



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
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SEP 13 2012

REPLY TO THE ATTENTION OF:

G. Vinson Hellwig  
Chief, Air Quality Division  
Michigan Department of Environmental Quality  
P.O. Box 30260  
Lansing, Michigan 48909

~~VINCE~~  
Dear Mr. Hellwig:

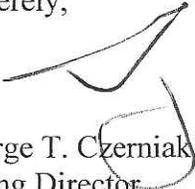
I am transmitting to you the final Michigan Title V Operating Permit Program evaluation report. This evaluation is part of the U. S. Environmental Protection Agency's ongoing oversight of state and local Title V programs nationwide. EPA initiated the Michigan program evaluation in July 2009.

Please see the enclosed report for further information regarding EPA's program evaluation findings. Note that we received the Michigan Department of Environmental Quality's (MDEQ's) August 3, 2012 Title V fee submittal update on August 9, 2012, and it is under review. We did not include any findings based on this submittal in the report.

We appreciate MDEQ's assistance during the program evaluation. We would especially like to thank Heidi Hollenbach and Joanne Foy, who were very knowledgeable and responsive to our questions and requests for further information.

If you have any questions, please contact me, or have your staff contact Beth Valenziano at (312) 886-2703. We apologize for the delay in issuing the final report.

Sincerely,

  
George T. Czerniak  
Acting Director  
Air and Radiation Division

Enclosure

**Title V Operating Permit Program Evaluation Report**  
**Michigan Department of Environmental Quality (MDEQ)**  
**August 2012**

I. Executive Summary

The United States Environmental Protection Agency conducted an evaluation of MDEQ's Clean Air Act Title V Operating Permit Program. This evaluation is part of EPA's ongoing oversight of state and local Title V programs. For this current round of Title V program reviews, EPA Region 5 drafted a questionnaire focusing on follow up from the previous evaluations, general permit program oversight, and State specific issues. For the Michigan review, EPA revisited the issues highlighted in MDEQ's 2004 program evaluation, including permit issuance, incorporating new Maximum Achievable Control Technology (MACT) requirements in permits, Title V funding and EPA program approval, and data management. In addition, EPA reviewed several basic Title V program requirements, including application forms, statements of basis, applicability, permit processing and response to comments, permit content, Compliance Assurance Monitoring (CAM), and Cross-Media Electronic Reporting Regulation (CROMERR) requirements. This report summarizes EPA's findings. Additional information is also available in the Michigan Title V Program Evaluation Questionnaire, dated August 6, 2012.

Overall, MDEQ has successfully and actively managed its Title V Program workload and implementation issues. Michigan has developed thorough program documentation, guidance, training opportunities, permit development tools, and permit issuance procedures. MDEQ has significantly reduced the overall initial and renewal application backlogs, and has the resources in place to address the permit modification backlog. MDEQ's Lean Process Improvement initiative has resulted in reductions in permit issuance processing time.

MDEQ has also addressed its data management needs by replacing its outdated Title V permit issuance tracking system and integrating it with the Michigan Air Compliance and Enforcement System (MACES). MDEQ has also addressed concerns with its electronic application submittal system by developing a new permit renewal application form that allows sources to develop the applications electronically and save the files for future submissions.

However, MDEQ's Title V program would benefit from increased State oversight of individual permits to ensure that they are consistent with MDEQ's permit program requirements. The quality and level of detail of individual Statements of Basis (Staff Reports), permits, and CAM permit requirements greatly varied. In addition, MDEQ's CAM permit content template could be further improved and clarified.

Further, MDEQ should address whether additional changes to Michigan's November 9, 2010 comprehensive program submittal to EPA are necessary. EPA acknowledges that Michigan updated its submittal in August 2012 to address the fee program inadequacies documented in the 2010 submittal. This recent submittal states that Michigan's Title V program is now adequately funded, and includes a fee sufficiency demonstration. EPA is currently reviewing this package. In addition, MDEQ has revised other aspects of Michigan's Title V program, including permit program applicability regulations for greenhouse gases, renewal application forms, and permit issuance guidance and procedures since the 2010 submittal. MDEQ and EPA also discussed

potential updates needed to Michigan's Title V applicability regulations, including sources subject to certain area source MACTs and sources required to have a permit under Parts C or D of Title I. MDEQ should determine which program elements in the November 2010 submittal need to be further revised and updated. EPA will work with MDEQ to address these issues and move forward with updating Michigan's Title V program approval.

