



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
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SEP 3 0 2010

REPLY TO THE ATTENTION OF:
A-18J

Laurel Kroack
Chief
Bureau of Air
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, Illinois 62794-9276

Dear Ms. Kroack:

I am transmitting to you the final report of the Title V operating permit program evaluation that took place between April 20 and April 21, 2010. Several representatives of the U.S. Environmental Protection Agency met with the Illinois Environmental Protection Agency (IEPA) managers and staff. This meeting was part of EPA's initiative to evaluate states' permit program implementation.

We appreciate the efforts IEPA has taken to address the issues raised in the 2004 program evaluation over the last six years. However, EPA finds that IEPA has an unacceptable Title V permit issuance rate and inadequate documentation of decision-making for more complex sources, and must address some aspects of the implementation of the compliance assurance monitoring requirements. Although we believe the steps Illinois has recently taken are likely to result in improvements, ultimately Illinois must determine and take the actions necessary to resolve these significant chronic problems. We look forward to working with you to develop an action plan to resolve issues addressed in this report. If you have any questions, please contact Pamela Blakley, of my staff, at (312) 886-4447.

Sincerely,

A handwritten signature in blue ink, appearing to read "Cheryl L. Newton".

Cheryl L. Newton,
Director
Air and Radiation Division

Enclosures

**Review of Illinois' Title V Operating
Permit Program
Illinois Environmental Protection Agency**

April 2010

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2010 Review of Illinois' Title V Operating Permit Program

I. Executive Summary

In April 2010, the U.S. Environmental Protection Agency conducted an evaluation of the Illinois Environmental Protection Agency's (IEPA) Clean Air Act Title V operating permit program. This evaluation is part of EPA's ongoing Title V program oversight of state and local permit programs. This report outlines the efforts IEPA has taken in response to the 2004 program evaluation over the last six years and the deficiencies EPA identified based on the program evaluation questionnaire.

Although IEPA has taken steps to address the concerns raised by EPA in the 2004 program evaluation, EPA finds IEPA's permit issuance rates and documentation of its decision making to be unacceptable. IEPA currently has more than 40 outstanding applications for Title V permit modifications or initial permits on which it has not acted for more than 18 months, and over 300 applications for renewals of active Title V permits that are more than five years old. This report requires IEPA to provide EPA with an assessment of the effectiveness of the programs it recently put in place to improve permit issuance, an evaluation of its efforts to meet the stated goal to reduce the backlog by ten percent by October 2011, and a detailed plan for how it will aggressively reduce its backlog. The report further requires IEPA to pay particular attention to the documentation of its decision making both in statements of basis and responsiveness summaries, quickly resolve the 39 CAAPP permit appeals, and address the compliance assurance monitoring (CAM) requirements of 40 C.F.R. § 64.6(c) in the body of permits.

IEPA has made a number of improvements to permit quality since the 2004 program evaluation. Some of these improvements include addressing periodic monitoring in the statement of basis under the coaching and direction of the Unit Manager, clarifying Title I actions embedded within the Title V permit and identifying them in the public notice, providing written responses to comments before the petition period begins to the extent possible but no later than final permit issuance, justifying non-applicability determinations, providing training to the permit analysts on the issues raised in the 2004 evaluation and updating Clean Air Act Permit Program (CAAPP) forms to improve the quality of the application. Some of the program and application form improvements mentioned during this review have yet to be fully utilized and IEPA plans to develop engineering instructions to help permit analysts with periodic monitoring, non-applicability justifications, and development of the statement of basis. These efforts are expected to also improve the quality of the permits. IEPA also worked to resolve through legislation that was passed and signed by the Governor on June 21, 2010 the problem of the Illinois Pollution Control Board (IPCB) staying Title V permits in their entirety during the appeals process, rather than severing and staying only the portions subject to appeal.

II. Introduction/Audit Program

In 2003, as part of its oversight role, EPA began an initiative to review the implementation of the Title V permit programs by permitting authorities throughout the country. Illinois' program was last evaluated by Region 5 in 2004. Program strengths and areas in need of improvement were identified at that time. In 2010, Region 5 embarked on a second round of permit program reviews. The program evaluation team drafted a questionnaire for the Title V program evaluation which consists of three components: follow-up from our 2004 Title V program evaluation, follow-up on permit program oversight, and evaluation of IEPA's implementation of CAM. EPA drafted questions specific to Illinois to discern if previously identified issues have been pervasive or have been adequately addressed so that they are no longer recurring.

On April 20-21, 2010, EPA staff visited the IEPA offices in Springfield, Illinois. Prior to this visit, EPA shared a copy of the questionnaire with IEPA. During the visit, IEPA's responses to the questionnaire were discussed. IEPA's final responses are in Attachment 1.

This final report summarizes findings and conclusions of EPA from its review of IEPA's Title V program. The findings and conclusions in the report are based on the answers IEPA gave to the questionnaire, the file review, and EPA staff knowledge of the program from experience with reviewing IEPA permits. This information was compared to the statutory and regulatory requirements for federal permitting programs as outlined in the questionnaire.

III. Program Description – Clean Air Act Permit Program (CAAPP)

IEPA's state operating permit program for major sources established to meet the requirements of 40 C.F.R. Part 70 is found in 39.5 of the Illinois Environmental Protection Act (415 ILCS 5/39.5). The program is called the CAAPP. The underlying statutory authority for this rule is found in Chapter 39 of the Illinois Environmental Protection Act (415 ILCS 5/39.5). IEPA's most recent submittal of information to support final full approval of its Title V operating permits program occurred on May 31, 2001; EPA gave final full approval of Illinois' operating permit program on December 4, 2001.

