



Kansas Department of Health and Environment

AIR PROGRAM REVIEW

REPORT

December 1, 2006

Conducted by the
U.S. Environmental Protection Agency
Region 7
901 North 5th Street
Kansas City, KS 66101

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ACRONYMS

ACTS – Asbestos Contractor Tracking System
AFS – Aerometric Facility Data System
ADI – Applicability Determinations Index
APCO – Air Permitting and Compliance Branch
APDB – Air Planning and Development Branch
BAR – Bureau of Air and Radiation
BEFS – Bureau of Environmental Field Services
CAA – Clean Air Act
CAIR – Clean Air Interstate Rule
CAP – Compliance Advisory Panel
CFR – Code of Federal Regulations
CMS – Compliance Monitoring Strategy
CO – Carbon Monoxide
FFY – Federal Fiscal Year
EIU – Emission Inventory Unit
EPA – Environmental Protection Agency
ESD – Environmental Services Division
FCE – Full Compliance Evaluation
FO – Field Office
HAPS – Hazardous Air Pollutants
HPV – High Priority Violator
KDHE – Kansas Department of Health and the Environment
KSU – Kansas State University
ICMS– Inventory, Compliance and Monitoring Section
IPP – Inventory Preparation Plan
LOA – Letter of Agreement
MACT – Maximum Achievable Control Technology
MDR – Minimum Data Requirement
NAAQS – National Ambient Air Quality Standards
NARS – National Asbestos Registry System database
NH3 - Ammonia
NEI – National Emissions Inventory
NESHAP – National Emission Standards for Hazardous Air Pollutants
NIST – National Institute for Standards and Technology
NOIA – Notice of Intended Action
NON – Notice of Non-compliance
NOV – Notice of Violation
NO2 –Nitrogen oxide
NPAP – National Performance Audit Program
NSPS – New Source Performance Standards
O3 – Carbon monoxide
P&A – Precision and Accuracy
PM – Particulate Matter
PSD – Prevention of Significant Deterioration
PTE – Potential to Emit

QAPP – Quality Assurance Project Plan
SBAP – Small Business Assistance Program
SBEAP – Small Business Environmental Assessment Program
SBTCP – Small Business Stationary Source Technical and Compliance Assistance Program
SFY – State Fiscal Year
SGF – State General Fund
SIP – State Implementation Plan
SLAMS – State and Local Air Monitoring Station
SO2 – Sulfur dioxide
SOP – Standard Operating Procedure
SRF – State Review Framework
VOP – Voluntary Operating Permits

CHAPTER 1

EXECUTIVE SUMMARY

Introduction

The following summarizes results from the U.S. Environmental Protection Agency (EPA) program review of the Bureau of Air and Radiation (BAR) of the Kansas Department of Health and Environment (KDHE). The program review took place during March and April of 2006. The exit interview was conducted on November 6, 2006. The agenda, attendees, and EPA notes will be located in Attachment F. The Executive Summary is divided into sections, each applying to a major program area and addresses EPA's findings.

PLANNING

The regulatory portion of the review focuses on two areas: 1) the State Regulatory Process and, 2) Federal requirements for the State Regulatory Process.

Regulatory Development

For this portion of the Program Review, the Air Monitoring and Planning Director, Tom Gross, and Environmental Specialist, Ralph Kiefer, of KDHE were interviewed.

The majority of the funding for KDHE comes from 20/20 (fees). Since State and Federal priorities are not always the same, many of the State Implementation Plans (SIPs) and rules fall under economic scrutiny which causes significant delays at the state level. Rules are reviewed in detail for environmental impact and financial analysis. These analyses, coupled with a legislative environmental committee that consists primarily of members from the agricultural committee who are not familiar with environmental issues, may cause further delays.

Rules were previously assigned to a member of BAR staff. Due to the volume of incoming rules KDHE developed a "rules by committee" approach that involves a group of BAR employees. These actions, coupled with personnel realignments, have improved the efficiency of the rulemaking process. EPA does have concerns with regard to rule tracking.

EPA Recommendation: Although KDHE has no control over their legislative rules process (i.e., the Legislative Environmental Committee), we recommend that they continue to track rules as they proceed outside the BAR.

KDHE Response:

BAR will continue to track any relevant rules as they progress through the legislative process.

EPA has no further comments.

Grants and Work Plan Development

KDHE's air program priorities are budget driven. These priorities are incorporated into two work plans funded under the Clean Air Act (CAA). The section 103 and 105 two-year plans are updated semi-annually to include both state and EPA priorities. KDHE is also working on a comprehensive planning process known as the "Balanced Scorecard". With this approach, KDHE programs will be building measures to be included in the overall agency plan. These measures will be linked to the grant and the budget work plan to minimize unnecessary duplication. KDHE program managers also maintain priority outcomes for their sections or units, which may include activities, not covered by the section 105 work plan.

KDHE annually experiences conflicts due to contracts that cross over the state fiscal year (July 1st to June 30th) and the uncertainty of the congressional budget which starts with the Federal fiscal year (October 1st to September 30th). While KDHE acknowledges that EPA does not control congressional actions, a firm budget amount and timely schedule for the award process would be very beneficial.

EPA Recommendations: No recommendations are noted at this time.

Local Agency Coordination and Contract Analysis

KDHE administratively manages five contracts; Mid-America Regional Council (MARC), Johnson County Environmental Department, City of Wichita Department of Environmental Services, Shawnee County Health Agency and Unified Government of Wyandotte County-Kansas City, Kansas Health (Attachment A: Local Contracts). In managing the contracts, quarterly progress reports from the local agencies are reviewed. Funding is contingent upon a "pay for performance" policy. Local grantees must submit reports on the completed work elements to receive funding. KDHE has also adopted a continuous review process, in which annual audits of the local agencies with contracts are conducted on a rotating basis. One local agency is audited annually by KDHE, repeating every five years (see Attachment N for an example of a local audit report).

Wyandotte County was previously a grantee directly through EPA. At the beginning of fiscal year 2006, they were converted to pass-thru status with KDHE as a pilot. Shawnee and Johnson Counties also ceded their monitoring programs back to BAR at the start of the 2006 fiscal year.

EPA Recommendations: All contracts were found to be acceptable. No recommendations are noted at this time. KDHE and Wyandotte County are still transitioning into their newly formed partnership, but we anticipate that communication will improve as adjustments are made.

EPA and KDHE discussed the working relationship of the locals and state at the exit conference. Contract negotiations with the local governments were in their final stages. Future budget cuts, especially under section 103, may contribute to the difficulty during next years process.

EPA has no further comments.

Training

Each KDHE employee has training needs identified by section rather than by bureau. The training database (Attachment B: BAR Training Plan) is used by BAR to determine employees training needs. The source of funds for training varies with the funding mix associated with each employee. A list of training funded by section 105 funding is provided to EPA at the end of the federal fiscal year (FFY) by the KDHE training officer, but there is not a specific budget set aside for training.

KDHE holds quarterly meetings with the local governments and trainings as needed. During the quarterly Clean Air Advisory meetings, KDHE updates the agencies on draft regulations, fees, guidance documents, state and federal priorities, etc. K-State and KSU are also invited participate in the quarterly meetings (Attachment C: Clean Air Advisory Meetings).

Due to limited funding, KDHE struggles to provide all the training desired for employees. Training availability relies heavily on continued federal support.

EPA Recommendations: No recommendations are noted at this time.

During the Exit Conference, EPA revisited the option of KDHE utilizing the APTI On-line Training Courses and will look into providing training at the region office.

EPA has no further comments.

Emissions Inventory (EI)

KDHE does not complete a nonpoint or area source inventory for all area source categories, but they take steps to ensure that emissions calculated by EPA and reported in the National Emissions Inventory (NEI) are reasonable and acceptable. In some cases, KDHE will also prepare an inventory for area source categories for which they believe they have better surrogate information. Examples of source categories for which an inventory has been prepared by KDHE include residential wood combustion, pesticides, cutback asphalt, wildfires, etc.

EPA Recommendations: Chromium emission numbers submitted by Boeing have been high. EPA Recommends working with OAQPS and Boeing to resolve how these numbers are calculated, and make sure we have the correct numbers in State and EPA databases. Over-all, KDHE does a commendable job when building and quality assuring their emission inventory.

KDHE Response:

KDHE was contacted by Anne Pope, OAQPS, about an emission estimate of Chromium compounds from Boeing in the 2002 inventory year. BAR staff contacted Boeing and Spirit Aerosystems in August 2006 to discuss their reported Chromium emissions. It was determined that the emissions of strontium chromate were being over reported as a result of a very conservative emission calculation method. KDHE provided the corrected information to EPA OAQPS and EPA R7.

EPA has no further comments.

Modeling

The air dispersion modeling review was conducted with Dana Morris, of KDHE, who reviews permit applications. Since, several Prevention of Significant Deterioration (PSD) permit applications were previously evaluated, no additional permit applications were reviewed at this time. The newly approved AERMOD air dispersion model was used for the majority of the PSD applications. In most cases, the KDHE has provided the necessary meteorological data for the modeling.

The modeling of increment consuming sources was a concern in the last program review. Recent modeling for the Coffeyville Nitrogen Fertilizer Facility included a more complete increment analysis with all identified increment consuming sources in Kansas, Missouri, and Oklahoma included in the modeling.

EPA Recommendations: KDHE has the expertise to evaluate air dispersion modeling and should be encouraged to continue to review all permits to ensure that the conditions modeled are included as enforceable conditions in the permits. Special emphasis should be given to evaluating haul roads, increment consumption, and complex wind situations.

(See notes from exit conference)

EPA has no further comments.

Small Business Assistance Program

In the State of Kansas, the Small Business Environmental Assistance Program (SBEAP) includes the Ombudsman, the Compliance Advisory Panel (CAP) and the technical assistance staff. The technical assistance portion of the SBEAP is contracted with the Kansas State University's (KSU) Pollution Prevention Institute which provides information through telephone inquiries, web site, on-site assessments, workshops, seminars, brochures, manuals and a quarterly newsletter. The KDHE/KSU work plan and contract are renewed on an annual basis.

The structure of the program remains the same as the previous program review and no adverse findings were made.

EPA Recommendations: No recommendations were noted at this time.

PERMITTING

The overall scope of the permitting review focused on 1) synthetic minor permitting, 2) application of federal technology standards under the new source performance standards (NSPS), national emission standards for hazardous air pollutants (NESHAP), and maximum achievable control technology (MACT), 3) establishment of enforceable permit conditions, and, 4) the interaction between the Title V and new source review (NSR) programs.

The department runs a capable construction and operating permit programs. We found that all the projects reviewed completed the proper level of permitting with no major institutional gaps, although there are a number of recommendations the department could make that could greatly improve the enforceability of individual permits and the provenance of the permitting record.

EPA Recommendations: Overall strengths outweigh the recommendations. Areas for improvement are discussed in the following:

After reviewing several “synthetic minor” permits, EPA is concerned that federally-approved limits incorporated in the permit, including those from the new source performance standards and the state implementation plan were not sufficient, by themselves, to limit a source from major source review. The permit must clearly establish enforceable caps on emissions, along with the appropriate averaging period (e.g. 12-month), compliance true-up period (e.g. rolled monthly), detailed mass balance accounting procedures and associated testing, recordkeeping and reporting to validate compliance with the caps.

EPA has concerns that opportunities for public participation are inconsistent with the federally approved state implementation plan, K.A.R. 28-19-204(a), the underlying federal rules at 40 CFR 51.161 and the requirement to notice all permit projects.

We recommend that the department prepare summaries of permitting activities, particularly when issuing one or more permits as part of a larger project. These summaries, facts sheets, or statements of basis, helps to clarify decisions for future permitting activities and better explains the project being reviewed.

We recommend that KDHE create an enhanced paper trail either in the “project summary,” “engineering analysis,” or a memorandum to the file detailing why the current project is or is not part of any other permitting action occurring within the past 6-12 months.

Except for PSD permits, we recommend that the state develop a policy for inclusion in its “Permits Writers Guide” that details when a project might benefit from an air quality review.

We recommend that the department adopt a standard practice of evaluating the emission calculations and documenting the analysis as part of the permit record.

We recommend that the department review, evaluate the specific findings in Section IV and take corrective action as necessary for: 1) Empire District Riverton to assure that the “pilot test period” for petcoke is appropriately limited so that PSD is not triggered (or that a PSD permit is obtained), and, 2) Astaris (now ICL Performance Products) to assure that the control device has been properly demonstrated to achieve 99% or better control on HAPs to validate the assumptions used to avoid the MACT.

EPA would like to see the department enhance its use of the internet and the department website by making its permitting activity more publicly accessible.

We encourage the department to further develop the “Permit Writers Guide” to assist new staff and assure experienced staff is consistent.

KDHE’s Response:

- 1. EPA expressed concern that some synthetic minor permit limits were not sufficiently limiting the PTE to below major source thresholds, along with a commensurate level of monitoring, testing, recordkeeping, and reporting.*

KDHE understands the importance of using the appropriate terminology in the permits to effectively limit the PTE to below major source thresholds. Therefore, KDHE believes that any permit conditions that EPA found during the audit that did not effectively limit the PTE would be the exception. KDHE feels the key to alleviating this problem is to maintain a well-trained and knowledgeable permitting staff. With that in mind, KDHE has created the permit development manual and is formalizing staff development policy.

For ethanol plants, we have made some recent improvements to our permit format. We have established periodic performance testing (with associated recordkeeping and reporting). We also added new wording in the Permit Conditions section of the permit to improve enforceability of control equipment specified in the Technical Specification section. The ethanol plants did, and continue to have, enforceable caps on emissions, along with appropriate averaging periods.

- 2. EPA expressed concern that KDHE was not following its regulations related to the public noticing of minor NSR permits.*

KDHE values the public participation process, and we appreciate EPA’s interpretation of the public notice requirements related to the minor NSR permits. KDHE attorneys evaluated the agency’s interpretation of the public notice requirements for minor source NSR permits and drafted/reviewed a guidance document detailing KDHE’s requirements. KDHE is in the process of modifying the minor source NSR program and as part of that process has entered into discussions with EPA to address the public notice issues. KDHE appreciates the input Region VII has provided related to alternative methods of public noticing and will continue to work with EPA towards a mutually acceptable public notice process. KDHE believes our current policy is consistent with our SIP and with federal regulations.

