minimum data requirements are met.

11. Degree to which the Minimum Data Requirements are accurate and complete, unless otherwise negotiated by the Region and State or prescribed by a national initiative.

Findings: The following table illustrates the type of discrepancies between data that is reported in the EPA database and data maintained by the State.

FED FY	Data Point	EPA Database	State Database	Difference
2006	Title V FCEs	110	92	18
2006	SM80 FCEs	212	126	86
2006	NOVs	23	19	4

Metric 11a. Number of HPVs/Number of NC Sources. 250% of Nebraska facilities in this category are below the 94% of HPVs of noncompliant sources. The discrepancy in the sources not in compliance count and the HPV count is due to the fact that five of the facilities on the HPV list are EPA violations involving global settlements. These facilities include two Archer Daniels Midland Companies, ADM Corn Processing, AGP Corn Processing, Inc., and American Laboratories. A compliance status code of “5,” meeting a schedule, was entered on these sources. The reason this was done by EPA, Region 7, is to prevent these facilities from continuing to appear on the Watchlist. While they now don’t appear on the Watchlist, this status code presents a trigger that would appear to indicate that the number of noncompliant sources is lower than the number of HPV sources. With the five additional facilities in violation, the ratio becomes 73% and is well below the national average of 94%.

Metric11b. Stack test results at federally-reportable sources. An area of significant concern is reporting of stack test observation in the EPA database. There are 34.8% of stack test results without pass/fail results. Due to current version of the IIS, results codes are not uploaded to the AFS. Result codes are reported to EPA and are entered manually by EPA Region 7. Result codes for stack tests are also entered manually by EPA.

12. Degree to which the Minimum Data Requirements are complete, unless otherwise negotiated by the Region and state or prescribed by a national initiative.

Nebraska enters data in their IIS database. The Universal Interface (UI) uploads the IIS data to EPA Region 7, on the 15th of each month to AFS. Region 7 believes that all minimum data requirements, except result codes are being entered into IIS. Result codes are manually sent to Region 7 and manually entered into AFS by the EPA data coordinator. The following information reflects the information found in AFS and the State's data:

Title V Universe: According to AFS, 131 sources are subject to the CAA Title V regulations (sources in AFS with Title V air program codes). Based on information received from the state, once a Title V permit is issued, the Title V air program code is applied to the facility in AFS.

State facility count: NDEQ indicated that there are 96 Title V sources. The City of Omaha has 17 and LLCHD has 14. This results in a total of 127 Title V sources. The 286 synthetic minor facilities was deemed inaccurate. Coding by both EPA and NDEQ will correct this discrepancy. NDEQ SM-80 count is at 212.

FCE Counts Complete: 101 FCEs were conducted in FY 2006 at major sources and SM-80s. This data was deemed accurate.

Violation Counts Complete: CAA Management Report, which uses data from AFS, lists 30 facilities with violations. According to state data, 19 violations were discovered in FY 2006.

Notice of Violation Counts Complete: The CAA Management Report lists 19 State Notices of Violation. According to State data, 19 Notices of Violation were issued to facilities in FY 2006.

HPV Counts Complete: AFS lists 16 individual HPVs at major sources identified in FY 2006. The State count is 17

Formal Action Counts Complete: The CAA Management Report indicates 16 formal enforcement actions were issued in FY 2006. The state data indicates 17 formal enforcement actions were issued in FY 2006.

Assessed Penalties Complete: The CAA Management Report showed penalties in the amounts of \$15,200 assessed in FY06. It was shown that the amount is inaccurate due to the state not reporting penalty amounts in the system. Two additional penalties will be entered for FY06.

Number of Major Sources Missing CMS Policy Applicability: No major sources were listed as missing a CMS Policy Applicability code in AFS.

Recommendation: The data in AFS needs to be maintained and comparable to what is maintained in the state database. Efforts should be made to reconcile the data in the two databases. EPA and the State will continue to explore methods/avenues to establish a

mechanism for interface between federal and state databases, so that data can be electronically uploaded.

Summary of Findings

After discussion with Nebraska concerning the areas of improvement, and the steps that the State is already taking, it is Region 7's assessment that Nebraska is running a core enforcement and compliance assurance program for the CAA stationary Sources. Region 7 will continue to work closely with Nebraska to continuously improve its program.

EPA Observations:

General Findings:

Nebraska is to be commended for its file organization. Requested files were quickly located and provided to the EPA reviewers. Files are organized by identification number, which remains constant for a site.

NDEQ did an excellent job in filling out the responses to the questionnaire.

In April of 1973, the NDEQ established a regional field office in North Platte, Nebraska. The office serves the citizens in the western half of the state. Another field office was opened in Chadron, Nebraska in 1983. Due to the success of these offices in effectively responding to the citizens and monitoring the regulated community, the NDEQ opened additional field offices in Holdrege, Omaha, Norfolk and Scottsbluff in 2000. The addition of these new offices is intended to provide the public better access to NDEQ personnel. By having personnel in the area, the NDEQ can be timelier in their responses to the needs of the public. A copy of the NDEQ field components is attached (Appendix D-5). The creation of these additional field offices was seen as an enhancement to compliance activities.

Findings on Inspection Reports:

Inspection reports for the most part utilized a comprehensive inspection format, including lists of emission points and permit condition checklists resulting in a completeness and consistency in inspections.

Inspection reports are completed in a timely fashion. There is an average of less than 30 days for completion of reports.

Inspection reports indicated that corrective action/enforcement follow-up was handled in a timely manner.

Inspection report transmittal letter was inconsistent in the files reviewed. Some inspections included the letter, others did not.

Some inspection reports reviewed were not dated.

It was unclear as to what the compliance status was in some inspection reports reviewed.

Self Reporting, Test Reports and Complaints

The NDEQ files contained no documentation that self reports (e.g. annual compliance certification) were being reviewed.

Few, if any actions were taken in response to self reporting on noncompliance.

One of two test reports reviewed was not closed out with a letter.

Complaint form is good. Where there was follow-up to complaint, there was a good response. However, no follow-up documentation in file on some complaints was noted.

One self disclosure was reviewed in which there was no follow-up documentation in the file

Enforcement Five files reviewed included major enforcement actions.

Air staff provided a good background on enforcement information in referrals to Legal.

Air staff had quick turnaround to Legal, however, once in legal, air staff has little control over timeliness.

Penalty calculations produced by Legal met state penalty policy and sometimes included SEPS.

Penalty justifications/calculations were documented in the files reviewed where a penalty was assessed. NDEQ should assess civil penalties that consider economic benefit.

NDEQ uses injunctive relief rarely due to few enforcement actions requiring installation of controls.

HPVs. The State had 3 facilities that went beyond the HPV time line, and that appeared on the watch list.

Penalty justification/calculations documentation was found in all of the files where a penalty was assessed.

State Review Framework (SRF) comments

1. The NDEQ meets EPA's full compliance evaluation coverage for majors.
2. SM-80 full compliance evaluation coverage is below the national average.
This appears to be a coding issue. When data changes are made, the region believes the inspection coverage will be consistent with regional expectations and national goals;
3. Investigations were entered that were not meeting the definition of investigation; The NDEQ compliance staff will correct this data entry error.
4. NDEQ meets the goal for review of self certifications at Title V sources. However, only 78 certifications were entered out of 96 Title V sources.
5. The metric HPV discovery rate per FCE was below the national goal. This may be due to higher level of outreach/compliance assistance.
6. One penalty entered into database in FY06. NDEQ will enter penalty amounts on two additional facilities.
7. NDEQ meets the timely and appropriate enforcement actions goals, in accordance with policy. Enforcement on HPVs were within the 270 day timeframe.
8. The number of sources in "automatic unknown" compliance status is a 0. This is also a good indicator of state inspection coverage;
9. Results codes for stack test and compliance certifications are not uploaded into AFS due to the outdated version of the Universal Interface. Stack test result codes are reported to EPA for entry. Until the UI is upgraded, EPA will work with NDEQ to upgrade the UI with the newest version.

Recommendations:

Staff are encouraged to provide coding information which results in data changes at the facility, i.e., operating status, reclassification, etc., to the data manager as soon as practicable so the data will be current and accurate.

An inspection report cover letter back to the facility needs to be sent and be part of the record.

A "signed" copy of the inspection reports should be in the file;

Staff are encouraged to attend the AFS training in KC in July. EPA will notify the appropriate staff when the training has been finalized.

SRF Recommendations:

1. SM-80 universe to be corrected.

Recommendation: Both NDEQ and EPA will work together to reconcile the SM-

80 data in the AFS and IIS. A high percentage of Synthetic Minor 80% sources are being recoded to accurately define this universe of sources. NDEQ will replace SM codes with B codes. EPA will delete the "S" flag on low emitter sources and enter the true SM sources which have been identified by NDEQ. Data will be reviewed with the next quarter update to determine if discrepancies are fixed.

2. Investigations entered by state into their data systems are inaccurate.

Recommendation: NDEQ to correct entry on 2 investigations.

3. HPV discovery rate per FCE is below the national goal.

Recommendation: Because NDEQ has a higher level of outreach and compliance assistance, HPV discovery rates from FCEs are low. NDEQ is aware and will target source review/inspections to increase HPV discovery.

4. Penalties are not being entered when settlements are entered into the IIS.

Recommendation: NDEQ to enter two additional penalty amounts for FY06. Penalties will be entered on future settlements. It is important that staff continually update enforcement data. Continual knowledge of how and what to enter into the IIS is needed. With the addition of penalty amounts, the sources as well as the public will be aware that penalties are part of the state enforcement program.

5. Result codes for stack test and compliance certification are not uploaded in AFS. While staff are entering the appropriate result code into the IIS, the NDEQ is utilizing a version of the UI which does not populate the result code data into AFS

Recommendation: NDEQ is working with TRC to upgrade the UI with the latest version. EPA will assist NDEQ with this upgrade where necessary. A target date of July 07, 2007 is the goal for completion. This will improve data accuracy and timeliness. This will also reduce information requests from EPA.

6. The SRF database will be reviewed periodically by EPA and NDEQ to reconcile ongoing discrepancy in class coding. EPA will work with NDEQ to evaluate each data metrics for any discrepancies and what actions will be taken to correct discrepancies.

Source Specific Findings

Source ID #	Facility Name/Location	File Review Comment
3104700031	TENNECO AUTOMOTIVE INC COZAD, NE	Inspection reports of 6/29/06 and 2/24/05 not dated. A compliance certification of 7/25/06 included several permit requirements out of compliance. Unclear from the

		file if any follow-up was done.
3106700014	STORE KRAFT MANUFACTURING CO BEATRICE, NE	Basis for proposed penalty included in file, however, AG downward calculations not shown.
3112700002	ARMSTRONG CABINET PRODUCTS AUBURN, NE	Two inspections of 1/10/06 and 10/6/06 discovered some of the same violations. Greater than 270 days to address.
3114100025	LINDSAY MANUFACTURING COMPANY LINDSAY, NE	An LOW was sent 3/10/05 following a 2/11/05 inspection. It was unclear from the inspection what the violation was. Inspection reports should clearly identify and cite violations.
3117900011	GREAT DANE LIMITED PARTNERSHIP WAYNE, NE	Letter to facility following a 6/13/06 inspection indicated that all HAPS were not being tracked. LOW or NOV would have been appropriate.
3117700026	CONCRETE EQUIPMENT CO INC BLAIR, NE	Inspection of 11/16/04 not dated
3114100035	FLEXCON COMPANY INC, COLUMBUS, NE	Source test was done on 5/6/06. Test report was submitted 87 days instead of the 45 days after the test. A letter was sent on 10/30/06 to advise source. An LOW or NOV would have been appropriate.
3105300074	AERO-TEC INC FREMONT, NE	Inspection of 10/21/04 not dated.
3104700048	PONY EXPRESS GREENHOUSE LLC GOTHENBURG, NE	Inspection reports of 7/8/04 and 8/3/06 not dated. Operating status is "operating" in AFS while NDEQ indicated the facility was closed.
3115300041	METZ BAKING COMPANY BELLEVUE, NE	Inspection of 5/23/06 did not include a transmittal letter back to the source. Deviations noted in the 2006 annual certification with no apparent follow-up
3111900078	APACHE MANUFACTURING NORFOLK, NE	Penalty not entered into AFS
3109500001	ENDICOTT CLAY PRODUCTS CO ENDICOTT, NE	Title V certification of 3/25/05 and 3/24/06 both noted deviations. Unclear from the file what follow-up, if any was taken

CHAPTER VI - MONITORING

INTRODUCTION

A Technical System Audit (TSA) of the NDEQ's ambient air monitoring program was conducted on March 13, 2007. The purpose of the audit was to document the NDEQ compliance with the EPA ambient air monitoring regulations. The audit information was obtained from on-site monitor performance audits, agency staff interviews, a review of the most recent year of data in the EPA AQS and agency performance in the National Performance Audit Program (NPAP). Monitoring audits were performed separately from other on-site evaluations. Copies of the Air Monitoring System Audit Questionnaires from the NDEQ, the Douglass County Health Department (DCHD) and the Lincoln Lancaster County Health Department (LLCHD) are attached as Appendix E-1.