The central office of Illinois EPA, located in Springfield, Illinois, is responsible for the drafting and issuance of Title V permits. Staff at the central office is also responsible for review of all periodic, malfunction, and compliance reporting; observation of stack testing or Continuous Emission Monitor certifications; review of all reports resulting from compliance demonstrations; and development of enforcement actions where appropriate. IEPA has field offices located throughout the state, whose primary responsibilities are inspection of regulated sources and response to citizen complaints.

IV. Summary of Evaluation

A. Follow-up on findings from 2004 program evaluation

On October 30, 2006, EPA issued a report on our findings from the August 2004 program evaluation (Attachment 2). EPA found eight areas in need of improvement: lack of periodic monitoring, statements of basis, non-applicability determinations, lack of written response to comments, renewal applications, severability of permits provisions during the permit appeals process, implementation issues regarding the Title I / Title V streamlining agreement, and outstanding initial Title V and synthetic minor permit applications. IEPA developed a corrective action plan to address these issues and submitted the plan to EPA on June 14, 2007 (Attachment 3). On December 9, 2009, IEPA submitted the audit closure report detailing its efforts to implement the corrective action plan and concluding that all efforts were complete (Attachment 4).

This report reviews IEPA's progress in addressing the findings from the 2004 program evaluation as detailed in the 2006 report.

1. Periodic monitoring

2006 finding: Based upon EPA's review of IEPA permits and the response to the questionnaire from the 2004 program evaluation, EPA found that IEPA did not regularly establish monitoring provisions in Title V permits and did not consistently meet the requirements for periodic monitoring of both 40 C.F.R. Part 70 and the Illinois statute. In situations in which IEPA found that no periodic monitoring is necessary to assure compliance with a limit, the rationale for the decision was not typically found in the statement of basis. Furthermore, EPA found that IEPA relied heavily on recordkeeping as a method to satisfy the periodic monitoring requirement, specifically pointing to mass emission limitations, control efficiency requirements, opacity limitations, and other similar limits, where compliance cannot be directly demonstrated with a record. Where this periodic monitoring was not provided in the underlying applicable requirement, EPA asked IEPA to establish it in the Title V permit, according to 40 C.F.R. § 70.6(a)(3)(i)(B) and (c). This includes requirements for measurements to be taken using appropriate methodology, at a frequency that is appropriate given the relevant time period of the limitation and other factors specific to the emissions unit.

Corrective action plan: EPA suggested IEPA provide training for its staff on the periodic monitoring requirements and consider whether or not changes to permit application forms, permit template language, or statement of basis template language is necessary. IEPA conducted training for its staff on December 18, 2008 and developed an application form requesting the applicants suggest periodic monitoring to assure compliance and a rationale for the suggested monitoring. IEPA made the new form available on August 10, 2009.

2010 finding: Currently the Unit Manager reviews all of the permits before they are made

available for public notice and provides individual coaching on the subject.¹ IEPA has also been using an appendix to the statement of basis to explain the process it generally follows to determine appropriate periodic monitoring. The resulting statements of basis for less complex sources have been improving over the last year. (See comments on UOP, LLC, permit number 95120029 and NTN – Bower Corporation, permit number 06030007 in Appendix A) IEPA also mentioned during the April 2010 visit that it plans on preparing an engineering instruction for its staff to assist in the development of appropriate periodic monitoring.

Monitoring the impact of the steps Illinois has taken thus far will be an on-going process. IEPA has implemented several program improvements to address periodic monitoring (i.e., new applications forms² that it recently has made available, Unit Manager review of pre-draft permits and the statement of basis) with more planned (i.e., improved use of the application forms and engineering instructions). At this time, EPA does not have additional recommendations, but we will continue to review permits to ensure that IEPA is addressing this important requirement of the Title V program.

2. Statement of basis

2006 finding: IEPA's statements of basis do not adequately discuss the decision-making that went into the development of the Title V permit. Specific information required, but not present, in IEPA statements of basis include: the rationale for any non-applicability determinations present in the permit; the basis for review of the facility's compliance status; the rationale for periodic monitoring provisions (or lack thereof) established in the permit; and an explanation of joint Title I/Title V permitting actions. IEPA must make a non-applicability determination based upon review of supporting documentation, and must include a summary of this review in the statement of basis. This documentation should include the applicability criteria that it considered, and the factual bases upon which IEPA relied to determine that the criteria have not been met. It is important that a permit writer review all available information to ensure that the source has no ongoing compliance issues and document the review in the statement of basis. Determining appropriate monitoring requires the use of discretion and judgment on the part of the permit writer and should include, at a minimum, the following decisions: the methods by which the permittee should monitor emissions; how frequently the measurement should be taken; and if the measurements are indirect (parametric), how the measured values relate to actual emissions from the source. In any case, whether the permit writer decides that no monitoring is required to assure compliance with a limit, record keeping may serve as monitoring to assure compliance, or periodic monitoring is established in the permit, the permitting authority must

¹ Section I.1 of the Questionnaire in Attachment 1 outlines IEPA's process for determining periodic monitoring and memorializing the decision-making on what is appropriate monitoring in a specific situation.

² The new application forms are in Appendix B.

place the rationale for this decision in the statement of basis. When IEPA is taking a Title I and a Title V action in a combined permit, it must include the rationale and factual basis for the Title I permitting actions in the statement of basis.