3. *EPA recommends that KDHE prepare a project/permitting summary that gives the basis for the permitting action. EPA also included a recommendation that KDHE begin a running total of the PTE of all facilities as KDHE works on a construction permit for a source. This is especially important when it comes to Title V sources – there is really no way to tell if the source is greater than 250 tons per year PTE.*

The description of the project and the rationale for permitting decisions is included in the first section of the construction permit. In addition, KDHE has begun including chronology logs which accompany the draft permit. These chronology logs provide a history of the permitting activity along with some rationale for decision-making although maybe not as extensive as a Title V statement of basis. As KDHE continues to use and improve the chronology log, the log may develop into a summary like EPA is proposing. KDHE does want to make sure that the amount of resources spent on preparing a permit summary is equal to the project's impact on the air quality in Kansas. For that reason, a permit summary may not be an efficient use of resources for very small projects. However, KDHE will consider a permit summary when it adds clarity to permit decisions.

In addition, KDHE evaluated several of Missouri's permit summaries found on their website and did not see any information that was in the summary that was not already included in the permit itself. It appears like this duplication may mean extra work for little benefit. KDHE plans to continue with the chronology log, providing more detail in the permits themselves where there is currently a deficiency (especially related to applicability decisions), and memorandums to the file explaining certain situations.

EPA expressed concern that there is no clear indication in KDHE's file whether a facility is major or minor for PSD. Although KDHE generally agrees with EPA's recommendation of maintaining a running PTE total, the problem is not as significant as it may seem. There are approximately 300 Class I sources in Kansas. Many of those sources have actual emissions greater than 250 tons per year for a pollutant (which means their PTE is clearly greater than 250 tons per year). Many of the remaining sources have accepted permit limits to reduce the PTE to below 250 tons per year for all pollutants. There would only be a few sources where it may be initially unknown if the PTE is greater than 250 tons per year.

4. *EPA recommends that KDHE clearly document why projects that occurred during a short time frame were considered separate projects for PSD purposes.*

Through a recent permit section reorganization, permit engineers are assigned the primary air responsibilities for specific facilities. Therefore, the permit engineer will be familiar with the facility's past projects and their relationship with any current or pending projects. KDHE is aware of the potential for sources to avoid PSD by splitting a major project into two or more minor projects. In situations where this may be of concern, the permit engineer is instructed to thoroughly review that possibility and discuss the issues in the "Description of the Permitting Activity" section of the construction permit. KDHE will continue to be vigilant in this matter.

5. *EPA recommends that KDHE prepare guidance when it is appropriate to conduct an air quality review of a permit application.*

KDHE anticipates improving our modeling capabilities by attending training and increasing the number of staff involved in modeling. KDHE anticipates conducting more modeling of larger emitting non-PSD construction permit projects. We also intend to develop a guidance document to address when modeling is appropriate.

6. *EPA recommends that KDHE develop a PTE guidance document that details the standard procedure for determining PTE. EPA also hinted that the use of AP-42 may not be appropriate (“The department continues to place a heavy reliance on AP-42 emission factors for determining permit applicability.”)*

KDHE does independently review and verify the emission estimates that are provided by applicants. In evaluating the PTE, KDHE uses the best available emission information. KDHE will look into drafting a guidance document that addresses the appropriate procedures for evaluating PTE.

7. *EPA recommends that KDHE review specific determinations KDHE made in the Empire District and Astaris permits.*

We will conduct the reviews.

8. *EPA recommends that KDHE utilize the internet to better inform the public of permitting activity.*

KDHE is working with our information technology group to better enhance our website. KDHE is in the process of putting public notices on the website. BAR is also forming a team to make sure that the website is up-to-date and is as useful to the public as possible.

9. *EPA encourages KDHE to expand the permitting manual by including guidance documents on the following: (1) engine replacement projects, (2) when stack testing or continuous monitoring may be appropriate, (3) when modeling should be required, and (4) procedures for limiting PTE.*

KDHE is in the process of developing an engine replacement guidance document in relation to our adoption of the NSR reform package. KDHE anticipates beginning work on guidance documents for stack testing and modeling soon. KDHE has included in the existing manual the procedures for setting federally enforceable permit limits and it is not clear at this point whether a formal guidance document is warranted.

EPA reviewed the permitting portion of KDHE's Response and believes it is a fair rebuttal to our report. KDHE indicates a willingness to improve in the areas we have identified, so we will continue to watch this effort.

ENFORCEMENT AND COMPLIANCE

The purpose of the review is to ensure that violations are being identified by KDHE, which High Priority Violators (HPV's) are being reported to EPA Region 7, and that timely and appropriate enforcement actions are taken on the violations.

EPA examined 12 critical elements, consistent with EPA's State Enforcement Program Review Protocol, covering inspection implementation, enforcement activity, commitments in annual agreements and data integrity consistent with State Review Framework (SRF). These 12 critical elements: 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 KDHE with the Clean Air Act (CAA) Stationary Sources Program policies and guidance.

EPA Recommendations: Inspection checklists used by KDHE are not sufficient for collecting information needed to make a compliance determination, or satisfy the definition of "compliance evaluation" (Attachment Z). We recommend that the checklist be supplemented with a brief narrative description describing how the compliance status was determined.

Kansas should take advantage of the enforcement tools available to them (i.e., enforcement orders, penalties, administrative orders), to encourage a rapid return to compliance with minimal delay. In addition, KDHE should verify compliance with existing orders before terminating.

The enforcement files should also include penalty calculations and justifications to explain the settlement terms.

KDHE's Response:

- 1. Inspection checklists used by KDHE are not sufficient for collecting information needed to make a compliance determination, or satisfy the definition of "compliance evaluation" (Attachment Z). We recommend that the checklist be supplemented with a brief narrative description describing how the compliance status was determined.***

Inspection forms (check lists) for synthetic minors and some 'B' sources are developed for consistency with operation permits and source information. The inspection forms include an inspection 'comments' section for a summary of the inspection and input of compliance status information. Title V source inspection form are developed by the field inspectors using the Title V operating permit to develop an inspection form. Field inspectors (6 districts and 4 local agencies) have been asked to assure that comments/summaries are included for each inspection. Some of the inspectors do an excellent job of completing the comments/summary

section, some could use improvement. Improvement on this issue is also a concern of BAR, as we also see this as an area in need of improvement by the field inspectors from KDHE , the locals and the districts.

To improve the contents of the comments/summary section to demonstrate compliance status, a segment on field inspection report requirements will be a part of the semiannual air quality field inspector meeting on November 8 and 9, 2006. This meeting will be attended by all AQ field inspectors as well as the six district administrators and Bureau of Field Services managers. The importance of comments section is for brief comments as to the determination of compliance status will be a part of the presentation as well as a discussion topic. In addition, inspectors will be informed that inspection reports that do not include a brief narrative description of how the compliance status was determined will be returned as ‘incomplete’ to the district/local agency field inspector for completion. Districts and local agencies inspection report will not be credited with a Full Compliance Evaluation (FCE) unless the inspection report is complete with a brief narrative.

In most cases, EPA-developed checklists for NSPS and MACT sources are not generally used by KDHE or EPA inspectors, as they are poorly developed for field use. The exception to this is the EPA Dry Cleaners check lists which have been modified into KDHE Dry Cleaner check lists.

- 2. Kansas should take advantage of the enforcement tools available to them (i.e., enforcement orders, penalties, administrative orders), to encourage a rapid return to compliance with minimal delay. In addition, KDHE should verify compliance with existing orders before terminating.*

KDHE changed its compliance and enforcement policies last year, including realignment of enforcement priorities, penalty matrix and policy, and a SEP policy. These policies are public and listed on the BAR web site.

Priorities realignment included focusing the limited staff resources on the emission-related violations with less emphasis on minor, programmatic violations such as reports and recordkeeping (paperwork violations). BAR began to issue Letters of Warnings (LOW) for minor violations, related to ‘paper work’ in many cases. Repeat minor violation and lower priority violations will receive a Notices of Noncompliance (NON) with a time line for a demonstration of compliance within 30 day. NONs usually include a follow up field inspection to determine compliance. For facilities with a history of noncompliance, failure to respond to LOW or NON, the BAR may issue a Bureau Director’s letter (BD letter). The BD letter requires a short-term response from the facility for repetitive or on-going non compliance – failure to adequately respond to a BD letter will be follow by an Administrative Order.

Compliance assistance to the regulated community is a priority at BAR. BAR is working with facilities to assist them with compliance issues and to reduce the number of LOWs, NONs, BD Letters, Administrative Orders, and Consent Agreements issued. However, BAR will continues its commitment to enforce state

and federal regulations, and issue enforcement actions to deter continuing s, repeat, and significant violations...

Administrative Orders (AO) and Consent Agreements and Final Order of the Secretary (CAO) are issued as appropriate, and is consistent with BAR Enforcement Policy. Over the last year, BAR has worked to reduce it's backlog of enforcement actions, and has made significant progress. Consent Agreements, without an Administrative Order have been issued, BAR will continue to be used these measures where the facility are willing to return to a compliance status and as an enforcement tool for additional reduction of emissions and to fund other environmental projects through SEPs, which are not available through administrative orders. Administrative orders are used where the facility are uncooperative and for repeats violators. A facility's failure to meet commitments in a CAO to resolve past violations, will not be afforded as an initial option in the future, an Administrative Order is issued first.

The use of CAOs and well as Administrative Orders, require compliance tracking to determine if and when the facility has meet deadlines contained within the agreement. To assist with this tracking, the section has improved its tracking capabilities by developing a new data base using MS Access, in addition to the current MS Excel spreadsheet used by the section, the district offices and local agencies. In addition, the status of all current and pending enforcement actions are discussed on a monthly conference call with all districts and local agencies field inspectors, providing the staff with a progress update, and providing the central office enforcement staff with feedback from any recent field inspections. File reviews along with input from the field inspectors is used to determine if the requirements of a CAO have been meet prior to termination of CAOs.

- 3. The enforcement files should also include penalty calculations and justifications to explain the settlement terms.*

The Air Compliance and Enforcement Section is routinely sending copies of the penalty calculations and justification to the facility files after the enforcement action is completed, after an Administrative Order is final or resolved by a CAO.

EPA has no further comments.

ASBESTOS

The Bureau of Air Quality and Radiation of KDHE implements a fully delegated Asbestos NESHAP program pursuant to 40 C.F.R. Part 61, Subpart M. The program is responsible for notifications, inspections, enforcement case development, outreach, and data management. Given the limited resources devoted to the program, the level of effort is commendable. KDHE exercises common sense and good judgment in prioritizing inspections and pursuing enforcement actions. The enforcement files are well organized and include adequate documentation to support enforcement actions. KDHE also implements an asbestos licensing program for workers and contractors/supervisors.

EPA Recommendations: A memo should be included in the enforcement file which documents the calculation and basis for the assessed penalty.

KDHE's Response:

KDHE is in the process of developing a form to calculate and assess penalties.

EPA has no further comments from the asbestos NESHAP perspective.

AIR TOXICS

The BAR determines the number of inspections in each of the six field offices. Complaint inspections and other investigations/site inspections are scheduled as soon as practical. The majority of the inspection reports contain a cover sheet, a checklist, and comment sheet to determine basic source information. Central office and district staff use a Complaint Investigation Form for documenting on-site investigations, as well as telephone or written complaints received from any source (public, governmental agencies, industry, etc.). The report is reviewed for completeness and documentation of regulatory compliance.

EPA Recommendations: KDHE should ensure all inspection reports contain a cover sheet, checklist, and comment sheet.

KDHE's Response:

- 1. Air Toxics Inspections: The Dry Cleaner MACT (Part 63, Subpart M) is not tracked by BAR, and only one dry cleaner was inspected for this MACT. Secondary Aluminum MACT sources are inspected only by the Bureau of Waste Management.*

Dry Cleaner MACT: BAR compliance and Enforcement Section has been conducting Dry Cleaners inspection who are subject to the Dry Cleaner MACT (Part 63, Subpart M) since late 2003. The BWM agreement in 1996 produced very few inspections. BAR has been working with the Bureau of Environmental Remediation (BER) on dry cleaner compliance and enforcement issues. BER was an active program, with an industry funded by site abatement program, inspection (18 to 25 per year) and meets with the Kansas Dry Cleaner Industry Advisory group on a regular basis. The Small Business Environmental Assistance Program (SBEAP) has been printing and sending out Dry Cleaner calendars for many years. The calendars were updated last year, with prior review by BAR and EPA (Richard Tripp).

There are approximately 153 dry cleaners in Kansas during 2003 (perc and petroleum solvents), with approximately 125 using perc at their facilities. BAR modified the EPA Dry Cleaner Check Lists and the field inspectors are using these checklists, as a part of the inspections process, including comments and cover page.

BAR has inspected all of the dry cleaner facilities in Kansas, except for Sedgwick County (19 out of 22 inspected) and Johnson County (26 out of 41 inspected). Sedgwick County will complete the three remaining dry cleaners this year, and Johnson County will be inspecting the remaining 15 over the next 2-3 years.

Many of the dry cleaners were not in compliance with the MACT, related to record keeping, leak checks, etc. Accordingly, BAR has issued 41 NONs for noncompliance with the MACT – the majority of NONs are recordkeeping violations. NONs were resolved and the facilities' re-inspected to assure compliance, except for some of the recent NONs. BAR has issued one Administrative Order.

Secondary Aluminum MACT: The known sites in Kansas are routinely inspected as subject to the MACT by BAR field inspectors. BAR work in conjunction with the Bureau of Waste Management, as the slag is often contaminated with enough lead to be classified as a hazardous waste.

All sources subject to the MACT standards are routinely scheduled for inspections, as contained within the district office (BEFS) work plans and contracts with local agency air programs. All MACT source inspection reports are currently required to have a cover sheet, checklist/inspection form, and a comment/summary section in the report. Issues related to the comment sheet, will be the same as other inspection report – see response #1 above. The implementation plan for the Dry Cleaner MACT was addressed between EPA R7 (Richard Tripp) and BAR in 2003, to assure that dry cleaners in the state will be inspected and to determine compliance status.

EPA has no further comments.