The participants in these audits were:

<u>Name</u>	<u>Agency</u>
Russ Haydan	Douglas County Health Department
Jerry Snyder	Douglas County Health Department
Margaret Finney	Douglas County Health Department
Hong Huynh	Douglas County Health Department
Craig Schainost	Lincoln Lancaster County Health Department
Jim Yeggy	Nebraska Department of Environmental Quality
Chris Hetzler	Nebraska Department of Environmental Quality
Douglas Henry	Grand Island High School
Dane Smith	Grand Island High School
Cale Dove	Nebraska State Health Laboratory
Thien Bui	EPA Region 7
James Regehr	EPA Region 7

The full cooperation and assistance of these individuals is acknowledged and greatly appreciated.

EPA Region 7 audit personnel were able to visit 61% of the DCHD operated network, 100% of the LLCD operated network and 50% of the NDEQ operated network for a total of 63% of the overall state wide SLAMS network. Half of these sites were chosen using NPAP Program results, Data Completeness Reports and Precision and Accuracy Reporting Systems Reports. The other half were randomly chosen. Site assessments were performed and selected monitor calibrations were audited. The following is a list of the audited monitors and the monitor audit results:

EPA Audits

Douglas County Health Department:

<u>Site Location</u>	<u>AQS I.D.</u>	<u>Pollutant</u>	<u>Audit Results</u>
Douglas Co. Hospital	31-055-0019	PM _{2.5}	Fail
		PM _{2.5} Collocated	Pass
2411 "O" Street	31-055-0028	O ₃	Pass
11414 N. 72 nd	31-055-0032	O ₃	Pass
30 th & Fort	31-055-0035	O ₃	Pass
		CO	Pass
7717 Dodge	31-055-0040	PM ₁₀	Pass
132 nd & "Q" Street	31-055-0044	PM ₁₀	Pass
9225 Berry	31-055-0052	PM _{2.5}	Pass
1616 Whitmore	31-055-0053	SO ₂	Pass
11300 N. Post Rd.	31-055-0055	SO ₂	Pass

Lincoln Lancaster County Health Department:

<u>Site Location</u>	<u>AQS I.D.</u>	<u>Pollutant</u>	<u>Audit Results</u>
First & Maple Davey	31-109-0016	O ₃	Pass
2620 "O" Street	31-109-0018	CO	Pass
3140 "N" Street	31-109-0022	PM _{2.5}	Pass
		PM _{2.5} Collocated	Pass

Nebraska Department of Environmental Quality:

<u>Site Location</u>	<u>AQS I.D.</u>	<u>Pollutant</u>	<u>Audit Results</u>
Weeping Water Sanitation	31-025-0002	PM ₁₀	Pass
		PM ₁₀ Collocated	Pass
Weeping Water Hwy. 50	31-025-0009	PM ₁₀ TEOM	Pass
Grand Island	31-079-0004	PM _{2.5}	Pass

The results of the monitor audits were all satisfactory or better with the exception of the primary PM_{2.5} sampler at the Douglas County Hospital site (31-055-0019). This instrument did not pass the internal leak check and therefore could not pass the audit. Copies of the actual air monitoring audit results are attached as Appendix E-2.

Audit Results

The technical systems audit focused on the following five areas:

- Network Management
- Field Operations
- Laboratory Operations
- Data and Data Management
- Quality Assurance/Quality Control

These areas were thoroughly reviewed onsite and through the TSA questionnaire form. EPA Region 7 found only minor deficiencies in these areas.

Network Management

The Nebraska air monitoring program consists of a network operated by three separate agencies as follows. NDEQ currently operates six PM₁₀ monitors at five sites including; Cozad, Gothenburg and three sites in Weeping Water. In addition, two PM_{2.5} samplers are operated at Grand Island and Scottsbluff and two IMPROVE protocol monitors are in operation in Oshkosh and Halsey. Lincoln Lancaster County Health Department operates one PM_{2.5}, one carbon monoxide and one ozone monitoring site. Douglas County Health Department operates two PM_{2.5} sites, four PM₁₀ sites, three ozone sites, two sulfur dioxide sites and one carbon monoxide site in the city of Omaha. A PM_{2.5} speciation sampler along with a PM_{2.5} continuous mass TEOM sampler, are also operated in the city of Omaha. In addition, DCHD also operates PM_{2.5} sites in Blair and Bellevue, Nebraska. A list of the state wide monitoring sites is attached as Appendix E-3. This network is designed in accordance with EPA regulations and is reviewed annually by the NDEQ to determine if monitoring locations need to be relocated, added or deleted as per 40 CFR Part 58 and the State's QAPP. These monitors are adequately maintained at a minimum required frequency of one visit every two weeks to each monitoring location.

All of the monitors and the laboratory analytical procedures being utilized in the DCHD, LLCHD and NDEQ Air Monitoring networks are EPA designated reference or equivalent methods for ambient air criteria pollutants, with the exception of the PM_{2.5} continuous mass TEOM and the PM_{2.5} Speciation Sampler in Omaha. Continuous PM_{2.5} samplers have not been granted federal reference method equivalency. Each of the standard materials used to calibrate or audit these monitors or procedures is properly certified. When required, the specific certifications are traceable to National Institute of Standards and Technology (NIST) reference standards.

Field Operations

Nebraska Department of Environmental Quality, DCHD and LLCHD have participated, as required by 40 CFR, Part 58, Appendix A, in EPA's NPAP program

conducting audits of each type of pollutant monitor they operate. A review of these audit results shows that they have been satisfactory for the past two years. As noted above, EPA Region 7 conducted several monitor performance audits as part of the program audit. At least one analyzer for each pollutant monitored by NDEQ, DCHD and LLCHD was audited by EPA Region 7. The agency's internal monitor performance auditing has been done according to the EPA required schedule. The results of these State and Local agency audits were satisfactory in 2005 and 2006.

Laboratory Operations

Laboratory operations for the PM_{2.5} and PM₁₀ programs are conducted at two independent laboratories. The DCHD maintains and operates a PM₁₀ and PM_{2.5} filter weighing laboratory located at 4102 Woolworth Avenue in Omaha, Nebraska. Filters collected by DCHD personnel are weighed at this laboratory. Filters collected by LLCHD and NDEQ are weighed at the Nebraska State Health Laboratory (NSHL) located at 3701 S. 14th Street in Lincoln, Nebraska. Both laboratories were reviewed as part of the Technical Systems Audit. The DCHD weighing laboratory was found to be operating under satisfactory conditions. The NSHL is also operating under satisfactory conditions, with one exception. Standard balance verifications are required to be performed on a quarterly basis. Currently, the NSHL is performing the standard balance verifications on a semi-annual basis.

Data and Data Management

Data completeness is an essential part of a monitoring program in evaluating air quality. Data completeness for the continuous gaseous analyzers (CO, SO₂ and Ozone) continues to be good. This good record of data completeness continued in 2006, the latest full year of validated data.

Particulate data, on the other hand, has been experiencing data completeness issues. As of May 1, 2007, the 4th quarter 2006 PM_{2.5} data has not submitted to AIRS-AQS and cannot be evaluated for completeness. This data was due to AQS on April 1, 2007. A review of the 2005 PM_{2.5} data revealed that four of the 12 samplers (33%) operating within the state did not satisfy the data completeness summary criteria for comparison to the annual standard. This is an increase from 27% incompleteness in 2004.

A review of the 2006 PM₁₀ data revealed four of 11 samplers (36%) operating within the state did not satisfy the data completeness summary criteria for comparison to the annual standard. This is an increase from 9% of the PM₁₀ samplers reporting incomplete data in 2005. A concerted effort needs to be made to improve PM_{2.5} and PM₁₀ monitoring data completeness.

All ambient air quality data are required to be submitted to the AIRS-AQS database within 90 days after the calendar quarter in which it was collected. Currently this reporting requirement is not always being met. (Reference 40 CFR Part 58, Section 58.35).

An Annual State Air Monitoring Report, containing an annual summary of all ambient air quality monitoring data collected must be submitted by July 1 of each year for data collected from January 1 to December 31 of the previous year. To date the Annual State Air Monitoring Report has been received in a timely manner. (Reference: 40 CFR Part 58, Section 58.26)

Quality Assurance/Quality Control

NDEQ, DCHD and LLCHD's quality assurance programs, including the required Quality Assurance Project Plans (QAPP's) and Standard Operating Procedures (SOP's) are complete and in approved status. However, several local agency SOP's need to be updated. Currently, all three agencies operate under NDEQ's QAPP for the pollutants which they monitor. The DCHD developed and is following their own set of SOP's for the pollutants and instruments they operate. At this time, their SO₂ SOP is in need of updating to reflect equipment and procedural changes. The LLCHD is currently updating pollutant and equipment SOP's.

Quality Control measures, in which independent audits are conducted with independent equipment by independent personnel, are being performed as required in each monitoring agency's network, with the exception of LLCHD's continuous gaseous network. While equipment audits are being conducted, they are not demonstrating a level of independence as required by 40 CFR, Part 58, Appendix A.

Summary of Findings

Commendations

Douglas County Health Department:

1. All sites maintained and operated by the DCHD Air Monitoring Program were clean, well maintained and in overall good condition.
2. All site personnel were gracious, professional and knowledgeable about the equipment at each site as well as the overall site condition.
3. All sites operated by the DCHD, currently meet the siting criteria in 40 CFR 58, Appendix E.
4. Quality Control forms and documentation are well improved since the 2003 Technical Systems Audit.
5. Site log books are well maintained.

Lincoln Lancaster County Health Department:

1. All monitors operated by LLCHD passed the performance audits conducted during the TSA.
2. Air monitoring technician was gracious, professional and well versed in all aspects of air monitoring.
3. All sites operated by LLCHD were clean, well maintained and currently meet the siting criteria set forth in 40 CFR Part 58 Appendix E.
4. Quality Assurance and Quality Control documentation as well as site and equipment log books are well maintained.

Nebraska Department of Environmental Quality:

1. NDEQ has developed an excellent database for PM_{2.5} and PM₁₀ monitoring.
2. All monitors operated by NDEQ passed the performance audits conducted during the TSA.
3. Air monitoring personnel were gracious, professional and well versed in all aspects of air monitoring.
4. NDEQ has provided outstanding work output with only two full time employees.
5. NDEQ personnel have development of self-sufficient state of the art solar site in Weeping Water, NE.