Corrective action plan: EPA suggested IEPA develop measures to ensure that statements of basis comply with the requirements of 40 C.F.R. Part 70 and the Illinois statute, and also with EPA policy and guidance, and consider changes to permit application forms, permit template language, or statement of basis template language. IEPA instituted boilerplate language to address periodic monitoring and prompt reporting determinations in two appendices to the statement of basis template, as well as updating the statement of basis template to include recurring and routine justifications for why the periodic monitoring is sufficient. IEPA conducted training for its staff on December 18, 2008 which included, among other things, a discussion regarding the requirement for a statement of basis, the elements required in a statement of basis, the requirement to discuss periodic monitoring decisions and the rationale for such decisions, when to discuss compliance matters, as well as an appropriate level of due diligence review.

2010 finding: Currently, the Unit Manager reviews all of the statements of basis before the permits are issued for public notice and provides individual coaching on the subject.³ IEPA has also been using an appendix to the statements of basis to explain the process it uses to determine appropriate periodic monitoring and the justification for prompt reporting determinations. The resulting statements of basis have been improving over the last year in less complex permitting actions. However, in the case of U.S. Steel - Granite City Works, a complex permit, IEPA provided neither documentation explaining its periodic monitoring decisions, nor sufficient detail on its periodic monitoring decisions in its responsiveness summary after receiving comments on this issue. (See comments on UOP, LLC, permit number 95120029, NTN – Bower Corporation, permit number 06030007, and U.S. Steel- Granite City Works, permit number 96030056 in Appendix A.) IEPA must include a description of the monitoring scheme for the facility, and how it was selected and determined to be sufficient to demonstrate compliance with the applicable requirement. IEPA also mentioned during the April 2010 visit that it plans to develop engineering instructions for its staff on writing complete statements of basis.

Monitoring the impact of the steps Illinois has taken thus far will be an on-going process. IEPA has implemented several program improvements to address the statement of basis deficiencies (i.e., new applications forms⁴ for periodic monitoring and non-applicability determinations that have recently been available, Unit Manager review of pre-draft statements of basis) with a few more planned (i.e., improved use of the application forms and an engineering instruction.) EPA encourages IEPA to continue its efforts to address all of the recommendations. EPA is available

³ See sections I.1 and I.2 of the Questionnaire in Attachment 1 on IEPA's view of the content of the project summaries.

⁴ The new application forms are in Appendix B.

for a refresher training on this subject and consultation on a permit-specific basis when IEPA is developing its supporting documentation prior to public notice and its responsiveness summary in response to public comments. EPA will be reviewing permits with this issue in mind over the next year, and commenting on and, if necessary, objecting to, permits which lack the required documentation. Determining appropriate monitoring requires the use of discretion and judgment on the part of the permit analyst. For any monitoring decision, the permit analyst must include in the Title V permit, at a minimum, the methods by which the permittee will monitor emissions and the frequency of the measurement. Further, the permit analyst must include in the statement of basis a description of why the chosen monitoring will assure compliance with the associated limits in the Title V permit. If the measurements are indirect (parametric), the permit analyst must explain how the measured values relate to actual emissions from the source. In any case, whether the permit analyst decides that no monitoring is required to assure compliance with a limit or that record keeping is adequate to assure compliance, or if the permit analyst establishes periodic monitoring in the permit, s/he must place the rationale for this decision in the statement of basis.

3. Non-applicability determinations (permit shields)

2006 finding: IEPA permit application forms fail to provide opportunity for applicants to provide certain relevant information required to support non-applicability determinations - for example, potential to emit calculations. As part of the application, this information must be certified for truth and accuracy by the responsible official.

Corrective action plan: EPA suggested IEPA conduct training, consider how to correct the apparent conflict between federal and state requirements and permit language for permit shields and consider whether permit application forms and instructions are clear with respect to what information is required from an applicant to obtain a non-applicability determination or whether changes to the forms or instructions are necessary. IEPA determined that changes to the permit boilerplate language in 8.1 were not necessary. IEPA developed a new application form to ensure that IEPA has all the necessary information to make a non-applicability determination. The form became available for use on August 10, 2009. IEPA conducted training for its staff on December 18, 2008 which included, among other things, a discussion regarding non-applicability statements and documentation of the rationale for such decisions in the statement of basis.

2010 finding: Currently, the Unit Manager reviews the non-applicability statements in CAAPP permits before the permits are made available for public notice and provides individual coaching on the subject.⁵

⁵ Section I.2 of the Questionnaire in Attachment 1 outlines IEPA's procedures for incorporating the rationale for non-applicability determinations in the permit record and what is included in the rationale.

IEPA has implemented several program improvements to address the problems cited in the 2006 final report (i.e., new application forms for non-applicability determinations, staff training, Unit Manager review of pre-draft permit record) and is planning several more (i.e., improved use of the application forms). IEPA must ensure that its permit analysts specifically address in each statement of basis all applicability criteria for any term for which s/he is including a nonapplicability determination in a Title V permit. At this time, EPA does not have any recommendations in addition to those provided in the 2006 final report, but encourages IEPA to continue its efforts to continually address this issue consistently in Title V permits.

4. Lack of written response to comments

2006 finding: IEPA does not routinely provide an adequate written response to public comments. IEPA may prepare a responsiveness summary for permits which require public hearings, but the summaries are not always available to the public prior to issuance of the final permits or prior to the deadline for submitting petitions to object to EPA. IEPA and EPA should work together to develop and implement a procedure to respond to all significant public comments in writing. Additionally, IEPA should resolve all EPA comments on permits, including written responses if appropriate, prior to final issuance.

Corrective action plan: IEPA committed to develop a procedure to provide a timely written response to significant comments on permits. IEPA updated the Title V Implementation Agreement to address how it handles comments, streamlines the public comment period with the proposed period, provides protocols for communication between IEPA and EPA, and shares information pertaining to applications and comments.