MDEQ provided the following recommendations to EPA regarding the implementation and oversight of the national Title V program: EPA should recognize states' experience and capability in running Title V programs by adjusting EPA oversight accordingly; and EPA should address the 2006 findings and recommendations made by the national Title V Task Force.

## II. Evaluation Summary and Findings

### A. 2004 Program Evaluation Follow Up: Timely Permit Issuance

EPA's November 5, 2004 Michigan Title V Operating Permit Program evaluation report noted Michigan's ongoing challenge to issue timely permit actions, including the six remaining initial permit issuance commitments, new initial permits, permit renewals, and permit modifications. MDEQ has actively managed its permit application backlogs, and has been successful in significantly reducing the overall initial and renewal permit backlogs. Due to budget issues, Michigan's permit modification backlog has increased. However, MDEQ now has resources in place to address the modification backlog and expects to reduce it in 2012.

The remaining six initial permit applications were delayed primarily due to enforcement and/or Permit to Install actions, which MDEQ wanted to resolve prior to issuing the operating permits. MDEQ completed action on two of these applications in 2004, two in 2005, one in 2007, and the last one in January 2008.

Michigan has also shown a marked reduction in the number of backlogged initial and renewal permit applications. According to the December 31, 2011 Michigan Title V Operating Permit System (TOPS) report, 361 sources out of a total of 373 are currently operating pursuant to an active Title V permit. Of the remaining twelve unpermitted sources, three are sources with expired permits due to an incomplete/untimely permit renewal application, and nine are sources with initial applications less than eighteen months old (extrapolated from TOPS data). In 2011, EPA Region 5 began to track renewal permit applications for sources with permits older than five years, and asked states to commit to reducing this renewal permit backlog. As of June 2012, MDEQ has taken action on 25 out of the 36 backlogged renewal applications. This 69% reduction is already significantly higher than EPA's region-wide 25% reduction goal for 2012.

In 2010, Michigan began a Lean Process Improvement initiative to evaluate the State's Title V operating permit issuance process and make it more efficient and effective. One result of the Lean initiative was the development of a new permit renewal application that includes a redline/strikeout version of a source's current Title V permit as a means of streamlining some of the application submittal requirements. The applications also save staff time by building upon the current permit. As a result of the Lean process, Michigan also updated its permit issuance procedures to make them more efficient. In 2009 (prior to the

Lean changes), Michigan's average permit issuance time for initial and renewal permit applications was 25 months. In 2011, Michigan's average permit issuance time for initial and renewal permit applications was 16 months. Also, in 2011, Michigan's average permit issuance time for the renewal applications using the new forms was eight months.

In December 2009, Michigan made several operating permit program cuts in an effort to address a fee budget shortfall. This included a suspension in processing Title V modifications and administrative amendments. Michigan indicated that, although permit revisions would be placed on hold, permit renewals would incorporate any pending revision applications. In October 2011, Michigan passed a legislative fee increase. As a result, MDEQ dedicated a staff position to be responsible for processing permit revision applications. MDEQ updated its procedures for tracking and processing permit revisions and for addressing the revision application backlog. In January 2011, MDEQ began to issue permit revisions. Michigan's December 2011 TOPS report indicated that there were four significant modification applications older than eighteen months and 101 minor modification applications older than 90 days. Michigan anticipates that, although there are issues with some of the backlogged applications, they will make progress in reducing the backlog in 2012.