MONITORING

An Air Monitoring System Audit of the KDHE was conducted on November 7, 2004. The purpose of the audit was to document the agency's 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 Air Quality System (AQS) and the agency's performance in the National Performance Audit Program (NPAP). \

It should be noted that the technical system audit (TSA) is a requirement of the Clean Air Act, rather than the Region 7 EPA program review. The timing of the TSA was coincidental with the program review, and therefore, will serve as the program review report. Response from the following findings and recommendations were addressed by the BAR Environmental Monitoring Branch on February 8, 2005 (Attachment D: Technical System Audit Report Response).

EPA Region VII audit personnel were able to visit one half of KDHE's air monitoring sites. Half of these sites were chosen using National Performance Audit

Program results, the current Data Completeness Report and the current PARS Report. The other half were randomly chosen.

The Kansas Department of Health and Environment (KDHE) is responsible for conducting the ambient air monitoring program throughout the state of Kansas. This network is designed to meet the EPA sitting regulations and is reviewed annually.

All of the monitors and the laboratory analytical procedures being utilized in this SLAMS network are EPA designated reference or equivalent methods. The standard materials used to calibrate and audit the monitoring systems are properly certified and have the required certification to NIST reference standards.

The agency's standard operating procedures (SOP's) and Quality Assurance Project Plan (QAPP) are in good order and well written. KDHE data completeness has historically been good for all pollutants monitored as have been the precision and accuracy (P&A) results for their monitoring.

EPA Recommendations: The final issued TSA report addressed both commendations and recommendations for its findings. All of the latter have been discussed and/or rectified with KDHE at this time.

For detail and local agency recommendations, please refer to Chapter 7.

KDHE's Response:

- 1. EPA Recommendations: The final issued TSA report addressed both commendations and recommendations for its findings. All of the latter have been discussed and/or rectified with KDHE at this time.*

Many of the recommendations associated with routine ambient air monitoring activities were addressed immediately. The KDHE Quality Assurance Program Plans (QAPPs) and Standard Operating Procedures (SOPs) have been updated, and will be sent to U.S. EPA Region 7 for approval as soon as all internal concurrences have been obtained.

Many of the auditors' recommendations to local agencies are actually KDHE responsibilities. The Shawnee County Health Agency has returned ambient air monitoring duties to KDHE. To address the recommendations to The Wichita Department of Environmental Services and the Unified Government of Wyandotte County – Kansas City, Kansas Department of Air Quality, KDHE ambient air monitoring personnel coordinated efforts with the appropriate local agency personnel.

One finding regarding up to date SOPs required special action: KDHE provides updated versions of QAPPs and SOPs to local agencies at the time of release, with instructions to replace previous editions. Because one local agency was discovered during the audit to be referencing outdated SOPs, current versions of QAPPs and SOPs were redistributed to local agencies, along with a memorandum stating a requirement to replace their existing copies with the new sets.

The complete BAR response to the ambient air monitoring audit was sent to EPA Region 7 in a letter from Scott Weir to Leland Grooms dated February 8, 2005. A copy of that letter is attached for reference.

Additional EPA Comments:

In light of the new PMcourse Standard the following additional recommendations will addresses over the next fiscal year.

Recommendations regarding Hi-vol PM10 are being evaluated in light of the following:

1) We will soon be disinvesting in PM10 samplers to implement the PMcourse standard; and

2) In conjunction with our on-going National Monitoring Strategy (i.e., NCore) network review, we are seriously considering replacement of Hi-Vol samplers with continuous monitors (i.e., TEOMs).

If it is determined that the current Hi-vol PM10 network will be continued, these recommendations will be reevaluated and addressed.

For detail and local agency recommendations, please refer to Chapter 7.

TITLE V FEE REVIEW

The purpose of the Title V Fee Review was to assure that KDHE was collecting adequate fees and accounting for the direct and indirect costs associated with Title V and non-Title V activities. The review team evaluated the interaction between the minor source review and Title V programs to assure that preconstruction permit terms were properly being incorporated into Title V permits. During the 2003–2005 evaluation period, KDHE issued nine PSD permits, three modifications to existing PSD permits, 108 initial Title V permits, 170 Title V permit renewals and three Title V permit modifications. A fee review was not performed during this program review.

EPA Recommendations: No recommendations are noted at this time.

CHAPTER 2

INTRODUCTION

PURPOSE:

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

In Region 7, EPA has delegated a large share of its authority to the states. After delegation, EPA maintains responsibility for overseeing delegated programs and continues to be accountable for progress toward meeting national environmental goals and for ensuring that Federal statutes are fulfilled. EPA is responsible for ensuring the fair and equitable application and enforcement of Federal environmental laws, regulations, and standards, and to provide its partners with the necessary assistance, tools, methods, and back-up support to solve environmental problems.

In delegated programs, the goal of oversight is to strengthen the relationship between EPA and its partners to ensure that the national environmental goals expressed in the EPA Strategic Plan are attained. Effective oversight helps to ensure adequate environmental protection through continued development and enforcement of national standards, and the use of direct enforcement action against polluters as necessary to reinforce the action and authority of EPA's partners. Oversight also helps to enhance a partner's 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. 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 not a static activity, and will vary across the different delegated entities. Conditions change, and program activities must change to respond to new environmental problems and challenges. Consequently, the methods used to oversee delegated programs must change over time, depending on the maturity and complexity of national programs and on the capability of EPA's delegated partners.

PROCESS:

The 1984 “EPA Policy on Oversight of Delegated Environmental Programs” provides the foundation for structuring a Program Review. Starting with this policy, EPA Region 7 staff developed a *Program Review Protocol* document, which provides the justification and framework for conducting program reviews in the Air, RCRA, and Toxics Division (ARTD) of Region 7.

The protocol establishes a minimum frequency for conducting program reviews within the Division, 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 also provides a way to document the rationale for determining whether or not any program review effort is needed in a particular program. In addition, the protocol includes a summary of the regulatory requirements for the major programs within ARTD, a discussion of oversight policy, and a differentiation between the requirements of grant close-out reviews and program reviews.

The ARTD staff subsequently issued a second document, *Operating Principles for Conducting Program Reviews*. This is primarily an internal planning document which lays out the process for providing consistent internal procedures for Program Reviews.

Finally, the EPA staff developed the *Program Review Criteria Notebook*, which was used as the basis for the Kansas Program Review. This notebook contains the criteria and checklist for each of the program areas being reviewed. This notebook was provided to all of Region 7's state partners in January 2000.

Prior to 2000, only partial program reviews were conducted. As stated in the Program Review Protocol, Region 7 plans to conduct a program review in each state once every four years.

PROCEDURE:

The EPA state manager coordinated with the KDHE primary contact person in January 2006 to select a mutually agreeable date for the review. Considerable lead time was necessary considering the number of staff involved in both agencies. On Dec 16, 2005, EPA mailed KDHE a ‘kick-off’ letter (Attachment E: Program review Kick-off Letter) which contained a detailed schedule for the February thru April review, provided checklist information, requested that the air program respond to several pre-review questionnaires and listed a schedule for completion of the draft and final reports. EPA received all requested information in ample time to review prior to the entrance conference.

EPA staff was periodically on-site at the Topeka KDHE office throughout the months of March and April of 2006. A face-to-face Exit Conference was scheduled in September of 2006 to discuss findings and recommendations from the review. The meeting consisted of the EPA staff providing a verbal summary of their results. The KDHE staff provided additional information as necessary for clarification, as well as

closing remarks (Attachment F: Exit Conference List of Attendees).

The EPA staff received the full cooperation and assistance of the KDHE staff throughout the on-site visit. Supervisors and individual staff members made themselves available as necessary to answer questions or to otherwise assist the EPA staff. EPA fully appreciates this assistance and spirit of cooperation.

CHAPTER 3

PLANNING AND PROGRAM DEVELOPMENT

The areas of review in this section include the following:

1. **Regulatory Development**
2. **Grant and Work Plan Management**
3. **Local Agency Coordination**
4. **Training**
5. **Emissions Inventory (EI)**
6. **Modeling**
7. **Small Business Assistance Program (SBAP)**

The organizational structure of the KDHE air program is:

Kansas Department of Health and Environment

Bureau of Air Quality and Radiation (BAR):

- Administration Unit
- Radiation and Asbestos Control Section
- Air Monitoring, Inventory & Modeling Section
- Air Operating Permit & Compliance Section
- Air Construction Permit Section

A Personnel/Organization Chart is included in the attachment section (Attachment G: KDHE Organizational Chart) for this section to further illustrate the program staff working in each area.

As described in the introduction, the on-site portion of the Program review took place in March and April of 2006. EPA personnel visited the Bureau of Air and Radiation in Topeka, KS, and conducted file reviews and face-to-face conversations with the BAR staff.

EPA specialists in the EI, and asbestos programs interviewed the respective KDHE program specialists during the on-site review. The SBAP information was gathered through a telephone interview. The remaining information was gathered by the EPA's Air Planning and Development Branch (APDB) state coordinator (Attachment H: APDB Review Checklist) and through interviews with the KDHE's BAR and other staff.

REGULATORY DEVELOPMENT

BAR has a development and review process for developing regulations (Attachment I: Policy and Procedure Manual). Most regulations are adopted by reference and the regulation is reviewed by the appropriate supervisory and legal staff. Rules that involve emission guidelines reviewed by technical workgroups are addressed (Attachment J: Regulatory Process). A checklist is maintained by the Division of Environment and is made available to the public in a quarterly newsletter.

The progress of rule actions is tracked by the person responsible for developing the rule and reported on the checklist.

Two rule files were reviewed for content:

K.A.R. 28-19-350 (2002) PSD

- Regulatory Impact Statement
- Public Hearing Record
- Public Hearing Notice
- Misc. communication
- Mailed notices (i.e., to EPA)
- Letter of Adoption
- Joint Committee on Administrative Rules and Regulations (JCARR) comments
- Hearing Officer's report
- Published Regs
- EPA Comments
- Background documents (i.e., what other states have done)
- Approved and Stamped Regs

K.A.R. 28-19-714 (Solvent Metal Cleaning RACT rule)

- Takings Analysis (file empty)
- SIP submittal
- Public Hearing Record
- Public Hearing Notice
- Responsiveness Summary (empty)
- Public Comments
- Misc. Comments
- Mailed notice
- Letter of Adoption
- JCARR comments
- Hearing Officer's report
- Final Published Regs.
- Federal Register Notices
- EPA Comments
- Our approval notice
- Concurrence sheets
- Background documents
- Checklist
- Approved stamped Regs

EPA noted that although the Economic Analysis is important to Kansas, there was not copy in either file. After conversation with KDHE, we discovered that the files which we reviewed were the administrative files and the Economic Analysis is located in the regulatory files along with draft rules, published final rule (copy), public hearing notices, public comments and KDHE’s response, and joint committee notes. In the interest of time, we did not review the regulatory files.

Most regulations are adoptions by reference with the process consisting of a review. For more complex rules, technical workgroups are formed. Rules are not assigned to any particular person and there are inconsistencies in tracking. The Kansas “rules by committee” approach involves anyone and/or everyone, which may contribute to the confusion. However, during FFY 2006 the efficiency of regulatory actions has improved with personnel realignments.

GRANT and WORKPLAN MANAGEMENT

The state incorporates an annual planning process into the budget cycle. EPA priorities are taken into consideration in developing the work elements to be included in the budget document. KDHE has work plans associated with the annual budget process which is comprehensive and associated with the CAA section 103 and 105 grants (Attachment K: CAA Section 103 and 105 work plans for FFY-07). Program managers also maintain priority outcomes for their section or units, which may include activities, not covered by the section 105 work plans.

The following is a timeline that EPA Region 7 has developed to coordinate with the states to implement effective strategies in addressing air quality issues. KDHE is actively working with EPA, regional states, local governments and tribes to implement these milestones.

2006

- September 27 Final Notice of Revised PM NAAQS to be published
- November 25 110(a)(2)(d) transport SIP due for NE and KS MO and IA participate in CAIR
- November/ December OAQPS- state/local workshop on PM 2.5 and Regional Haze

2007

- March 28 Proposed rulemaking published for the review of the ozone NAAQS.
- April 5 PM 2.5 Inventory SIP due
- May 25 110(a)(2)(d) SIP FIP deadline of May 25, 2007
- June 15- 8-hour Ozone maintenance plan Kansas City due
- December Submittal of the infrastructure SIP (meaning the remaining requirements of section 110(a)(2)) for ozone)
- December 17 Regional Haze SIPs due from all four states
- December 19 Final rulemaking published concerning the review

of the ozone NAAQS

<u>2008</u>	
December 31	15% VOC and/or NO _x reductions for 8-hour ozone are achieved in St. Louis.
<u>2009</u>	
March 15	RACT compliance date
<u>2013</u>	5 year Regional Haze Update, which is equivalent to a mid-course correction
<u>2014</u>	Last year Kansas City must demonstrate maintenance of the 8-hour ozone standard.

The continued cuts in funding over the past few years, coupled with the proposed funding cuts for the upcoming year will make balancing state and federal priorities difficult to accomplish. KDHE indicated they may reach the point where the federal contribution to funding the overall program is relatively small. When federal contribution to the program substantially decreases, effort toward accomplishing federal priorities will presumably be proportionately decreased.

There is little distinction between use of state matching funds and CAA section 105 grant funds. An employee is generally funded from a mix of funding sources, and many purchases and operational expenses are funded from both state and federal funds. Capital expenditures such as, monitoring and calibration equipment are ultimately funded with CAA section 105 grant dollars.

For additional planning information, see the attachment section (Attachment L: BAR Strategic Plan, July 2005).

LOCAL AGENCY COORDINATION

KDHE administratively manages five contracts with the local entities; Mid-America Regional Council (MARC), Johnson County Environmental Department, City of Wichita Department of Environmental Services, Shawnee County Health Agency and Unified Government of Wyandotte County-Kansas City, Kansas Health (Attachment A: Local Contracts). The Wyandotte County grant was previously managed directly through EPA. As of fiscal year 2006, they were converted to pass-through status under KDHE's oversight. All local contracts for 2006 are for reimbursement and are paid on a quarterly basis.

In managing the contracts, quarterly progress reports from the local agencies are reviewed. Funding is contingent upon a "pay for performance" policy. Local grantees must submit reports on the completed work elements to receive funding. KDHE has also adopted a continuous review process, in which annual audits of the local agencies with contracts are conducted on a rotating basis (Attachment N: Local Program Reviews). One local agency is audited annually, repeating every five years (Attachment M: Local Performance Reports).