2010 finding: IEPA expressed in the April 2010 meeting that its policy is to address all comments, as follows. IEPA responds to EPA's comments via e-mail and ensures that EPA accepts all of the changes to the permit addressing those comments, or lack thereof, before issuance.⁶ IEPA responds to all comments received from the public during the public comment period in the responsiveness summary which is available by the time the permit is issued final. IEPA posts any written responsiveness summaries online when the permit is posted. IEPA recently developed a template for responsiveness summaries⁷ and conducted training for its staff on December 18, 2008.

EPA continues to be concerned with the inadequate response to comments that IEPA has been producing. The U.S. Steel – Granite City Works responsiveness summary is a case in point.⁸

⁶ Section I.3 of the Questionnaire in Attachment 1 outlines IEPA's procedures for responding to comments.

⁷ See Appendix C.

⁸ See Appendix D for the October 1, 2009 petition to object to the September 3, 2009 Title V

Due to the lack of specificity and detail in describing IEPA's decision making in response to comments on the permit and the incomplete responses, EPA expects to grant a number of issues raised in the October 1, 2009 petition to object to the September 3, 2009 CAAPP permit. (The reasoning behind EPA's decision on the specific issues raised in this petition to object will be described in EPA's response which will be issued before December 17, 2010.)⁹

IEPA must prepare adequate written responses to comments when it receives significant comments during the public comment period, and should make the responses available at the beginning of EPA's 45-day review period. This practice will significantly reduce the number of issues that might otherwise be raised in petitions. EPA is available for a refresher training on this subject and consultation on a permit-specific basis when IEPA is developing its supporting documentation prior to public notice and its responsiveness summary in response to public comments. EPA will be reviewing permits with this issue in mind over the next year and commenting on and, if necessary, objecting to permits which lack the required documentation.

5. Renewal permit applications

2006 finding: According to the IEPA instructions, an applicant for a renewal permit is not required to submit a complete, updated version of its initial application. Rather, the applicant may submit, at its discretion, only the pages of the permit application that contain information which has changed since submittal of the initial permit application. This does not require or provide an opportunity for the applicant to reference previously submitted materials in a clear and unambiguous manner. As a result, renewal permits may be issued based upon renewal applications that contain incomplete or outdated information, or information in the permit record may be insufficiently available for review by the public.

Corrective action plan: IEPA committed to revise its CAAPP-200 form to include a better representation and documentation of what is being incorporated by reference into the renewal application. IEPA also developed a new incorporation by reference form that became available on August 10, 2009. This new form works in conjunction with the CAAPP-200 form and these changes are now part of the requirement for an administratively complete application.

2010 finding: IEPA has developed a new incorporation by reference application form¹⁰ which addresses the concern raised in the 2006 findings report. At this time, EPA does not have any additional recommendations from those provided in the 2006 final report, but encourages IEPA

permit and responsiveness summary for U.S. Steel – Granite City Works.

⁹ EPA recently discussed the adequacy of responses to comments in our responses to the petitions to object to the permits issued by other states to Alliant Energy – WPL Edgewater Generating Station (Petition Number V -2009-02), Wisconsin Public Service Corporation – J.P. Pulliam Power Plant (Petition Number V-2009-01), and Wheelabrator Baltimore LP.

¹⁰ See Appendix B.

to ensure that applicants that would like to incorporate by reference any or all parts of previous applications use IEPA's new form.

6. Severability of permits during the appeals process

2006 finding: Both the federal and state Title V programs require, during a possible stay granted during a permit appeals process, the preservation of non-challenged portions of a Title V permit. However, the Illinois Pollution Control Board (IPCB) frequently stays appealed Title V permits in their entirety during the appeals process. A stay of the entire Title V permit delays its effectiveness as if it had not been issued at all, and is a failure to meet the state and federal requirements for severability.

Corrective action plan: The IPCB has found that Section 10-65(b) of the Illinois Administrative Procedures Act (Illinois APA), 5 ILCS 100/10-65(b) (2004), prohibits severability clauses in CAAPP permits. IEPA does insert such severability clauses in its CAAPP permits; nevertheless, there have been almost 40 instances in which a CAAPP permit has been appealed on one issue and the IPCB, based upon its reading of the Illinois APA, has chosen to stay the entire permit rather than just the portion of the permit under appeal. *See, Midwest Generation, LLC, Crawford Generating Station v. Illinois Environmental Protection Agency*, PCB 06-56. Despite severability clauses in Title V permits and in Illinois' Title V program, IEPA has not successfully appealed the IPCB action to the state appellate court.

The IPCB has found that Section 10-65(b) of the Illinois Administrative Procedures Act (Illinois APA), 5 ILCS 100/10-65(b) (2004), prohibits severability clauses in CAAPP permits. IEPA does insert such severability clauses in its CAAPP permits; nevertheless, there have been almost 40 instances in which a CAAPP permit has been appealed on one issue and the IPCB, based upon its reading of the Illinois APA, has chosen to stay the entire permit rather than just the portion of the permit under appeal. *See, Midwest Generation, LLC, Crawford Generating Station v. Illinois Environmental Protection Agency*, PCB 06-56. Despite severability clauses in Title V permits and in Illinois' Title V program, IEPA has not successfully appealed the IPCB action to the state appellate court.

IEPA considered three possible options to remedy the situation. The first option was to amend the Illinois APA, the second was to amend Section 39.5 of the Illinois Environmental Protection Act (415 ILCS 5/39.5 (2004)), and the last option was to appeal any future IPCB decision on this point to a state appellate court.