#### B. 2004 Program Evaluation Follow Up: Incorporating New MACT Requirements into Permits

During Michigan's 2004 program evaluation, MDEQ acknowledged the challenge of incorporating complex new requirements into permits, particularly the MACT standards for hazardous air pollutants. MACT standards include numerous compliance options and alternative requirements, requiring a high level of technical expertise to incorporate into a permit. MDEQ has addressed this challenge by developing standard-specific templates and also by providing ongoing training opportunities and detailed program documentation.

To assist permit writers in drafting permits with MACT conditions, MDEQ has developed 20 standard-specific templates. Permit writers find the templates to be very helpful because they do not have to start from scratch when drafting complex MACT permit conditions. The templates also help provide consistency. MDEQ has sought a balance between providing sufficient detail of the MACT requirements and referencing the very detailed regulatory requirements, such as test method protocols (see EPA's March 5, 1996 White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program). The templates include instructions to permit writers so that they can be tailored to include the specific requirements applicable to individual sources. The templates help reduce the time needed to draft the permit.

In addition to the MACT permit templates, MDEQ continues to provide permit writers with the training and written resources necessary to draft comprehensive operating permits that adequately address the Clean Air Act requirements. MDEQ provides numerous staff training opportunities on new Federal and State requirements, as well as training on any changes to the operating permit program procedures and requirements. MDEQ also has source category, MACT, and New Source Performance Standard (NSPS) specific experts available to assist District staff. In addition, MDEQ has developed a multitude of written resources for permit

writers, including numerous permit program guidance, detailed permit issuance procedures, form and template instructions, and standard permit document templates.

#### C. 2004 Program Evaluation Follow Up: Title V Funding and EPA Program Approval

EPA's November 5, 2004 Michigan evaluation report noted that Michigan's current statutory fee authorization would expire in September 2005. As part of the fee reauthorization process, Michigan would need to ensure that the fees would be sufficient to cover the Title V program costs for the duration of the next fee cycle. Since EPA's original approval of Michigan's Title V program, the State has reauthorized its Title V fee structure several times:

On April 3, 2009, EPA sent MDEQ a letter supporting Michigan's efforts to authorize its Title V fees at an amount sufficient to cover the costs of the program. In addition, the letter included a request for MDEQ to submit an updated Title V program to EPA for approval. On April 23, 2009, MDEQ responded to EPA's letter, agreeing to begin work on updating Michigan's Title V program and fee demonstration.

In December 2009, Michigan estimated the Fiscal Year 2010 Federal presumptive minimum at \$10.6 million, and the State's fee formula at \$9.4 million. To address the funding shortfall, the Air Quality Division instituted several measures, including: a reduction of Title V staff by eleven positions (13%), a reduction in the number of compliance evaluations and inspections, a reduction in the response to citizen complaints, increased enforcement escalation to EPA, and the suspension of processing Title V permit modifications.

By spring of 2010, Michigan had not yet submitted its operating permit program revisions to EPA because the Michigan Legislature had not acted on the revisions to Michigan's operating permit program fees. On April 5, 2010, EPA sent MDEQ another letter requesting program revisions and fee updates.

On November 9, 2010, Michigan submitted its revised Part 70 Operating Permit Program to EPA. The comprehensive submittal included all operating permit program elements, and completely replaced the comprehensive package Michigan previously submitted on June 1, 2001 and September 20, 2001. Because the Michigan Legislature had not yet made revisions to the State's operating permit program fees, Michigan's program submittal to EPA included documentation that the current fees were not adequate to implement the program. The submittal also acknowledged the staffing and resource cuts described above.

On March 15, 2011, EPA sent Michigan a letter identifying concerns with Michigan's operating permit program fee demonstration. The letter stated that EPA could not approve Michigan's revised operating permit program unless the State adequately addressed these concerns.

In October 2011, Michigan passed legislation that increased the State's Title V fees. Although MDEQ had been seeking a fee increase for many years, this was the first approved increase since 2001. On August 3, 2012, MDEQ submitted a revision to the November 2010 program submittal, including the October 2011 fee legislation, a revised fee sufficiency analysis, and additional program documentation resulting from the fee increase. As a result

of the fee increase, MDEQ has also filled staff and management vacancies, and is now processing Title V permit modifications.