KDHE holds quarterly meetings and/or conference calls with the local agencies in order to track progress on work activities, to update the local agencies on policy issues and to review any contract related issues that arise. KDHE also meets with the local agencies as the needed to develop contract language or to discuss specific program issues in greater detail. A bureau and local agency liaison is identified for each contract activity.

TRAINING

Each KDHE employee has training needs identified by section rather than by bureau. The training database (Attachment B: BAR Training Plan) is used by BAR to determine employees training needs. The source of funds for training varies with the funding mix associated with each employee. A list of training funded by section 105 funding is provided to EPA at the end of the federal fiscal year (FFY) by the KDHE training officer, but there is not a specific budget set aside for training.

KDHE holds quarterly meetings for the local governments and trainings as needed. K-State and KSU are also invited participate in the quarterly meetings (Attachment C: Clean Air Advisory Meetings).

KDHE is not able to provide all the training desired for employees and requests continued federal funding for the training activities. Consistent training is crucial for the bureau to stay current on federal rules and regulations, employee health and safety and technological advances.

EMISSION INVENTORY

Introduction:

A technically defensible emission inventory (EI) serves as the foundation of sound public policy. The Air Monitoring, Inventory and Modeling Section within the Bureau of Air and Radiation (BAR) of the Kansas Department of Health and Environment (KDHE) has the responsibility to ensure that the level of quality needed from an emission inventory is achieved. Four people from this section are responsible for collecting emissions data, entering that data into I-Steps, implementing the emission inventory quality assurance project plan (QAPP) and submitting data to EPA's National Emissions Inventory (NEI). The 2003 program review conducted on this section was focused on ensuring that KDHE was on its way to developing the proper quality assurance/quality control methods to be implemented in future emission inventory efforts. At that time, KDHE was in the process of obtaining approval on their draft Emission Inventory Quality Assurance Project Plan. The emphasis of the 2006 Program Review will be on verifying that the steps outlined in KDHE's Emission Inventory QAPP were followed and determining if recommendations offered during the previous program review were addressed.

During the program review the following elements were reviewed: (1) EIQ files, (2) quality assurance reports, (3) checklists, and (4) knowledge of staff in regards to the methods

established in the QAPP (Attachment O: EI Checklist). This was accomplished by choosing random EIQ files to verify that the appropriate checklists were filled out and that the file was in order, obtaining copies of the different quality assurance reports and interviewing staff.

Quality Assurance Activities:

The data quality objectives outlined in KDHE's QAPP are designed to ensure that the emissions and fee data is complete, accurate and comparable. The accuracy and completeness of the emission inventory questionnaires (EIQs) is accomplished and documented by completing the *QC Checklist for Class I Inventory and Fee Forms* (Attachment: O) for each EIQ. This checklist ensures that staff verify that the facility's information is correct, that the facility used the appropriate methods and emission factors to calculate emissions, that operating rates and emissions are reported for all required units and that the facility report on all required pollutants, etc.

In addition, an in-depth review is conducted on 5-10% of the EIQs by preparing reports on the QC checks outlined in the *QC Checklist for YEAR Emission Inventory* (Attachment: O). The quality assurance measures in this checklist allows KDHE to verify if emissions from the previous and current year are comparable by facility, source categories, similar processes, etc. It also ensures that the staff verifies that the location and stack parameters reported by the facilities are accurate. Results from this review are documented through reports that include, but are not limited to, the following: *2002/2003 Facility Total* (Attachment: O), *Emissions by Pollutant Comparison, 2002/2003 Facility Total emissions by SIC comparison* (Attachment: O), *Particulate Matter QA for: PT, PM 10 and PM 2.5* (Attachment: O), *Stack Parameter QA* (Attachment: O). Also, follow-up letters are sent to the facilities whose EIQs have been audited. These letters are meant to continually improve emission inventory data by notifying the data submitters of deficiencies found in their EIQ and by telling them what corrective actions need to be taken to improve their submittal. If the errors found in the EIQ are minimal, the facility is told to correct their error in future submittals. On the other hand, if significant errors are found, meaning errors that alter fees significantly, corrections are required during that same year. The results from these in-depth reviews are documented and the data entry staff is instructed to verify that past observations have been addressed with that year's submittal.

Finally, although KDHE does not complete a nonpoint or area source inventory for all area source categories, they do take steps to ensure that emissions calculated by EPA and reported in the NEI are reasonable and acceptable. In some cases, KDHE will also prepare an inventory for area source categories for which they believe they have better surrogate information. Some area source categories for which an inventory has been prepared by KDHE includes residential wood combustion, pesticides, cutback asphalt, wildfires, etc.

Elements Reviewed:

During the program review, the EIQ files were reviewed to verify how they were organized and bound and to ensure that the *QC Checklist for Class I Inventory and Fee Forms* (Attachment: O) was filled out for each EIQ. Four EIQs were randomly chosen and

the above referenced checklist was filled out for 100% of the EIQs reviewed. To the extent that it was under KDHE's control, the EIQs files were bound and organized; however, the organization of the EIQ itself was greatly dependent on the source. Based on this review, it appears that KDHE has addressed a concern expressed during the previous program review on the organization of the EIQs. Also, five facilities were randomly chosen to verify emissions reported to the 2002 NEI against emissions found in the I-Steps database. This review did not result in any differences between the emissions found in the 2002 NEI and the emissions found in KDHE's database for the year 2002.

KDHE has done a good job a documenting the activities outlined in their emission inventory QAPP and making those available to the necessary staff. Checklists, Plans for reviewing EIQs, Plans for reviewing the emission inventory, QA Checks reports and the emission inventory QAPP are all located in a shared drive which allows all employees to have access to all the necessary information. Also, hard copies of the emission inventory QAPP and some of the reports are kept in the unit's library.

Finally, interviews conducted on the staff responsible for emission inventory activities demonstrated the staff possessed a comprehensive understanding of the data entry and quality assurance process, as well as the location of important quality assurance documentation and the I-Steps database.

Conclusion:

High chromium emission numbers submitted by Boeing are of concern. EPA Recommends working with EPA OAQPS, Boeing, and KDHE to resolve how these numbers are calculated, and make sure we have the correct numbers in State and EPA databases.

Overall, EPA concludes that KDHE does a commendable job when building and quality assuring their emission inventory. KDHE has a number of methods in place to verify and document the accuracy, completeness and comparability of their emissions data from year to year. It was found that KDHE follows the quality assurance steps outlined in their QAPP and they also actively participate in NEI improvements and developments. Because KDHE only prepares a mobile source inventory to support special studies or the development of State Implementation Plans or Maintenance Plans, the next program review will include a component that touches on the process followed to develop and quality assure the mobile source inventory for the Kansas City Maintenance Plan. Also, if the 2008 NEI reengineering efforts have been implemented and these have resulted in changes to KDHE's quality assurance and inventory development process when the next program review is conducted, these will be revisited to determine how these changes have impacted KDHE's emission inventory work.

MODELING

The air dispersion modeling review was limited to discussions with Dana Morris who reviews permit applications. No permit applications were reviewed during the Program Review. Several Prevention of Significant Deterioration (PSD) permit applications had been

reviewed previous to the program review. The newly approved AERMOD air dispersion model was used for the majority of the PSD applications. In most cases the KDHE has provided the necessary meteorological data for the modeling.

A recommendation made in the 2002 Program Review was that KDHE should evaluate the procedure in which increment analyses are conducted. The recent modeling for the Coffeyville Nitrogen Fertilizer Facility included a more complete increment analysis. All identified increment consuming sources in Kansas, Missouri and Oklahoma were included in the modeling.

The general discussion included modeling for complex wind situations including stagnant situations. These situations are not new in our region but with the approved CALPUFF model it is now possible to more accurately model these situations. In our region these situations occur in river valleys and complex terrain. Representative “on-site” meteorological data and/or grided meteorological data are necessary to model these situations. This means that during the pre-application meeting between a regulatory agency and the company/consultant, that the possibility of requiring “on-site” meteorological data must be discussed as well as determining what model should be used.

The modeling of haul roads was another subject that we discussed. Haul roads have not been modeled in all situations. The concentrations from haul roads and other fugitive sources can be high close to the source and often result in violations of the PM₁₀ NAAQS or PSD increment standards. Haul roads should be modeled.

KDHE is also involved in regional modeling. The regional modeling was not reviewed, but Andy Hawkins is very active in CENRAP and Kansas City ozone modeling.

KDHE has the expertise to evaluate air dispersion modeling and should be encouraged to continue to review all permits to ensure that the conditions modeled are included as enforceable conditions in the permits. Special emphasis should be given to evaluating haul roads, increment consumption and complex wind situations.

SMALL BUSINESS ASSISTANCE PROGRAM (SBAP)

The Small Business Air Quality Liaison Program was established in 1994 and is located in the Kansas Department of Health and Environment’s Bureau of Environmental Field Services. One FTE has been established to fulfill the duties of the Small Business Ombudsman. The Liaison is Cathy Colglazier, who has been in this position since October 2002; her direct supervisor is John Mitchell. The Liaison is also referred to as the Ombudsman in this report.

The technical assistance portion of the SBEAP is contracted with the KSU Pollution Prevention Institute. KSU provides individual assistance to small businesses affected by environmental regulations through telephone inquiries, Web site, on-site assessments, workshops, seminars, brochures, manuals and newsletters. The work plan and contract between KDHE and KSU is renewed on an annual basis and is designed to provide

comprehensive services to small businesses, but funding dictates project work and drives technical assistance focus. The Ombudsman provides oversight for the contract.

On request, the SBEAP works with the business (usually one-on-one) to help determine appropriate permits, requirements, etc., as well as on-site assessments. SBEAP follows up with written reports or by providing the business with the necessary permit applications or forms. Whatever help the business needs with environmental issues can be requested through the SBEAP. In addition, the ombudsman publishes a document “Roadmap to Environmental Permits” which can be found at www.kdheks.gov/environment. All services are free and confidential.

The Compliance Advisory Panel (CAP) meets on a regular basis and has indicated that the SBEAP is providing good service. Recently, the CAP has been involved in discussions regarding the multi-media status of the SBEAP and funding issues.

The 2004 SBEAP survey data below indicates clients have made regulatory changes and reduced emissions as a result of SBEAP hotline and on-site services.

Hotline calls:

- 91% of callers have a compliance question
- 100% say they now understand the regulations better
- 61% say they will make changes as a result of what was learned on the call

On-site assistance:

- 35% survey rate
- 91% call with compliance concerns
- 85% of compliance-related recommendations were implemented or planned
- Rated reports 8.8 on scale of 1-10
- Average dollar value \$3200

EPA requested a breakdown of the \$410,220 SBEAP budget and the response is as follows:

Title V fees	\$	272,615
Solid Waste Fee Fund	\$	50,000
Hazardous Waste Fee Fund	\$	12,500
Tire Fee Fund	\$	12,500
319 (NPS) Fund	\$	46,605
Aboveground Storage Tank	\$	3,000
Underground Storage Tank	\$	3,000
Dry Cleaning Fee Fund	\$	<u>10,000</u>
	\$	410,220

For additional information see the SBAP checklist (Attachment P: SBAP Checklist).

CHAPTER 4

PERMIT PROGRAM REVIEW

Introduction:

On March 27 – 29, 2006, EPA Region 7 performed an evaluation of the Kansas air permitting programs. We conducted the review in part to fulfill a regional office commitment with 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 1) synthetic minor permitting, 2) application of federal technology standards under the new source performance standards (NSPS), national emission standards for hazardous air pollutants (NESHAP), and maximum achievable control technology (MACT), 3) establishment of enforceable permit conditions, and, 4) the interaction between the Title V and new source review (NSR) programs.

The EPA review team was comprised of Tamara Freeman, Jon Knodel, Patricia Scott and Bob Webber. Debbie Bishop and Althea Moses with Region 7's environmental justice group also assisted in the review for a half day. During the review, the team discussed a number of program elements with the permit program managers and concluded the review with a brief exit interview. The exit interview provided an opportunity for the EPA and KDHE staff to meet and discuss our general findings. Overall, we found that the department runs a capable construction and operating permit program but could benefit from the recommendations described in this report. The review team appreciates the cooperation shown by the department during our visit.

The permitting group reviewed the Wyandotte County Department of Air Quality permit program in July, 2002, so no additional review was conducted at this time. The final Wyandotte County report was included with the final 2003 KDHE program review and is available at http://www.epa.gov/region07/programs/artd/air/st_local/reviews.htm.

EPA initiated its review process by letter to the department dated January 5, 2006, followed by a series of emails dated January 24 and 31, 2006, requesting specific detailed information about the NSR and Title V programs, respectively. The department provided a timely and comprehensive response for each request.

The team evaluated 31 source files containing approximately 150 permit projects. Most of the projects reviewed were permitted in either 2003, 2004, 2005 or early 2006 and represent about 13% of the 1,200 plus projects evaluated by the department during the review period. Of these 1,200 plus projects, 497 were issued as "approvals", 233 were issued as "permits" and 478 required no decision by the department.

The major findings, including both commendations and recommended program recommendations are described in the following section (i.e., Summary of Findings and Conclusion). The Source Permit Files table and Attachment Q and R, includes a summary of

source files reviewed, a spreadsheet documenting which permit elements were found in each source file, and a detailed compendium for each file reviewed. Lastly, Attachment S contains the NSR and Title V questionnaires completed by the department. About two-thirds of the source files were selected randomly from the list of permitting activities provided by the state. The remaining files were selected based on the type of project permitted or because it appeared the source had a significant number of discrete projects over a short period of time. Approximately six of the source files reviewed are in areas that the Region characterizes as “environmental justice” communities. Since the majority of files were randomly selected, our findings should generally be representative of KDHE’s air permitting program as a whole.

The review team did not look at the Prevention of Significant Deterioration (PSD) permitting program in any substance since we evaluate and comment on these projects in real-time as they are issued. We also did not focus detailed attention to the Title V permitting program since the region receives notice of these projects and has an opportunity to comment and review at any time. Instead, the review team evaluated the interaction between the minor source review and Title V programs to assure that preconstruction permit terms were properly being incorporated into Title V permits. During the 2003–2005 evaluation period, KDHE issued nine PSD permits, three modifications to existing PSD permits, 108 initial Title V permits, 170 Title V permit renewals, and three Title V permit modifications.