IEPA ultimately decided that the "best" option would be to amend the provisions of Sections 40 and 40.2 of the Illinois Environmental Protection Act to make it clear that the IPCB should not automatically stay an entire permit in an appeal of a subpart thereto unless the permit provisions being challenged could reasonably be expected to affect the permit in its entirety. Therefore, draft amendatory language was prepared. However, this draft language did not make it into actual

proposed legislation for prior legislative sessions.

2010 finding: We are encouraged that IEPA renewed its efforts to pass legislation in 2010. The legislation¹¹ was passed by the legislature and was signed by the Governor on June 21, 2010. The purpose of the CAAPP cannot be served if the permits are not issued. Currently Illinois has 39 appealed permits that are stayed and awaiting resolution. This means that there are 39 sources without a CAAPP permit and the benefits provided by being permitted. We expect the legislation changes will improve the situation, but Illinois also needs to take immediate action to resolve the appealed permits.

7. Implementation issues regarding the Title I / Title V streamlining agreement

2006 finding: In February 2000, IEPA and EPA signed an implementation agreement to allow streamlined permits to be issued in a single permitting action, under the separate authorities of Title V and the Title I (major and minor New Source Review (NSR)) programs. The agreement requires that IEPA must provide adequate public notice of the Title I actions taken in the combined permit. At the time of the visit to IEPA, EPA was concerned that every Title V permit was labeled as a combined permit, and that the public notice for each permit did not specify whether the permit contained a Title I action, or was simply a Title V permit. Because the permit and public notice language required by the agreement is intended to notify the public when a Title I action is being taken, it is essential that the language only be used when a Title I action is being taken. Otherwise, if every Title V permit is labeled as a combined permit whether it contains a Title I action or not, the public is not being effectively notified of Title I actions.

Furthermore, the implementation agreement should reflect the fact that there is a difference between terms that are created or revised in a combined Title I/Title V permit, and that are subsequently incorporated into a Title V renewal permit, and adequate procedures for notation of those terms should be developed.

Corrective action plan: IEPA conducted training for its staff on December 18, 2008 which included a discussion of how to prepare combined permits.

2010 finding: IEPA shared with us the template for public notice¹² and the written procedures for incorporating Title I terms in a combined Title I/Title V permit.¹³ The public notice template specifically mentions if the permit out for public notice also contains new Title I conditions in addition to the Title V conditions. Condition 1.5 of the CAAPP permits now explicitly explain

¹¹ See Section I.5 of the Questionnaire in Attachment 1 for the proposed amended language to the Environmental Protection Act.

¹² See Appendix E.

¹³ See Appendix F.

what types of Title I conditions are in the permit and how they are labeled so the reader can better understand the origin and authority for each of these terms. IEPA no longer automatically labels all permits both Title I and Title V where the permit is not a combined Title I/Title V permit.

8. Outstanding initial Title V and synthetic minor permit applications

2006 finding: At the time of the visit to Springfield, IEPA had 35 initial Title V permits left to issue. IEPA did not meet its goal of issuing all Title V permits addressed in its commitment schedule by December 1, 2003. In addition, since the program review, it has come to EPA's attention that there are a significant number of Title V facilities, approximately 50-70 that have applied to IEPA for federally enforceable state operating permits (FESOPs) but have not yet received those permits. IEPA explains that the delay in Title V and FESOP permit issuance is due to extreme citizen interest in the remaining initial Title V permits to be issued, and the focus of effort on initial Title V permits rather than FESOPs. Although EPA recognizes that these issues are challenges to timely permit issuance, these challenges exist for all permitting authorities. Furthermore, for the most part, these burdens are inherent to the normal process of issuing Title V permits.

Corrective action plan: IEPA committed to issuing its initial Title V permits according to the schedule in the corrective action plan. IEPA did issue all the permits by December 9, 2009.

2010 finding: IEPA worked to issue the remaining, difficult initial Title V permits within the timeframe to which it committed. However, IEPA's backlog of FESOPs is extremely high: according to its semi-annual Title V operating permit system report, as of June 30, 2010, the backlog of applications waiting FESOP permits has grown to 251.

B. Follow-up on permit program oversight

During the April 2010 program evaluation, EPA asked IEPA about how it is handling several Title V program implementation challenges that have arisen since our last review. These issues include permit issuance rates, CAM, and maximum achievable control technology (MACT) vacatur and incorporating MACTs into permits.

1. Permit issuance rates

As mentioned in A.8 above, as of September 2009, IEPA has issued all of the initial Title V permits to which it committed in the December 2003 schedule. However, IEPA has identified a number of issues that it believes have created challenges to timely issuance of quality CAAPP permits,¹⁴ including: the appeal of and petitions to object to the issued permits; the detail

¹⁴ See Section II.1.E of the Questionnaire in Attachment 1.

required by EPA in incorporating applicable requirements into the permit and for the statement of basis; the learning curve for both the permit analysts and the attorneys handling the appeals to the IPCB; new permit requirements and federal standards; differences in the Title I and Title V permitting processes; and the IEPA resources available to issue the permits.

IEPA has taken steps to improve its issuance rates.¹⁵ It has implemented a productivity initiative to improve permit issuance efficiency where employees provide suggestions on how best to improve the permit issuance rates. For example, the staff suggested a streamlined CAAPP permit template and engineering instruction on such topics as periodic monitoring and statement of basis development. IEPA is planning to implement both of these ideas in the future. IEPA recently started a “work habits improvement” program¹⁶ which includes expectations for each staff person and bi-weekly, monthly, and quarterly meetings involving problem-solving, coaching, counseling, and development of annual work plans. IEPA develops specific annual targets in these work plans based on EPA’s targets.¹⁷ Currently IEPA intends to reduce its backlog of renewal permits by 10%. However, according to the latest TOPs report, IEPA’s backlog of renewal permits increased by 1.3% between June 2009 and June 2010.¹⁸ IEPA currently has more than 40 outstanding applications for Title V permit modifications or initial permits on which it has not acted for more than 18 months, and over 300 applications for renewals of active Title V permits that are more than five years old.