Recommendations

Douglas County Health Department:

1. Data invalidation criteria on Quality Control forms should be changed from 25% to 15%. (Reference: Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part 1, Section 12)
2. A signed copy of the most current approved QAAP for all criteria pollutants should be available for review.
3. Mass flow controllers for CO and SO₂ monitors should be calibrated every quarter.
4. The PM_{2.5} speciation audit form should include the name of the auditor.
5. The most recent network review document should be available for review.
6. The temperature recorder charts in monitoring shelters should be changed weekly. These are 7 day charts and currently they are being allowed to overlap. If shelter temperatures outside the operating range of the equipment occur, it is not possible

- to document when the excessive temperatures occurred unless the charts are changed every 7 days.
7. The Sulfur Dioxide Standard Operating Procedure needs to be updated to reflect changes in the calibration procedure. DCHD has transitioned from using permeation tubes to using gas dilution to calibrate SO₂ instruments. Currently the SOP still contains the permeation calibration procedure.
 8. The R&P TEOM Standard Operating Procedures, developed by NDEQ, should be followed by DCHD. Specifically, in reference to where instrument flows are taken.
 9. Data Handling Procedures for all pollutants should be developed.

Responses

1. **Response: Recommendations 2, 6 – 9:** NDEQ will be addressing these items in the next state-local workplan agreement.
EPA Response: Noted.

Lincoln Lancaster County Health Department:

1. Standard Operating Procedures for the operation of a Carbon Monoxide site and an Ozone site need to be reviewed and revised to describe in detail the method for operation, analysis, or action with thoroughly prescribed techniques and steps for performing certain routine or repetitive tasks. (Reference: Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part 1, Ambient Air Quality Monitoring Program Quality System Development, EPA-454-R-98-0004, August 1998, Section 5 & 9).
2. The operating temperature range of most air pollution analyzers without experiencing excessive drifts are from 20° C to 30° C. Currently the temperature at the Davey ozone site (AQS ID 31-109-0016) is uncontrolled and allowed to exceed these parameters. In order to maintain the measurement method's FRM equivalent status, the ozone instrument at the Davey site must be located in a controlled temperature environment. A 24-hour temperature recorder is recommended for this site. (Reference: Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part 1, Ambient Air Quality Monitoring Program Quality System Development, EPA-454-R-98-0004, August 1998, Section 7.1)
3. Craig Schainost is planning to retire in July 2007. Replacement personnel with knowledge of all aspects of the LLCHD Air Program duties and procedures are needed to take over Mr. Schainost's duties.
4. Ozone transfer photometers should be certified against a primary standard on a quarterly basis. (Reference: Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part 1)

5. A multi-point calibration is considered valid when all points are within 2% of full scale of the best-fit straight line. This linear regression requirement should be included on the Carbon Monoxide calibration form.
6. In order to validate data which has been collected, a Level 1 span and zero should be performed, prior to each major repair or maintenance procedure.
7. A signed copy of the Quality Assurance Project Plan, for all criteria pollutants, should be available for review.
8. Site identification forms with vital data about each monitoring site including maps and pictures should be developed and kept at the LLCHD offices. (Reference: Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Part 1, Ambient Air Quality Monitoring Program Quality System Development, EPA-454-R-98-0004, August 1998, Section 5).
9. To ensure quality data, all carbon monoxide and ozone audits should be performed by an independent auditor with independent equipment. (Reference: 40 CFR Part 58, Appendix

Responses

1. **Response: Recommendations 1, 6 – 8:** NDEQ will be addressing these items in the next state-local workplan agreement.
EPA Response: Noted.
2. **Response: Recommendation 2:** Since the audit was conducted, NDEQ provided LLCHD with an enclosure for the ozone analyzer at Davey that should address this issue.
EPA Response: Noted

Nebraska Department of Environmental Quality:

1. All ambient air quality data should be submitted to the AIRS-AQS database within 90 days after the calendar quarter in which it was collected. Currently this reporting requirement is not always being met. (Reference 40 CFR Part 58, 58.35).
2. Data Completeness is essential in determining if the NAAQS are being met. A concerted effort should be made to ensure that the quarterly 75% data completeness for particulate matter is being met. (Reference: 40 CFR Part 50, Appendix K and Appendix N and grant workplan requirements)
3. In order to prevent data loss, maintenance schedules should be developed for PM2.5 and PM10 samplers.

4. The design flow rate calculation should be included on PM10 and PM2.5 flow audit forms.
5. Ensure all PM2.5 and PM10 samplers are calibrated on an annual basis. (Reference 40 CFR Part 58, Appendix A).
6. Site forms with all pertinent information regarding siting criteria should be developed and kept at a location at the NDEQ offices. All sites should be evaluated to meet siting criteria on an annual basis or as needed. (Reference: 40 CFR Part 58, Appendix E).
7. Data handling procedure for all criteria pollutants should be developed and followed.
8. NDEQ should develop a performance audit plan for DCHD and LLCHD for ozone, carbon monoxide, sulfur dioxide, PM10 and PM2.5. A technical systems audit on each of the local agencies and the Nebraska State Health Laboratory should be done on a bi-annual basis or as needed.
9. The Nebraska State Health Laboratory should perform quarterly standard balance verifications. Currently they verifications are being performed on a semi-annually basis.

Responses

1. **Response: Recommendation 1:** NDEQ agrees that according to 40 CFR Part 58, data is to be submitted within 90 days after the calendar quarter in which it was collected. To our knowledge, this data submittal deadline was missed once. A contributing factor to the missed deadline was the extended medical absence of the employee responsible for data submittal. When a small staff is utilized and there are no back ups available in the system, deadlines will occasionally be missed when such unforeseen circumstances arise.
EPA Response: Noted.
2. **Response: Recommendation 2:** Although the PM2.5 data completeness for 2005 was a disappointing 33%, the report fails to indicate that was brought up to 20% for 2006. While not where we would like our network to be, this was a marked improvement over the 2005 numbers. What this statistic fails to show is the majority of this downtime is major problems with the monitors. When viewed from quarterly basis we had 75% data completeness in 42 of 52 quarters in 2004 (81%), 41 of 48 quarters in 2005 (85%) and 38 out of 40 quarters in 2006 (95%). Although we don't review data capture from a quarterly basis, this statistic shows the poor data capture is not from poor day to day operation, but problems getting malfunctioning monitors back on line.

The same is reflected for the PM10 monitors. In 2004, 38 quarters out of 40 (combined all monitors) did meet the completeness criteria for 95% capture. In 2005, all quarters met 100% capture. In 2006, 41 of 44 quarters met the completeness criteria of 93% capture. Of primary concern to NDEQ with meeting 75% capture at 90% of the monitors is our low number of monitors coupled with the distance to reach those monitors. There is almost 500 miles spanning our monitors. The distance factor is magnified because of the age of our equipment. Older equipment tends to breakdown more frequently. Although having a structured preventive maintenance schedule may help some, it will not prevent significant equipment malfunction.

EPA Response: Noted.

3. **Response: Recommendation 3:** A maintenance schedule is being developed. However data loss is generally attributed to monitor malfunctions, which may be helped by preventive maintenance but it will not eliminate loss.

EPA Response: Noted.

4. **Response: Recommendation 9:** EPA indicated that the State lab “should perform quarterly standard balance verifications”. According to the *Quality Assurance Handbook for Air Pollution Measurement Systems Volume II: Part 1, Appendix 3*, the balance should be audited once per year. It is possible there is some semantic confusion over the difference between an audit and verification; however, the guidance document mentions only the audit and nothing else regarding the balance.

EPA Response: Noted.

Follow Up Assessment:

A follow up assessment by staff from EPA Region 7 is proposed for fall of 2007 to document and verify the implementation of the aforementioned recommendations.

PART II

Lincoln Lancaster County Health Department

CHAPTER VII – LLCHD EMISSIONS INVENTORY

INTRODUCTION

The Lincoln Lancaster County Health Department's (LLCHD) emission inventory program was chosen for an onsite evaluation as part of the NDEQ 2007 Program Review. The primary components assessed during this review include LLCHD's emissions data collection and quality assurance process, data completeness as it pertains to data elements required to be reported by 40 CFR Part 51 - Consolidated Emissions Reporting Rule (CERR), and data accuracy and representativeness. Also, the NDEQ conducted an audit of LLCHD's emission inventory program. The findings report from this audit is found in Appendix B-10.

Emission Inventory Data Collection and Quality Assurance

In general, emissions data is collected in the following manner:

1. EIQs are mailed to sources on January 1st of each year and are due back on March 31st of each year.
2. EIQs are customized for each source and the data collected is based on information found in each source's permit. (Appendix F-1) The data collected in the EIQs, if applicable to that source, can include the following: annual throughputs or activity data, control equipment used, control efficiencies, fuel sulfur content and fuel ash content. However, sources may also report throughput, emissions or both. If the source reports both, on a source by source basis, the decision is made to review the source's calculations, if those are provided. EIQs are updated upon permit renewal or as the source's construction permit changes.
3. All emissions data is kept in an excel workbook which contains a spreadsheet for each source (Appendix F-2). Throughput, activity or emissions data, whichever is applicable, are then entered into each source's spreadsheet. The previous year's spreadsheet is used as a starting point. This is done to be able to easily identify unreasonable emissions changes from one year to the next. This workbook also includes a sheet where the total emissions by sources are summarized.
4. If errors are found in the EIQ, LLCHD EI staff contacts the source and notifies them of the errors. Corrections are then manually made in the EIQ and initialed to identify who made the correction.
5. If applicable, the data is prepared for NEI submittal by transferring it into the NEI input format (NIF) by manually entering it into the following access database: LLCHD P2Aq.mdb.

Finally, 5 EIQs were reviewed to verify the representativeness of the source's data within the NEI. Our findings are as follows:

1. Emissions data were accurately reported
2. Some data elements as prescribed by the CERR were not reported to the NEI (Appendix F-3)

Summary of Findings

Commendations

1. We commend the LLCHD for their efforts to expand their emission inventory program by taking the lead in mobile emissions modeling within their jurisdiction in addition to submitting area source emissions data to the NEI for Lincoln Lancaster County. In addition, LLCHD is the only reporting agency within the state of Nebraska to perform mobile emissions modeling.

Recommendations

1. Emission Inventory Questionnaires:
 - a. LLCHD does not use standard EIQs to collect emissions data. LLCHD customizes forms for each facility which does not allow for flexibility in reporting. We recommend that LLCHD develop standard EIQs that allow for reporting of new processes that may have come into operation after the issuance of the permit and thus may not be reflected in the permit.

Response: Our air source inspectors permit writers, and emission inventory personnel have excellent working relationships with our many regulated sources. As a result, we are acutely aware of the processes at our many regulated facilities. Due to this fact, any facility modifications that have taken place are documented very quickly, and we can quickly adjust each source's EIQ to fit their modified operating scenario. Facility representatives are required to contact the LLCHD in the event that they add a process to their facility, so in most cases, we know about the process changes before they are implemented.

EPA Response: LLCHD's response is noted, however, EPA continues to believe that EIQs should be developed. EPA will work with the LLCHD on this issue.

- b. The EIQs do not collect all the data elements required by 40 CFR Part 51. When the data is going to be submitted to the NEI, some of these data elements are extracted from the source's permit. Permits may not always be representative of the actual operations for a particular year; therefore, we recommend that LLCHD expand their EIQs to include all the data elements required to be reported by the CERR.

Response: We are not completely familiar with what data elements are required for the CERR, but are working to improve our understanding in this area. We would greatly appreciate the assistance of the EPA to help us broaden our understanding of the CERR. In addition, while the permits may not always reflect the facility's operations for the entire year, the EIQ's represent the facility's operations quite well.

EPA Response: EPA will work with the LLCHD to improve their understanding of the CERR data elements. Also, please refer to Table 2A of 40 CFR 51, Subpart A for a complete list of data elements.

- c. Sources are not consistent in how they report their emissions data, in part due to the customization of the EIQs. Sources may report emissions data, throughput data or both. Enough information should be collected to allow LLCHD verify emission calculations, as necessary.

Response: The reason for inconsistency lies within the fact that some sources report throughputs rather than emissions. Their emissions are derived directly from their facility throughput so to report both would result in redundancy, as the facilities will be utilizing the same calculations that we do to determine source emissions. Likewise, some sources choose to submit only their emissions data. Their emissions are calculated using formulas that are included with their permit applications. Again, it would become a practice in redundancy to request both throughputs and emissions data, as both the facility representatives and the LLCHD would utilize identical means to reach the emission figures.