Summary of Findings and Conclusions:

On balance, the department runs capable construction and operating permit programs. In general, we found that all the projects reviewed completed the proper level of permitting with no major institutional gaps. As described in more detail below, though, we believe there are a number of program recommendations the department could make that could greatly improve the enforceability of individual permits and the provenance of the permitting record, with little or no impact on permitting resources.

We encourage the reader not to over-emphasize or compare the number of strengths to areas for improvement or the breadth of discussion in this section. Overall strengths outweigh the program recommendations. By necessity, the basis for these recommendations requires a more comprehensive analysis. Our recommendations for the program are generally listed in priority order, from most concern to least. The first four recommendations should be considered high priority; the last four as medium.

Commendations:

The files were well maintained and contained all of the information one would expect to find for a pre-construction review. All included comprehensive permit applications, review notes, records of conversations with the source and their consultants, draft permits, and final permits. The source files also contained compliance inspections, NSPS, NESHAP and MACT notifications, so all relevant source information was easily found.

We found many telephone conversation records, written correspondence and emails between the permit review staff and sources and their consultants throughout the files. This is a good indication that staff is conducting comprehensive reviews and are not necessarily taking the information in permitting applications at face value.

We noted that the majority of permits correctly documented applicability of NSPS, NESHAP, or MACT standards.

Our review revealed that only seven of 150 projects involved “after the fact” or “as built” permitting activity. This is a good indication that companies throughout the state are aware of the permitting requirements and applying for timely approvals. The department’s use of the internet to distribute permit forms and instructions may have helped to better educate those who must make use of the program.

Based on the significant number of “no action required” and “approvals” (or simple registrations) issued during the review period, constituting about 80% of the department’s review activities, it appears that recent efforts to evaluate where best to place valuable staff resources is worthwhile.

The department maintains a very detailed database of construction and operating permitting actions and has been very responsive to all requests made by EPA Region 7. The department should continue to evaluate its capability to report the new operating permit milestones required for upcoming FY-2007 reporting year.

The review team found no evidence that the department is issuing pre-construction waivers or using variances to allow a source to construct prior to obtaining an approval or permit.

The department is developing a “Permit Writer’s Guide” which contains policy, guidance and procedures for handling different permitting situations that might arise. We encourage the department to continue this effort to assist new staff in learning the permitting program and to assure that trained staff consistently applies these procedures.

The inspection checklists, developed by the permit engineer at the time of the permit review, is a helpful tool for inspectors and compliance staff who must understand the permitting record to properly carry out their oversight responsibilities. While we understand the extra time it takes to develop the checklist, it appears to be a worthwhile effort and we encourage the department to continue.

EPA Recommendations:

A recent review of three “synthetic minor” permits, two for proposed ethanol-related projects and another for a refinery project, along with one MACT-avoidance permit evaluated during the program review, highlight the importance of setting practicable, enforceable permit limits on emissions, along with a commensurate level of monitoring, testing, record keeping and reporting. In the absence of such conditions, a source may be at

risk for not having the right kind of permit or approval. In the actions described above, the federally-approved limits incorporated in the permit, including those from the new source performance standards or the state implementation plan were not sufficient, by themselves, to limit a source from major source review. For permits where a plant-wide emission cap is determined to be the best method to limit emissions below the major source thresholds, the permit must clearly establish enforceable caps on emissions, along with the appropriate averaging period (e.g., 12-month), compliance true-up period (e.g., rolled monthly), detailed-mass balance accounting procedures and associated testing, recordkeeping and reporting to validate compliance with the caps. Equipment descriptions and the summary of air pollution controls and anticipated effectiveness that appear in the "air emission unit technical specifications" portion of the permit, while informative, do not by themselves establish the necessary conditions for major source avoidance.

Approximately 14 of 24 project permits and seven of 76 project approvals reviewed were accompanied by an opportunity for public participation. These projects typically involved construction of new ethanol plants, acceptance of limits to avoid a MACT standard, or were otherwise requested by the source. We encourage the department to continue the opportunity for public participation for these types of projects. But, we have concerns that these few select opportunities for public participation are inconsistent with the federally approved state implementation plan, K.A.R. 28-19-204(a), the underlying federal rules at 40 CFR 51.161 and the requirement to notice all permit projects. The current federal rule in 40 CFR 51.161 requires opportunity for public comment for any project subject to the state's preconstruction review program whether the particular source is subject to the "approval" procedures or the minor source permitting procedures. We understand that the department, as part of its recent efforts to develop streamlined revisions to its minor source permitting rules, has adopted a new policy on opportunity for public notice. However, until KDHE submits its new permitting rules, its interpretation of when public notice is required by Kansas statute, and obtains approval from EPA that these new rules are consistent with the requirements in 40 CFR 51.161, we encourage the department to follow the procedures under the federally-approved SIP. We believe that the federal rule provides flexibility regarding the form of the notice and the timing (e.g., internet posting, and an abbreviated period of time for the public to state whether they want to comment on a particular project), but does not allow the state to dispense with public comment altogether. Failure to provide for public comment could be a basis for a citizen to challenge the permit and for EPA to make a finding that the minor source construction program is deficient.

We found very few permit review summaries, statement of basis or other project or source fact sheets in the project files reviewed. These summaries like those used by all of the Region 7 States provide an opportunity to clearly document the record for future permitting and actions. The summaries contain a detailed explanation of the project under review, anticipated and potential emissions from the project and source as a whole, any associated impacts analyses, a list of historical permitting actions taken and a clear rationale for why any stack testing, monitoring, record keeping, or reporting is required (or not). While the files contained a lot of information and permits for individual emission units, there appeared to be no single document that brought the projects together into a cohesive review. The permit history is a particularly useful tool for understanding the pace of source expansion and

whether new emission units have been properly permitted. The history also provides a mechanism to document the existing emission potentials to help the engineer review the source, and the public understand what level of permitting is necessary. For example, while it was relatively easy to determine if a source is major at the 100 ton per year threshold if they have a Title V permit, it was often unclear whether “unnamed” major sources were at or above the 250 ton per year threshold necessary for PSD review. We understand that documenting the project history for each source file can be a time-consuming process, but the approach helps to provide a clear basis for the current activity at a plant and puts a comprehensive project history in place for future permit writers. Taken in small pieces over the next 3-4 years, as new projects are evaluated, the department could begin documenting the permit history and establish a comprehensive baseline for future permitting actions. We encourage the department to look for opportunities to enhance the description of its permitting activities, especially when issuing one or more permits as part of a larger project. For an example of an approach we think works well, you might see a “Permit Summary” from one of the minor source permits issued by the Missouri Department of Natural Resources, or the Nebraska Department of Environmental Quality.

Except for PSD permits, we found little or no evidence in the source files that the department performs air quality analyses for approval or permit projects. Permit applications prepared by applicants or their consultants also lacked any air quality analysis. While most projects evaluated had de minimis emissions and may not create adverse “real world” impacts, several others were very large emitters permitted at or near the PSD thresholds. In particular, we noted several ethanol projects, which are typically permitted as synthetic minor facilities to avoid PSD review, had no air quality analysis. Based on analyses we have seen in other states, these larger projects often emit at or near the National Ambient Air Quality Standards (NAAQS) and most often exceed the levels for PSD increment. While such analysis is not “required” by the states approved minor source permitting rules, it would be prudent to perform an air quality analysis in potential high growth areas such as industrial parks or where the emissions are close to the PSD thresholds. In addition, the Kansas rule (consistent with 51.160) clearly requires that no permit or approval may be issued if the department determines that emissions from the source or modification would interfere with attainment or maintenance of a NAAQS. At least in instances where there is no air quality analysis at all, it would seem that KDHE could not demonstrate that this requirement has been met, unless, for example, they have a policy, based on some analysis, that certain types or sizes of sources may be presumed not to have an adverse air quality impact. In that regard, we recommend that the state develop a policy for inclusion in its “Permits Writers Guide” that details when a project might benefit from an air quality review.

The department continues to place a heavy reliance on AP-42 factors for determining permit applicability. We noted very few instances in the source files where staff appeared to review, verify, challenge or correct emissions estimates made by sources and its consultants. In most states, we typically find that the review agency either performs their own independent emissions analysis or otherwise provides written verification in the permit record that they agree with, or dispute the emission factors. In most cases, the emission factors used were well documented in the permit application and were of a magnitude that

did not trigger any substantive federal technology standard or major source permitting program, so we found no major consequences of this oversight. Nevertheless, we recommend that the department adopt a standard practice of evaluating the emission calculations and documenting the analysis as part of the permit record. This quality check assures that applicants use the most recent, or best documented, information when making permit applicability decisions.

Approximately 21 of the 31 source files selected for review involved multiple, sequential projects that occurred within six months of the last permitting action. Of these, none provided any insights or documentation into how the department evaluates multi-permit projects to determine whether a more substantive permit review should have been required. While we didn't identify any projects that escaped major source review, because most of the projects were de minimis in nature, this is an important standard practice to assure that "related" projects do not escape major source review by virtue of splitting themselves into multiple, minor projects. For future permitting actions it would be worthwhile for the review engineer to create an enhanced paper trail either in the "project summary", "engineering analysis", or a memorandum to the file detailing why the current project is or is not part of any other permitting action occurring within the past 6-12 months.

The current KDHE website allows access to permit forms and instructions, answers many common questions about the permitting programs, and makes many of the departments' policies and guidance accessible to those required to obtain permits. These are all helpful tools. But, as information technology becomes more advanced and the public expectations are raised, we would like to see the department enhance its use of the internet and the department website to make its permitting activity more publicly accessible. Many states now make both draft and final permits available on line, along with associated deadlines for hearings, petitions, and the public comment period. In the near term, we anticipate many states will also begin to post permit applications on their websites. We encourage the department to explore options for making this information available via the internet.

As part of the "Permit Writers Guide" currently under development by the department, we believe that staff could benefit from guidelines for 1) engine replacement procedures, 2) when stack testing or continuous emission monitoring may be appropriate, 3) when modeling should be required, and, 4) procedures for limiting Potential to Emit (PTE) for synthetic minors or other sources seeking to avoid federal requirements such as MACT. For example, when a "no modeling" or "no stack testing" decision is made, it would be helpful to document the basis for that decision in the record. We found many instances where such "no-decisions" were made, but the reason for the exemption was unclear or undocumented altogether. For example, could it be that the exception is consistent with a department policy or guidance document? Or, are the anticipated emissions so far below the limit that they could reasonably be expected to demonstrate compliance? Or, has the source previously tested and the department is willing to use such results for subsequent permitting? For engine replacements, we noted that sometimes a permit or approval is required, but at other times not. With no reference to a department policy or other documentation in the file, there appeared to be no rationale for this inconsistency. Documenting these kinds of actions,

beyond a “yes” or “no” answers, would assure a better level of consistency between permit reviewers and provide a historical record for such decisions. It also provides a uniform set of procedures for new permitting staff to follow when first learning the program. We encourage the department to develop these and other relevant procedures for inclusion in the guide.

Other Observations:

Over the past several years, EPA has taken an interest in variances issued by states to allow sources to commence construction prior to obtaining all required approvals. EPA’s position is that any source that commences construction without the appropriate permit conditions to limit major source permit applicability (e.g. PSD, Title V Section 112(g)) is in violation of those requirements. In recent years, several states have revised their SIPs to allow for pre-construction waivers for “true” minor sources. Nevertheless, we periodically observe that sources may still try to seek a waiver to begin major source construction activities prior to receiving their permits. The federally-approved (and state-approved) Kansas rules contain no provision for a source, whether a “true” minor or not, to commence early construction. Further, our review of the files reveals no evidence that the department is allowing sources to commence construction prior to obtaining all of the required approvals or permits.

EPA Recommendations:

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

We recommend that the department review, evaluate the specific findings in Attachment S. and take corrective action as necessary for, 1) Empire District Riverton to assure that the “pilot test period” for petcoke is appropriately limited so that PSD is not triggered (or that a PSD permit is obtained), and, 2) Astaris (now ICL Performance Products) to assure that the control device has been properly demonstrated to achieve 99% or better control on HAPs to validate the assumptions used to avoid the MACT.

Source Permit Files Evaluated During Program Review

<u>ID</u>	<u>AFS</u>	<u>Facility Name</u>	<u>SIC</u>	<u>Construction Permit</u>	<u># Projects</u>	<u># Public Notice</u>	<u>Title V Operating Permit</u>	<u>EPA Reviewer</u>
067	00030	BP America Production Company	1311	X	3	1	X	RW
093	00021	BP America Production Company	1311	X	3		X	RW
173	00029	Cargill, Inc. (Soybean Mill)	2075	X	6	3	X	TF
125	00035	CCPS Transportation, LLC	4612	X	1	1	X	RW
173	00068	Coleman Co., Inc. (The)	3429	X	3		X	PS
035	00036	Coffeyville Resources Crude Transport.	4612	X	1	1	X	TF

125	00059	Coffeyville Resources Crude Transport.	4612	X	1	1	X	JK
169	00037	Crestwood, Inc.	2434	X	5		X	JK
003	00030	East Kansas Agri-Energy	2869	X	2	1		TF
021	00002	Empire District Electric Company (The)	4911	X	3		X	JK
161	00001	Fort Riley, Army	9711	X	3		X	JK
035	00031	GE Engine Services, Inc - Strother South	3724	X	4		X	JK
777	00287	Harshman Construction L.L.C.	1422	X	12			RW
045	00013	ICL Performance Products, Inc.	2819	X	7	2	X	JK
091	00126	ITW Dymon	2842	X	5			PS
125	00064	John Deere Coffeyville Works, Inc.	3566	X	4			JK
161	00007	Kansas State University	4911	X	7	1	X	PS
117	00001	Landoll Corporation	3523	X	5			TF
145	00024	Larned State Hospital	8063	X	2			PS
005	00002	MGP Ingredients, Inc.	2085	X	16	2	X	TF
079	00045	Mid Continent Cabinetry	2434	X	7		X	PS
777	00018	Midwest Minerals, Inc.	1422	X	8			PS
175	00012	National Beef Packing Company, L.L.C.	2011	X	4	2	X	TF
189	00008	Northern Natural Gas Company	4922	X	1		X	TF
169	00050	Schwans Global Supply Chain, Inc. (Tony's Pizza)	2038	X	2	1	X	RW
777	00297	Shawnee Rock Company	1422	X	15			TF
055	00023	Sunflower Electric Power Corporation	4911	X	1		X	JK
021	00033	Tamko Roofing Products, Inc.	2952	X	12	1		RW
055	00043	Tyson Fresh Meats, Inc.	2011	X	4	1	X	JK
063	00019	Western Plains Energy, L.L.C.	2869	X	2	1		PS
151	00054	Wildcat Bio-Energy LLC	2869	X	2	1		RW

Attachment Q: Detailed Comments on Permit Source Files

Attachment R: Quick Summary of Findings for Permit Source Files Reviewed

Attachment S: NSR Self-Evaluation Questionnaire Completed by KDHE

CHAPTER 5

ENFORCEMENT AND COMPLIANCE

Introduction:

The report examines 12 critical elements covering inspection implementation, enforcement activity, commitments in annual agreements and data integrity consistent with the State Review Framework (SRF) issued by the Office of Enforcement and Compliance (Attachment Y: State Review Framework). These 12 critical elements: 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 KDHE with the Clean Air Act (CAA) Stationary Sources Program policies and guidance.