EPA finds IEPA’s permit issuance rates unacceptable. We understand that IEPA is faced with a number of challenges and obstacles to issuing permits. However, these same challenges are also experienced by all the permitting authorities, yet the backlogs are not as extensive as the backlog seen in Illinois. IEPA should implement the several permit quality and issuance improvement projects that it has identified and continue its efforts to address staffing. Although we believe the steps Illinois has recently taken are likely to result in improvements, ultimately Illinois must determine and take the actions necessary to resolve these deficiencies. In October 2011, IEPA must provide EPA with an assessment of the effectiveness of these programs, an evaluation of its efforts to meet the stated goal to reduce the backlog by 10%, and a detailed plan for how it will continue to aggressively reduce its backlog.

2. Renewal permits and CAM

EPA developed 40 C.F.R. Part 64, Compliance Assurance Monitoring (CAM) requirements, to provide reasonable assurance that facilities comply with emissions limitations by monitoring the operation and maintenance of their control devices. Part 64 requires a source subject to the rule to submit a CAM plan with its initial Title V operating permit application if

¹⁵ See Section II.1.D of the Questionnaire in Attachment 1.

¹⁶ See Appendix G.

¹⁷ See Appendix H.

¹⁸ See Appendix I.

the application was submitted after April 1998, with any significant modification request, or with its renewal application. Given that most of the initial CAAPP applications were submitted prior to April 1998, IEPA, in effect, started issuing permits incorporating CAM requirements since the last program evaluation in 2004. During this recent program evaluation, EPA inquired in section II.2 of the Questionnaire (See Attachment 1) about how IEPA was implementing CAM. (An assessment of CAM permit content will be discussed in section C of this report.) IEPA does require an applicant to address CAM applicability in its application. However, IEPA does not use the statement of basis as a vehicle for documenting its CAM non-applicability determinations for the permit record; instead IEPA relies on the permit application and the permit to justify the CAM non-applicability determinations. IEPA depends on EPA's guidance on the criteria for the adequacy of the CAM plans and has held in-house training for its staff.

3. MACT vacatur and permit incorporation

The United States District Court for the District of Columbia has vacated a number of Maximum Achievable Control Technology (MACT) standards, including the polyvinyl chloride MACT, the brick, clay ceramics MACT, the boiler MACT, and the plywood MACT. Under section 112(j) of the Clean Air Act, the permitting authorities bear the responsibility to implement a case-by-case MACT if a federal MACT doesn't exist. During this recent program evaluation, EPA inquired in section II.3 of the Questionnaire about how Illinois is addressing these MACT issues (See Attachment 1). There are no sources in Illinois that are subject to the polyvinyl chloride MACT, the brick, clay ceramics MACT, and the plywood MACT. IEPA stated that the boiler MACT vacatur had little impact on its permitting. IEPA hadn't issued any CAAPP permits containing vacated MACT requirements so no permit revisions were needed. Nor has IEPA issued any permits requiring a section 112(j) determination. To date, IEPA has developed one draft permit that contains requirements addressing the vacated boiler MACT through section 112(j) authority – a permit for U.S. Steel-Granite City Works. EPA is reviewing this permit in conjunction with a petition to object.

IEPA stated in the program evaluation visit that it incorporates all applicable requirements of the MACT, making clear which compliance options the permittee has chosen to use in accordance with EPA policy in White Paper II.

C. CAM permit review

EPA asked IEPA to identify and provide three permits with CAM provisions and the supporting documentation for EPA review. IEPA provided the final permit, the statement of basis, and the CAM plan application forms for Silgan Containers Manufacturing Corporation (Application No. 95120230), Ahlstrom Engine Filtration, LLC (Application No. 02070042), and Alton Steel (Application No. 96020056).¹⁹ EPA assessed whether these permits met the

¹⁹ See Appendix J.

requirements of 40 C.F.R. Part 64 as part of our evaluation. IEPA generally includes the CAM plan as an attachment to the permit and references the plan in the “Monitoring Requirements” section for each emission unit which is subject to the CAM plan, using the following language, based on 40 C.F.R. Part 64.

7.1.8 Monitoring Requirements

Compliance Assurance Monitoring (CAM) Requirements

The affected [emissions units] are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The Permittee shall comply with the monitoring requirements of the Compliance Assurance Monitoring (CAM) Plan described in Attachment 3, Table 3, pursuant to 40 CFR Part 64 as submitted in the Permittee’s CAM plan application.

The “Recordkeeping Requirements” and “Reporting Requirements” sections for the same unit will include the following language based on 40 C.F.R. Part 64.

7.1.9 Recordkeeping Requirements

Records for Compliance Assurance Monitoring (CAM) Requirements

The Permittee shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, and other supporting information related to the monitoring requirements in Condition 7.1.8, as required by 40 CFR 64.9(b)(1).

7.1.10 Reporting Requirements

b. Reporting of Compliance Assurance Monitoring (CAM)

The Permittee shall submit monitoring reports to the Illinois EPA in accordance with Condition 8.6.1 and shall include, at a minimum, the information required under Condition 8.6.1 and the following information:

- i. Summary information on the number, duration, and cause of excursions or exceedances, and the corrective actions taken [40 CFR 64.6I(3) and 64.9(a)(2)(i)]; and
- ii. Summary information on the number, duration, and cause for monitoring equipment downtime incidents, other than downtime associated with calibration checks [40 CFR 64.6I(3) and 64.9(a)(2)(ii)] (sic).