EPA Response: EPA's comment stands. For quality assurance purposes, both data elements should be collected. EPA and the NDEQ will address this issue through the development of LLCHD's emission inventory quality assurance project plan (QAPP).

In summary, EPA recommends that LLCHD develop standard EIQ forms to be used by all sources. The EIQs should in the minimum collect the data elements required by 40 CFR part 51 and should allow flexibility for new processes, not found in the permit, to be added as emission sources.

Response: In summary, we feel as though our hands-on, active knowledge of the changing nature of our regulated facilities allows us to collect extremely accurate data. We feel as though a more generalized, non-specific EIQ would only lead to greater confusion on behalf of the source, and would produce a less efficient means to conduct the annual Emission Inventory.

EPA Response: EPA and the NDEQ will work with LLCHD to address concerns through the development of the LLCHD's QAPP.

2. LLCHD does not have or operate under an approved quality assurance project plan. A QAPP serves as the foundation of a technically defensible emission inventory. A QAPP must be developed to be reviewed and approved by NDEQ and EPA emission inventory staff. EPA and NDEQ will work with the LLCHD to address this issue.

Response: We are in the process of developing a Quality Assurance Project Plan. We will work with the EPA and NDEQ once we have completed the draft.

EPA Response: Noted.

3. We commend LLCHD's efforts to submit a mobile emissions inventory for Lincoln Lancaster County. Although a thorough review of this topic was not possible due to time constraints, it was observed that LLCHD does not have a methods document for mobile source inventory development. EPA recommends that a methods document be created to be able to evaluate inventory development and to ensure consistency. In addition, EPA will work with LLCHD staff to conduct a more thorough review of the mobile emission inventory development to ensure accurate methods are being used.

Response: We are unsure what would be included or required in this methods document, but would appreciate any assistance that the EPA could provide in this matter.

EPA Response: Noted.

4. We commend LLCHD for their efforts in submitting area source emissions data. We recommend that a methods document be developed for the area source categories that are addressed by the program. This will ensure that consistent methodologies are used in future area sources emission inventory development efforts.

Response: We are unsure what would be included or required in this methods document, but would appreciate any assistance that the EPA could provide in this matter.

EPA Response: Noted

5. LLCHD does not collect all the data elements that must be reported to EPA per 40 CFR Part 51 – Consolidated Emissions Reporting Rule. EPA recommends that all data elements be collected. (Appendix F-3)

Response: As previously mentioned, we are still not completely familiar with the requirements of the CERR, but as our familiarity increases, we will work to make sure all required data elements are collected.

EPA Response: EPA will work with the LLCHD to improve their understanding of the CERR data elements and that the collection of these data elements is implemented in a timely manner. Also, please refer to Table 2A of 40 CFR 51, Subpart A for a complete list of data elements.

6. LLCHD does not submit all the data elements that must be reported to the NEI per 40 CFR Part 51 – Consolidated Emissions Reporting Rule. EPA recommends that all data elements be submitted.

Response: As previously mentioned, we are still not completely familiar with the requirements of the CERR, but as our familiarity increases, we will work to make sure all required data elements are collected.

EPA Response: EPA will work with the LLCHD to improve their understanding of the CERR data elements and that the collection and reporting of these data elements is implemented in a timely manner. Also, please refer to Table 2A of 40 CFR 51, Subpart A for a complete list of data elements.

7. We recommend that LLCHD consider taking advantage of using the Integrated Information System (IIS) to store their data. The NDEQ uses the IIS to store their air permits and emissions data. The use of the IIS may facilitate data storage, data entry and data transmittal to the NEI.

Response: We will gladly explore any options that allow for a more efficient system of data entry, storage, and transmittal.

EPA Response: Noted

CHAPTER VIII– LLCHD PERMITS REVIEW

INTRODUCTION

On February 14-16, 2007, U.S. Environmental Protection Agency, Region 7 (EPA) performed a local air permit program review of the Lincoln-Lancaster County Health Department (LLCHD), located in Lincoln, Nebraska. The review was conducted in part to fulfill a regional office commitment with U.S. EPA Headquarters to perform an annual comprehensive review of at least one state or local agency permitting program, and in part, to satisfy EPA Region 7's policy on periodic review of state and local programs. The overall scope of the review focused on the LLCHD Title V air permitting program which has been delegated to the local air permitting authority. Additionally, the program was reviewed for interaction of the Title V permitting activities with the new source review (NSR) program, synthetic minor permitting, new source performance standards (NSPS), national emission standards for hazardous air pollutants (NESHAP), maximum achievable control technology (MACT), and establishment of enforceable permit conditions.

The EPA air permit program review team was comprised of Tamara Freeman, Jon Knodel, Patricia Scott and Bob Webber. The program review was opened with comments from the LLCHD and the EPA review teams which included EPA staff from the permits and compliance and enforcement programs. During the air permit program review, the permits team discussed a number of program elements with the program managers and concluded the review with a brief exit interview. The exit interview provided an opportunity for EPA to highlight some of the major findings of the review and allowed opportunity for LLCHD comments and responses. The air permits team appreciates the cooperation shown by the permitting authority during our visit.

The EPA initiated its review process with LLCHD through a teleconference on December 5, 2006, followed by written correspondence on December 19, 2006, that was coordinated with the various EPA programs participating in the air program review. Additional e-mails were sent on December 8, 2006, February 1, 2007 and February 5, 2007. Included with the correspondence were questionnaires requesting specific detailed information regarding the Title V and NSR program permitting activities. The LLCHD provided a timely and comprehensive response for each request.

The EPA team reviewed 10 Title V and four NSR source files. Initial and renewal operating permit and application files were evaluated and select NSR construction permits issued within the past three years were reviewed. The major findings, including both commendations and program enhancements are described in summary of findings of this report. The list of source files reviewed are found in Appendix G-1; specific details/comments for each review are in table format in Appendix G-2, and a matrix showing the timeliness of renewal applications and renewal permit issuance are described in more detail in Appendix G-3. Appendix G-4 contains the list of NSR project permits issued during 2004 – 2006. Lastly, Appendices G-5 and G-6

contain the Title V and NSR self-evaluation questionnaires, respectively, that were completed by the LLCHD.

Since LLCHD manages its own approved Title V operating permit program, EPA is responsible for oversight of its activities. The LLCHD has a limited number of Title V sources; therefore, the air permits review team was able to review most all active Title V source files with additional reviews of four NSR source files. The NSR source files were selected based upon the type of construction projects permitted over the past three years and/or the nature of business conducted at the source. Given the file selection criteria, our findings should be representative of LLCHD's air permitting program.

The LLCHD has issued one PSD permit; however, the review team did not evaluate their PSD program in any substance since we evaluate and comment on PSD projects in real time as they are issued. Additionally, LLCHD does not evaluate environmental justice during the pre-construction permitting or operating permitting process; therefore, information regarding that aspect of the program was not available for review.

Summary of Findings

We encourage the reader not to over-emphasize or compare the number of strengths to the number of areas for recommended enhancements or the breadth of discussion in this section. Overall, strengths outweighed areas for improvement and the basis for these recommendations requires a more comprehensive analysis. The recommended program enhancements for additional strengthening of the LLCHD air permit program are generally ranked in order from greatest priority to moderate priority.

Commendations

1. The LLCHD's electronic file storage system seems to be fairly extensive, and they consider it to be their official file. The staff could quickly locate and retrieve requested documents from the system.
2. It was evident that the Title V permit incorporates the requirements from the construction permit. The LLCHD's practice of attaching a copy of the construction permit to the operating permit in the appendix is a positive practice. It was also noted that LLCHD has a good understanding and use of the MACT and NSPS requirements.
3. During the review, the permit team observed that LLCHD used post-it notes in the permit files on specific sections of the permit that needs to be updated. This practice assures that update requirements are not omitted during the renewal/modification permitting process.

4. The review team found no evidence that LLCHD is issuing pre-construction waivers or using variances to allow a source to construct prior to obtaining a permit.
5. Interviews with management and the files reviewed by the permitting team provided evidence that LLCHD is using public notices for their Title V and NSR permits.
6. During the review, discussions with LLCHD air permitting staff revealed that, when available, air modeling and/or air quality analysis had been obtained from NDEQ prior to construction of NSR sources located in the area under LLCHD's permitting authority.

Recommendations

1. The review team observed that some of the more recently issued Title V permits contained compliance assurance monitoring (CAM) discussions or a section in the application addressing the application of CAM. We recommend that LLCHD continue working with the sources to educate them regarding the need for a CAM plan to be submitted with the application or if CAM does not apply to the source, the source needs to demonstrate that CAM is not applicable to their emissions units. The LLCHD may improve their applications by updating the specific section that is currently used to address CAM requirements. Such a section may be set up as a flowchart/decision tree to be included with the operating permit application. Use of a flowchart will assist the sources and LLCHD with the CAM applicability determinations.

Response: LLCHD will work with each of the sources to determine whether a CAM Plan is necessary for their facility. If a CAM rule is not applicable according to the source, LLCHD will require an explanation. LLCHD will update the section of the Title V permit that deals with CAM requirements, and we may implement a flow chart/decision tree for CAM applicability determinations.

EPA Response: Noted.

2. The review team observed that the effective date of the permit was not the same date the permit was signed. Currently, it appears that LLCHD adjusts the effective date of the permit to match the start of the next calendar quarter, so all the reporting and record keeping requirements will coincide with calendar quarter dates. Our concern is that the permit sits idle during this time, calling into question whether the source has an effective Title V permit or not. The better way to synchronize the reporting and recordkeeping requirements to a calendar quarter basis is to state in the permit that these requirements begin immediately, but that the first reporting period begins at the end of the quarter in which the permit is issued. While the period of time may not correspond to a full quarter, this shorter reporting period does not really matter. From there on, the source

would be in synch with the calendar quarter scheme preferred by LLCHD. Therefore, we recommend that LLCHD use the signature date as the effective date of the permit.

Response: LLCHD will change its procedure so that the signature date is the same as the effective permit.

EPA Response: Noted.

3. The LLCHD's permit files could be enhanced by including additional documents such as copies of e-mails or telephone conversation records with the source and with EPA. Our recommendation for LLCHD is to develop a check list to include with each file to note when tasks have been completed and which documents are placed in the file. Since LLCHD considers their electronic files to be their official file and relies heavily upon their electronic filing system, final documents should note issue dates and signatures. This step may be accomplished through scanned files of the original signed and dated document. If document scanning is not available to LLCHD, another protocol could be established to document date and signature of final issued documents.

Response: LLCHD will strive to develop a checklist for each file to note when tasks have been completed and to identify which documents are placed in the file.

EPA Response: Noted.

4. During the review, the permit team observed some renewal applications that had been submitted less than six months prior to the expiration of the permit. We recommend that LLCHD issue warning letters or take enforcement action when the sources do not comply with the Part 70 application requirements.

Response: LLCHD will issue warning letters or will take enforcement action when sources do not comply with Part 70 application requirements.

EPA Response: Noted.

5. We observed that several permits were not issued within 18 months of the submittal of the application. We recommend that efforts be made to identify causes for delays and a plan be developed to expedite the issuance of the permits in a timely manner. Our observations suggest that possible delays are due to a need for improved application forms and instructions to assist the sources in submitting more complete application information. These improvements should lead LLCHD to issuing the renewal permits in a more timely manner. The LLCHD should consider making use of their website for posting instructions and forms and inform sources of the resources at their website.

Response: LLCHD is now dealing only with renewal applications and it is believed that no further delays will be encountered.

EPA Response: Noted.

6. The review team observed that most of the Title V permits did not include the required credible evidence language found at Article 2, Section 34(H). The credible evidence language is an applicable requirement and must be included in its entirety in each Title V permit. We recommend that LLCHD edit their Title V permit template to include all five subsections of Article 2, Section 34(H).