During the Title V program evaluation, MDEQ and EPA also discussed potential updates needed to Michigan's Title V applicability regulation. Specifically, EPA has promulgated some area source MACT standards, including the Electric Arc Furnace area source MACT, subpart YYYYYY, that require certain area sources to obtain Title V permits. In addition, Section 502(a) of the Clean Air Act requires sources that are required to have a permit under parts C or D of Title I (New Source Review, Prevention of Significant Deterioration) to also obtain a Title V permit. Although these sources typically are subject to Michigan's Title V program, there may be some non-major sources that would not be covered by Michigan's applicability regulations. At the time of the program evaluation, MDEQ was not aware of any sources subject to subpart YYYYYY or required to obtain a Part C or D permit that were not also required to obtain a Title V permit. However, Michigan's rules may need to be revised to address any such sources in the future.

Since Michigan's 2009 program evaluation, some additional area source MACTs as well as major sources of greenhouse gases (75 FR 31514) have become subject to Title V permitting. EPA will need to evaluate these Title V applicability requirements as part of its review of Michigan's program submittal.

Since Michigan's November 2010 submittal, MDEQ has made other program changes, including new permit application renewal forms, guidance, and procedures resulting from MDEQ's Lean Process Improvement initiative. MDEQ will need to determine which program elements in the November 2010 submittal need to be further revised and updated. EPA will work with MDEQ to address these issues and move forward with updating Michigan's Title V program approval.

#### D. 2004 Program Evaluation Follow Up: Data Management

EPA's November 5, 2004 program evaluation report noted that Michigan was planning to further address data management needs by updating the State's Title V data system and possibly integrating it with data from the Permit to Install Program, the Michigan Air Emissions Reporting System (MAERS) database, and the MACES data system.

ROP Toolkit Version 1 (Toolkit V1), MDEQ's original Title V data management system, was developed in 1996. The system tracks general source information, permit applications (including amendment and modification applications), and actions taken on the applications, including completeness review, public comment period, EPA comment period, and permit effective date. Permit Application Submittal Software (PASS-ROP) was created to allow sources to prepare an electronic application. Version 2 of ROP Toolkit (Toolkit V2) added the ability to accept those electronic application forms and perform an administrative completeness check.

Because of the age of the Toolkit V1 system, it developed stability issues. For example, data from some Districts seemed to disappear at times. Also, some staff could not access Toolkit V1 after email addresses were changed statewide. Michigan corrected these issues.

However, there have been numerous other issues, including data overflow error messages and blank screens when viewing data, entering data, and retrieving query reports. In addition, Toolkit V1 could not readily handle data queries, as there was no easy way to program them into the system.

Further, permittees had concerns with the PASS-ROP software and associated Toolkit V2 enhancements that allow sources to submit electronic permit applications and have them automatically checked for administrative completeness. Once a source submitted an electronic application, there was no way to use that existing data to populate a renewal permit application. Sources had to re-enter all information manually into the PASS-ROP software for every application cycle.

In 2009, The Michigan Department of Information Technology began working with IBM to determine the costs of updating and enhancing the State's MACES tracking system. The plan included replacing Toolkit V1 with a new MACES component for tracking Title V permit applications and permit issuance.

In the fall of 2010, MDEQ replaced Toolkit V1 with the enhanced MACES. In addition to tracking Title V compliance certifications, MACES now tracks all Title V applications and associated permit issuance milestones. The new system is stable, needs less quality assurance/quality control checks, and is capable of handling more query functions. Staff is regularly updating the permitting data. MDEQ is using the MACES data to track permit issuance timeframes Title V Lean Process Improvement initiative, and also for Title V TOPS reporting to EPA.