The purpose of the review is to assess KDHE's compliance and enforcement activities to ensure that violations that are being identified by KDHE 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.

The EPA enforcement review team included JoAnn Heiman and Gary Bertram, both representing the Air Permitting and Compliance Branch (APCO). Vic Cooper, Russ Brichacek and Mariellen Butler were the primary representatives for the KDHE air compliance program.

Methodology of the Review

Prior to meeting with KDHE, a list of source files to be reviewed was prepared and provided approximately one week prior to each visit. Providing the file list in advance provided ample opportunity to pull all necessary information into a central location. In addition to the files reviewed at KDHE, EPA also reviewed files maintained by the Wyandotte County Health Department. EPA reviewed 27 KDHE files and five Wyandotte County Health Department files. 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 System (AFS) data base was used to identify source files for file review.

File Review

A Self-Evaluation Questionnaire (Attachment: Z) was developed by EPA to assist with file review. The questionnaire was completed for each source file reviewed. The EPA review

covered calendar year 2004 activities to the date of file review. EPA conducted the file review on four visits to the KDHE between the months of February and May, 2006. Any additional enforcement information made available to EPA following the date of file review was also included in the review. Any questions regarding file content or enforcement actions were presented to KDHE either during the EPA visit or submitted via e-mail briefly following each visit.

Program Element Review

Review of the program elements was conducted primarily by evaluating the data KDHE inputted into AFS for Federal Fiscal Year 2005. 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>.

Program element review is based on Federal Fiscal Year 2005 data.

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

Inspections at major sources: The KDHE Compliance Monitoring Strategy (CMS) (Attachment: Z) which KDHE agreed to in the 12/03/95 Implementation Agreement, states that KDHE will follow the guidelines for minimum inspection frequencies for major sources. The KDHE CMS further states that a Full Compliance Evaluation (FCE) will be conducted at major sources every two years, except for a mega-site and some natural gas compressor stations that will be performed every three years. KDHE conducted an FCE at 323 of the 328 major sources (98.5%) over the past two fiscal years. This fell short of the national goal of 100%, but it is well above the national average of 75.4%.

Inspections at synthetic minor (80% of major source level) – (SM80s): The CMS that KDHE agreed to already states that KDHE will inspect facilities that emit or have the potential-to-emit at or above 80% of the major source threshold once every five years. KDHE conducted an FCE at 620 of the 731 synthetic minor sources (84.8%) over the past four fiscal years. This exceeds both the national goal (80%) and the national average (77.8%).

Title V Annual Compliance Certifications received and reviewed: KDHE received and reviewed 315 of the 319 annual compliance certifications due (98.7%) during the fiscal year. This fell short of the national goal of 100%, but it is well above the national average of 76.2%. Further evaluation of the four annual compliance certifications revealed that the certifications had been reviewed, however the source was late with their submission; therefore, the state actually reviewed 100%.

Sources with unknown compliance status designations: AFS generates an unknown compliance status for CMS sources when either an FCE was not done within two fiscal years or an FCE was completed but was not entered into AFS. KDHE had one facility identified with an unknown compliance status.

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

Each inspection report reviewed contained a checklist that had been prepared for the facility. The checklist addressed permit requirements. A checklist outlining regulatory requirements was prepared for the facilities not requiring a permit. The checklists appeared to be thorough.

The checklists are a valuable tool for the inspector. However, many of the inspection reports reviewed contained limited narrative. Violations were identified, but a narrative description of inspector observations was not always present (see recommendations).

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

Inspection reports reviewed were typically completed within one week of inspection. Violations are typically identified by the time the inspection report is completed.

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

KDHE has a high priority violation discovery rate (per major FCE coverage of major and minor sources) of 4.8%. This places KDHE just below the national goal of greater than ½ of the national average of 9.7%.

KDHE has a high priority violation discovery rate (per major source) of 2.9%. This rate of discovery meets the national goal of ½ of the national average of 4.3%.

5. Degree to which state enforcement actions require complying action that will return facilities to compliance in a specific time frame.

NONs – A KDHE issued Notice of Non-compliance (NON) requires the facility to respond by documenting correction of the violations. Deadlines are placed in the NON. The EPA review revealed that two dry cleaners did not provide a response to the KDHE issued NON. Instead, KDHE conducted a follow up inspection to document whether the violations had been corrected.

Orders – The EPA review of orders and consent decrees revealed that time frames for compliance were included in the actions.

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

The percentage of HPVs unaddressed for greater than 270 days is 69.8%. This is higher than the national average of 50.6%. It should be noted that 19 of the 37 unaddressed sources were part of a statewide “global” settlement for Anadarko Gathering Company.

7. Degree to which the State includes both gravity and economic benefit calculations for all penalties.

The KDHE Air Regulatory Enforcement Policy (July 14, 2005) takes into consideration the gravity of the violation and the economic benefit to be gained by the violator. Documentation of the penalty calculations were not found for all of the orders reviewed by EPA. Penalties collected ranged from \$1000 to \$51,000 for the files reviewed. KDHE should maintain documentation of penalty calculations, including a justification, in the case file for each penalty order issued.

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

The percentage of actions at HPVs with a penalty is 92.9%. This exceeds the national goal of 80% and the national average of 79.3%.

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 KDHE to conduct timely enforcement actions against major and synthetic minor sources, consistent with the State’s enforcement policies and priorities. The grant work plan contains no specific enforcement commitments, since Title V fees are used to cover compliance and enforcement of major sources. However, as noted above, KDHE has been very close to, or exceeded current national goals for inspections and enforcement.

10. Degree to which the Minimum Data Requirements are timely.

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.

KDHE has entered 73.3% of the HPVs into AFS greater than 60 days after designation. Region 7 holds monthly calls with the KDHE enforcement staff. AFS issues will be added to the regular

discussions in an effort to proactively address future data entry concerns and emphasize the importance of timely entry of minimum data requirements.

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.

KDHE enters data into their I-Steps database. The I-Steps data is provided to EPA Region 7, who then batches the data into AFS. Region 7 believes all minimum data requirements are being entered into I-Steps.

And,

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

EPA Recommendations:

KDHE 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. Some of the requested files contained facilities with name or ownership changes. The file contained all necessary information, irregardless of site ownership.

KDHE is to be commended for its knowledge of current and historic enforcement activity. As a result, KDHE was able to quickly respond to questions posed by the EPA reviewers.

KDHE and Wyandotte County Health Department are to be commended for the source specific checklists used during inspections. The checklists are a valuable tool that can help the inspector quickly determine if a violation of the air regulations or facility permit has occurred.

The inspection reports would benefit from a consistent format. Some inspection reports consisted solely of the inspection checklist. Some reports consisted of the inspection checklist with handwritten notes in the margins. Some reports consisted of a checklist and narrative describing inspection observations and violations. The latter better described the inspector's findings. EPA recommends that inspection reports consist of a brief narrative addressing the inspector's observations and violations and attaching the checklist(s) as a supporting document.

Penalty justification/calculation documentation was not found in all of the files where a penalty was assessed. KDHE should ensure such documentation is included in the file for each penalty order issued.

Several inspections were conducted with a memo in file stating a letter was not mailed to the facility due to ongoing compliance issues. Such statements in the file are confusing and suggest that either there was no purpose in the inspector's visit or the inspector was not informed in advance of on-going enforcement activity. If KDHE requires the inspection, then the file should

contain documentation discussing the purpose of the inspection and the relation to the on-going enforcement activity. If KDHE does not require the inspection (and plans to take no action based on the inspection findings due to an ongoing enforcement action), then it may be a more efficient use of resources to communicate this information to the inspector and provide an alternate inspection target.

Although the files are well organized, the EPA reviewer noted a number of “holes” in the files, including facility response to enforcement actions and KDHE follow up action to identified violations.

Source Specific Findings

Deffenbaugh, Ind. (091-0117)

Documents in the file indicate discussions were held with the facility prior to drafting the CAFO in an effort to bring them into compliance. Although the intent is to speed resolution of the enforcement action, this approach can have the effect of complicating resolution of the enforcement action. The purpose of the CAFO is to outline the requirements to bring the facility into compliance and establish a date by which compliance is to be achieved.

Forest View Landfill (209-0003)

The facility is classified as HPV for NSPS WWW for flaring issues and monitor downtime. The flare issues were identified in June 2003. A September 24, 2004, inspection states “5th time out of compliance.” An October 4, 2004, memo lists the following compliance issues identified during the September 24, 2004, inspection: recordkeeping/no notification of 10 new gas extraction wells and ~2120 feet of gas collection header; failure to submit annual NSPS report and failure to submit collection & control design information. The file contains no additional information regarding the potential violations identified by the inspector. Therefore, it is unknown if the potential violations identified by the inspector were addressed.

Enforcement action for violations noted in June 2003, were not formally addressed for well over two years. The EPA December 22, 1998, policy “The Timely and Appropriate Enforcement Response to High Priority Violations” states that HPVs should be addressed within 270 days of designation as an HPV. EPA recommends that KDHE respond more quickly in preparing enforcement actions. The longer it takes to settle a case, the longer the facility may be in noncompliance. Also, in this case, the delay in issuing the enforcement action in a timely fashion may be an economic benefit for the facility due to a relatively low penalty (\$6,000) to address violations that may not have been resolved in excess of two years.

Columbian Tec Tank (099-0037)

A June 2005 letter terminated the December 2004 CAO. KDHE collected \$22,000 and waived the need for a Class I permit due to a lower Potential to Emit by the facility. The request

to vacate the Class I permit was made in a memo from the facility to KDHE dated November 2004. Reference to the memo was found in the file, but a copy was not found by the EPA reviewer. An August 2, 2005, inspection revealed the facility was operating differently than reported in its request to vacate their Class I permit. KDHE is unsure if a violation exists due to the fact that the facility is now classified as a B source and no longer is subject to a Class I permit. An information request letter was mailed to the facility on March 15, 2006, requesting additional information that will help determine if the facility is a true minor source.

EPA recommends that decisions to reclassify Class I facilities to synthetic minor not be incorporated into enforcement settlement agreements unless the facility has implemented a SEP that will clearly reduce its potential to emit. The EPA reviewer was unable to find a copy of the memo from the facility requesting the facility reclassification. However, the situation gives the appearance that the facility was rewarded for settling the enforcement action.

Air Capitol Plating (173-0152)

The facility is an HPV. The facility failed to submit reports during the years 2003, 2004 and 2005. Inspections were conducted September 27, 2004, and July 20, 2005. The inspector noted no violations during the two inspections. However, KDHE issued an LOW on May 2, 2005, and an NON on May 26, 2005. In addition, the facility submitted semi-annual compliance certifications identifying a number of violations, including: 1) formulations exceeding VOC limits; 2) use of unapproved solvent; 3) top coat exceeding VOC limits; 4) primer exceeding VOC content limit; and 5) top coat exceeding organic HAP content. The most recent compliance certification reviewed February 15, 2006 states violations still exist.

“Day Zero” was established as March 15, 2005, to establish the facility as an HPV. In accordance with the EPA December 22, 1998, policy “The Timely and Appropriate Enforcement Response to High Priority Violations” states that HPVs should be addressed within 270 days of designation as an HPV. A formal enforcement action has not been issued as of June, 2006. EPA recommends that KDHE respond more quickly in preparing enforcement actions.

National Beef Packing (175-0012 & 057-0013)

The case against both sites was settled at the same time. The facility paid a penalty and prepared an EMS. The CAO was terminated on May 3, 2005. Inspection of the two facilities occurred on January 10 and 11, 2006. The inspector noted no violations. However, a memo was also added to the file stating that a letter would not be mailed to the facility due to “Topeka issues”. The EPA reviewer was informed that the inspector was not aware the CAO requirements had been met.

Snorkel International (043-0017)

The facility failed to submit 2002 Emissions Inventory. An order was issued to the facility in December 2003. The CAO was terminated October 4, 2004. A penalty of \$1500 was

waived due to fact that Snorkel purchased the site from Omniquip in December 2002. Snorkel submitted EI forms to Omniquip for completion, but Omniquip did not respond. Inspections on April 15, 2004, and January 18, 2006, revealed no violations.

Palmer Manufacturing (055-0055)

A memo in the file documents the facility was open burning. The memo includes e-mails documenting the facility's knowledge of the open burning ban. An order was issued against facility seeking \$3500 in penalties. No documentation in file regarding current status of order.

Marble Creations (091-0154)

The facility was issued an order in November 2004, for late submission of their Class II permit application. It was also noted that facility's PTE would indicate they are a major source. A CAO was issued in April 2005. The CAO required the following: payment of \$2500 penalty; use of low-hazard air pollutant emission spray guns by July 15, 2005; and testing of one new low-HAP gel coat or resin each year. The CAO was terminated on July 7, 2005, and the penalty collected. An inspection was conducted November 29, 2005. The following comment was found in the report, "Facility has not met the terms of the CAO, which is now terminated." However, a letter was mailed to the facility on November 30, 2005, stating no violations were noted during the inspection.