Response: The Credible Evidence rule is now being included in all Title V permit renewals and will be included in a future renewals.

EPA Response: Noted.

7. During the review, it was noted that the Title V permits included language that indicated LLCHD was attempting to correct or change pre-construction permit requirements during the Title V permitting process. If conditions in a pre-construction permit need to be changed, both permits should be drafted/amended and placed on public notice at the same time for public review and comment. This process will allow both permits to be in agreement for specific terms and conditions stated therein.

Response: All pre-construction permit changes will be public noticed and any conditions noted in an operating permit will be consistent with those in an applicable construction permit.

EPA Response: Noted.

8. Throughout our review, we discovered that a statement of basis had most always been prepared. However, we recommend that these support documents be enhanced during the renewal phase to add a detailed explanation of the parameters under which the source is operating. The statement of basis should explain the provisions included in the permit and may explain reason for omitting other provision that might only appear to be applicable to the source or process. This document is intended to provide EPA, the source, and other interested parties with information used by the permitting authority to explain their decision of requirements to include or exclude during the permit drafting process.

Response: A statement of basis is now always prepared for all operating and construction permits. LLCHD will strive to fully explain the provisions of each permit and reasons for omitting any other provisions that might only appear to be applicable to the source or process.

EPA Response: Noted.

9. As information technology becomes more advanced and the public expectations are raised, we would like to see the LLCHD enhance its use of the internet and the department's website to make its permitting activity more publicly accessible. Many permitting authorities now make both draft and final permits available on line, along with associated deadlines for hearings, petitions, and public comment periods. In the near term, we anticipate many state and local permitting authorities will also begin to post permit applications on their websites. We encourage the LLCHD to explore options for making this information available via the internet.

Response: On line information technology is currently being reviewed and LLCHD will strive to incorporate this capability into the program.

EPA Response: Noted.

Follow Up

We recommend that the LLCHD undertake an effort over the next two years to focus on the top four program enhancements. As appropriate, the LLCHD may re-prioritize the list to concentrate on those areas most critical to the continuing success of the permitting program.

CHAPTER IX – LLCHD COMPLIANCE AND ENFORCEMENT

INTRODUCTION

The Lincoln/Lancaster County Health Department, Lincoln, Nebraska, (LLCHD) was delegated Title V enforcement authority in 1995. LLCHD is organized into several divisions. The Air Quality Branch is in the Division of Environmental Health. The Environmental Quality Section includes an Air Quality, Waste Management and Water Quality subsection. Staff in the Air Quality Section includes five engineers, one health specialist, one public health educator, senior office assistant and supervisor. An organization chart is attached.

The Nebraska Department of Environmental Quality (NDEQ) has an interagency agreement with the LLCHD which defines the roles and responsibility of the partnership. The NDEQ also has a workplan agreement with the LLCHD. The workplan reflects the priorities that are included in the NDEQ/EPA workplan.

The NDEQ audits the LLCHD on a rotating annual basis. The NDEQ meets with the LLCHD each year for coordination and oversight purposes. It also has routine, bimonthly conference calls to discuss inspection and enforcement activities.

Federal section 105 funds are passed through the NDEQ to the LLCHD. The LLCHD provides matching funds in support of the Federal grant to the State. The LLCHD does not receive any State funds.

METHODOLOGY OF REVIEW

Prior to meeting with the LLCHD, several elements were developed to assist in the review. An Evaluation questionnaire of State/Local Air Quality Compliance and Enforcement Activities was provided to LLCHD two months prior to the review. This questionnaire with responses is found in Appendix H-1 for this Section. A list of source files to be reviewed were sent to LLCHD approximately 10 days prior to the review to allow LLCHD time to gather the file information at one central location. A total of 10 files were reviewed. The sites were randomly selected in the areas of jurisdiction to the City, primarily County 109, which is Lincoln and Lancaster Counties. The sources selected were facilities that were classified as major sources and Synthetic Minor 80 (SM-80) which had a full compliance evaluation (FCE) during FY06. The sources were subject to significant Clean Air Act requirements such as NSPS, NESHAP, MACT, or PSD. The following files were reviewed:

Lincoln, Nebraska 07 Program Review Enforcement and Compliance File List

Title V Sources

Source Name	City	AFS ID #	MACT Subpart
Yankee Hill Brick	Lincoln	31-109-00002	
Megellan Pipeline	Lincoln	31-109-00004	
Goodyear Tire & Rubber	Lincoln	31-109-00019	
Square D Company	Lincoln	31-109-00088	

SM Sources

Source Name	City	AFS ID #	MACT Subpart
Deeter Foundry, Inc.	Lincoln	31-109-00016	
General Dynamics	Lincoln	31-109-00041	M Subpart not listed in AFS
Dodson Brothers Construction	Lincoln	31-109-00126	
Pfizer Animal Health	Lincoln	31-109-00134	

Retrievals were pulled from the AFS database to assist in the selection of sources for the file review, as well as to provide full compliance evaluations and enforcement activities for each facility.

The focus of the review covered the time period starting with FY 06 through the date of the review. A checklist was developed by EPA to consistently review each file. The checklist was completed for each file reviewed by EPA. A copy of the checklist is included in Appendix D-3.

OVERVIEW OF LLCHD'S COMPLIANCE AND ENFORCEMENT PROGRAM

The Air Quality Division of the LLCHD regulates the Air Compliance Program for the LLCHD. The Air Quality Division consists of an Air Quality Manager, inspectors, data management and clerical positions for a total of 1.17 FTEs. The Air Managers, inspectors, clerical and data management personnel have 51 years of total experience.

LLCHD inspects all Title V sources on an annual basis. SM-80 sources are scheduled for inspection on a two years basis, but most are inspected annually. The number is reflected in the FCEs pulled as 14 Title V inspection. Twelve SM80 out of 17 were inspected in FY06. LLCHD defines Title V as a source with permitted potential greater than 100 tons for criteria pollutant/10 tons for any one HAP or 25 tons for all

HAPS combined. Synthetic minor (SM-80) sources are source that have the potential to emit to be Title V sources, but have taken limits in their operating or construction permits to remain below the Title V thresholds. The current universe of sources in LLCHD is as follows:

Total Number of Sources Regulated	111
Major Title V	14
SM-80	14
Minor	82

The AFS data listed 15 Title V sources. However, one of these facilities has not yet been issued a Title V permit at this time. The AFS data listed 17 SM-80 sources. In reviewing the list, the classification of several of the facilities had changed to as true minor. With this information, the numbers are consistent with the AFS database retrieval. These facility changes will be entered in AFS to update the data system.

Inspection Procedures

The Air Quality Section is responsible for carrying out inspection and compliance activities. The Air Quality Manager identifies the inspection schedule for a two year period in the Air Quality Compliance Monitoring and Inspection Schedule (CMS). A full compliance evaluation is conducted at a minimum of once every two year at all Title V major sources and once every five years at synthetic minor sources that emit or have the potential to emit at or above 80 percent of the Title V major source threshold. The LLCHD meets EPA's full compliance evaluation coverage for both majors and synthetic minor 80% sources and far exceeds national averages. The region believes the inspection coverage is consistent with regional expectations and national goals.

Typically, most site visits occur as a result of routine, program-specific, compliance inspections. These can involve extensive advance preparation, including review of program protocols, applicable statutory and regulatory requirements, facility permit, files, documents, or other relevant information. If the inspection has documented a violation, a Letter of Warning (LOW) or Notice of Violations (NOV) is sent to the owner, operator, or registered agent, in charge of the violating facility.

Enforcement Procedures

The Air Compliance Section may discover violations in a variety of ways, including, but not limited to compliance inspections, reports, complaint investigations, and referral from other law enforcement officials, follow-up inspections, and reviews of submitted documents. Once violations have been detected, they are documented in an inspection report or memorandum as soon as possible. When violations do occur, LLCHD may seek a voluntary return to compliance through informal means or seek formal enforcement. Depending on the type of violations, one or more of the following actions and enforcement mechanisms may be pursued:

Voluntary Compliance
Letters of Warning
Notice of Violation
Permit Denial, Revocation, or Modification
Administrative Order
Consent Orders, Agreement, Stipulations
Injunctive Relief
Referral to EPA
Joint State/EPA Enforcement
SEP

Civil penalties for violations of the Lincoln-Lancaster County Air Pollution Control Program Regulations and Standards are assessed according to established procedures (See attached *Civil Penalty Calculation of Costs Policy*. The policy, which was updated on January 11, 2005, ensures that the following:

1. Penalties are assessed in a fair and consistent manner,
2. Penalties are appropriate to the circumstances of the violation,
3. Economic benefits or incentives to noncompliance are removed,
4. Penalties are sufficient in severity to deter further noncompliance by the violator;
5. A return to compliance and resolution of air pollution problems are achieved quickly;
6. Violators are treated fairly and equitable; and
7. Public health and environmental risks are properly weighed in relation to possible economic hardship to the regulated community.

After a source has been cited for a violation of the regulations and standards and the source's response has been considered, and a final determination is made that a violation occurred, the principal staff member involved with the case, the Environmental Health Supervisor, and the Manager of the Environmental Health Division will jointly determine whether to recommend the assessment of a civil penalty for consideration by the Health Director.

All Major, Synthetic Minor (SM), National Source Performance Standards (NSPS), and MACT sources which are issued an NOV or LOW are copied to EPA. .

Data Management

1. The Air Facility System (AFS) is the national information database for State-EPA communications of compliance determinations and agency compliance activity at major stationary source of air pollution. All states and regions must report and track certain core information pertaining to air facilities. Since this information is available to the public, every effort is made to ensure that the information is accurate. In July 2006, the "Air Facility System (AFS) Business Rules Compendium" Section 1, identified current minimum data reporting (MDR) for agencies authorized with delegation of the CAA.

LLCHD is a direct user of AFS. Minimum data elements, including inspections and Title V Certifications are entered monthly by LLCHD into the AFS.

Summary of Findings

General Findings

LLCHD is implementing a comprehensive air compliance program

Coordination between Permit and Compliance staffs is good.

LLCHD did an excellent job in filling out the responses to the questionnaire.

LLCHD continually cooperates on air inspection and issues.

Program Review Observations

1. Utilization of a comprehensive inspection checklist, showing applicability requirements, results in completeness and consistency in inspections.
2. Inspection reports are completed in a timely fashion. There is an average of 60 days for report to get back to facility.
3. LLCHD has a proactive relationship with sources resulting in a higher rate of compliance. Several facilities selected for performance track.
4. Data entered directly in AFS enhances the program. Data quality is consistent in the IIS and AFS regarding Title V, SM-80 and certifications reviewed;
5. Specific coding areas were discussed for clarification; including MACT subpart and SM80 to TV classification, and penalty on the correct action. Suggest staff to attend the AFS training this spring/summer.
6. Cooperation in inspection targeting.
7. The state meets EPA's full compliance evaluation coverage for both majors and synthetic minor 80% sources and far exceeds national averages. The region believes the inspection coverage is consistent with regional expectations and national goals;
8. Formal enforcement utilized as shown in AFS data retrieval.
9. Penalty policy and SEPS used in computation of penalty.
10. LLCHD takes timely and appropriate enforcement actions, in accordance with policy. Enforcement on HPVs were well within the 270 day timeframe ;

11. Continue to insure that all NOV's and LOW's for major, SM, NSPS and MACT sources are forwarded to EPA.
12. The state is reporting Title V self-certifications in the data system.
13. The number of sources in "automatic unknown" compliance status (16) is a relatively small percentage of the overall universe of sources. This is also a good indicator of state inspection coverage;

Specific File Review Comments

8 files reviewed:

Consistency was found in the inspection reports reviewed. EPA has the following comments on the files reviewed:

General Dynamic – Unclear from inspection report which MACT subpart was applicable.

Dobson, Deeter. – File did not contain the cover letter back to the facility on the most recent inspection reports.