With respect to permittees' concerns regarding electronic application submittals, MDEQ's 2010 Lean Process Improvement initiative evaluated permit renewal application forms and permit issuance process to make them more efficient and effective. One result of the Lean initiative was the development of a new permit renewal application form that includes a redline/strikeout version of the source's current Title V permit as a means of streamlining some of the application submittal requirements. The forms are not submitted electronically in the same way that the Toolkit V2 system provided, but they do allow sources to develop the applications electronically and save the files for future submissions. For initial applications, the PASS-ROP software will continue to be used because the new streamlined forms and application process is designed for renewals only.

#### E. Permit Issuance Process: Application Forms, Statement of Basis, Public Participation, Permit Content

##### 1. Application Forms.

One result of Michigan's 2010 Lean initiative was the development of a new permit renewal application. The streamlined renewal application builds upon the information in the existing Title V permit by including a redline/strikeout version of the source's current permit. Sources provide detailed information for any new requirements or proposed changes to existing permits, and must still include all application content requirements. The applications save staff time by building upon the current permit and focusing on the changes to the renewal permit. MDEQ has received positive feedback from applicants.

The new renewal application cannot be officially submitted to MDEQ electronically (an official hard copy submittal is required), but it does allow sources to develop the application electronically and save the files for future submissions. In addition, MDEQ can more readily make electronic versions of the applications available to EPA and interested persons.

MDEQ intends to submit an update to the November 2010 Title V program submittal to EPA to include the revised renewal application forms, revised permit issuance procedures, templates, and guidance, and any additional changes resulting from the Lean initiative. EPA will work with MDEQ to address these issues and move forward with updating Michigan's Title V program approval.

## 2. Statement of Basis

MDEQ uses a Staff Report template for developing the Title V Statement of Basis for each permit. MDEQ has updated the Statement of Basis template to address new applicable requirements (including greenhouse gas requirements), to clarify certain descriptions, and to add more detail. The template helps ensure consistency from District to District; however, staff include additional, source specific information in the report as well.

EPA reviewed MDEQ's Staff Report template as well as several individual Staff Reports to see how they addressed basic Statement of Basis components, including source description, Title V applicability, applicable Federal requirements, streamlining, and response to comments. The template included sections addressing all of the elements, and also included standard language options for many Title V applicability and applicable Federal requirements. Because the Staff Report template included these components, it helped ensure that the Staff Reports for each source addressed them as well.

However, the quality and level of detail of the information varied by Staff Report. Three of the Staff Reports did not completely address why the sources were subject to Title V. One did not specify which criteria pollutants were major, and two did not indicate that the sources were major for Hazardous Air Pollutants, even though both Staff Reports indicated that they were subject to major source MACT standards. One of the Staff Reports also listed actual emissions of carbon monoxide (CO) above the major source threshold, but did not indicate that the source was major for CO when addressing Title V applicability.

One Staff Report included streamlining of applicable requirements. The analysis did not address the underlying applicable requirements, and whether those requirements allowed some limits to be removed. EPA's March 5, 1996 White Paper Number 2 provides for streamlining multiple applicable requirements; however, the guidance addresses subsuming less stringent requirements, not removing them. As discussed in the White Paper, the overall objective is to determine the set of permit terms and conditions that will assure compliance with all applicable requirements. In 2011, MDEQ revised and expanded its Staff Report template and permit content streamlining guidance for permit writers to ensure that the process is consistent with White Paper Number 2.

### 3. Permit Processing and Public Participation

MDEQ's District Offices issue initial and renewal Title V permits. MDEQ has assembled its Title V guidance for permit writers into a compilation called the Renewable Operating Permit Manual. The procedures, guidance, and resource material is extensive, and includes the processing of application submittals; background information for technical review; permit development; public participation; reporting; certification; permit revisions; void procedures; and operational memoranda.

MDEQ has updated the permit issuance procedures as a result of the Lean Process Improvement initiative. Notably, MDEQ has developed procedures for permit renewal pre-application meetings, which give MDEQ and the source the opportunity to discuss any changes to the facility or to applicable requirements that will need to be addressed in the permit renewal application. In addition, MDEQ has developed permit issuance timelines to keep renewal permit issuance on track and timely. MDEQ and the source develop a source specific timeline during the pre-application meeting. MDEQ has also added procedures for processing the new renewal application forms and completing technical review.