Clay Center (027-00007)

The facility was issued an order in July 2004. The order cited the facility for failure to submit an annual certification, failure to submit semi-annual reports, late submission of quarterly reports and failure to conduct Method 9 and/or submit reports. The order assessed a penalty of \$7,000. A letter was mailed to the facility on September 9, 2005, noting that the facility is late submitting semi-annual reports. The letter further states that this is a recurring violation. The facility's consultant responded September 19, 2005. The consultant states there was a misunderstanding regarding the reporting dates. No additional information was found in the file documenting resolution of the September 9, 2005, letter or the July 2004 order.

London Pride Cleaners (091-00220)

KDHE issued an NON to facility on March 18, 2005, citing the following: 1) failure to maintain perc usage records; 2) failure to conduct leak inspections; 3) failure to maintain weekly temperature monitoring logs; and 4) failure to provide 30-day advance notification of startup. Facility was reinspected May 16, 2005, to determine compliance. No violations were noted during the inspection. However, no documentation of facility's response to NON or NON resolution was found in file.

Tower Metal Products (107-00027)

The file contained a memo from the inspector dated September 1, 2004. The memo notes that a letter was not prepared for the August 28, 2004, inspection due to compliance issue. A telephone conversation record dated December 15, 2004, states that both parties have decided to void the existing permit because the facility is a "B" source. A Class II permit was issued to the facility on April 15, 2005. There is no additional information regarding resolution of the compliance issue noted in the inspector's September 1, 2004, memo.

Discount Cleaners (173-00299)

The facility was issued an NON on August 16, 2004, citing the following violations noted during the August 4, 2004 inspection: 1) failure to maintain perc records; 2) failure to conduct leak checks; and 3) failure to maintain records of temperature checks. An inspection conducted on September 7, 2004, determined the violations had been corrected. No documentation of facility's response to NON was found in file.

Innovia Films (177-00035)

On December 21, 2005, KDHE issued a CAO to facility for violation of previous CAO and failure to demonstrate compliance with Subpart UUUU by December 10, 2005. The CAO placed facility on a compliance schedule. In addition to a \$10,000 penalty, the facility is required to accomplish the following: 1) develop a supplemental environmental project; 2) prepare and implement an EMS by June 1, 2007; 3) contribute \$1000 to support environmental education; 4) submit a construction permit application by March 1, 2006; and 5) install a flare within one year of permit issuance. The penalty was paid on January 18, 2006. The permit application was submitted on March 1, 2006. On March 15, 2006, the facility suggests the addition of a boiler control system to increase boiler efficiency to serve as the required supplemental environmental project. KDHE accepted the supplemental environmental project on March 20, 2006. It appears as though the supplemental environmental project was not proposed until after the CAO was signed. EPA's SEP Policy states that "The type and scope of each project are defined in the signed settlement agreement." The CAO requires the facility to commit "at least \$38,000 for a SEP project involving air emission reductions at their Tecumseh facility that is agreed mutually by KDHE and Innovia."

The EPA SEP Policy requires a SEP meet one of the following criteria:

- the project is designed to reduce the likelihood that similar violations will occur in the future;
- the project reduces the adverse impact to public health or the environment to which the violation at issue contributes;
- The project reduces the overall risk to public health or the environment potentially affected by the violation at issue.

The State SEP Policy offers similar requirements, but also requires the facility to develop an Environmental Management System and contribute to a statewide environmental education

program. However, the EPA reviewer did not find documentation showing the proposed SEP would reduce emissions, reduce impact to the environment or go beyond minimum compliance with the law.

Triumph Accessory (191-00035)

An inspection conducted on August 4, 2004, determined the facility is subject to Subpart T. Facility had not submitted annual solvent usage information. A memo in the file dated January 5, 2005, states that an NON should be issued to the facility for failure to report. No follow-up to the memo was found in the file.

Overall Assessment of Enforcement Program

The State of Kansas is implementing an adequate Air Enforcement Program. KDHE has program elements that are highlighted and areas for improvement as discussed below.

File Structure: Files were organized by ID number (not facility name) which made it very easy for staff to locate files, even for facilities in which ownership has changed. Documents located within the files are organized chronologically. Occasionally, a document would be missing or misfiled. But, overall Kansas is to be commended for the management of their Air Enforcement Files.

Inspections: Kansas came very close to inspecting all of its major sources in the past two years. Even though AFS would indicate they fell short, Kansas still performed much better than the national average. Tools available to the inspectors (i.e. checklists) are very well constructed and are valuable elements of an inspection.

Enforcement: Kansas is committed to returning violators to compliance. This is a worthy goal which should be the cornerstone, but balanced with formal enforcement. Kansas has been successful returning facilities to compliance.

EPA Recommendations:

Inspections: Although the checklists are important to the inspection procedure to assist the inspector in identifying potential permit and rule violations, some inspectors appear to rely too heavily on the checklists. Some inspection reports consisted primarily of the inspection checklist and little more. The inspection checklist should be a tool to support the findings of the inspector. Thus, the inspector should also provide, at a minimum, a brief narrative describing the inspection procedures and findings.

Timely Enforcement: Sometimes the efforts to negotiate before an order is issued or prior to a CAFO have resulted in delayed resolution of the enforcement action, and delayed compliance. In other cases, the CAFO may have been signed before the facility identified a SEP or the CAFO may have been terminated before the final deliverables were received by Kansas. Kansas should

use the available enforcement tools (enforcement orders, penalties, CAFOs) to encourage a rapid return to compliance with minimal delay and ensure compliance with all conditions are achieved before terminating the CAFO. By using these enforcement tools, specific deadlines can be set for the facilities to return to compliance.

CHAPTER 6

ASBESTOS

Introduction:

The Bureau of Air and Radiation of KDHE 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. Given the limited resources devoted to the program, the level of effort is commendable. KDHE exercises common sense and good judgment in prioritizing inspections and pursuing enforcement actions. The enforcement files are well organized, and include adequate documentation to support enforcement actions. KDHE also implements an asbestos licensing program for workers and contractors/supervisors.

Program Operation:

Non-notifiers:

KDHE identifies non-notifiers in several ways. Abatement projects using demolition work practices are tracked to identify non-notifiers for the actual demolition. The demolition notification forms include questions concerning friable material found during the asbestos inspection, and the responses to those questions are used to identify non-notifiers for abatement projects. KDHE receives several citizen complaints per month, and many of these constitute demolitions with no prior notification. Field inspectors from other programs are trained to look for demolitions in progress, and district office personnel in other media programs have received training on the asbestos regulations. Also, news media reports are monitored to learn of non-notified projects.

Enforcement Response Policy:

KDHE has a written asbestos program enforcement policy document dated August 12, 1992, which considers gravity of the violation, compliance history, economic benefit, and other relevant factors. Generally, a notice of noncompliance is issued for first-time violators and for paperwork violations, whereas penalties are sought for repeat violators of emission control requirements. KDHE can levy penalties of up to \$5000 per violation for state regulations, and up to \$10,000 per day for NESHAP violations. When warranted, KDHE can also revoke business licenses. The present enforcement response policy does not appear to address the timeliness of enforcement actions; however, KDHE management and staff do keep track of case review and enforcement. KDHE is planning to update its 1992 policy, which will include criteria for documenting penalty calculations.

Education and Outreach:

KDHE takes advantage of opportunities to provide education and outreach to interested parties. KDHE meets frequently with city officials planning urban renewal projects and conducts "courtesy" inspections so that demolition and renovation requirements can be communicated beforehand. Similar approaches are also conducted with school districts planning renovation projects. The KDHE website includes many asbestos forms and resources, and the Department plans to make the site more user-friendly.

NESHAP Category I nonfriable floor covering:

KDHE follows EPA's policy with regard to the removal of Category 1 non-friable floor covering. If the material is in good condition, and is not sanded, ground or abraded, the removal is not considered a regulated project.

Policy Determinations:

KDHE maintains a Q & A notebook of EPA policy determinations and also accesses EPA's Applicability Determination Index (ADI).

Data Management:

NESHAP inspection data are entered into a Microsoft Access database and a hardcopy report is generated and maintained in the inspection folder for licensed abatement companies. The Access database has been operational for a few years, and replaced a previous AS400 system. The Access database has not been purged, and data from the former AS400 system has been merged into the new system. If an enforcement action is initiated, and enforcement file folder is maintained until the case is closed, at which time the folder is stored in the file room.

The Access database is also used to track notifications. The system is not accessible by either the KDHE regional offices, or the local delegated programs; however, for active abatement projects, the data base is able to generate Microsoft Excel and Word project summary documents which can be accessed throughout KDHE on its shared T: drive. NESHAP inspections conducted through work agreements with local agencies are also entered into the database.

File Review:

KDHE's files are organized by contractor name, and separate sub-folders are maintained for notifications, inspections and enforcement actions (if applicable). The files are well organized and contain sufficient information to document enforcement actions. File documentation was excellent and included telephone conversation records, inspection reports, event chronologies, newspaper articles, results of asbestos sample analysis, and notices of noncompliance, administrative orders and penalty actions. In particular, the compliance inspection reports were

well written and contained extensive narrative discussions in instances where enforcement action was to be pursued. Asbestos samples and chain of custody information are filed at the KDHE laboratory facility. KDHE frequently documents asbestos inspections using a video camera. This form of evidence has proven quite effective in settling asbestos enforcement cases. For additional information see Attachment T: BAR Annual Report 2005)

In all files examined, enforcement actions taken were appropriate for the gravity of the violations. EPA recommends that KDHE include a memorandum in enforcement files that documents the calculation and basis for penalties that are assessed. Most enforcement actions appeared to proceed expeditiously and delays seemed to be beyond the control of the department. KDHE also keeps well-documented asbestos sampling log book. Entries include analysis results, the location from which the sample was taken and the physical properties of the sample.

KDHE promptly issues a letter of response to each party submitting an asbestos abatement notification. If the notification information is incomplete, KDHE contacts the party to get additional information. The letter of response contains a summary of the pertinent notification information, which has proven valuable in documenting violations.

Subsequent to an asbestos inspection, KDHE issues a follow-up survey to the owner/operator. Obviously, when violations are documented and enforcement action is being considered, the survey responses often reflect the ire of the respondent. However, the survey responses generally offer KDHE a means of improving its compliance inspection process.

EPA Recommendations:

Include a memo in enforcement files which documents the calculation and basis for the assessed penalty. EPA understands that KDHE intends to implement this recommendation in conjunction with revising its August 12, 1992, Enforcement Response Policy.

CHAPTER 7

AMBIENT AIR MONITORING

Summary:

The Kansas Department of Health and Environment (KDHE) is responsible for conducting the ambient air monitoring program throughout the state of Kansas. 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), particulate matter-2.5 micron (PM_{2.5}), nitrogen dioxide (NO₂) and sulfur dioxide (SO₂). This network is designed to meet the EPA sitting regulations and is reviewed annually.

All of the monitors and the laboratory analytical procedures being utilized in this SLAMS network are EPA designated reference or equivalent methods. The standard materials used to calibrate and audit the monitoring systems are properly certified and have the required certification to NIST reference standards.

The agency's standard operating procedures (SOP's) and Quality Assurance Project Plan (QAPP) are in good order and well written. KDHE data completeness has historically been good for all pollutants monitored as have been the precision and accuracy (P&A) results for their monitoring.

Introduction:

An Air Monitoring System Audit of the KDHE was conducted on November 7, 2004. The purpose of the audit was to document the agency's 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 Air Quality System (AQS), and the agency's performance in the National Performance Audit Program (NPAP). A copy of the Air Monitoring System Audit Questionnaire is attached as Appendix A.

The participants in this audit were:

Name	Agency
Leland Grooms	EPA Region 7
Thien Bui	EPA Region 7
James Regehr	EPA Region 7
Mike Martin	KDHE/BAR
Gary Cragg	KDHE/BAR
Fred Diver	KDHE/BAR

Gary Ficklin	KDHE/BAR
Scott Weir	KDHE/BAR
Yan Wang	KDHE/BAR
Maurice Terrebonne	Wichita Environmental Health
John Stark	Wichita Environmental Health
R. Sachs	Unified Government of Wyandotte County Department of Air Quality
Perry Piper	Shawnee County Health Agency

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

EPA Region VII audit personnel were able to visit one half of KDHE's air monitoring sites. Half of these sites were chosen using National Performance Audit Program results, the current Data Completeness Report and the current PARS Report. The other half were randomly chosen. The following is a list of the audited monitors and the monitor audit results:

Site Location	Pollutant	Audit Results
JFK Center	CO	Excellent
JFK Center	NO ₂	Excellent
JFK Center	O ₃	Excellent
JFK Center	SO ₂	Excellent
Justice Center	PM _{2.5}	Satisfactory
Justice Center*	PM _{2.5}	Satisfactory
Mine Creek BF	CO	Excellent
Mine Creek BF	O ₃	Excellent
Mine Creek BF	SO ₂	Excellent
Mine Creek BF	NO ₂	Excellent
Mine Creek BF	PM _{2.5}	Satisfactory
Mine Creek BF*	PM _{2.5}	Satisfactory
Blackbob Elementary School	PM _{2.5}	Satisfactory
1900 E. 9 th , SC	CO	Excellent
1900 E. 9 th , SC	NO ₂	Excellent
1900 E. 9 th , SC	O ₃	Satisfactory
Shawnee County, Robinson Sch	PM ₁₀	Satisfactory
Shawnee County, McClure Sch	PM _{2.5}	Satisfactory
Shawnee County, Robinson Sch	PM _{2.5}	Satisfactory
Wichita, Health Department	PM _{2.5}	Satisfactory
Wichita, Health Department*	PM _{2.5}	Satisfactory
Wichita, Coleman	PM ₁₀	Satisfactory
Wyandotte County, JFK Center	PM ₁₀	Satisfactory
Wyandotte County, JFK Center*	PM ₁₀	Satisfactory
Wyandotte County, JFK Center	PM _{2.5}	Satisfactory

Wyandotte County, JFK Center*	PM _{2.5}	Satisfactory
* indicates collocated monitors		

Audit Results:

The technical systems audit focused on the following five areas:

- 1) Network Management
- 2) Field Operations
- 3) Laboratory Operations
- 4) Data and Data Management
- 5) Quality Assurance/Quality Control

These areas were thoroughly reviewed onsite and through the technical systems audit form questionnaire. EPA Region VII found only minor deficiencies in these areas.

Network Management:

The current ambient air monitoring network in the state of Kansas (including local agencies) includes: four CO, nine O₃, twelve PM₁₀, twelve PM_{2.5}, four NO₂ and five SO₂ monitors. A listing of these sites is attached as Appendix C. It is reviewed annually to determine if monitoring locations need to be relocated, added or deleted. These monitors are adequately maintained during one visit every two weeks to each monitoring location.