Deeter – Inspection indicated a leak in the south access door of baghouse. There was no indication as to whether there was follow-up on any repairs.

Yankee Hill Brick – High Priority Violator which was resolved well within the 270 days required by the HPV policy. Penalty calculation was not part of the general files. (Penalty calculations were provided to EPA upon request)

Several inspections in the file were not signed. A signed copy should be copied for the file

Recommendations:

1. Staff are encouraged to attend the AFS training in KC in July.

Response: Lori Cook is scheduled to attend the AFS training in September.

EPA Response: Noted.

2. Staff is encouraged to provide data which results in reclassification to the data manager as soon as practicable.

Response: Staff is now providing data which results in re-classification to the data manager.

EPA Response: Noted.

3. Penalty amounts need to be entered on the correct action type to ensure that Headquarter data pulls accurately reflect the penalty amounts.

Response: Penalty amounts are now entered on the correct action type.

EPA Response: Noted.

4. Include all applicable requirements in the inspection report, especially any MACT;

Response: All applicable requirements are now included in inspection reports.

EPA Response: Noted.

5. All enforcement documentation, including penalty calculations should be part of the file. This complete documentation will provide a flow and process for others to follow in the future;

Response: Enforcement documentation including penalty calculations are included in the source file.

EPA Response: Noted.

6. Inspection cover letter back to the facility need to be part of the record. Also a “signed” copy of the inspection reports should be in the file;

Response: LLCHD will ensure that all inspection cover letters and a signed copy of the report will be included in each source file.

EPA Response: Noted.

7. LLCHD needs to document all applicable requirements in the inspection report, include MACTs.

PART III

Omaha Air Quality Control

CHAPTER X – OAQC EMISSIONS INVENTORY

INTRODUCTION

The Omaha Air Quality Control (OAQC) emission inventory program was chosen for an onsite evaluation as part of the NDEQ 2007 Program Review. The primary components assessed during this review include the OAQC's emissions data collection and quality assurance process, data completeness as it pertains to data elements required to be reported by 40 CFR Part 51 - CERR, and data accuracy and representativeness. Also, the NDEQ conducted an audit of the OAQC's emission inventory program. The findings report from this audit is found in Appendix B-12.

Emission Inventory Data Collection and Quality Assurance

In an effort to streamline their emissions data collection process and to minimize reporting errors, the OAQC has created an electronic emission inventory questionnaire (EIQ) (Appendix G-1). The electronic EIQs are currently used by all sources within the Agency's jurisdiction to report their emissions. OAQC staff has found that this format has facilitated the source's reporting as well as minimized the reporting errors previously encountered. In general, emissions data is collected in the following manner:

1. EIQs are customized and pre-filled for each source by OAQC staff. Pre-filled information includes, but is not limited to facility contact and address information, and static data such as process information (description, source classification code, process IDs, etc), pollutant codes, emission factors and emission factor units, stack parameters, source coordinates, etc. Information for each EIQ is obtained from the source's permit. The data that is considered static by the emission inventory personnel is only accessible for modification to OAQC staff. This serves as a good quality assurance measure because it ensures that the correct static parameters, such as emissions factors, are used when calculating emissions.
2. EIQs are emailed to each source on January 1st of each year and are due on March 31st of each year.
3. Each source is responsible for reviewing and updating facility contact information, as necessary, and for reporting material parameter data such as annual throughputs. If a source has made modifications that has changed some of the processes reported in the EIQ, the source is supposed to contact OAQC EI staff and notify them of this change. Upon notification, OAQC EI staff updates the EIQ to reflect the actual emission sources in the facility. Updates to the format of the EIQ and therefore to emission points, controls and emission factors are made when permit revisions are made.

4. Once throughput information is entered, the EIQ auto-calculates and auto-fills emission data. This is a good quality assurance step because it avoids manual calculation errors.
5. Each source then emails their completed forms to OAQC emission inventory staff and mails a signed copy of Form 1.0 which includes the emissions statement for each source.
6. Upon receipt of the EIQ, the data is reviewed for completeness and accuracy.
7. Emissions data is then manually entered into OAQC's *SourceList.mdb* access database. As data is being entered, emissions for that year are compared to emissions from previous years. If large discrepancies are noticed, research is done to learn about the reason for the change, ensure that the change in emissions are valid and acceptable or to correct the EIQ, whichever is applicable. Also, trends in emissions increases are noted. If a source is approaching potential to emit (PTE), the source is notified that they may need to get a Title V permit if they expect to exceed their PTE. This is a good quality assurance measure because it ensures that unreasonable changes in emissions are addressed appropriately.
8. Once the EIQ is approved, it is printed and located in the source's file.
9. If there is a requirement to submit data for a particular source to EPA's NEI, the emissions data are manually entered into the NIF for future submittal. Data entry into both databases is done simultaneously to minimize data entry errors.

As noted previously, there are a number of proactive rather than reactive quality assurance steps in OAQC's emissions data collection process. For instance, EIQs are pre-filled with data found in the source's permit, pre-filled information pertinent to emissions calculations, with exception of activity data, are protected and emissions data are auto-calculated by the EIQ. In addition, the OAQC EI staff reviews data for representativeness upon receipt and during data entry to ensure that emissions are within a reasonable range and to verify that they have not exceeded their potential to emit. If large discrepancies are noted, action is taken to either confirm the reported emissions or correct the information submitted. Also, full audits of emissions inventory are performed during facility inspections to ensure the accuracy of data collection and reporting.

Finally, 5 EIQs were reviewed to verify the representativeness of the source's data within the NEI. Our findings are as follows:

1. Emissions data were accurately reported
2. There were discrepancies between the geographic coordinates found in the 2002 NEI and those reported in the EIQs reviewed.
3. Some data elements as prescribed by the CERR were not reported to the NEI (Appendix G-2)

Summary of Findings

Commendations

1. EPA Region 7 commends the OAQC for their efforts to improve their emission inventory program. OAQC has implemented changes in their emissions data collection efforts that have allowed them to streamline the process while adding some quality assurance steps.

Recommendations

1. Although pre-filling EIQs and protecting certain information in the EIQ could serve as a good quality assurance measure for the reasons mentioned above, the EIQs are not flexible to allow for the addition of new processes that have come into operation after the issuance of the permit. EPA recommends that the EIQs allow for the addition of new information that is not found in the permit.

Response: New information will either be due to additional materials for mass balance calculations, or the addition of new equipment. By having our staff modify the EIQ, we double check for the accuracy of the calculations. If the change needs to be made due to the introduction of new equipment, information should come through the construction permit process. If they have new equipment, for which a construction permit has not been applied, this gives us the opportunity to help and educate them as to the requirements.

EPA Response: Noted.

2. The OAQC does not collect all the data elements that must be reported to EPA per 40 CFR Part 51 – Consolidated Emissions Reporting Rule. EPA recommends that all data elements be collected. (Appendix G-2)

Response: The State NDEQ prepares the CERR submittal for area, nonroad, onroad, and biogenic sources. At this time the level of detail that we collect is representative of the year's emissions. As such, we don't collect daily throughput, any seasonal throughput, hourly throughput, start times, days/week in operation, or weeks/year in operation.

EPA Response: Noted.

3. The OAQC does not submit all the data elements to the NEI that must be reported to EPA per 40 CFR Part 51 – Consolidated Emissions Reporting Rule due to their position on confidential business information (CBI).(Appendix G-2) EPA does not consider the data elements required to be reported by the CERR CBI. We recommend that OAQC submit all the data elements required by the CERR.

Response: The structure of the NEI Input Format (NIF) limits the amount of information that can be submitted. The hierarchy of NIF 3.0 creates records that combine “required” fields of CBI information with data elements that can be reported. 40 CFR § 51.15(d) states that the data collected under this regulation to be considered in the public domain and does not treat the information as confidential. Based upon 40 CFR § 2, we do not submit throughputs from sources that have declared the information to be confidential.

EPA Response: EPA will work with the OAQC to solve any differences in opinion regarding the interpretation of CERR data elements as CBI.

4. The OAQC practices a number of quality assurance steps to ensure EI data is reliable and accurate, however the program does not have an approved emission inventory QAPP. OAQC has created a QA document where the NDEQ’s EI QAPP is adopted with exceptions. EPA believes that there are elements within NDEQ’s QAPP that cannot be adopted by the OAQC and that were not adequately addressed in the OAQC’s QA document (Appendices H-3 OAQC QA document and H-4 NDEQ QAPP); therefore, EPA believes that it is not adequate for the OAQC to adopt the NDEQ’s EI QAPP. A QAPP must be developed to be reviewed and approved by NDEQ and EPA emission inventory staff. EPA and NDEQ will work with the OAQC to address this issue.

Response: We discussed our Quality Assurance Project Plan methodology with the NDEQ and were unaware that it is unsatisfactory and doesn’t meet their expectations. We will work with the EPA and NDEQ to resolve this issue.

EPA Response: Noted.

5. Geographic coordinates reported in the 2002 NEI did not correspond to those found in EIQs reviewed. Through the NEI’s quality assurance process, the Office of Air Quality and Standards may have found these to be erroneous and may have replaced these coordinates. The OAQC should verify the correct coordinates and correct either their database or submit correct coordinates through the next cycle of the NEI.

Response: The source for the geographic coordinates that we used when generating our 2002 EIQ is no longer available. We plan to review and update these for all sources using hand held GPS units.

EPA Response: Noted.

6. It was found that the OAQC does not document changes and/or corrections made to the EIQs through their QA process. EPA recommends that a system to document these modifications be developed and implemented.

Response: We do archive old EIQ forms and keep all submittals. After submittals have been approved, they are saved electronically under a separate name in an associated folder as well as the hard copy (with signatures) in the source's file. Changes to applicable emission factors occur and are documented through the permitting process.

EPA Response: Noted.

CHAPTER XI – OAQC PERMITS REVIEW

INTRODUCTION

On February 12-14, 2007, U.S. Environmental Protection Agency, Region 7 (EPA) performed a local air permit program review of the Omaha Air Quality Control Division (OAQC), located in Omaha, Nebraska. The review was conducted in part to fulfill a regional office commitment with U.S. EPA Headquarters to perform an annual comprehensive review of at least one state or local agency permitting program, and in part, to satisfy EPA Region 7's policy on periodic review of state and local programs. The overall scope of the review focused on the OAQC Title V air permitting program which has been delegated to the local air permitting authority. Additionally, the program was reviewed for interaction of the Title V permitting activities with the new source review (NSR) program, synthetic minor permitting, new source performance standards (NSPS), national emission standards for hazardous air pollutants (NESHAP), maximum achievable control technology (MACT), and establishment of enforceable permit conditions.

The EPA air permit program review team was comprised of Tamara Freeman, Jon Knodel, Patricia Scott and Bob Webber. The program review was opened with comments from the OAQC and the EPA review teams which included EPA staff from the permits, compliance and enforcement, emissions inventories, and NESHAP/asbestos programs. During the air permit program review, the permits team discussed a number of program elements with the program managers and concluded the review with a brief exit interview. The exit interview provided an opportunity for EPA to highlight some of the major findings of the review and allowed opportunity for OAQC comments and responses. The air permits team appreciates the cooperation shown by the permitting authority during our visit.

The EPA initiated its review process with OAQC through a teleconference on December 5, 2006, followed by written correspondence on December 19, 2006, that was coordinated with the various EPA programs participating in the air program review. Additional e-mails were sent on December 8, 2006, January 29, 2007, February 1, 2007 and February 5, 2007. Included with the correspondence were questionnaires requesting specific detailed information regarding the Title V and NSR program permitting activities. The OAQC provided a timely and comprehensive response for each request.