MDEQ has developed detailed, step by step guidance and procedures to assist staff in issuing Title V permits and ensuring that they meet the public participation requirements, including public, EPA and Affected State notices, public hearing requirements, response to comments requirements, and documenting the permit issuance process.

MDEQ does not have any major implementation concerns regarding permit issuance and public participation procedures. Supervisor oversight of the process, plus the extensive guidance and numerous templates help address any consistency issues. There can be minor consistency issues from staff to staff, and occasionally the Internet or internal data links are unavailable, resulting in temporary delays. Overall, MDEQ considers their Title V and Permit to Install webpages to be successful in providing information to the public, as they are in MDEQ's top 10 Internet "hits".

### 4. Permit Content

MDEQ has developed a Title V permit template and detailed template instructions to assist permit writers in drafting permits. MDEQ has made minor changes to the permit shell template. Also, clarifications have been made to the semi-annual and annual monitoring/compliance certification requirements and to Appendix 6 regarding Permits to Install. MDEQ has also developed many applicable requirement templates for MACT, NSPS, and CAM to help ensure that permits consistently address all requirements.

Supervisor review of the draft permits helps ensure that permit writers are using the most up to date permit shell and templates. In addition, MDEQ has incorporated the shell and templates into Microsoft Word, which is connected to the latest updates. Providing these links directly in the word processing program better ensures that staff are using the most recent versions, as opposed to having staff individually responsible for checking shared computer drives for the latest versions.

EPA performed a cursory review of MDEQ's permit shell template as well as several Michigan Title V permits to see how they addressed some basic permit content requirements, including: citing underlying applicable requirements for each permit term, addressing monitoring methods, identifying applicable requirements, and addressing non-applicability determinations for the permit shield. The permit shell included sections addressing these requirements, and also included standard language for many general permit conditions. Because the permit shell included these components, it helped ensure that the individual permits addressed them as well.

The quality and level of detail varied by permit. All the permits consistently included underlying applicable requirement citations for the permit terms and conditions. However, one permit did not appear to include sufficient monitoring requirements for many emission limits. Another permit did include detailed monitoring requirements, but it was not always clear how the monitoring corresponded to the emissions limits and standards. Two permits may not have included MACT requirements in sufficient detail. Although the general quality of most of the permits was satisfactory, there is room for improvement with respect to these issues.

#### F. MACT Vacatures and Permitting

Several MACT standards have been vacated, including the polyvinyl chloride MACT, the brick and clay ceramics MACT, the boiler MACT, and the plywood MACT (partial). In addition, EPA's mercury rule was vacated. Michigan has not incorporated any of the vacated standards into State law, and does not need any rule changes to address the vacatures. MDEQ can directly include applicable Federal standards into Title V permits without incorporating the standards into State law.

With respect to the original boiler MACT vacatur, MDEQ sent a mailing to Title V sources subject to the standard, recommending that the permittees request removal of the vacated MACT standards. Most sources submitted minor modification applications requesting removal. MDEQ addressed the vacatures in the Staff Report Addendum when processing the modifications.

Due to the ongoing litigation, court decisions, and EPA's repromulgation and reconsideration of the boiler MACT regulations, MDEQ is addressing the history and status of these requirements in Staff Reports when issuing renewal permits. Also due to litigation issues, MDEQ is addressing the history and status of the Clean Air Interstate Rule program requirements in Staff Reports. As of June 2012, these standards are currently applicable, and MDEQ is including them in Title V permits. However, the ongoing litigation and EPA rulemaking actions will continue to impact these Federal requirements.

MDEQ is addressing any required Section 112(g) case by case MACT requirements during Permit to Install review. This has included a few pending coal fired power plant projects. With respect to Section 112(j) case by case MACT requirements for existing sources, MDEQ has not required Section 112(j) applications due to the expiration of the Federal Information Collection Request authorizing Section 112(j) applications. MDEQ is awaiting further EPA guidance regarding Section 112(j) implementation.