All of the monitors and laboratory procedures used in the KDHE network have been designated by EPA as approved reference or equivalent methods for ambient air criteria pollutants. Each of the standard materials used to calibrate or audit these monitors or procedures is properly certified. When required, the standard certifications are traceable to NIST reference standards.

Field Operations:

KDHE has participated, as required, in EPA's national monitor performance audit program conducting audits of each type of pollutant monitor they operate. A review of the results of these audits confirms they have been satisfactory for the past two years. EPA Region VII, as noted above, conducted several monitor performance audits as part of this program audit. At least one analyzer for each pollutant monitored by KDHE was audited by Region VII. The calibration of each audited monitor was satisfactory or better. Also, the agency's internal monitor performance auditing has been done according to the EPA required schedule. The results for these audits were satisfactory in 2003-2004.

Laboratory Operations:

The laboratory operations for the KDHE PM_{2.5} program are currently contracted out to IML Air Science, Sheridan, WY. This program was audited by KDHE during the last fiscal year and no unfavorable findings were reported.

The PM₁₀ Laboratory for the state is located at the Forbes Field facility in Topeka. This area was reviewed during the technical system audit on November 7, 2004 and was found to be operating in a satisfactory manner.

Data and Data Management:

The completeness of valid data from the KDHE's ambient monitoring network historically has been good. The quarterly reports of this data to EPA have also been timely. This good record of data completeness continued in 2003 (the latest full year of validated data), every monitor in the network had more than 75 percent complete data for each quarter as required.

Quality Assurance/Quality Control:

The agency's standard operating procedures (SOP's) and Quality Assurance Project Plan (QAPP) are in good order and well written. However, several of the local agencies are operating off outdated SOP's. KDHE's data completeness has historically been good for all pollutants monitored as have been the precision and accuracy (P&A) results for their monitoring.

EPA Recommendations:

KDHE

KDHE needs to insure that all local agencies are operating off the most up to date SOP's for equipment operation and audit procedures to ensure consistency throughout the program.

Manual spot checks should be performed periodically on the weight equation for PM_{2.5} results received from the contract weighing lab.

The KDHE episode plan and SOP should be updated to include an AQI action limit lower than the present score of 200.

Air monitoring site records should be updated to include current pictures of the site, periods and reasons of invalidated data and record of requests and permission for moving/discontinuing site operations. All air monitoring site records should be stored in a central file.

Internal shelter temperature at monitoring stations must be maintained between 20 - 30 degrees Celsius to meet EPA reference and equivalency requirements. In order to document temperature control, a continuous temperature recorder at all monitoring sites is recommended. (Reference: Quality Assurance Handbook for Air Pollution Measurements Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development, EPA-454-R-98-004, August 1998, Section 7.1).

Cylinders BAL2189 (NO - 49.3ppm) and BAL3198 (NO - 48.7ppm) are out of certification. Care should be taken to use only gas standards that are within their certification periods.

Dirt was observed inside the sampling lines at the Health Department monitoring station in Wichita, KS. A cleaning schedule for sampling lines and manifold is recommended and should be included in the Standard Operating Procedures (SOP).

Field handling of PM_{2.5} filters should be consistent with all technicians who operate the PM_{2.5} analyzers. Filters inside the cassettes should be loaded in the magazine in a clean environment. Extraction of the exposed filters should also be done in a clean environment, not at the monitors. Better defined filter handling procedures should be included in the existing SOP.

The design flow rate of the PM₁₀ Hi-Volume sampler should be checked during a flow rate audit. A specific space to calculate the percent difference of the design flow rate and sampler flow rate is recommended to be included in the PM₁₀ audit form. (Reference: Quality Assurance Handbook for Air Pollution Measurements Systems, Volume II: Part 2, Specific Methods, Quality Assurance Guidance Document 2.11).

A flow rate/design flow rate check should be done monthly on a PM₁₀ Hi-Volume sampler. (Reference: Quality Assurance Handbook for Air Pollution Measurements Systems, Volume II: Part 2, Specific Methods, Quality Assurance Guidance Document 2.11).

A Quality Control (QC) check should be performed by the monitoring agency after an audit failure to validate the audit failure. Only the QC check by the monitoring agency will determine the validity of the data. Corrective action is done only after the QC check is performed by the monitoring agency. This procedure should be included in the current SOP.

An external leak check, internal leak check, temperature check (ambient and filter), and pressure audit should be performed once a quarter. (Reference: Quality Assurance Handbook for Air Pollution Measurements Systems, Quality Assurance Guidance Document 2.12, Monitoring PM_{2.5} in Ambient Air Using Designated Reference or Class I Equivalent Methods).

All points of a multi-calibration for continuous gaseous analyzers should be within +-2% of full scale of best-fit straight line. These criteria should be calculated and shown on the calibration sheet to insure that a calibration is valid. (Reference: Quality Assurance Handbook for Air Pollution Measurements Systems, Volume II: Part I, Ambient Air Quality Monitoring Program Quality System Development, EPA-454-R-98-004, August 1998).

A clearer adjustment procedure should be developed and included in the current SOP for the continuous analyzers.

An observed adjustment was made to the NO and NO_x channels during an audit by EPA personnel before the operator checked the NO₂ channel. An adjustment should only be done after NO, NO_x, and NO₂ level one checks have been performed. An additional level one span check should be done after the adjustment.

A temperature and pressure check is recommended when an audit is performed on the continuous PM₁₀ monitor. This should be documented on the audit form.

At the JFK site, the CO was last calibrated on December 17, 2003, a time span of 10 months since the last calibration. All continuous analyzers should be calibrated 6 months after the most recent calibration as stated in the Kansas Ambient Monitoring SOP.

The flow rate criteria should be change to +-4 percent on the PM_{2.5} monthly verification form.

The PM₁₀ elapsed timer/counter being used by KDHE and all local agencies should be checked for accuracy on an annual basis. (Reference: 40 CFR Part 50, App. M, Section 7.1.5).

SHAWNEE COUNTY HEALTH AGENCY

A flow rate/design flow rate check should be done monthly on the PM₁₀ Hi-Volume samplers. (Reference: Quality Assurance Handbook for Air Pollution Measurements Systems, Volume II: Part 2, Specific Methods, Quality Assurance Guidance Document 2.11).

The current flow rate should be included during a calibration on the PM_{2.5} Calibration Form A +- 4 percent error calculation is also recommended for the one point verification.

The flow rate criteria should be changed to +-4 percent on the PM_{2.5} monthly verification form.

WICHITA ENVIRONMENTAL HEALTH

Current procedures for Wichita Environmental Health personnel include taking out a clean filter for the PM₁₀ Hi-Volume sampler and installing it in the cassette at the site. Filter recovery is also done at the site. EPA recommends that the clean filter be placed in the cassette in a clean environment protected and then installed in the monitor before sampling to reduce contamination. Exposed filter removal from the cassette should also be done in a clean environment. This procedure should be included in the current SOP.

A flow rate/design flow rate check should be done monthly on the PM₁₀ Hi-Volume samplers. (Reference: Quality Assurance Handbook for Air Pollution Measurements Systems, Volume II: Part 2, Specific Methods, Quality Assurance Guidance Document 2.11).

Calibration procedure for PM₁₀ Hi-Volume samplers should be consistent with the current SOP. If the manufacturer service manual is used then that should be included in the current SOP.

A more detailed documentation process is recommended for each recorded site visit to include maintenance documentation, PM_{2.5} filter information and corrective actions if needed.

Review sitting criteria on the Sedgwick County Health Department air monitoring site as it may be out of compliance with CFR requirements.

The barometric pressure sensor has not been certified since February 4, 2003. Pressure sensors should be calibrated/verified on an annual basis.

Quality assurance documentation such as temperature probe certification should be on hand. A good filing system for all documentation is recommended.

All PM_{2.5} filter cassettes should be installed in the magazine with a clean environment before taken out to the site for installation. Exposed filters should be taken back to the office inside a magazine, and then taken out when ready to ship to the lab within a clean environment. This procedure should be included in the current SOP.

The Chinook FTS SN#981105A certification expired on February 15, 2003. Care should be taken not to use any QC equipment that is not within allowable certification.

WYANDOTTE COUNTY

A flow rate/design flow rate check should be done monthly on a PM₁₀ Hi-Volume sampler. A certified flow orifice should also be used when a flow check is performed. Wyandotte County uses a Volumetric Flow Controller. If used, this procedure for the flow check should be included in the current SOP. (Reference: Quality Assurance Handbook for Air Pollution Measure).

For additional information see the following attachments:

Attachment U: National Air Monitoring System Audit Questionnaire

Attachment V: Monitor Audit Results

Attachment W: Ambient Air Monitoring Network

CHAPTER 8

AIR TOXICS

Introduction:

The BAR is where rules are adopted, the sources are tracked, reports submitted, inspection reports reviewed and permits written. The field offices' Bureau of Environmental Field Services (BEFS) or local agencies conduct source inspections. Source tests are observed by the BAR or the local agencies.

Inspections:

The BAR determines the number of inspections in each of the six field offices. The district field inspector submits a schedule of monthly inspections, and in general, the inspection numbers are evaluated by the BAR Central Office quarterly. Complaint inspections and other investigations/site inspections are scheduled as needed, and generally as soon as practical. Central office and district staff use a Complaint Investigation Form for documenting on-site investigations, as well as telephone or written complaints received from any source (public, governmental agencies, industry, etc.).

The report is expected to be sent back to the BAR within ten days of the inspection. Most of the inspection reports contain a cover sheet, a checklist, and comment sheet to determine basic source information. The report is reviewed for completeness and documentation of regulatory compliance.

Most Title V sources are inspected every year. The Synthetic Minors (KDHE Class II) sources are scheduled every two years. All Synthetic Minor sources in Kansas are scheduled for inspection on a one- or two-year cycle. Most other minor sources (KDHE "B" sources) are scheduled to be evaluated on a once every five-year cycle, except in Shawnee County where they are inspected on a yearly basis.

The data from the reports input into the BAR system and data are transferred to EPA for entry into AIRS. All reports are reviewed by BAR staff where follow up action is taken if deemed necessary.

Data Tracking:

The BAR personnel have used different spreadsheets over the past few years. The initial spreadsheets had a separate page for each standard, and listed the source and the points subject to the regulation. A second generation spreadsheet is being used that also tracks the compliance with the reporting requirements. BAR personnel are in the process of designing a data base to handle the requirements of the MACT notification and reporting and tracking.

Management of Program:

KDHE receives the initial notification reports, tracks and observes the performance test and tracks the compliance status. KDHE also incorporates the MACT standard in the permits and tracks the semiannual and annual compliance status reports. They schedule inspections, review inspections and track completion of the inspections. Two MACT categories, dry cleaners and secondary aluminum sweat furnaces, are not handled in this manner. The Bureau of Waste Management was tasked with inspections of dry cleaners and secondary aluminum sweat furnaces. The compliance data are entered into I-Steps, and some of the inspection and compliance data transferred to EPA for entry into AIRS.

Inspections:

Targeting of inspections, documentation of the sources' compliance during the inspection and reviews of the inspection report for the BEFS are excellent.

Two inspection reports, "Safety-Kleen, Inc, 2549 N. New York, Wichita" and "Raytheon Aircraft Company, 9709 E. Central, Wichita" did not have a detail checklist accompanying the inspection report. These inspection reports did not detail how the sources were complying with the standard. Appendix T-3

The one MACT standard, the dry cleaners' standard, Subpart M, is not tracked by the BAR program. Apparently the Bureau of Waste agreed in 1996 they would inspect the dry cleaners for compliance with the MACT standard. The Bureau of Waste submitted a list entitled "Outreach Cleaners" which listed 16 dry cleaners (Appendix T-4). The files for "Bentley's Garment Care Ctr., Neodesha," and "Hygenic Dry Cleaners, Topeka Kansas" were reviewed; these inspections do not include an air component to the inspections. The BAR program reviewed the Kansas files, after the on-site audit, and only found one dry cleaner inspection that included an air component to the inspection. EPA had received notifications from 145 dry cleaners located in Kansas.

EPA Recommendations:

EPA makes the following recommendations in response to the findings listed in Summary of Findings.

Evaluate the inspection reports for the local agencies and ensure that they meet a standard that allows the reviewer of the report to determine which parameters were checked to determine the source's compliance status and the compliance.

Revise the implementation plan for the MACT standard for dry cleaners.

KDHE should ensure all inspection reports contain a cover sheet, checklist, and comment sheet.

CHAPTER 9

TITLE V FEE REVIEW

Introduction:

The purpose of the Title V Fee Review was to assure that KDHE was collecting adequate fees and accounting for the direct and indirect costs associated with Title V and non-title V activities.

EPA started the Title V Fee review by submitting a set of questions to the KDHE, Bureau of Air and Radiation (BAR), concerning the Title V fee revenue, expenditures and the accounting system. KDHE provided detailed responses to the questions prior to the program review; however, KDHE was asked to give some clarification during the review.

The KDHE uses an Emission Inventory form for sources to identify their actual emissions for NO_x, VOC, PM₁₀, SO_x, PM, CO and HAP pollutants. Based on the amounts identified, an annual fee is paid on a per-ton basis. The current regulation fee is \$20 per ton. The fees are tracked by the source identification number using a spreadsheet.

The KDHE staff track their time through the use of cost codes to differentiate between Title V and Non-Title V activities. The BAR has a total of 53 people doing air quality work. Currently, Title V dollars fund 29.7 BAR FTE's and 7.14 Bureau of Environmental Field Services FTE's. The remaining positions are paid for with CAA section 103, 105, and State General Funds (SGF).

The reporting of Title V and non-Title V funds and activities are reviewed by the KDHE on a quarterly basis in order to make any needed adjustments. By tracking the revenues, expenditures and projections, the KDHE adjusts the per-ton yearly fee in order to meet the funding needs. A fee review was not performed during this program review.

Conclusion:

KDHE is collecting sufficient fees, and accounting for the direct and indirect costs associated with administering the Title V program in conjunction with the Non-Title V activities.

For additional information see the Self-Evaluation (Attachment X: Title V Self-Evaluation Questionnaire Completed by KDHE)