The EPA team reviewed 14 Title V and four NSR source files. Initial and renewal operating permit and application files were evaluated, and select NSR construction permits issued within the past three years were reviewed. The major findings, including both commendations and program enhancements are described in the summary of findings of this report. The list of source files reviewed are found in Appendix J-1; specific details/comments for each review are in table format in Appendix J-2, and a matrix showing the timeliness of renewal applications and renewal permit issuance are described in more detail in Appendix J-3. Appendix J-4 contains the list of NSR project permits issued during 2004 – 2006. Lastly, Appendices J-5 and J-6 contain

the Title V and NSR self-evaluation questionnaires, respectively, that were completed by the OAQC.

Since OAQC manages its own approved Title V operating permit program, EPA is responsible for oversight of its activities. The OAQC has a limited number of Title V sources; therefore, the air permits review team was able to review most all active Title V source files with additional reviews of four NSR source files. The NSR source files were selected based upon the type of construction projects permitted over the past three years and/or the nature of business conducted at the source. Given the file selection criteria, our findings should be representative of OAQC's air permitting program.

The OAQC has not issued any PSD permits, therefore, the review team did not evaluate their PSD program. Likewise, OAQC does not evaluate environmental justice during the pre-construction permitting or operating permitting process; therefore, information regarding that aspect of the program was not available for review.

Summary of Findings

We encourage the reader not to over-emphasize or compare the number of strengths to the number of areas for recommended enhancements or the breadth of discussion in this section. Overall, strengths outweighed areas for improvement and the basis for these recommendations requires a more comprehensive analysis. The recommended program enhancements for additional strengthening of the OAQC air permit program are generally ranked in order from greatest priority to moderate priority.

Commendations

1. The OAQC shares the draft permit with the source prior to public notice. By working with the source during the permit drafting phase, the sources comments can be incorporated into the draft permit; thereby, leading to a more accurately drafted permit and expedite the permitting process.
2. The OAQC's electronic file storage system seems to be fairly extensive, and their plan to continue development of the system is a positive aspect of their air permitting program. The staff could quickly locate and retrieve requested documents from the system.
3. It was evident that OAQC notified the sources under their authority regarding upcoming application deadlines.
4. The review team found no evidence that OAQC is issuing pre-construction waivers or using variances to allow a source to construct prior to obtaining a permit.

5. All Class II operating permits and “synthetic” minor pre-construction permits included permit conditions and appropriate documentation to limit the source to “less than major source” status.
6. The files contained evidence that OAQC is using public notices for their Title V and NSR permits.

Recommendations

1. The OAQC’s permit files could include additional documents such as copies of e-mails or telephone conversation records with the source and with EPA. We recommend that OAQC develop a check list to include with each file to note when tasks have been completed and documents are placed in the file. Since OAQC relies heavily upon their electronic file system, final documents should note issue dates and signatures. This step may be accomplished through scanned files of the original signed and dated document. If document scanning is not available to OAQC, another protocol could be established to document date and signature of final issued documents.

Response: The City of Omaha is currently working to implement a program called “City Works”. As this becomes available to our division, we should be able to use this as an additional tool to help track these activities.

EPA Response: Noted.

2. Even though there were indications that OAQC notified the source of nearing Title V renewal application deadlines, the review team noted a pattern that the renewal application were being submitted on or very near the application deadline. It was also noted that in many instances, additional information was required to constitute a complete application. We recommend that OAQC issue completeness letters to the source. Since our onsite review and closing comments, we have been contacted by OAQC with additional information regarding their schedule of planned source notification for renewal notices. Past schedules allowed for renewal application notices to be sent at 12-months and 6-months prior to permit expiration. The updated schedule outlines renewal application notices to be sent at 19-months, 12-months and 9-months prior to permit expiration. Additionally, phone calls will be placed as needed to track permit application status. We recommend that OAQC adopts the planned notification schedule and include it with any other standard operating procedures that it has developed.

Response: We will begin issuing letters of completeness to the sources after we have received and completed our initial review of the application. As noted, we have adopted a renewal notification schedule to contact sources 19 months, twelve months, and 9 months prior to their permit expiration date.

EPA Response: Noted.

3. During the review, the permit team observed several renewal applications that had been submitted less than six months prior to the expiration of the permit. We recommend that OAQC issue warning letters or take enforcement action when the sources do not comply with the Part 70 application requirements.

Response: We will issue warning letters and take enforcement action when Part 70 application requirements are not met.

EPA Response: Noted.

4. The permit review team discovered that there are nine in-house renewal applications that OAQC is processing. A considerable number of these renewal permits have passed the permitting authority's 18-month required timeline for issuance. We recommend that OAQC review their application forms and instructions to assist the sources in submitting more complete application information which will lead OAQC to issuing the renewal permits in a more timely manner. OAQC should consider using their website for posting instructions and forms and inform sources of the resources at their website.

Response: We are working to reduce the backlog of permit applications. We are also working to get the various forms and instructions on the website.

EPA Response: Noted.

5. The permit review team discovered one initial Title V application that was submitted in June 1997, and the permit still has not been issued. We recommend that OAQC apply a concentrated effort to issue the Kellogg USA, Inc. initial Title V permit as soon as possible.

Response: The Kellogg permit is being addressed; a draft permit should be issued by the end of October 2007.

EPA Response: Noted.

6. Another area for strengthening the Title V permit program is to give more attention to CAM requirements. The renewal applications and current initial application need to address CAM with either a CAM plan or the source should demonstrate that CAM is not applicable to any emission units at the source. We recommend that OAQC develop a specific section of the application to address CAM requirements. Since our onsite review, OAQC has submitted a draft flowchart/ decision tree to include with their operating permit application that will assist the sources with their CAM applicability determinations. We encourage OAQC to implement the form and make edits/improvements to it as such becomes apparent.

Response: As noted above, we are working to incorporate the Compliance Assurance Monitoring flowchart decision tree into the operating permit application.

EPA Response: Noted.

7. The review team observed that the Title V permits did not include the credible evidence language found at Omaha Municipal Code, Section 41-2, Chapter 34.008. The credible evidence language is an applicable requirement and must be included in its entirety in each Title V permit. We recommend that OAQC edit their Title V permit template to include all five subsections of OMC, Section 41-2, Chapter 34.008.

Response: The credible evidence language has been incorporated verbatim into our operating permits.

EPA Response: Noted.

8. During the review, we did not discover any evidence that air modeling or air quality analysis had been conducted prior to construction of NSR sources located in the area under OAQC's permitting authority.

Response: We have not done air modeling in the past; future instances will be carefully reviewed to determine whether modeling is warranted.

EPA Response: Noted.

9. During the review, we observed that in some instances the statement for the origin of and authority for the condition was identified as a "state requirement." The origin of and authority for each condition should clearly cite the Omaha code, or state that it is a local, state, and federal requirement. Stating that it is a "state requirement" is misleading and may be misinterpreted to mean the condition is a "state-only requirement."

Response: We have modified our citations to reflect more succinctly the origin and authority of each condition.

EPA Response: Noted.

10. Throughout our review, we discovered a statement of basis had most always been prepared. We recommend that these support documents be enhanced during the renewal phase to add a detailed explanation of the parameters under which the source is operating. The statement of basis should explain the provisions included in the permit and may explain reason for omitting other provision that might only appear to be applicable to the source or process. The statement of basis is

intended to provide EPA, the source, and other interested parties with information used by the permitting authority to explain their decision of requirements to include or exclude during the permit drafting process.

Response: The statement of basis for future permits will attempt to more clearly explain the various options or operational parameters that have been considered during development of the operating permit.

EPA Response: Noted.

11. As information technology becomes more advanced and the public expectations are raised, we recommend that OAQC enhance its use of the internet and the department's website to make its permitting activities more publicly accessible. Many permitting authorities now make both draft and final permits available on line, along with associated deadlines for hearings, petitions, and public comment periods. In the near term, we anticipate many state and local permitting authorities will also begin to post permit applications on their websites. We encourage the OAQC to explore options for making this information available via the internet.

Response: We are working to get the various forms and instructions of our program on the website. Our goal is to make maximum use of current technology to the extent possible.

EPA Response: Noted.

Follow Up

We recommend that the OAQC undertake an effort over the next two years to focus on the top four program enhancements. As appropriate, the OAQC may re-prioritize the list to concentrate on those areas most critical to the continuing success of the permitting program.

CHAPTER XII - OAQC COMPLIANCE AND ENFORCEMENT

INTRODUCTION

The City of Omaha (the City) was delegated Title V Clean Air Act (CAA) enforcement authority in 1995. The City implements the program in the Omaha Public Works Department. The staff implementing the CAA program are housed at the Missouri River Wastewater Treatment Plant. The Nebraska Department of Environmental Quality (NDEQ) implemented an interagency agreement with the City of Omaha in 1989. The agreement defines the roles and responsibility of the partnership. The NDEQ also has a workplan agreement with the City of Omaha which document FY 06/07 activities. The workplan reflects the priorities that are included in the NDEQ/EPA workplan. .

The NDEQ audits the City of Omaha on a rotating annual basis. A copy of the most recent workplans, audits, and agreements are included in the EPA Program Review file. The NDEQ meets with the City of Omaha for coordination and oversight purposes. It also has routine, bimonthly conference calls to discuss inspection and enforcement activities.

Federal section 105 funds are passed through the NDEQ to the City of Omaha. The City of Omaha provides 40% matching funds in support of the Federal grant to the State. The City of Omaha does not receive any State funds.

METHODOLOGY OF REVIEW

Prior to meeting with the City of Omaha, several elements were developed to assist in the review. An evaluation questionnaire of State/Local Air Quality Compliance and Enforcement Activities was provided to The City two months prior to the review. This questionnaire is found in the Appendix K-1 for this Section. A list of source files to be reviewed were sent to the City approximately 10 days prior to the review to allow the City time to gather the file information at one central location. A total of 10 files were reviewed. The sites were randomly selected in the areas of jurisdiction to the City, primarily Count 055 or Douglas County. The sources selected were mainly facilities that were classified as Title V Major Sources and Synthetic Minor and which had a full compliance evaluation during FY06. The City defines Title V as a source with permitted potential greater than 100 tons for criteria pollutant/10 tons for any one HAP or 25 tons for all HAPS combined. Synthetic minor (SM-80) sources are source that have the potential to emit to be Title V sources, but have taken limits in their operating or construction permits to remain below the Title V thresholds. Some of the sources were also which were subject to significant Clean Air Act requirements such as NSPS, NESHAP, MACT, or PSD. The following files were reviewed:

Omaha, Nebraska 07 Program Review Enforcement and Compliance File List

Title V Sources

Source Name	City	AFS ID #	MACT Subpart
OPPD North Omaha Power Station	Omaha	31-055-00002	
Connectivity Solutions	Omaha	31-055-00004	M Subpart PPPP, DDDDD
Kellogg USA Inc.	Omaha	31-055-00061	
Epsen Hillmer Graphics	Omaha	31-055-00201	
Bemis Co	Omaha	31-055-00056	

SM Sources

Source Name	City	AFS ID #	MACT Subpart
Lozier Corporation West Plant	Omaha	31-055-00009	M Subpart not listed in AFS
Alegent-Immanuel	Omaha	31-055-00036	
LBT Inc.	Omaha	31-055-00093	
Weyerhaeuser Paper Co	Omaha	31-055-000157	
Mud Liquid Propane Gas Storage	Omaha	31-055-000165	

Data retrievals were pulled from the AFS database to assist in the selection of sources for the file review, as well as to provide full compliance evaluations and enforcement activities for each facility.

The focus of the review covered the time period starting with FY 06 through the date of the review. A checklist was developed by EPA to consistently review each file. The checklist was completed for each file reviewed by EPA. A copy of the checklist is included in Appendix D-3.

OVERVIEW OF OMAHA'S ENFORCEMENT PROGRAM

The Air Quality Division of the City of Omaha regulates the Air Compliance Program for the City of Omaha. The Air Quality Division consists of an Air Quality Manager, inspectors and data management positions for a total of 1.5 FTEs. The Air

Manager and inspectors have 23 years of total experience and the data management position has 6 years of experience.