## G. Cross-Media Electronic Reporting Regulation

CROMERR provides the legal framework for electronic reporting under all of EPA's environmental regulations. CROMERR establishes standards for information systems that receive reports and other documents electronically, such as sources' Title V submissions to permitting authorities.

MDEQ provides sources a mechanism for electronically submitting initial applications and renewal applications using the older forms. MDEQ also provides sources with new permit renewal forms that can be filled out using a common word processing application. In all cases, sources are also required to submit an official hard copy of the application, including signature and certification. Therefore, MDEQ is not currently seeking CROMERR approval of any electronic Title V application submittal systems.

MAERS, MDEQ's emissions inventory system, allows electronic submittal of emissions data. MDEQ is updating the MAERS system to address CROMERR requirements. The updates will require users to register and receive a PIN for electronic data submissions, and also will add security questions for verifying user identification. However, to also meet Title V submission requirements, Responsible Officials will still have to submit a hard copy of the Responsible Official certification form along with the electronic MAERS submittals.

## H. Compliance Assurance Monitoring

To assist permittees and permit writers, MDEQ has developed extensive CAM guidance addressing applicability, exemptions, CAM requirements, technical review of CAM plans, CAM plan revisions, and incorporation of CAM requirements into permits. Also, MDEQ has developed example CAM plans, a CAM plan checklist, a CAM permit template, and excursion/exceedance and monitor downtime report forms. MDEQ has a CAM expert who is responsible for the guidance, and also assists with source specific CAM concerns.

The standard permit application addresses CAM on form EU-003. The form requires the applicant to specifically identify whether each emission unit at the source is subject to CAM. CAM plans are submitted on form AI-001. In addition, the applicant must address CAM testing, reporting, and monitoring on forms AR-002 and MS monitoring system forms.

The streamlined renewal application also addresses CAM. Part B of the application includes a permit application content checklist that identifies whether the application includes any CAM plans. Part E of the application specifically requires the applicant to identify all units subject to CAM and to include a CAM plan on form AI-001 if one has not been previously submitted. In addition, any CAM permit terms and conditions in the existing permit would also be included in the application, as the application requires submittal of a mark-up copy of the current permit.

MDEQ has had difficulty in obtaining adequate CAM plans, but actively works with the affected sources to get the necessary information as part of the permit application review and permit development. MDEQ's CAM expert performed an audit of permits containing CAM to ensure the permits included the applicable CAM requirements and to ensure statewide

consistency. MDEQ also developed a CAM permit template with source specific options to help ensure that permits include all standard and source specific CAM requirements.

EPA performed a file review of the basic CAM permit content requirements. The review included MDEQ's CAM permit template and instructions, as well as two Title V permits. In general, the permit template included sections addressing the CAM requirements, but some of the template language should be further clarified. The provisions in one of the permits largely addressed the CAM requirements, but two provisions were unclear and could be expanded. Further, the conditions in the other permit did not address all of the CAM requirements. The specific concerns regarding these permits are addressed in the program evaluation questionnaire. EPA notes that MDEQ developed the template after MDEQ issued these two permits. The availability of the CAM permit template should now help ensure that MDEQ's Title V permits include the CAM permit content requirements. However, there is some room for improvement.

With respect to the CAM permit template, the example monitoring conditions do not clearly require either continuous monitoring or the collection of data at all required intervals, in accordance with 40 CFR 64.7(c). The example conditions are structured in this manner: "The permittee shall monitor [indicator]... and take a daily reading...." As written, it is not clear whether the monitoring requirement is continuous or whether the monitoring is only required once per day. Also, it's not clear whether the daily reading requirement (specified for units that are not large pollutant specific emission units) would in all cases meet the recordkeeping requirements of 40 CFR 64.9(b). Although other language in the permit template addresses continuous monitoring, MDEQ should update the CAM permit template to clarify the monitoring and recordkeeping requirements in the examples.