The CAM plan found in an attachment to the permit uses the following format.

Table 3. PSEU Designation:	Unit 1 (Sheet Coaters)
Significant Emission Unit Section:	7.1
Pollutant:	VCM
Indicators:	#1: Concentrator Description Chamber Temperature
<u>GENERAL CRITERIA</u>	
THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:	Thermocouple
THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:	Set point is 360°F per manufacturer; kept within 20°F of the set point
QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:	188 hours per 6-month period
<u>PERFORMANCE CRITERIA</u>	
THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:	Thermocouple is installed directly in the description chamber
VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:	The thermocouple will be calibrated or replaced a minimum of once per year
QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:	The accuracy of the thermocouples will be checked a minimum of once per year by calibration
THE MONITORING FREQUENCY:	Displayed continuously but only recorded daily
THE DATA COLLECTION PROCEDURES THAT WILL BE USED:	Recorded daily
THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:	No averaging period

The statement of basis does not contain any information about the decision-making used in developing the CAM plan. IEPA instead relies on the application for any justifications.

1. Silgan Containers Manufacturing Corporation (Application No. 95120230)

EPA determined that the Silgan Containers Manufacturing Corporation permit provided by IEPA incorporated the elements required by Part 64 with a few exceptions. 40 C.F.R. § 64.6(c) requires the permitting authority to “establish one or more permit terms or conditions that specify the required monitoring...” At a minimum the permit must specify the indicators; the means or devices to measure the indicators; the performance requirements; or the definition of an excursion or exceedance in terms of the indicator range or designated condition, or procedures to establish such a definition if it specifies appropriate notice procedures. Although the permit includes a CAM plan as an attachment, which includes these elements, the permit would more clearly comply with 40 C.F.R. § 64.6(c) if the body of the permit specifically addressed this CAM requirement. 40 C.F.R. § 64.7(d) requires that the permit include a response to excursions or exceedances. The permit, the CAM plan, and the application do not include any language that meets the requirements of section 64.7(d). 40 C.F.R. § 64.9(a)(2)(iii) requires a monitoring report that includes a description of the actions taken to implement the quality improvement plan. IEPA’s permit does not include such a requirement.

2. Ahlstrom Engine Filtration, LLC (Application No. 02070042)

EPA determined that the Ahlstrom Engine Filtration, LLC permit provided by IEPA incorporated the elements required by Part 64, with a few exceptions. 40 C.F.R. § 64.6(c) requires the permitting authority to “establish one or more permit terms or conditions that specify the required monitoring...” At a minimum the permit must specify the indicators; the means or devices to measure the indicators; the performance requirements; or the definition of an excursion or exceedance in terms of the indicator range or designated condition, or procedures to establish such a definition if it specifies appropriate notice procedures. Although the permit includes a CAM plan as an attachment, which includes these elements, the permit would more clearly comply with 40 C.F.R. § 64.6(c) if the body of the permit specifically addressed this CAM requirement. 40 C.F.R. § 64.7(d) requires that the permit include a response to excursions or exceedances. The permit, the CAM plan, and the application do not include any language that meets the requirements of section 64.7(d). 40 C.F.R. §§ 64.7(b) and 64.9(a)(2)(iii) require that the owner or operator maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment at all times and to submit to the permitting authority a monitoring report that includes a description of the actions taken to implement the quality improvement plan respectively. IEPA’s permit does not include either requirement.

3. Alton Steel (Application No. 96020056)

EPA determined that the Alton Steel permit provided by IEPA incorporated the elements required by Part 64 with the following exceptions. 40 C.F.R. § 64.6(c) requires the permitting authority to “establish one or more permit terms or conditions that specify the required monitoring...” At a minimum the permit must specify the indicators; the means or devices to measure the indicators; the performance requirements; or the definition of an excursion or exceedance in terms of the indicator range or designated condition, or procedures to establish such a definition if it specifies appropriate notice procedures. Although the permit includes a CAM plan as an attachment, which includes these elements, the permit would more clearly comply with 40 C.F.R. § 64.6(c) if the body of the permit specifically addressed this CAM requirement. 40 C.F.R. § 64.7(d) requires that the permit include a response to excursions or exceedances. The permit, the CAM plan, and the application do not include any language that meets the requirements of section 64.7(d). 40 C.F.R. §§ 64.7(b) and 64.9(a)(2)(iii) require that the owner or operator maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment at all times and to submit to the permitting authority a monitoring report that includes a description of the actions taken to implement the quality improvement plan respectively. IEPA’s permit does not include either requirement.

On July 28, 2010, Michael Reed, of IEPA, provided three additional permits as additional examples of how IEPA has addressed CAM in its CAAPP permits; Intertape Polymer Group (Application No. 95090099), Nucor Steel (Application No. 96030147) and Bluegrass Flexible Packaging Company, LLC (Application No. 95090028).²⁰ Mr. Reed also provided IEPA’s CAM permit template language, as follows.

This goes into section 7.x.8 – Monitoring of the CAAPP permit

Compliance Assurance Monitoring (CAM) Requirements

The affected _____ are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The Permittee shall comply with the monitoring requirements of the CAM Plan described in Attachment ___, pursuant to 40 CFR Part 64 as submitted in the Permittee’s CAM plan application. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment [40 CFR 64.7(a) and (b)].

- i. Continued Operation [40 CFR 64.7(c)]
Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator

²⁰ See Appendix K

shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

- ii. Response to Excursions or Exceedances [40 CFR 64.7(d)]
 - A. Upon detecting an excursion or exceedance, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
 - B. Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device.