The City inspects all Title V sources on an annual basis. SM-80 sources are scheduled for inspection on a two years basis, but most are also inspected annually. The City defines Title V as a source with permitted potential greater than 100 tons for criteria pollutant/10 tons for any one HAP or 25 tons for all HAPS combined. Synthetic minor (SM-80) sources are source that have the potential to be Title V sources, but have taken limits in their operating or construction permits to remain below the Title V thresholds. The current universe of sources in the City is as follows:

Total Number of Sources Regulated	60
Major Title V	17
SM-80	40
Minor	3

The AFS retrieval listed 19 facilities in the Title V universe and 45 facilities in the SM-80 universe. In reviewing the list of facilities, the extra facilities were outside the Douglas County limits. That area is outside the authority of the City of Omaha. Therefore, the numbers are consistent with the AFS database retrieval.

Inspection Procedures

The Air Quality Section is responsible for carrying out inspection and compliance activities. The Air Quality Manager identifies the inspection schedule for a two year period in the Air Quality Compliance Monitoring and Inspection Schedule (CMS). A full compliance evaluation is conducted at a minimum of once every two year at all Title V major sources and once every five years at synthetic minor sources that emit or have the potential to emit at or above 80 percent of the Title V major source threshold. The City of Omaha was meeting the goal of 100% inspection of Title V sources every two years and the goal inspection of SM-80 facilities every five years. The AFS data retrieval also indicated that 17 compliance certifications had been received during FY06. This is consistent with the number of Title V sources that the City has authority for.

Typically, most site visits occur as a result of routine, program-specific, compliance inspections. These can involve extensive advance preparation, including review of program protocols, applicable statutory and regulatory requirements, facility permit, files, documents, or other relevant information.

Enforcement Procedures

The City of Omaha has adopted the State's Enforcement Manual of January 2002. The Air Compliance Section may discover violations in a variety of ways, including, but not limited to compliance inspections, complaint investigations, and referral from other law enforcement officials, follow-up inspections, and reviews of submitted documents. Once violations have been detected, they are documented in an inspection report or

memorandum as soon as possible while the facts are still fresh. When violations do occur, the City may seek a voluntary return to compliance through informal means or seek formal enforcement by referring the matter to the Legal Division. Depending on the type of violations, one or more of the following actions and enforcement mechanisms may be pursued:

Voluntary Compliance
Letters of Warning (LOW)
Notice of Violation (NOV)
Permit Denial, Revocation, or Modification
Administrative Order
Consent Orders, Agreement, Stipulations
Injunctive Relief
Referral to EPA
Joint State/EPA Enforcement

All Major, Synthetic Minor (SM), National Source Performance Standards (NSPS), and MACT sources which are issued an NOV or LOW are copied to EPA. The City has not issued a CAA enforcement action. The City was encouraged to issue NOV or LOW when needed.

Data Management

The Air Facility System (AFS) is the national information database for State-EPA communications of compliance determinations and agency compliance activity at major stationary source of air pollution. All states and regions must report and track certain core information pertaining to air facilities. Since this information is available to the public, every effort is made to ensure that the information is accurate. In July 2006, the “Air Facility System (AFS) Business Rules Compendium” Section 1, identifies current minimum data reporting (MDR) for agencies authorized with delegation of the CAA. Minimum data elements are directly entered by the City directly into the State Integrated Information System (IIS). The City updates the IIS on the 8th day of each month. The NDEQ then uploads data from the IIS to AFS on the 15th of each month.

Summary of Findings

General Findings

The most significant areas of improvement communicated to the City at the closeout meeting on February 13, 2006 were:

Program Review Observations

1. Inspection reports completed in a timely fashion; usually to facility in less than 1 month;
2. The City uses a comprehensive inspection checklist;

3. The state meets EPA's full compliance evaluation coverage for both majors and synthetic minor 80% sources and far exceeds national averages. The region believes the inspection coverage is consistent with regional expectations and national goals;
4. The state is reporting Title V self-certifications in the data system.
5. The number of sources in "automatic unknown" compliance status (16) is a relatively small percentage of the overall universe of sources. This is also a good indicator of state inspection coverage;
6. Proactive relationship with sources has resulted in higher compliance rates.
7. Data quality consistent in the IIS and AFS regarding Title V, SM-80 and certifications reviewed;
8. Cooperation between the City and EPA in inspection targeting. Communication issue with Bemis when the City inspected the facility one month prior to EPA;
9. Formal enforcement action encouraged, especially LOWs and NOVs;

Specific File Review Comments

Lozier- Connectivity - More detail needed on applicable requirements, specifically MACT. It is difficult to determine from the inspection report which MACT is applicable to the facility.

MUD – 2003 inspection was found in non compliance for failure to permit two boilers. The inspection report indicates that MUD should apply for a permit modification for the new boilers. It was not clear from the files how or when the boilers were permitted, if necessary.

Kellogg – Applicability check for PSD, NSR or MACT, but not explanation of what the facility is subject to.

OPPD – Date of facility inspection should vary. It was noted that inspections in 03, 04, 05 and 06 were all done on September 27. During the close out, the City indicated this may have been a computer issue.

Recommendations

1. Staff are encouraged to attend the AFS training in KC in May. While the City uses the IIS it would benefit staff to become familiar with the AFS system.

Response: Omaha Air Quality Control will evaluate resources and funding available for sending someone to the upcoming AFS training.

EPA Response: Noted

2. Include all applicable requirements in the inspection report, especially any MACT.

Response: Specifically: Lozier's has become a synthetic minor, to opt out of the MACT. The each individual MACT is review to see if there is an area MACT

requirement during permitting. OAQC will work on the inspection documentation to assure that it is clearer which regulations do /don't apply.

EPA Response: Noted.

3. Promote enforcement action where needed. While the City has a proactive relationship with sources, CAA violations should be documented by either an NOV or LOW. No violations were determined through inspections during the review period.

Response: OAQC follows the Nebraska Enforcement Manual. This manual sets out three steps in enforcement:

- Request for voluntary Compliance,
- Letter of Warning,
- Notice of Violation,

Typically OAQC follows these steps, unless, as outlined in the manual, the violation is egregious or deliberate. OAQC will work to formalize the Request for Voluntary Compliance steps customarily used by our inspection staff with first offenders.

EPA Response: Noted.

CHAPTER XIII - ASBESTOS

INTRODUCTION

In accord with a Memorandum of Agreement with the NDEQ, the Omaha Air Quality Control (OAQC) Division implements a fully-delegated asbestos NESHAP program pursuant to 40 CFR Part 61, Subpart M. The program is responsible for notifications, inspections, enforcement case development, outreach, and data management. Few enforcement penalty actions are pursued; however, OAQC puts forth a commendable effort to ensure that regulated entities achieve and maintain compliance with the applicable requirements. The staff evidences an excellent knowledge of the regulations and can perform inspections within asbestos abatement containment areas when necessary. The asbestos files are well indexed and organized, and included adequate documentation to support the one penalty enforcement action which was reviewed. OAQC should consider developing a specific enforcement response/penalty policy for asbestos NESHAP violations.

OAQC's responses to the self-evaluation questionnaire can be found in Appendix L.

PROGRAM OPERATION

1. Non-notifiers

On a weekly basis, OAQC receives a report from the Omaha Permits and Inspections Division (P&I) indicating what demolition permits have been issued. If a facility shows up on the list for which a NESHAP notification has not been received, OAQC will investigate the potential non-notifier. OAQC has worked extensively with P&I to increase awareness of the NESHAP requirements; consequently, the number of non-notifiers has decreased.

Non-notifiers are also revealed through citizen complaints and from field staff observation of demolition projects in conjunction with other on-going field activities.

2. Enforcement Response Policy

OAQC does not have a specific penalty policy for asbestos violations. Generally, a notice of warning is issued for first-time violators and less egregious violations, whereas penalties are sought for recalcitrant or repeat violators of work practice requirements. Penalty determinations consider both gravity of the violation and economic benefit. Timely and appropriate asbestos enforcement actions are issued in accord with the Nebraska Enforcement Manual, January 2002. OAQC can levy a maximum penalty of \$10,000 per day, per violation. OAQC works

effectively with NDEQ and Nebraska Health and Human Services System (NHHS), and participates in joint enforcement actions with those agencies as appropriate. EPA recommends that OAQC develop an asbestos NESHAP enforcement response/penalty policy. Such a policy would benefit the regulated community and would minimize the perception that penalties are established arbitrarily.

3. Education and Outreach

OAQC realizes the value of education and outreach and has developed several products to support that goal:

Improper NESHAP submittal Warning Form
Asbestos Regulation Checklist for Demolitions
Omaha's Residential Asbestos Shingles – Requirements
What Do I Need to do to Renovate a Building?
What Do I Need to do to Wreck a Structure?
OAQC Asbestos Guidance – notification requirement and the residential exemption

OAQC has worked extensively with P&I to ensure that the need for asbestos NESHAP compliance is understood when building demolition permits are issued.

4. NESHAP Category I nonfriable floor covering

OAQC agrees with EPA policy with regard to the removal of Category 1 nonfriable floor covering. If the material is in good condition, and is removed in significantly whole pieces, the removal is not considered a regulated project. For friable floor tile removal projects, OAQC levies a fee of 15 cents per square foot with a minimum charge of \$50 and a maximum of \$5000.

5. Policy Determinations

OAQC utilizes EPA's Applicability Determination Index (ADI), and maintains electronic copies of any policy-related correspondence issued or received.

DATA MANAGEMENT

Since 2001, OAQC has maintained its asbestos data using Microsoft Access. The data system is not compatible with those of NDEQ and NHHS; however, lack of compatibility has not been an issue with program implementation. OAQC submits to NDEQ a quarterly summary report of

asbestos program activity. To date, no data have been purged from the system, but this could happen in the future if warranted by storage constraints.

FILE REVIEW

Review of OAQC's files revealed that few enforcement penalty actions are pursued; however, OAQC puts forth a commendable effort to ensure that regulated entities achieve and maintain compliance with the applicable requirements. OAQC conducts an inspection of each asbestos abatement contractor at least once per year; and, overall, strives to inspect 20 percent of the sites for which notifications are received. The staff evidences an excellent knowledge of the regulations and can perform inspections within asbestos abatement containment areas when necessary. The asbestos files were well indexed and organized, and included adequate documentation to support the one penalty enforcement action which was reviewed. Generally, digital photographs taken during field investigations are stored separately from the enforcement case files.

Summary of Findings

1. Develop a specific enforcement response/penalty policy for asbestos NESHAP violations.

Response:

Omaha Air Quality Control Asbestos enforcement history

The following is list of the formal enforcement actions taken by OAQC. There are many outreach and education opportunities that we take in connection with or P & I Department, as outlined in you Program review. We believe that the minimum # of repeat violations shows that our program is effective, also please note that repeat offenders are usually stepped from a LOW to a NOV.

2001

NOV	Mc Gill Asbestos
LOW	Fager Excavating

2002

LOW	Anderson Excavating
NOV	Fager Excavating
LOW	Pink Excavating
LOW	Henry Doorly Zoo
NOV	Henry Doorly Zoo
RFVC	City County Building Com
LOW	Heimes Excavating
LOW	Health Trac
LOW	Home – One

2003

LOW	Ayar & Ayar
LOW	Demcon
NOV	Demcon
LOW	Christensen Excavating
LOW	Lund Management

	LOW	Nebraska Dirtwork & Demo
	LOW	Roth Grading
	LOW	Protasky Grading
	RfVC	Double Tree
2004		
	LOW	Bellevue Quality Roofing
	LOW	Hawkins Construction
	NOV	Investment Property Res
2005		
	LOW	Taylor Excavating
2006		
	LOW	CMT Enterprises
	LOW	D. Emerson
	LOW	East Contracting
	LOW	Hansen Truck
	LOW	J Miller
	LOW	Nebraska Dirt Work
	LOW	SFI Limited
	RfVC	Sutherlands / Murante
	LOW	Prairie Lane Assn
	LOW	Prairie Construction
2007		
	LOW	Double D Excavating

EPA Response: Noted