In addition, the CAM permit template does not include the specific requirements for improved monitoring, in accordance with 40 CFR 64.7(e). The template does require the permittee to notify the permitting authority if the existing CAM plan is inadequate and the permit needs to be modified. However, the permit condition does not define "inadequate," and does not include the specific provisions in 40 FR 64.7(e). MDEQ should update the CAM permit condition template to include the specific conditions requiring improved monitoring.

#### I. State Program Audits and State Feedback

Michigan's Title V program has been the subject of several led audits, including several fee program audits by the Michigan Office of the Auditor General in October 2003, October 2007, and October 2011. The 2003 and 2011 audits concluded that Michigan's Title V fees were not sufficient to meet the minimum requirements of the Clean Air Act, particularly with respect to required permit issuance timeframes (2003 and 2011) and required annual inspections (2011). Although the 2007 report stated that fees were sufficient, this was based on unexpended fees carried forward from previous years in addition to current revenue. Further, both the 2007 and 2011 audit reports concluded that the Title V fees were not projected to generate sufficient revenue for the upcoming fiscal years. In October 2011, Michigan passed legislation that increased Title V fees. Although MDEQ had been seeking a fee increase for many years, this was the first approved increase since 2001. On

August 3, 2012, MDEQ submitted a revision to the November 2010 program submittal to include the October 2011 fee legislation, a revised fee sufficiency analysis, and additional program documentation resulting from the fee increase.

In August 2009, the Michigan Office of Internal Audit Services issued a performance audit of four of MDEQ's permit and authorization processes, including the Title V Operating Permit Program. The audit concluded that the permit application processes, final permit issuance processes, and permit renewal processes were adequate, effective, and complied with program requirements. However, the audit report raised concerns regarding information technology applications used for permit processing and tracking, stating that the applications lacked controls to ensure the confidentiality, integrity, and availability of system information. In response to the findings, MDEQ indicated that the Department is actively trying to replace older electronic data management systems, as well as add an information technology security officer to address the deficiencies. However, budget constraints are impacting the timing of these measures. In the fall of 2010, MDEQ replaced the existing Title V data tracking system with a new tracking module incorporated into MDEQ's MACES data tracking system. The new system is stable, needs less quality assurance/quality control checks, and is capable of handling more query functions. Staff is regularly updating the permitting milestones, resulting in fewer data integrity and data availability issues.

MDEQ listed the following concerns with the national Title V Operating Permit Program: the need for clear Section 112(j) requirements and guidance from EPA for MACT vacatur; the complexity of Federal standards and the associated issues regarding permit content level of detail; permitting and enforcement questions regarding unconventional requirements in some area source MACT standards, such as energy efficient lighting requirements; and NSPS Subpart YYYYY applicability issues and lack of clear direction from EPA Headquarters offices.

MDEQ provided the following recommendations to EPA regarding the implementation and oversight of the national Title V program: EPA should recognize states' experience and capability in running Title V programs by adjusting EPA oversight accordingly; and EPA should address the 2006 findings and recommendations made by the national Title V Task Force.

MDEQ listed the following as Michigan Title V Operating Permit Program priorities: improving permit issuance efficiency, particularly in light of the ongoing budget and fee issues; and submitting a revised Title V program to EPA for approval. MDEQ addressed the priority of permit issuance efficiency through the Lean Process Improvement initiative, and updated the permit issuance procedures. As a result of Lean, Michigan's average permit issuance time for initial and renewal permit applications decreased substantially. MDEQ addressed the program submittal to EPA priority by submitting a comprehensive program update to EPA on November 9, 2010 and a fee program update on August 3, 2012. Since Michigan's November 2010 submittal, MDEQ has also made other program changes, including new permit application renewal forms, guidance, procedures resulting from MDEQ's Lean Process Improvement initiative, and regulatory changes to incorporate greenhouse gas applicability requirements. MDEQ will need to determine which program elements in the November 2010 submittal need to be further revised and updated.