This goes into section 7.x.9 - Recordkeeping of the CAAPP permit

Records for Compliance Assurance Monitoring (CAM) Requirements

The Permittee shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, and other supporting information related to the monitoring requirements in Condition _____, as required by 40 CFR 64.9(b)(1).

This goes into section 7.x.10 - Reporting of the CAAPP permit

Reporting of Compliance Assurance Monitoring (CAM)

The Permittee shall submit monitoring reports to the Illinois EPA in accordance with Condition 8.6.1 and shall include, at a minimum, the information required under Condition 8.6.1 and the following information:

- i. Summary information on the number, duration, and cause of excursions or exceedances, and the corrective actions taken [40 CFR 64.6(c)(3) and 64.9(a)(2)(i)]; and
- ii. Summary information on the number, duration, and cause for monitoring equipment downtime incidents, other than downtime associated with calibration checks. [40 CFR 64.6(c)(3) and 64.9(a)(2)(ii)].

These permits incorporate the template language, with one exception, which includes the language required by 40 C.F.R. §§ 64.7(d), 64.7(b) and 64.9(a)(2)(iii), the language of concern to EPA from our review of permits issued for Silgan Containers Manufacturing Corporation (Application No. 95120230), Ahlstrom Engine Filtration, LLC (Application No. 02070042), and Alton Steel (Application No. 96020056). The Intertape Polymer Group permit is missing the reporting requirements from 40 C.F.R. § 64.9(a). EPA doesn't believe this one oversight is reflective of a programmatic issue given that the template language does include the reporting requirements from 40 C.F.R. § 64.9(a). EPA believes that IEPA current implementation of CAM in its CAAPP permits is adequate with two exceptions:

- (1) 40 C.F.R. § 64.6(c) requires the permitting authority to "establish one or more permit terms or conditions that specify the required monitoring..." At a minimum the permit must specify the indicators; the means or devices to measure the indicators; the performance requirements; or the definition of an excursion or exceedance in terms of the indicator range or designated condition, or procedures to establish such a definition if it specifies appropriate notice procedures. Although the permit includes a CAM plan as an attachment, which includes these elements, the permit would more clearly comply with 40 C.F.R. § 64.6(c) if the body of the permit specifically addressed this CAM requirement.
- (2) The statement of basis does not contain any information about the decision-making used in developing the CAM plan. IEPA instead relies on the application for any justifications.

V. Findings and Recommendations

IEPA has taken steps to address the concerns raised in the 2004 program evaluation.

Some of these steps include addressing periodic monitoring in the statement of basis under the coaching and direction of the Unit Manager, clarifying Title I actions embedded within combined Title I/Title V permits and identifying them in the public notice, providing written responses to comment as early as possible, but no later than the date that it issues the permit, justifying non-applicability determinations, providing training to the permit analysts on the issues raised in the 2004 evaluation, and updating the CAAPP form to improve the quality of the application. IEPA has yet to implement some of the program and application form changes mentioned during this review. They include new CAAPP forms designed to improve the quality of the application by asking for additional justifications for periodic monitoring and non-applicability determinations, and ensuring that any previously submitted CAAPP application forms that the applicant is incorporating into a current application are certified as true and accurate at the time of the current application. IEPA also has plans to develop engineering instructions to help permit analysts with periodic monitoring and non-applicability justifications and development of the statement of basis. IEPA also worked to resolve the concern that when Illinois CAAPP permits are appealed, they are frequently stayed in their entirety during the appeals process by the IPCB. A stay of a permit delays the effectiveness of the Title V permit, as if it had not been issued at all, and results in failure to meet the state and federal requirements for severability. IEPA prepared and proposed draft amendatory language for the Illinois Environmental Protection Act. The legislation was passed by the legislature and was signed by the Governor on June 21, 2010.

EPA finds IEPA's permit issuance rates and adequacy of the documentation of its decision making unacceptable. IEPA should fully implement the several permit quality and issuance improvement projects that it has identified including a productivity initiative to improve permit issuance efficiency, a work habits improvement program which includes a disciplinary procedure with expectations for each staff person and quarterly productivity meetings involving coaching, counseling, and developing targets, and efforts aimed at improved applications. Although we believe the steps Illinois has recently taken are likely to result in improvements, ultimately Illinois must determine and take the actions necessary to resolve the significant problems identified in this program evaluation.

In October 2011, IEPA must provide EPA with an assessment of the effectiveness of these programs, an evaluation of its efforts to meet the stated goal to reduce the backlog by 10%, and a detailed plan for how it will continue to aggressively reduce its backlog. IEPA must pay particular attention to its documentation of its decision making both in the statement of basis and responsiveness summary. EPA will be reviewing permits with this issue in mind over the next year and commenting on and, if necessary, objecting to permits which lack the required documentation. IEPA also should quickly resolve the 39 CAAPP permit appeals.

EPA has two concerns with IEPA's implementation of CAM pursuant to 40 C.F.R. Part 64. IEPA is relying on the CAM CAAPP application forms to provide the rationale to explain why the permittee's selection of the indicator and indicator range will provide reasonable assurance of compliance with emission limitations and standards for the anticipated range of

operation. This is particularly apparent given the inadequate justifications given in the Ahlstrom Engine Filtration, LLC and Alton Steel applications provided to EPA as part of this review. EPA urges IEPA to include IEPA's review and conclusions of its approval of the CAM plans in the statement of basis. IEPA generally includes the CAM plan, which includes the required elements listed in 40 C.F.R. § 64.6(c), as an attachment to the permit and is referenced in the body of the permit. The permit would more clearly comply with the rule if the body of the permit specifically addressed this CAM requirement.